UNIVERSITY OF AMSTERDAM

# UvA-DARE (Digital Academic Repository)

## Consumers and their data

*When and why they share it*

Demmers, J.

**Publication date**
2018

**Document Version**
Final published version

**License**
Other

Link to publication

**Citation for published version (APA):**
Demmers, J. (2018). *Consumers and their data: When and why they share it*. [Thesis, externally prepared, Universiteit van Amsterdam].

**General rights**
It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

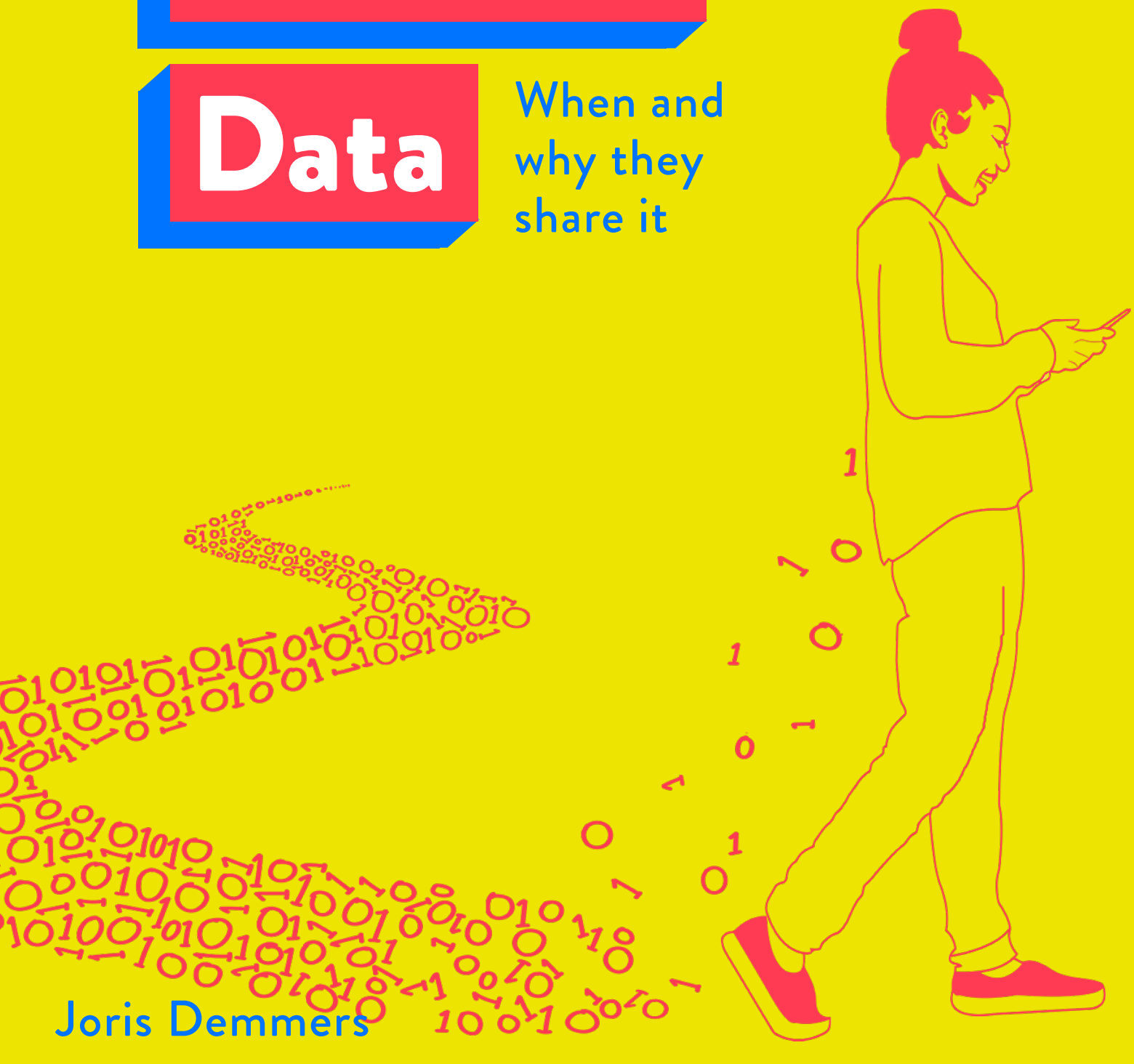
**Disclaimer/Complaints regulations**
If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: https://uba.uva.nl/en/contact, or a letter to: Library of the University of Amsterdam, Secretariat, P.O. Box 19185, 1000 GD Amsterdam, The Netherlands. You will be contacted as soon as possible.

*UvA-DARE is a service provided by the library of the University of Amsterdam (https://dare.uva.nl)*

Download date:15 Sept 2026

# Consumers and their Data

When and why they share it



Joris Demmers

# CONSUMERS AND THEIR DATA: WHEN AND WHY THEY SHARE IT

ACADEMISCH PROEFSCHRIFT
ter verkrijging van de graad van doctor
aan de Universiteit van Amsterdam
op gezag van de Rector Magnificus
prof. dr. ir. K.I.J. Maex
ten overstaan van een door het College voor Promoties ingestelde commissie,
in het openbaar te verdedigen in de Agnietenkapel
op dinsdag 17 april 2018, te 10:00 uur
door Joris Demmers
geboren te Halsteren

## PROMOTIECOMMISSIE:

| | | |
|---|---|---|
| Promotor: | Prof. Dr. W. M. van Dolen | Universiteit van Amsterdam |
| Co-promotor: | Dr. J. W. J. Weltevreden | Hogeschool van Amsterdam |
| Overige leden: | Prof. Dr. H. P. Borgman | Universiteit van Amsterdam |
| | Prof. Dr. N. A. N. M. Van Eijk | Universiteit van Amsterdam |
| | Prof. Dr. E. Peelen | Universiteit van Amsterdam |
| | Prof. Dr. P. Verlegh | Vrije Universiteit Amsterdam |
| | Prof. Dr. C. B. Weinberg | University of British Columbia |
| | Dr. U. Konuş | Universiteit van Amsterdam |
| Faculteit: | Economie en Bedrijfskunde | |

This research was supported by the Centre for Applied Research on Economics and Management (CAREM), Hogeschool van Amsterdam.

© 2018 Joris Demmers

All rights reserved. No part of this publication may be copied, reproduced or transmitted in any form or any electronic, mechanical, or other means, including photocopy, recording, or any information or retrieval system, without the written permission of the author. The copyright of the articles that have been published, has been transferred to the respective journals.

## TABLE OF CONTENTS

**1: INTRODUCTION ..... 1**

1.1 The importance of consumer data in marketing ..... 2

1.2 Data sharing and consumer privacy ..... 3

1.3 Outline ..... 5

References ..... 9

**2: HANDLING CONSUMER MESSAGES ON SOCIAL NETWORKING SITES: CUSTOMER SERVICE OR PRIVACY INFRINGEMENT? ..... 13**

Abstract ..... 14

2.1 Introduction ..... 15

2.2 Theoretical framework ..... 18

2.3 Pilot study ..... 24

2.4 Study 1 ..... 24

2.5 Study 2 ..... 29

2.6 Discussion ..... 31

References ..... 36

Appendix A ..... 41

Appendix B ..... 42

**3: CARING ABOUT YOUR PRIVACY TODAY AND IGNORING IT TOMORROW: HOW CONSTRUAL LEVEL FIT DRIVES THE PRIVACY PARADOX ..... 45**

Abstract ..... 46

3.1 Introduction ..... 47

3.2 Conceptual framework ..... 50

3.3 Pilot study 1: psychological distance of consequences ..... 56

3.4 Study 2: diverging mindsets ..... 59

3.5 Study 3: effect of mindset ..... 60

3.6 Study 4: mental accessibility ..... 63

3.7 Study 5: moderation ..... 65

3.8 General discussion ..... 68

References ..... 73

**4: BE OPEN WITH ME AND I WILL SHARE MY DATA WITH YOU: THE RECIPROCAL EFFECT OF CORPORATE TRANSPARENCY ON CONSUMER PERSONAL DATA SHARING ..... 77**

Abstract ..... 78

4.1 Introduction ..... 79

4.2 Theoretical framework ..... 80

4.3 Method ..... 84

4.4 Results ..... 87

4.5 Discussion ..... 90

References ..... 94

Appendix A ..... 98

Appendix B: ..... 99

**5: ENGAGEMENT WITH BRAND POSTS DURING CONSECUTIVE STAGES OF THE CUSTOMER JOURNEY ..... 101**

Abstract ..... 102

5.1 Introduction ..... 103

5.2 Conceptual development ..... 105

5.3 Method ..... 115

5.4 Results ..... 118

5.5 Discussion ..... 122

References ..... 128

**6: CONCLUSION AND DISCUSSION ..... 133**

6.1 Theoretical contributions ..... 135

6.2 Practical implications ..... 136

6.3 Directions for future research ..... 138

References ..... 140

**SUMMARY ..... 142**

**SAMENVATTING ..... 143**

**ACKNOWLEDGEMENTS ..... 144**

# Chapter 1:

## Introduction

## 1.1 THE IMPORTANCE OF CONSUMER DATA IN MARKETING

Companies' ability to collect, analyse, and use consumer data to gain insights into consumer preferences and behavior is pivotal in today's marketing landscape and will become even more important as more and more elements of human life become digitalized. Over the past decade, an explosion of digital technologies has been transforming the industry. On the one hand, these digital advancements have created empowered consumers (Edelman & Singer, 2015; Labrecque, vor dem Esche, Mathwick, Novak, & Hofacker, 2013); consumers today have access to unprecedented amounts of information about products and companies, and can share their opinions about brand experiences through interconnected online social networks with fellow consumers. At the same time, the same digital technologies also give companies access to exponentially growing amounts of data about consumers' activities. By tracking consumers' activities throughout the customer journey, marketers are able to deliver fine-tuned targeted advertisements and content that is accurately matched with one's demographics, consumption patterns, and interests.

Scholars and practitioners agree that having access to data regarding customers' preferences and behavior will be a growing source of competitive advantage. The focus on the collection and analysis of data in business settings is not new, although the primary use of data used to be in the optimization of internal operations. In 1985, Michael Porter stated that "information technology is generating more data as a company performs its activities and is permitting it to collect or capture information that was not available before", and that this data made room for a wide variety of applications "ranging from allowing computer-aided design in technology development to incorporating automation in warehouses" (Porter & Millar, 1985). With the shift from the transaction-based marketing mix approach to relationship marketing as the dominant paradigm in marketing, data gradually also began to play a pivotal role in the marketing function. Developing long-term customer retention through satisfaction and valuable relationships required an intimate knowledge of customers' preferences and behavior, leading to the development of databases in which huge amounts of customer data could be stored and specialized customer relationship management software allowing vendors to use this information to generate future sales (Malthouse, Haenlein, Skiera, Wege, & Zhang, 2013; Saarijärvi, Karjaluoto, & Kuusela, 2013). Today, the strategic focus of data analysis is on delivering value to customers. The interconnection of computing devices embedded in everyday objects via wireless communication enabling them to send and receive data in real time – the Internet of Things – is the basis of new business models (Porter & Heppelmann, 2015) and is regarded one of the key drivers of the shift from products as being central to a company's value proposition to a more service-dominant logic (Davenport, 2013; Vargo & Lusch, 2008). Parallel to the increased strategic focus on data in the marketing function, companies have also become more technically competent in collecting, storing,

managing, analysing, and visualizing individual-level data from all direct and indirect interactions with customers or "touchpoints" that together make up the customer journey (Edelman & Singer, 2015; Lemon & Verhoef, 2016).

## 1.2 DATA SHARING AND CONSUMER PRIVACY

It is clear that both companies and consumers benefit from the use of consumer data by marketers. In-depth real-time insights allow marketers to optimize individual customer experiences by offering personalized offerings that are customized to fit a customer's needs and preferences at any point of the customer journey. On the other hand, however, the increasing use of consumer data from a wide variety of sources also has implications for consumer privacy. Personal data can be used for hidden influence and manipulation, the creation of "filter bubbles", or price discrimination. It is therefore not surprising that over the years, parallel to the increasing depth and breadth of consumer data collection practices and applications, consumer privacy has moved to the forefront of public debate. Several scandals, such as the US National Security Agency collecting phone records on foreign nationals and American citizens, or retailer Target exposing a teen girl's pregnancy to her parents based on an analysis of her consumption patterns (Hill, 2012), have further sparked the privacy debate. Survey-based research consistently shows that the vast majority of consumers reports being (increasingly) concerned with their privacy across various contexts (e.g. Pew Research Center, 2015). Such concerns about consumer privacy may increasingly become an obstacle to obtaining the consumer data required to get the in-depth knowledge about consumers' characteristics, preferences, and behavior that is needed to establish and maintain profitable customer relationships and gain a competitive advantage. Governments around the world are designing new privacy regulations to restrict the collection and use of consumer data without explicit consent from individual consumers. In addition, sensitized consumers that are growing more concerned with their privacy may become more reluctant to share information about themselves with companies. For example, recent studies show that people are sharing less and less original content via Facebook (Armstrong, 2017). Hence, the ability to persuade consumers to voluntarily share their data will be the key to keeping access to consumer data (Kang & Hustvedt, 2014; Kirby, 2012; Peppers & Rogers, 2012).

Although privacy is intensively studied across many disciplines and fields including law, public policy, marketing, organizational behavior, and information systems, no general consensus exists about the definition of privacy. In early work privacy was defined as the right to be left alone (Warren & Brandeis, 1890), later work has refined this conceptualization. Several scholars distinguish between different dimensions of privacy. For example, Burgoon (1982) makes the distinction between informational privacy (the ability to control who gathers and disseminates information about one's self),

social or interactional privacy (control over social interactions), psychological privacy (the freedom to decide about one's disclosure of personal feelings and thoughts, and the protection from cognitive or affective interference from others), and physical privacy (freedom from surveillance and unwanted intrusions upon one's physical space). Although digital advancements potentially pose risks to consumers on each of these dimensions, informational privacy has received most attention by scholars in the context of consumer data. Informational privacy has been defined as the right of individuals, groups, or institutions to determine for themselves when, how, and to what extent information about them is communicated to others (Westin, 1967). In her conceptualization of consumer privacy, a subset of privacy, Goodwin (1991) ties together physical privacy and informational privacy by defining it in terms of control over two dimensions: control of information disclosure and control over unwanted intrusions into the consumer's environment.

Several theoretical frameworks exist that attempt to explain how institutions and individuals govern and manage privacy. Privacy calculus theory is one of the most prominent frameworks with regards to people's privacy decision making. Grounded in social exchange theory, it posits that an individual's decision to either or not disclose personal information is based on a risk-benefit analysis (Culnan & Armstrong, 1999; Laufer & Wolfe, 1977). As long as the net outcome of this analysis is positive, i.e. perceived benefits are larger than perceived costs, the individual will accept the costs accompanying the benefits. In other words, consumers will share personal information if they perceive that the overall benefits of disclosure are greater than the assessed risks associated with disclosure. Other theoretical frameworks include social contract theory, which views privacy as a moral contract between individuals and institutions (Martin & Murphy, 2017), and justice theory, which predicts that consumer privacy concerns are shaped by the perceived fairness of corporate information practices (Culnan & Bies, 2003). Finally, privacy regulation theory posits that people maintain and coordinate their desired level of social interactions through a variety of behavioral and environmental boundary mechanisms (Altman, 1975).

Scholars agree that the threat to consumer privacy posed by advanced consumer data collection practices require urgent attention, as it may undermine a firm's marketing performance in the long run (Goldfarb & Tucker, 2011; Morey, Forbath, & Shoop, 2015; Pitta, Franzak, & Laric, 2003). In 2014, the Marketing Science Institute (MSI) acknowledged the importance of consumer privacy in marketing science by identifying it as a top tier research priority. Specifically, the MSI asked: "What do consumers expect of organizations with respect to privacy? How do marketers manage the trade-off between being personal and relevant versus invading privacy?" (Marketing Science Institute, 2014). In the most recent 2016-2018 Research Priorities list, consumer privacy was again identified as a key topic, now from a more consumer behavioral perspective. Specifically, the MSI calls for research on

"how consumers trade off privacy concerns versus the benefits of personalization, sharing data versus convenience, customization versus intrusion, and annoyance versus effectiveness", and wonders about "the role of trust and authenticity in digital environments" (Marketing Science Institute, 2016). The prominent position of privacy as a top tier research priority on the 2014-2016 and 2016-2018 MSI lists illustrates that in today's marketing landscape of consumer data collection and personalized marketing communication, it is important that we study consumer data sharing, as well as the role of consumer privacy herein, both from a strategic and a consumer behavior perspective.

In this dissertation, I aim to answer this call for research on consumer data sharing and the role of consumer privacy in a marketing landscape in which the ability of companies to collect consumer data and use it to optimize every touchpoint in the customer journey is more important than ever before. Specifically, the first aim of this dissertation is to study how consumers integrate privacy considerations into their decision making processes with regards to sharing their data with companies. The second aim is to study how companies' activities with regard to company-consumer interactions throughout the customer journey affect consumers' data sharing. The results of my research will be presented in four empirical chapters. Each chapter describes an empirical study or series of studies and is self-contained with its own abstract, introduction, discussion, and reference list. Below I present an outline of the chapters in this dissertation. As the studies were done in collaboration with my supervisors, colleagues, and students, I use "we" instead of "I" when referring to the authors of the studies.

## 1.3 OUTLINE

### *Chapter 2*

In chapter 2, I investigate how consumers incorporate privacy into their evaluations of customer service encounters. In this chapter, I apply privacy regulation theory (Altman, 1975) to the context of customer responses to firms' proactive customer service interventions on a social network site and integrate it in a 'privacy calculus' framework (Culnan & Armstrong, 1999; Laufer & Wolfe, 1977). Many companies today use specialized tools to track relevant consumer messages and gauge online sentiments, and companies are increasingly moving from passive listening to actively intervening with online consumer conversations. Proactive customer service – reaching out to consumers when they have indirectly mentioned a company or used a relevant key term – has been identified as one of the top trends in customer service practice (Forrester Research, 2016). However, these proactive interventions are sometimes perceived as intrusive and out of place. We theorize that proactive customer service interventions may evoke feelings of privacy infringement, and find that customer satisfaction can be

modelled through a calculus of the perceived usefulness and feelings of privacy infringement associated with an intervention. Hence, in chapter 2 we demonstrate that consumers incorporate privacy considerations into their evaluations of customer service encounters. However, we also show that the net effect of privacy concerns on intervention effectiveness is not just determined by the perceived loss of privacy, but also by the benefits a customer derives from an intervention in return.

### *Chapter 3*

In chapter 3, I zoom in on the privacy calculus model of data sharing (Culnan & Armstrong, 1999; Laufer & Wolfe, 1977) from a consumer psychological perspective. The trade-off between benefits and costs of disclosure has a central position in the idea of the 'data economy': When consumers use technology, there is an – often implicit – assumed understanding that the consumer trades his/her personal information for the service or product that offers the convenience or functionality s/he is looking for (KPMG, 2016). A growing body of work shows that the privacy calculus is often not a fully rational calculation of all relevant benefits and costs, but instead is subject to contextual influences and mental biases and heuristics (Acquisti, Brandimarte, & Loewenstein, 2015; Kokolakis, 2017). As a result, general attitudes towards privacy are often poor predictors of actual privacy behavior, a phenomenon that has been well-established and is commonly referred to as the "privacy paradox" (Acquisti et al., 2015; Kokolakis, 2017; Norberg, Horne, & Horne, 2007). Drawing on construal level theory (Trope & Liberman, 2010), in chapter 3 we propose an updated view on privacy calculus theory. Across five experimental studies, we demonstrate that 1) attitudinal privacy preference contexts lead to a more abstract mindset than behavioral contexts, 2) these different mindsets drive different privacy preferences and data disclosure decisions, depending on the psychological distance of perceived benefits and costs of disclosure. Hence, we show that privacy preferences and therefore data sharing propensity depend on the congruency between one's mindset and the psychological distance of benefits and costs of disclosure. With these findings, we enhance the understanding of how consumers weigh benefits and costs of sharing personal information in privacy sensitive situations, and answer calls for more research and overarching frameworks on the privacy paradox and the factors that drive privacy preferences and data sharing behavior. Our construal level congruency account is relatively comprehensive as compared to prior explanations for the privacy paradox because, by looking at the role of diverging mindsets in different preference contexts, it explains not only why one would choose to disclose despite perceiving substantial privacy costs, but also why the same individual would assign higher weight to those privacy costs when reporting their attitudes and intentions, or in situations where the configuration of proximal benefits and distant costs is reversed.

### *Chapter 4*

The findings of chapter 3 suggest that consumer privacy concerns may not always lead to adequate privacy protecting behavior, and that companies can persuade consumers to disclose personal data by 1) communicating benefits on a construal level that is congruent with one's mindset, or 2) by moving the 'consent' moment forward or back, depending on when one's mindset is congruent with the psychological distance of the benefits. Such a mechanism would operate largely outside of people's conscious cognitive processes. In chapter 4, I look at how companies can persuade consumers to voluntarily share their personal information through a more 'direct approach', with consumers going through a more deliberate or conscious decision making process. Specifically, in chapter 4 we propose and examine the idea that corporate transparency - a firm being open and forthright about matters relevant to stakeholders - triggers a process of reciprocity which entices consumers to voluntary disclosure of personal data. Using an experimental design, we test whether the type of information and the source of the information affects participants' willingness to disclose their personal information with a company. Results from prior work suggest that marketers may benefit from trivializing or concealing data collection practices. Consistent with the theory of perceived risk (Bauer, 1960), our findings suggest that doing quite the opposite, i.e. being open and forthright about the collection and use of consumer data or about something that is relevant to consumers but not directly related to how customer data is used, may also persuade consumers to share their personal data. For marketers, the main advantage of using corporate transparency as a means of persuading consumers to voluntarily share their data over strategies that aim at downplaying or concealing data collection practices may be that it builds rather than harms consumer trust, and as such may provide a more sustainable basis for ongoing customer-firm relationships.

### *Chapter 5*

After investigating in chapter 3 and 4 how marketers can persuade consumers to voluntarily share their data, building on a mechanism that operates either largely outside (chapter 3) or within (chapter 4) people's conscious cognitive processes, in chapter 5, I investigate how companies, through their online communication activities, can optimally engage consumers in such a way that they actively share data through their engagement behaviors. Here, instead of sharing existing data from other sources with a company, by engaging with branded content consumers share additional information about their perceptions of their customer experience (Labrecque et al., 2013).

The key construct in chapter 5 is customer engagement. It is often seen as a multidimensional construct, defined as the motivationally driven investment of cognitive, affective, behavioral, and social

resources into brand interactions (Hollebeek, Glynn, & Brodie, 2014). In the past decade, customer engagement has been at the forefront of attention of practitioners and scholars. This focus can be traced back to the shift from transaction-based exchange marketing to relationship marketing as the dominant paradigm in marketing in the 1980s, directing all marketing activities towards establishing, developing, and maintaining successful relational exchanges (Berry, 1995; Grönroos, 1997; Hunt & Morgan, 1994; Van Doorn et al., 2010), and involving and integrating customers into a firm's activities throughout the customer journey (Sharma & Sheth, 1995). The notion of engaged customers that interact with companies in all stages of the customer journey also fits within the service-dominant logic, which views customers as co-creators of value (Vargo & Lusch, 2008; Vivek, Beatty, & Morgan, 2012). Interestingly, there is a clear link between customer engagement and the customer experience on a conceptual level (Hollebeek, Srivastava, & Chen, 2016; Lemon & Verhoef, 2016), but most empirical work on customer engagement with branded content online does not integrate it in a customer experience framework.

In chapter 5, I explore the link between customer engagement behavior and customer experience empirically by studying how companies use social media to engage with customers in pre-consumption, consumption and post-consumption stages of the customer experience. We draw on uses-and-gratifications (UG) theory (Katz, 1959) and findings from the online customer engagement literature to develop our conceptual model, in which we propose that the extent to which companies' social media posts fulfil the goals of consumers in the different stages of the customer experience through their social media posts drives customer engagement with these posts. The results of this study, in which we collected and analysed over 24,000 brand posts by more than 200 fair and conference organisers, show that in order to maximize customer engagement behavior with their social media posts, and as such persuade customers to share information about their customer experiences and brand perceptions, marketers should differentiate between the different stages of the customer journey and adapt their communication accordingly.

### *Chapter 6*

Finally, in the sixth and final chapter, I synthesize the results of the studies presented in the previous chapters, reflect on the contributions of my work, and suggest directions for future research.

## REFERENCES


Acquisti, A., Brandimarte, L., & Loewenstein, G. (2015). Privacy and human behavior in the age of information. *Science*, *347*(6221), 509–514.

Altman, I. (1975). *The environment and social behavior: Privacy, personal space, territory, and crowding*. Monterey, CA: Brooks/Cole Publishing.

Armstrong, P. (2017). Facebook users posted a third less content in 2016 than in 2015. Retrieved December 12, 2017, from https://www.forbes.com/sites/paularmstrongtech/2017/02/14/facebook-users-posted-a-third-less-content-in-2016-than-in-2015/

Bauer, R. A. (1960). Consumer behavior as risk taking. In R. S. Hancock (Ed.), *Dynamic Marketing for a Changing World* (pp. 389–398). Chicago, IL: American Marketing Association.

Berry, L. L. (1995). Relationship marketing of services - Growing interest, emerging perspectives. *Journal of the Academy of Marketing Science*, *23*(4), 236–245.

Burgoon, J. K. (1982). Privacy and communication. *Annals of the International Communication Association*, *6*(1), 206–249.

Culnan, M., & Armstrong, P. (1999). Information privacy concerns, procedural fairness, and impersonal trust: An empirical investigation. *Organization Science*, *10*(1), 104–115.

Culnan, M. J., & Bies, J. R. (2003). Consumer privacy: Balancing economic and justice considerations. *Journal of Social Issues*, *59*(2), 323–342.

Davenport, T. H. (2013). Analytics 3.0: In the new era, big data will power consumer products and services. *Harvard Business Review*, *91*(12), 64–72.

Edelman, D. C., & Singer, M. (2015). Competing on customer journeys. *Harvard Business Review*, *93*(11), 88–100.

Forrester Research. (2016). Trends 2016: The future of customer service. Retrieved December 12, 2017, from https://www.forrester.com/report/Trends+2016+The+Future+Of+Customer+Service/

Goldfarb, A., & Tucker, C. (2011). Online Display Advertising: Targeting and Obtrusiveness. *Marketing Science*, *30*(3), 413–415.

Goodwin, C. (1991). Privacy: Recognition of a consumer right. *Journal of Public Policy & Marketing*, *10*(1), 149–166.

Grönroos, C. (1997). From marketing mix to relationship marketing - towards a paradigm shift in marketing. *Management Decision*, *35*(4), 322–339.

Hill, K. (2012). How Target figured out a teen girl was pregnant before her father did. Retrieved December 12, 2017, from https://www.forbes.com/sites/kashmirhill/2012/02/16/how-target-figured-out-a-teen-girl-was-pregnant-before-her-father-did/

Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of Interactive Marketing*, *28*(2), 149–165.

Hollebeek, L. D., Srivastava, R. K., & Chen, T. (2016). S-D logic-informed customer engagement: Integrative framework, revised fundamental propositions, and application to CRM. *Journal of the Academy of Marketing Science*, *45*(3), 1–25.

Hunt, S. D., & Morgan, R. M. (1994). Relationship marketing in the era of network competition. *Marketing Management*, *3*(1), 18–28.

Kang, J., & Hustvedt, G. (2014). Building trust between consumers and corporations: The role of consumer perceptions of transparency and social responsibility. *Journal of Business Ethics*, *125*(2), 253–265.

Katz, E. (1959). Mass communications research and the study of popular culture: An editorial note on a possible future for this journal. *Studies in Public Communication*, *2*, 1–6.

Kirby, J. (2012). Trust in the age of transparency. *Harvard Buiness Review*, *90*(7/8), 158–159.

Kokolakis, S. (2017). Privacy attitudes and privacy behaviour: A review of current research on the privacy

paradox phenomenon. *Computers and Security*, *64*, 122–134.
KPMG. (2016). *Crossing the line: staying on the right side of consumer privacy*. Retrieved December 12, 2017, from assets.kpmg.com/content/dam/kpmg/xx/pdf/2016/11/crossing-the-line.pdf
Labrecque, L. I., vor dem Esche, J., Mathwick, C., Novak, T. P., & Hofacker, C. F. (2013). Consumer power: Evolution in the digital age. *Journal of Interactive Marketing*, *27*(4), 257–269.
Laufer, R. S., Wolfe, M. (1977). Privacy as a concept and a social issue: A multidimensional developmental theory. *Journal of Societal Issues*, *33*(3), 22–42.
Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, *80*(6), 69–96.
Malthouse, E. C., Haenlein, M., Skiera, B., Wege, E., & Zhang, M. (2013). Managing customer relationships in the social media era: Introducing the social CRM house. *Journal of Interactive Marketing*, *27*(4), 270–280.
Marketing Science Institute. (2014). *Research Priorities 2014-2016. Marketing Science Institute*. Cambridge, Massachusetts. Retrieved December 12, 2017, from https://www.msi.org/uploads/articles/MSI_RP14-16.pdf
Marketing Science Institute. (2016). *Research Priorities 2016–2018*. *Marketing Science Institute*. Cambridge, Massachusetts. Retrieved December 12, 2017, from http://www.msi.org/uploads/articles/MSI_RP16-18.pdf
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.
Morey, T., Forbath, T., & Shoop, A. (2015). Customer data: Designing for transperancy and trust. *Harvard Business Review*, *93*(5), 97–105.
Norberg, P. A., Horne, D. R., & Horne, D. A. (2007). The privacy paradox: Personal information disclosure intentions versus behaviors. *The Journal of Consumer Affairs*, *41*(1), 100–126.
Peppers, D., & Rogers, M. (2012). *Extreme trust: Honesty as a competitive advantage.* New York, NY: Penguin Group Inc.
Pew Research Center. (2015). *Americans' attitudes about privacy, security and surveillance*. Retrieved December 12, 2017, from http://www.pewinternet.org/2015/05/20/americans-attitudes-about-privacy-security-and-surveillance/
Pitta, D. A., Franzak, F., & Laric, M. (2003). Privacy and one-to-one marketing: Resolving the conflict. *Journal of Consumer Marketing*, *20*(7), 616–628.
Porter, M. E., & Heppelmann, J. E. (2015). How smart, connected products are transforming companies. *Harvard Business Review*, *93*(10), 96–114.
Porter, M. E., & Millar, V. E. (1985). How information gives you competitive advantage. *Harvard Buiness Review*, *63*(4), 149–160.
Saarijärvi, H., Karjaluoto, H., & Kuusela, H. (2013). Customer relationship management: The evolving role of customer data. *Marketing Intelligence & Planning*, *31*(6), 584–600.
Sharma, A., & Sheth, J. N. (1995). The evolution of relationship marketing : A framework for analysis. *International Business Review*, *4*(4), 397–418.
Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review*, *117*(2), 440–463.
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.
Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: Continuing the evolution. *Journal of the Academy of Marketing Science*, *36*(1), 1–10.
Vivek, S. D., Beatty, S. E., & Morgan, R. M. (2012). Customer engagement : Exploring customer relationships

beyond purchase, *20*(2), 127–145.
Warren, S., & Brandeis, L. (1890). The right to privacy. *Harvard Law Review*, *4*(5), 193–220.
Westin, A. F. (1967). *Privacy and freedom*. New York: Atheneum.

# Chapter 2:

## Handling consumer messages on social networking sites: Customer service or privacy infringement?

Authors: Joris Demmers, Willemijn M. van Dolen, Jesse W. J. Weltevreden

This paper has been published in the *International Journal of Electronic Commerce*[1]. Earlier versions of this work were presented at the Direct/Interactive Marketing Research Summit 2014, San Diego, CA, and the 42th European Marketing Academy Conference 2014, Istanbul, Turkey.

[1] In line with *International Journal of Electronic Commerce* guidelines, footnoting referencing style is used for this chapter.

## ABSTRACT

Firms increasingly use social network sites to reach out to customers and proactively intervene with observed consumer messages. Despite intentions to enhance customer satisfaction by extending customer service, sometimes these interventions are received negatively by consumers. We draw on privacy regulation theory to theorize how proactive customer service interventions with consumer messages on social network sites may evoke feelings of privacy infringement. Subsequently we use privacy calculus theory to propose how these perceptions of privacy infringement, together with the perceived usefulness of the intervention, in turn drive customer satisfaction. In two experiments, we find that feelings of privacy infringement associated with proactive interventions may explain why only reactive interventions enhance customer satisfaction. Moreover, we find that customer satisfaction can be modeled through the calculus of the perceived usefulness and feelings of privacy infringement associated with an intervention. These findings contribute to a better understanding of the impact of privacy concerns on consumer behavior in the context of firm–consumer interactions on social network sites, extend the applicability of privacy calculus theory, and contribute to complaint and compliment management literature. To practitioners, our findings demonstrate that feelings of privacy are an element to consider when handling consumer messages on social media, but also that privacy concerns may be overcome if an intervention is perceived as useful enough.

## 2.1 INTRODUCTION

"The link doesn't work for me, can you just make my phone work! @TMobile you are the most annoying phone company!"

– James Yammouni

"@James_Yammouni we would love to have you in our wireless family. What are you waiting for?"

– Verizon Wireless Support

Consumers talk about brands online: they write hotel reviews on travel websites, forward funny advertisements to their peers, and tell their friends about their everyday brand experiences on social network sites (SNSs). Many firms use specialized tools to track relevant consumer messages and gauge online sentiments, as it provides them with relevant insights about customer experiences. In recent years, firms are increasingly moving from passive listening to actively intervening with online consumer conversations [48]. Industry reports show that over 60 percent of firms now use popular platforms such as Twitter as customer service channels, with dedicated personnel to reach out and address relevant consumer messages [22]. As the real-life example of a response by Verizon to a message that an unsatisfied T-Mobile consumer posted on Twitter illustrates, the intervention strategies that firms employ on SNSs to improve customer relationships increasingly go beyond answering questions and handling complaints directed at the firm. In our example, the T-Mobile customer did not directly address Verizon. However, by actively monitoring customer messages that mention competitors, Verizon was able to proactively intervene in an attempt to convince the customer to switch phone providers. Proactive customer service—reaching out to consumers when they have indirectly mentioned a firm or used a relevant key term—has been identified as one of the top trends in customer service practice [46]. Although not all firms intervene with messages in which consumers complain about a competitor [35], firms are often encouraged to respond to relevant customer messages even when these messages only mention the firm indirectly [16, 46]. One popular view holds that by engaging in proactive customer service, firms can "amaze" customers by exceeding expectations [48], but there is also evidence that proactive interventions with consumer messages on SNSs are sometimes perceived as intrusive, out of place, and even referred to as "customer stalking" [17, 35, 61].

In recent years, some studies have started to explore the impact of corporate interventions with online consumer messages [45, 48, 62, 74], but why firms' attempts to reach out to customers on SNSs are sometimes appreciated while leading to backlash at other times remains unclear. Compared to traditional customer service channels, SNSs pose a complex environment for firms to manage

interactions with customers. Whereas traditional customer service channels are dedicated to facilitate service-related interactions between individual customers and firm representatives, on SNSs users simultaneously talk about an unlimited variety of topics with many other users from different social spheres. Hence, unlike when a customer calls a firm's helpline, fills out a contact form or sends an e-mail, on SNSs it is sometimes less clear who is the intended audience of a post [11, 39]. How do consumers respond when they receive a response from a firm they did not directly address? In our example, will the consumer be positively surprised by Verizon's intervention or feel that the unsolicited response is intrusive? And how does this affect the probability that he will switch to Verizon? Interestingly, the role of privacy concerns—a concept that has attracted much attention from scholars and practitioners in the digital marketing era—has to date remained unexplored in the context of online customer service. We propose that privacy concerns may play a crucial role in explaining the inconsistency in consumer responses to firms' online interventions. Therefore, the research questions of this study are: (1) What is the role of privacy concerns in consumer responses to firms' interventions with online consumer messages? (2) To what extent does the role of privacy depend on the proactivity of an intervention and the valence of the consumer message? and (3) How do consumers weigh privacy concerns against the benefits derived from an intervention?

We draw on several theories to build our hypotheses about the role of privacy and the impact of privacy concerns on firms' customer service intervention effectiveness. First, we use privacy regulation theory [5, 6] to hypothesize how unsolicited interventions on SNSs may lead to violation of the boundaries that consumers maintain to prevent an excess of social contact. Subsequently, we draw on social exchange theory [36] and privacy calculus literature to theorize how customer satisfaction can be modeled through the joint effects of privacy concerns and perceived usefulness associated with an intervention. Hence, we argue that the net effect of privacy concerns on intervention effectiveness is determined not only by the perceived loss of privacy but also by the benefits a customer derives from an intervention in return (e.g., the mitigation of negative emotions following a service failure). We first conducted a pilot study to investigate the extent to which firms intervene with different types of consumer messages on a specific SNS. Next, we used an experimental design to test our hypotheses about when firms' interventions with consumer messages on SNSs may lead to feelings of privacy infringement. Subsequently, we scrutinize the underlying mechanism through which these privacy concerns, together with the perceived usefulness of the intervention, affect customer satisfaction using a second experimental study.

With this work we aim to make several contributions. Prior work has yielded mixed results with regard to the extent to which online customer service interventions contribute to positive outcomes for firms [45, 74]. First, by investigating the role of privacy concerns in relation to online customer

service interventions that vary in proactivity, we deepen our understanding of the unique aspects of online conversations between firms and customers on SNSs, which can help organizations in designing optimal online customer service strategies and avoiding consumer backlash. Second, this study aims to contribute to a better understanding of the impact of privacy concerns on consumer behavior. Prior work has linked privacy concerns to negative outcomes for firms [8, 10, 31, 44, 72, 75, 85], but also shows that privacy concerns often fail to predict consumer behavior [1, 42]. We show that consumer responses can be modeled through the separate effects of perceived usefulness and feelings of privacy infringement associated with a customer service intervention. Most prior work using such a privacy calculus approach focuses on willingness to disclose personal information as dependent variable as a product of the trade-off between perceived privacy risks and derived benefits [21, 47, 54]. By looking at customer satisfaction with firms' interventions on SNSs and using actual perceived privacy infringement rather than perceived risks as the cost factor, we demonstrate that the applicability of privacy calculus theory is broader than currently assumed. Finally, we aim to contribute to customer service literature. While the vast majority of research on customer service has focused on customer complaints, a substantial proportion of consumer messages on SNSs is positive [12, 73]. By investigating the impact of customer service interventions on satisfaction for both negative and positive messages, this research is one of the first to address the effectiveness of corporate interventions with positive customer feedback [27, 48, 63].

## 2.2 THEORETICAL FRAMEWORK

Social network sites (SNSs) are defined as networked communication platforms in which participants (1) have uniquely identifiable profiles that consist of user-supplied content, content provided by other users, and/or system-provided data; (2) can publicly articulate connections that can be viewed and traversed by others; and (3) can consume, produce, and/or interact with streams of user-generated content provided by their connections on the site [26]. Customer service encompasses all activities that are undertaken with the aim of taking care of the customer's needs by providing and delivering professional, helpful, high-quality service and assistance before, during, and after the customer's requirements are met [82]. Firms provide online customer service when they engage in online interactions with consumers by actively searching the web to address consumer feedback [74]. The potential contribution of engaging in online customer service via SNSs to organizational goals is threefold [76]. First and foremost, it helps firms to signal relevant customer issues and address these issues with the goal of enhancing customer satisfaction. Second, providing online customer service can serve as a public relations tool, as firms' interventions with consumer messages can be observed by a broad audience beyond the consumer that posted the initial message. Third, the insights that derive from monitoring online sentiments about a firm can be used as input to improve products and services. However, online customer service practices may not always enhance customer satisfaction. In the following section we outline how firms' proactive customer service interventions on SNSs may lead to feelings of privacy infringement, and we discuss how these feelings of privacy infringement may affect customer satisfaction.

### *Privacy Regulation on Social Network Sites*

Following Peltier, Milne, and Phelps [63], we define consumer privacy as a consumer's control over information disclosure and unwanted intrusions into his/her environment. A large body of research confirms that privacy is an important issue in today's digital marketing landscape. Surveys consistently show that the majority of consumers is moderately to highly concerned about their privacy online [1, 13, 28, 49, 65, 78, 80]. Most research on privacy in SNS contexts focuses on the loss of information privacy or control over personal information being shared with others [42]. However, privacy threats may also come from excessive social contact [39]. Privacy regulation theory [5, 6] posits that people strive to achieve an optimal level of social interaction. When the desired level of social interactions is greater than the actual level, one will feel lonely or isolated; if the actual level of social interactions exceeds the desired level, a lack of privacy is perceived. People regulate their level of social interaction by using a variety of boundary mechanisms, including personal space, territory, verbal behavior, and

non-verbal behavior. Although Altman's [5, 6] initial boundary mechanisms were specific to the physical environment, later work has applied privacy regulation theory to the context of SNSs. Wisniewski, Lipford, and Wilson [79] identified five types of interpersonal boundaries people seek to manage within SNSs: relationship boundaries (who is let into one's social network and what are appropriate interpersonal interactions given the type of relationship), network boundaries (access others have to one's network connections), territorial boundaries (what content is available through interactional spaces), disclosure boundaries (what personal information is disclosed within one's network), and interactional boundaries (enabling or disabling potential interactions with other users).

As most SNSs have a (semi)public infrastructure, regulating interpersonal boundaries on SNSs can be challenging. Privacy issues specifically occur when content that is meant for one social sphere becomes visible to another [11, 39]. On SNSs, users interact with multiple publics on an unlimited variety of topics. A substantial part of the content users share on SNSs is brand-related. On Twitter, for example, more than 20 percent of all posts by consumers mention a brand name [38]. Some of these brand-related posts directly address a firm, but consumers also use SNSs to talk about brands with the objective of engaging with fellow consumers within their network [34, 38]. In the latter case, a customer service intervention is unsolicited. Recent research has shown that on consumer-generated social media platforms, an intervention by a firm is indeed unexpected and leads to feelings of surprise [63]. Although in this study the authors find that consumers are positively surprised when firms respond to positive consumer messages, other studies point in the opposite direction. Previous work suggests that the presence of brands on SNSs is often perceived by consumers as intrusive and out of place [29]. Another study found that a corporate intervention with negative word of mouth had a negative effect on brand evaluations when the word of mouth was posted on a consumer-generated platform and when a response was not explicitly asked for [74].

Privacy regulation theory suggests that unsolicited interventions with consumer messages on SNSs that do not directly address a firm may lead to feelings of privacy infringement in two ways. First, users might initially be unaware of the actual reach of their action [84]—that is, they do not accurately assess the extent to which their message will also be observed by audiences beyond the primary addressee. Prior work shows that many consumers are often not fully aware of the extent to which their online behavior is tracked [1, 29]. An unsolicited intervention may then emphasize firms' capability of monitoring online conversations, and lead to an infringement of disclosure boundaries and perceived loss of control [71]. Second, unsolicited interventions may be perceived as an intrusion into the consumer's virtual territory and a violation of relationship and interaction boundaries [29]. These violations, in turn, may lead to an emotional reaction, a feeling of privacy violation, and a behavioral mechanism to overcome it [39].

In sum, we propose that customer service interventions with consumer messages on SNSs in which the firm is not the main addressee may lead to perceptions of privacy infringement. We refer to these interventions as "proactive", because they require the firm to reach out and intervene with messages in which the firm is not directly addressed and hence no response is directly solicited. We expect no such effect for interventions that are "reactive", that is, are in response to consumer messages in which a consumer directly addresses a firm. Here, the customer service intervention follows the traditional customer service interaction pattern in which the customer initiates the interaction. In this case, the customer service intervention is solicited and hence unlikely to lead to perceptions of privacy infringement.

*H1:* Intervention proactivity moderates the relation between customer service interventions and feelings of privacy violation: the effect of interventions on feelings of privacy violation is stronger when the intervention is proactive.

### *The Privacy Calculus*

The privacy calculus concept holds that a consumer's decision to disclose personal information is based on a cost–benefit analysis in which both the merits and potential negative consequences of disclosure are considered [10, 85]. The notion that expected risks and benefits affect people's behavior originally comes from economic theory and has later been adopted by social sciences [23]. Social exchange theory [38] is based on the assumption that humans seek rewards and avoid punishments. It posits that people's evaluations of interpersonal interactions depend on a comprehensive assessment of the associated costs and benefits. The outcome of this analysis determines the overall worth attributed to a social exchange and drives relationship decisions. As long as the net outcome of the cost–benefit analysis is positive, that is, perceived benefits are larger than perceived costs, people are likely to accept the costs accompanying the benefits. Previous work on the privacy calculus applies this notion of a subjective assessment of costs and benefits as an antecedent of human decision making to a privacy context, such that consumers will disclose personal information if they perceive that the overall benefits of disclosure are greater than the assessed risks associated with disclosure [1, 23, 36]. The large majority of this work has looked at individuals' willingness to disclose personal information [1, 21, 47, 54]. Privacy costs are typically operationalized as either the privacy risks associated with the release of personal information or the privacy concerns about practices related to the collection and use of personal information [21, 47, 54]. However, privacy concerns can affect many forms of consumer behavior beyond self-disclosure in ways that are disadvantageous to firms. For example, privacy

concerns have been linked to reluctance to do business with a firm [9, 24, 53, 67], negative attitudes toward personalized offerings [8, 44], rejection of e-mail solicitations [75], and reduced online advertising effectiveness [31, 72]. Privacy concerns are negatively related to brand trust, which reduces consumers' willingness to engage with a firm [9, 24, 58, 68]. Moreover, if firms' practices evoke perceptions of privacy infringement, consumers may respond in reactance and act in ways opposite to the firms' intentions [25]. Based on these findings, we expect that feelings of privacy infringement elicited by customer service interventions are likely to be perceived as a cost and thus have a negative effect on the overall worth of the interaction. Hence, we expect that customer satisfaction will decrease as perceptions of privacy infringement increase.

*H2:* There is a negative relation between perceptions of privacy infringement induced by customer service interventions and customer satisfaction.

In line with the idea of a privacy calculus, privacy concerns do not always lead to withdrawal from social interactions with firms. Consumers often willingly share their personal information in return for the convenience of using web services or discounts [42], even if they report being (very) concerned about their privacy [1, 69]. It is clear that customers can also derive benefits from customer service interventions. Numerous studies have shown that delivering adequate customer service enhances customer relationships and has a positive effect on different aspects of a firm's performance [37, 41, 59, 61, 83]. A large body of research has addressed the effectiveness of customer service interventions by looking at the outcomes customers receive from the customer service encounter with the firm, mostly in the context of complaint handling [57]. In these studies, a clear link has been identified between customer outcomes and subsequent satisfaction. These outcomes may be either monetary or affect-based. Research by Tax, Brown, and Chandrashekaran [70] demonstrates that customers evaluate complaint incidents in terms of the material outcomes they receive, but also in terms of the procedures used to arrive at the outcomes and the nature of the interpersonal treatment during the process. Matilla and Wirtz [51] found that an apology is often a more effective way to restore customer satisfaction and subsequent repatronage intentions than compensation following a service failure [50, 52].We use the concept of perceived usefulness to operationalize the perceived benefits of a customer intervention, that is, the extent to which a customer feels he/she is better off because of the firm's intervention [19]. Perceived usefulness is a vital element of the technology acceptance model, which models how users come to accept and use new technologies [20]. Moreover, perceived usefulness is an important component in the construction of perceived value of a service to the customer. More specifically, the perceived value stems from (or is determined by) the tangible and intangible benefits

that a customer derives from a service relative to the associated costs [60]. Perceived usefulness has also been used in previous work on customer service interactions to operationalize the degree to which a contact episode fulfills the customer's perceived needs and desires [30]. In line with previous work and the idea of usefulness of an intervention as a benefit consumers derive from an adequate customer service intervention, we expect that customer satisfaction will increase with the perceived useful- ness of the firm's handling of customer voice. Following prior work that has linked customer satisfaction following customer service encounters to willingness to use a service again [18, 51, 66], we furthermore expect that the increase in customer satisfaction should in turn lead to higher repurchase intentions.

*H3:* There is a positive relation between the perceived usefulness of customer service interventions and customer satisfaction.

*H4:* There is a positive relation between satisfaction and repurchase intentions.

### *Message valence*

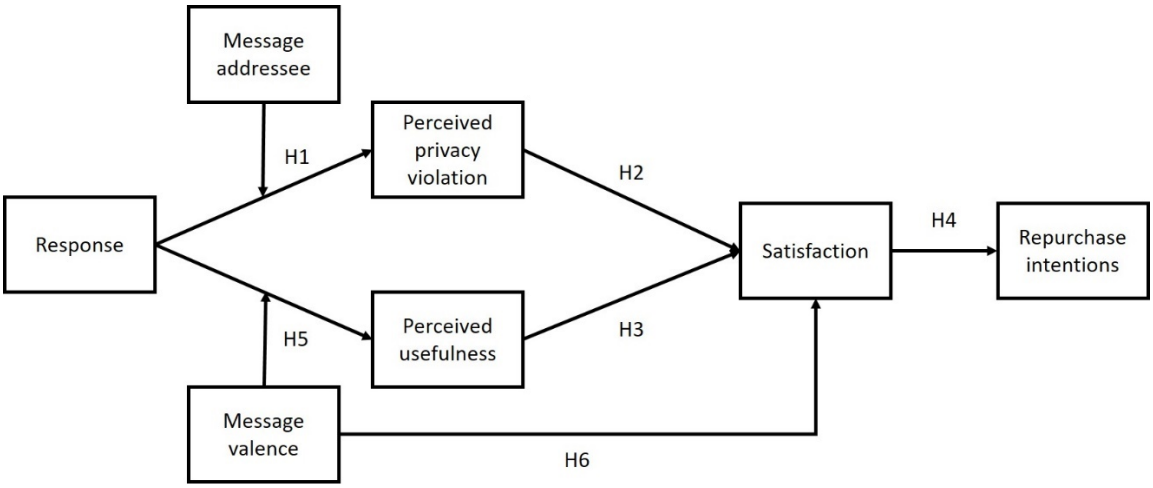
The extent to which a customer has a positive or a negative experience with a firm directly impacts customer satisfaction. Similarly, the valence of customer messages on SNSs is also directly related to the experience with a firm: consumers may post negative messages after unsatisfactory experiences and sometimes post positive messages following a satisfactory experience [7]. Hence, regardless of how the firm handles customer messages on SNSs, message valence is likely to be positively associated with satisfaction. More interestingly, however, customer satisfaction may also be affected by differences in perceived usefulness following an intervention with a positive versus a negative customer message. That is, interventions with negative messages may be perceived as more useful than interventions with positive messages. The probability that a customer voices his/her opinion follows a U-shaped distribution with the probability of voice increasing as satisfaction moves toward either extreme [7]. That is, customers complain when they are very dissatisfied rather than a little dissatisfied and compliment a firm when they are very satisfied rather than somewhat satisfied. This may affect perceptions of usefulness in two ways. First, consumers who already hold a very positive opinion are more likely to move down rather than up the satisfaction scale, whereas consumers who hold a very negative opinion are more likely to move up rather than down, due to a regression to the mean effect [14, 56]. Second, expectation confirmation theory posits that satisfaction is influenced by disconfirmation of original expectations [60]. In the context of customer service interventions on SNSs, this effect may be mediated by perceived usefulness. An appropriate customer service intervention

with a complaint positively disconfirms the initial negative experience, and as such mitigates the negative affect associated with the experience preceding the complaint [51]. Prior work has demonstrated that effectively handling service failures may increase satisfaction to levels that even exceed satisfaction when a service failure is absent [50]. Matilla and Wirtz [51] found that an apology can be an effective way of restoring customer satisfaction and subsequent repatronage intentions because it takes away the negative emotions following a service failure. In contrast, an adequate intervention with a customer compliment is congruent with the preceding positive experience. A customer that is already satisfied will likely derive little additional usefulness from the intervention, given that there are no negative emotions that might be mitigated. Thus, we expect that customer service interventions with negative consumer messages on SNSs will lead to higher perceived usefulness than interventions with positive messages. Our conceptual model is presented in Figure 1.

*H5:* Message valence moderates the relation between customer service interventions and perceived usefulness: interventions with negative messages lead to higher perceived usefulness than interventions with positive messages.

*H6:* Satisfaction is higher following a positive message than following a negative message.

**FIGURE 1: CONCEPTUAL MODEL**



## 2.3 PILOT STUDY

In our focal studies we investigate the effect of firm interventions with both positive and negative consumer messages that either do or do not directly address a firm. To assess the external validity of these studies, given the fact that to the best of our knowledge to date no official statistics are available on the incidence of proactive versus reactive interventions on SNSs, we conducted a pilot study to assess the extent to which firms intervene with the different categories of consumer messages on a specific SNS. We collected and analyzed a total of 25,839 brand-related Twitter messages from, to, and about the 15 leading firms in three major business-to-consumer industries in the Netherlands (health insurance, telecommunications, and retailing) using specialized web scraping software [64]. The results confirm the dual function of Twitter as a platform that is used by consumers to engage in conversations both with and about firms. Of all consumer messages, 50.7 percent contained the "@" symbol in combination with the firm name to directly address a firm, whereas 49.3 percent mentioned but did not directly address a firm, that is, did not use the "@" symbol in combination with the firm name. Message valence was assessed by four independent judges. To assess interrater reliability, we asked the judges to code overlapping sets of a total of 173 units and calculated Krippendorf's alpha ($\alpha$ = 0.82). The majority of consumer messages, 77.2 percent, was neutrally valenced, whereas 15.7 percent was negative and 7.1 percent was positive. Although substantial differences existed across firms and industries, all firms to some degree intervened with all types of posts. Overall, the observed response rates were 63.2 percent for direct negative messages and 21.5 percent for indirect negative messages, versus 57.2 percent for direct positive messages and 19.5 percent for indirect positive messages. These results confirm the use of Twitter as a customer service platform where firms both proactively and reactively intervene with different types of consumer messages.

## 2.4 STUDY 1

### *Method*

In the first experiment, we test how customer service interventions affect feelings of privacy infringement and how these feelings in turn affect customer satisfaction. We used a 2 (message addressee: firm vs. other user) × 2 (message valence: positive vs. negative) × 2 (response: present vs. absent) between-subjects experiment to test H1, H2, H4, and H6. As part of a larger study on online firm-related preferences and behavior, we exposed 1,260 members of a consumer panel (50.8 percent female, $M_{age}$ = 43.8, *SD* = 13.6, all social media users) to a short description of a service experience with an online retailer and asked them to imagine themselves as being the customer in that situation. We

then exposed them to a consumer message on Twitter about that situation and asked them to imagine having posted this message following the described service experience. We used a fictional retailer to prevent prior experiences with the retailer from biasing responses. We manipulated message addressee (firm vs. other) by either including or not including the "@" symbol in adjunction with the firm name in the message, as is common on Twitter. Although all participants were active SNS users, we explicitly mentioned in the instructions that the "@" symbol is used on Twitter to directly address specific other users to ensure that participants understood the meaning of the manipulations. In the positive consumer message conditions, the consumer message displayed satisfaction with an unexpectedly fast delivery, whereas in the negative conditions the message displayed dissatisfaction with an unexpectedly late delivery. Finally, we manipulated whether the firm responded to the message. In the intervention conditions, the firm either apologized for the inconvenience caused by the late delivery or thanked the consumer for the compliment about the fast delivery. These specific stimuli were used because most people are likely to have experienced similar service encounters and hence can relate to the scenario.

Note that the content of the intervention itself did not vary between consumer messages addressing the firm and messages not directly addressing the firm. However, whether or not the firm is the primary addressee of the consumer message determines whether the intervention is reactive or proactive. Hence, when we mention a reactive intervention, we are referring to the specific scenario in which the firm intervenes with a consumer message that directly addresses the firm by using the "@" symbol in adjunction with the firm name. Similarly, a proactive intervention refers to a scenario in which the firm intervenes with a consumer message that does not directly address the firm (not using the "@" symbol). Stimuli for all treatments are displayed in Appendix A.

A pretest among 51 first-year undergraduate business students showed that people perceived the two scenarios as realistic and as oppositely valenced, yet equally deviant from a neutral service experience ($M_{positive}$ = 4.44 on a fivepoint scale with 3 representing a neutral service experience, $SD$ = 0.47; $M_{negative}$ = 1.56, $SD$ = 0.51; $F(1,49) = 425.85$, $p < 0.001$). The interventions with the positive and negative consumer messages were perceived as (equally) appropriate ($M$ = 3.56 on a five-point scale with 1 representing a very inappropriate and 5 a very appropriate response, $SD$ = 0.93; p = 0.40). After having exposed participants to the experimental stimuli, we measured service encounter satisfaction (2 seven-point items) [40], perceived privacy violation (10 five-point items) [81], and two manipulation checks. In addition, we asked respondents about their involvement with the task and their general level of trust in others (3 five-point items), which we used as a marker variable to test for the presence of common method variance. We selected self-reported involvement with the task and general trust level

as marker variable because they are theoretically unrelated to customer satisfaction or perceptions of privacy infringement.

### *Results*

Because our data collection relied on a single source, we first tested whether common method variance was a relevant concern in our data. As a first step, we conducted an exploratory factor analysis which revealed that a single factor solution did not account for the majority of the total variance [32]. Next, we conducted a confirmatory factor analysis (CFA) marker technique analysis [81]. Results showed that the model in which the indicators of our substantive variables were modelled to load equally on the marker variable fit the data significantly worse than the model in which the method factor loadings were forced to zero ($\Delta\chi^2 = 32.23$, $\Delta df = 1$, $p < .01$). These results suggest that the likelihood of common method bias in the data is low. Finally, we compared the average variance extracted of both perceived privacy violation and service encounter satisfaction with the bivariate correlation between the two constructs [27]. The results showed that the average variance extracted of both constructs (.69 and .91 respectively) was greater than the variance shared between perceived privacy violation and service encounter satisfaction ($r^2 = .18$), which provides evidence of sufficient discriminant validity.

We subsequently tested whether our manipulations had been successful. Results revealed that reported message valence for the positive message was indeed significantly higher ($M = 6.20$, $SD = 1.01$) than for the negative message ($M = 2.43$, $SD = 1.23$) ($F(1,1259) = 3525.36$, $p < .001$). In addition, the extent to which participants perceived the message to be directed at the firm was significantly higher for the direct message ($M = 4.40$, $SD = 1.85$) than for the indirect message ($M = 3.16$, $SD = 1.91$) ($F(1,1259) = 138.28$, $p < .001$). These results suggest that our manipulations were successful.

To test our hypotheses, we first conducted a factorial analysis of variance – an extension of one-way analysis of variance that examines the impact of multiple categorical independent variables on a single dependent variable. We modelled message addressee, message valence, intervention, and their interaction terms as independent variables and customer satisfaction as dependent variable. The results revealed a significant main effect of message valence on satisfaction ($F(1,1252) = 278.33$, $p < .001$). In line with H6, satisfaction was higher following a positive experience than following a negative experience ($M_{positive} = 4.91$, $SD = 1.49$; $M_{negative} = 3.57$, $SD = 1.48$). In addition, there was a main effect of intervention on satisfaction ($F(1,1252) = 6.35$, $p < .05$) which was qualified by a significant interaction of message addressee and intervention ($F(1,1252) = 3.94$, $p < .05$). A closer examination of the interaction effect showed that the intervention was associated with higher satisfaction than no intervention when the consumer message was directed at the firm (reactive intervention) ($M_{@_response} =$

4.40, *SD* = 1.63; $M_{@_noresponse}$ = 4.00, *SD* = 1.56; *F*(1,1259) = 2.85, *p* < .01), but not when the message did not address the firm directly (proactive intervention) ($M_{no@_response}$ = 4.14, *SD* = 1.56; $M_{no@_noresponse}$ = 4.34, *SD* = 1.72; *F*(1,1259) = 1.52, *p* = .12). Examination of the other contrast showed that satisfaction following an intervention was significantly higher when it was in response to the consumer message that directly addressed the firm (reactive intervention) as compared to in response to the consumer message in which the firm was not directly addressed (proactive intervention) ($M_{@_response}$ = 4.40, *SD* = 1.63; $M_{no@_response}$ = 4.14, *SD* = 1.56; *F*(1,1259) = 2.23, *p* < .05). However, satisfaction following no intervention was significantly lower when the message did directly address the firm ($M_{@_noresponse}$ = 4.00, *SD* = 1.56; $M_{no@_noresponse}$ = 4.34, *SD* = 1.72; *F*(1,1259) = 2.20, *p* < .05) (see figure 2). Finally, the interaction effect of message valence and intervention was also significant (*F*(1,1252) = 26.36, *p* < .05). An intervention increased satisfaction when the consumer message was negative ($M_{negative_response}$ = 3.79, *SD* = 1.50; $M_{negative_noresponse}$ = 3.14, *SD* = 1.32; *F*(1,1259) = 5.22, *p* < .001), but not when the message was positive ($M_{positive_response}$ = 4.81, *SD* = 1.53; $M_{positive_noresponse}$ = 5.02, *SD* = 1.40; *F*(1,1259) = 1.79, *p* = .07) (see figure 3). The remaining effects in the model were not significant.

**FIGURE 2: INTERACTION RESPONSE AND MESSAGE ADDRESSEE**

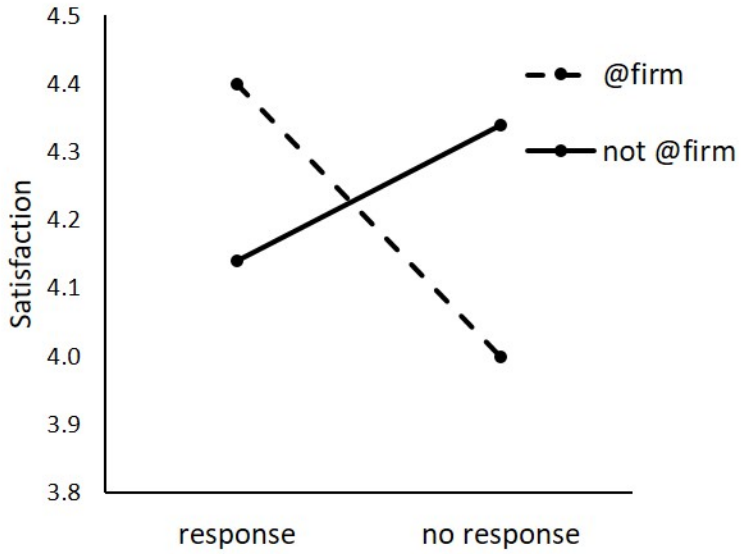
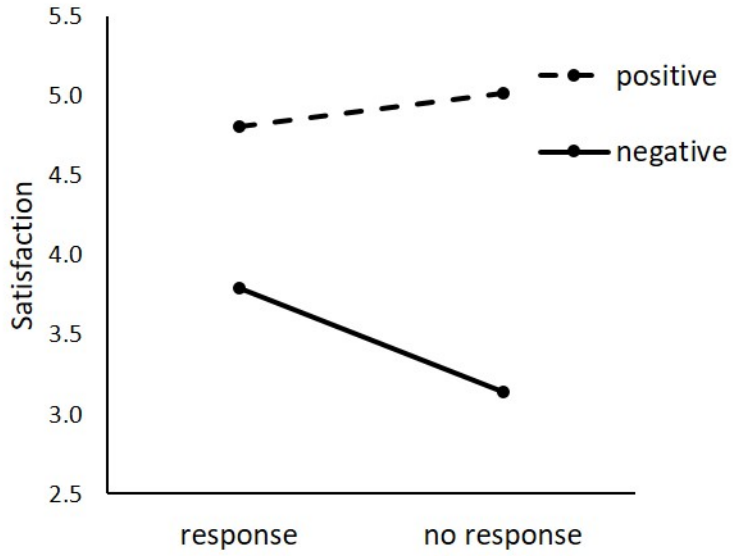


**FIGURE 3: INTERACTION RESPONSE AND VALENCE**




Next, we conducted a mediation analysis using a bootstrap approach [33] to test whether the difference in satisfaction following proactive and reactive customer service interventions is mediated by feelings of privacy violation caused by the intervention, as proposed in our conceptual model. To test whether the mediating effect of privacy on the relation between intervention proactivity and customer satisfaction was different for positive and negative consumer messages, message valence was included as a moderator. The bootstrapping test (n iterations = 10,000) showed that the indirect effect of intervention proactivity on consumer sharing through perceived privacy violation was significant, with a 95% confidence interval excluding zero (0.05, 0.54). In line with H1, results showed that the customer service intervention led to significantly higher feelings of privacy infringement when it was proactive as compared to when it was reactive (unstandardized $B$ = 0.91, $p$ < .05). Feelings of privacy violation in turn negatively affected customer satisfaction ($B$ = -0.69, $p$ < .05), which supports H2. The direct effect of intervention proactivity on satisfaction after the path through privacy violation was accounted for was no longer significant ($B$ = -0.14, NS). The interaction term of intervention proactivity and message valence did not significantly affect feelings of privacy violation, which indicates that the difference between proactive and reactive interventions in the extent to which they evoke feelings of privacy infringement is the same for positive and negative messages. Because the first analysis did yield a significant interaction effect of message valence and intervention on customer satisfaction, these results suggest that there is an additional (unobserved) factor that drives satisfaction following a customer service intervention (or the lack thereof) on a SNS.

## 2.5 STUDY 2

### *Method*

In the second study we again used a 2 (message addressee: firm vs. other user) x 2 (message valence: positive vs. negative) x 2 (response: present vs. absent) between subjects experimental design to investigate the role of perceived usefulness of an intervention in addition to the impact of privacy concerns, to gain a deeper understanding of how benefits and costs of an intervention together affect customer satisfaction, and, in turn, repurchase intentions. We exposed 459 different members of the consumer panel (53.8% female, $M_{age}$ = 42.2 *SD* = 12.6; all social media users) to the same stimuli as in study 1. We again manipulated message addressee ("@" in combination with firm name present vs. absent), message valence, and whether or not the firm responded to the consumer message, and randomly assigned participants to one of the eight conditions (see appendix A). This time, in addition to service encounter satisfaction (three seven-point items) [40], repurchase intentions (three seven-point items) [40] and perceived privacy violation (three five-point items) [4], we also measured perceived usefulness of the firm's handling of the message by measuring to what extent the firm's (lack of) intervention was perceived as useful and having added value, improved the customer's position and situation, increased positive affect and decreased negative affect (six five-point items). Finally, we asked participants to fill out some demographic questions and a question about their general internet usage level. We used internet usage as a marker variable to test for the presence of common method variance, since it is theoretically unrelated to our substantive constructs. We estimated a structural equation model to test the hypotheses presented in the conceptual model. We adopted a structural equation modeling approach because it allows the opportunity to simultaneously analyze the dependencies of all constructs in the conceptual model, and as such test all six hypotheses outlined in our conceptual model (figure 1).

### *Results*

The results show that our model fits the data well: RMSEA = 0.055 (90% CI: 0.047, 0.063), close fit test not significant ($p$ = 0.146), CFI = 0.962, TLI = 0.955, and SRMR = 0.063. Because the error terms of two of our perceived usefulness items were highly correlated, we lifted the restriction of uncorrelated disturbances for these two specific items [15].

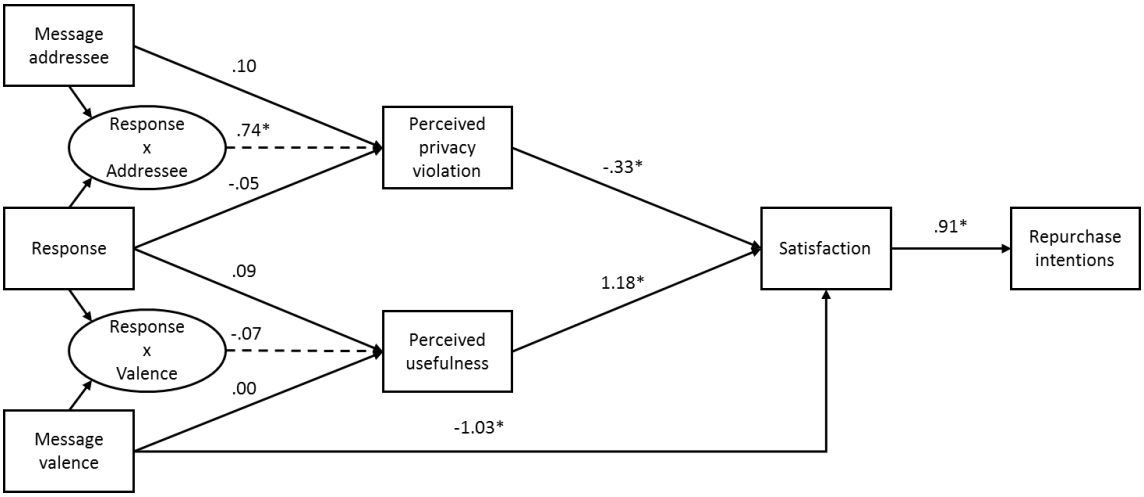
To test for common method variance, we estimated a series of additional models [81]. Results showed that the model in which the indicators of our substantive variables were modelled to load on the marker variable did not fit the data significantly better than the model in which the method factor

loadings were forced to zero ($\Delta\chi^2$ = 1.69, $\Delta df$ = 1, NS). These results suggest that the likelihood of common method bias in the data is low.

To rule out the possibility that our experimental manipulations have effects not accounted for by our hypotheses, we estimated an alternative model including additional paths from message addressee and its interaction with intervention to perceived usefulness and from message valence and its interaction with intervention to perceived privacy violation. Based on the Bayesian Information Criterion (BIC; low values indicating better fit), the alternative model (+15.86) fitted the data worse than our proposed model.

All indicators in our proposed model had significant factor loadings greater than 0.50 (all $p$ < .001). Parameter estimates for the structural part of the model are presented in figure 4. The results show a significant interaction effect of message addressee and intervention on perceptions of privacy violation. Specifically, in line with H2, the intervention with the consumer message mentioning the firm led to higher feelings of privacy violation than that same response to the message directly addressing the firm (0.74, $p$ < 0.001). The non-significant path from message addressee to privacy violation shows that, unsurprisingly, when the firm did not respond, feelings of privacy violation did not differ between messages addressing and mentioning the firm. The non-significant path from intervention to privacy violation shows that when the consumer message directly addressed the firm, the intervention did not evoke higher feelings of privacy violation as compared to no response. Thus, an intervention only led to higher feelings of privacy violation when the message did not directly address the firm. The paths from intervention, message valence, and the interaction term between these two variables to perceived usefulness of the firm's handling of the consumer message were all non-significant. Hence, in contrast with H5, responses to the negative message were not associated with higher perceived usefulness than responses to positive messages. Interestingly, even though the pretest showed that the responses were adequate in the specific service experience used in this study, a response was not perceived as more useful as compared to no response. In line with H3 and H1, higher perceptions of privacy violation led to lower satisfaction (-0.33, $p$ < 0.001), whereas higher perceived usefulness led to higher satisfaction (1.18, $p$ < 0.001). Perceived privacy violation and perceived usefulness were uncorrelated (-0.04, $p$ = 0.52). In line with H6, the valence of the consumer message also had a direct effect on satisfaction (-1.03, $p$ < 0.001); satisfaction was higher when the message was positive. The final path in our model, from satisfaction to repurchase intentions, was also significant and positive (0.91, $p$ < 0.001), which is in line with H4.

**FIGURE 4: RESULTS STUDY 2**




Unstandardized path coefficients ($N$ = 459), * $p$ < 0.001

## 2.6 DISCUSSION

Firms increasingly use SNS as customer service platforms on which they respond to relevant messages posted by consumers. As the results of our pilot study show, these interventions can be either reactive or proactive in nature, depending on whether a consumer directly addresses the firm or not. In general, research has shown that adequate customer service interventions lead to favorable outcomes in terms of customer satisfaction and future patronage intentions. At the same time, firms' attempts to engage with customers online sometimes evoke feelings of privacy infringement that lead to consumer backlash. In this study, we investigated how feelings of privacy violation affect the effectiveness of customer service interventions on SNSs.

In a set of two studies we tested how interventions with consumer messages affect customer satisfaction, and whether this is contingent upon whether the intervention is proactive or reactive. We proposed that whereas reactive interventions with consumer messages that directly address a firm will enhance satisfaction because a response is solicited, proactive interventions may be perceived as unsolicited and as such lead to perceptions of privacy infringement, which in turn may lead to lower customer satisfaction. In line with previous work, results revealed that reactive interventions with consumer messages that directly address a firm can indeed enhance customer satisfaction. However, the results also revealed that when the consumer message did not directly address the firm, the same intervention had a detrimental effect on customer satisfaction. In both studies, this differential effect of proactive versus reactive interventions could be explained by the level of privacy infringement

elicited by the intervention. That is, a customer service intervention led to substantial feelings of privacy infringement only when it was proactive, i.e. in response to a consumer message in which the firm was mentioned but not directly addressed, which in turn negatively affected customer satisfaction. This finding is in line with prior work which has established a link between privacy concerns and consumer responses [3, 31, 55, 72]. In the first study, we also found that an intervention only increased satisfaction when the consumer message was negative. In the case of a positive consumer message, customer satisfaction unsurprisingly was higher than following a description of negative experience, but an intervention did not further increase satisfaction. In the second study we tested whether this finding could be explained by a difference in perceived usefulness of an intervention with a positive versus a negative message. We did not find evidence for such a contingency effect. However, findings of study 2 did show that customer satisfaction is affected by the intervention's perceived usefulness: the greater the benefits a customer derives from a customer service intervention, the greater the satisfaction with the service experience. Hence, in line with the literature on the privacy calculus, customers' responses to privacy violations were a product of both the benefits derived from the customer service intervention and the costs in terms of loss of privacy.

These findings contribute to several areas of research and practice. First and foremost, our findings contribute to a better understanding of the effectiveness of customer service interventions in general and in the context of SNSs specifically. Extant research has demonstrated the effectiveness of customer service interventions in enhancing customer satisfaction and building customer relationships [88]. The current study, however, shows that this positive effect of customer service is not without boundaries. Drawing on previous work on online consumer privacy, we identify that proactive customer service interventions can lead to feelings of privacy violation that in turn have a detrimental effect on customer satisfaction. To the best of our knowledge, the current study is the first to investigate the role of privacy concerns in a customer service context. As such, our findings emphasize the unique character of social media as a customer service platform. Our findings demonstrate that for customer service conversations on SNSs that follow the 'traditional' pattern in which a customer starts a conversation and a firm responds in the best possible way, customer service interventions are effective in enhancing customer satisfaction. More proactive interventions, however, to some extent seem to be perceived as an infringement of privacy. Although we do not directly test why such interventions are perceived as privacy intrusive, it could be that they demonstrate the consumer's lack of control over who has access to his/her personal information [30]. These findings support previous work that demonstrates the ineffectiveness of unsolicited interventions under specific circumstances [74].

Second, our findings contribute to a better understanding of the impact of privacy concerns on consumer behavior. Previous work has linked privacy concerns to negative outcomes for firms [8,

10, 31, 44, 72, 75, 85]. At the same time, privacy concerns often fail to predict consumer behavior [1, 36]. Our findings find support for a calculus account of this privacy paradox, in which consumer responses can be modelled through the separate effects of perceived usefulness and feelings of privacy infringement associated with a customer service intervention. That is, privacy concerns induced by an intervention may negatively impact customer satisfaction while the benefits of the intervention simultaneously enhance satisfaction. By testing this calculus account in the context of customer service interventions, we extend the applicability of privacy calculus theory. Most prior work using a privacy calculus approach focuses on willingness to disclose personal information as a product of the tradeoff between perceived privacy risks and derived benefits [21, 47, 54]. Our findings demonstrate that privacy calculus theory can also be used to predict customer satisfaction with firms' interventions on SNSs, using actual perceived privacy infringement rather than perceived risks as the cost factor.

Third, our findings contribute to the growing literature on the effectiveness of firms' interventions with positive consumer messages [43, 48, 63]. Although a substantial proportion of consumer messages on social network sites is positive [12, 73], most research on customer service has focused explicitly on customer complaints. Based on the idea that, other than for negative messages, appropriate interventions with positive consumer messages are congruent with current evaluations of the service experience and that the high satisfaction following an unsatisfactory experience allows for little room for upward evaluation adjustments, we proposed that the effectiveness of customer interventions with positive messages would be smaller than interventions with negative messages. We do not find conclusive evidence for this theorizing, however this study does contribute to a more profound body of empirical work on the impact of corporate interventions with positive customer feedback and positive word of mouth.

Our findings have important practical implications for marketers. Despite the growing popularity of SNSs as customer service channels, empirical results that offer guidance in effectively handling customer complaints and compliments within the complex environment of social media are limited. Encouraged by research demonstrating the positive effects of customer service in building customer relationships, many firms make use of the growing opportunities to automatically track and intervene with relevant consumer messages on SNSs. Our results confirm that for consumer messages that directly address the firm, this intervention strategy can indeed be effective as long as the customer derives some utility from the intervention. However, our results also show that firms may want to exercise some restraint in intervening with consumer messages in which the firm or one of its brands is merely mentioned. As stated by Fournier and Avery, proactive interventions with consumer conversations may evoke perceptions of firms as "uninvited crashers of the web 2.0 party" [29]. Thus, proactive interventions that are aimed at enhancing customer satisfaction may lead to feelings of

privacy infringement and have a detrimental effect on satisfaction and repatronage intentions instead. This does not mean that firms should never proactively reach out to customers and intervene with relevant consumer messages on SNSs. Our findings show that customer satisfaction following an intervention is a product of the feelings of privacy infringement but also of the benefits derived from the intervention. Hence, an intervention that induces privacy concerns may still enhance customer satisfaction if the benefits derived from the intervention outweigh the costs in terms of loss of privacy. Indeed, previous research has shown that factors such as the presence of privacy policy statements, industry and government regulation, and personally relevant benefits can persuade consumers to disclose personal information by increasing perceived benefits or reducing perceived risks associated with disclosure [1, 77]. Although the current work focuses mostly on the detrimental effects of feelings of privacy infringement on customer satisfaction, investigating how customer service providers and community managers could enhance the perceived usefulness of interventions while simultaneously preventing privacy concerns provides an interesting venue for future research.

Finally, several limitations of our study call for further research. First, our results provide mixed evidence with regards to the effectiveness of interventions with positive versus negative messages. In contrast with our expectations, the observed difference in intervention effectiveness between positive and negative messages in study 1 did not seem to be driven by a difference in perceived usefulness of an intervention with a positive versus a negative message. This finding may be due to the fact that, on average, the interventions used in study 2 did not induce high levels of perceived usefulness, although pretests confirmed that the interventions were seen as appropriate in the context of the presented scenarios. However, on the basis of our findings it cannot be ruled out that the interaction effect of valence and intervention on customer satisfaction operates through an unobserved variable. Moreover, the firm's response was adapted to be an appropriate intervention based on the valence of the consumer message (i.e. an apology in the case of a negative message and an expression of gratitude in the case of a positive message). Although the pretests showed that the interventions were seen as equally appropriate, we cannot rule out that the content of the firm's intervention may have interacted with the valence of the consumer message in the current study. Hence, further research is needed to shed more light on the differential effect of firms' interventions with positive and negative consumer messages on SNSs.

Second, our study employed written scenarios to simulate the experience of customer service interventions on a SNS, and relied on self-reported scales to measure the dependent variables. Moreover, although the stimuli in our studies were selected on the basis of being representative of the main categories of consumer messages and firm interventions observed in the pilot study, the number of stimuli used in our studies are limited and do not adequately reflect the rich variety of consumer

messages on SNSs. In addition, our sample consisted of members of a Dutch consumer panel. The use of opt-in panels is common in experimental research, and we used a quota sampling approach to ensure a representative sample in terms of gender, age, education level, and household composition. However, the use of opt-in consumer panels always implies some degree of uncertainty about the generalizability of results. In sum, further research is needed to assess the generalizability of our findings in real-world situations in order to increase external validity.

Third, although the results of the current work provide initial evidence for the detrimental role of perceptions of privacy violation on customer satisfaction in response to proactive customer service interventions by firms, as well as the role of perceived usefulness of the intervention in mitigating this effect of privacy concerns, we cannot rule out alternative or additional explanations that may drive these effects. Prior work, for example, has identified human conversation voice as a determinant of consumer attitudes towards interventions of firms with online consumer conversations [74]. Future research could aim at determining to what extent alternative or additional explanations may account for the effects of firms' interventions with online consumer messages on SNSs.

Finally, we focused on the immediate effects of customer service interventions on customer satisfaction and repatronage intentions and the role of perceived privacy infringement and perceived usefulness in explaining these effects. However, customer service interventions may also have delayed effects on customer relationships. For example, a customer service intervention that offers little immediate utility for a specific service encounter may still enhance confidence in the firms' capabilities to adequately handle future service requests and as such enhance customer loyalty. Similarly, an intervention that offers immediate benefits but also induces feelings of privacy infringement may enhance customer satisfaction in the context of the current service encounter but lead to reluctance to engage in further interactions with the firm in the future. Further research could look at the long-term effects of these interventions.

## REFERENCES


1. Acquisti, A.; Brandimarte, L.; and Loewenstein, G. Privacy and human behavior in the age of information. *Science*, *347*, 6221 (2015), 509–514.
2. Acquisti, A., and Gross, R. Imagined communities: Awareness, information sharing, and privacy on the Facebook. In Golle, P. and Danezis, G. (Eds.), *Proceedings of 6th Workshop on Privacy Enhancing Technologies*. Cambridge, UK: Robinson College, pp. 36-58, 2006.
3. Acquisti, A., and Spiekermann, S. Do interruptions pay off? Effects of interruptive ads on consumers' willingness to pay. *Journal of Interactive Marketing*, *25*, 4 (2011), 226-240.
4. Ahmad, A., and Mykytyn, P. Perceived privacy breach – the construct, the scale, and its antecedents. In *Proceedings of the Eighteenth Americas Conference on Information Systems (AMCIS)*, Seattle, 2012.
5. Altman, I. (1975). *The Environment and Social Behavior*. Monterey, CA: Brooks/Cole.
6. Altman, I. (1976). Privacy: a conceptual analysis. *Environment and Behavior*, *8*, 7-29.
7. Anderson, E. W. Customer satisfaction and word of mouth. *Journal of Service Research*, *1*, 1 (1998), 5-17.
8. Andrade, E. B.; Kaltcheva, V.; and Weitz, B. Self-disclosure on the web: The impact of privacy policy, reward, and company reputation. *Advances in Consumer Research*, *29*, 1 (2002), 350-353.
9. Andrews, D., and Preece, J. M. T. A conceptual framework for demographic groups resistant to on-line community interaction. *International Journal of Electronic Commerce*, *6*, 3 (2002), 9-24.
10. Awad, N., and Krishnan, M. The personalization privacy paradox: An empirical evaluation of information transparency and the willingness to be profiled online for personalization. *MIS Quarterly*, *30*, 1 (2006), 13–28.
11. Binder, J.; Howes, A.; and Sutcliffe, A. The problem of conflicting social spheres: effects of network structure on experienced tension in social network sites. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, Boston, pp. 965-974, 2009.
12. Bryant, E. M., and Marmo, J. The rules of Facebook friendship: A two-stage examination of interaction rules in close, casual, and acquaintance friendships. *Journal of Social and Personal Relationships*, *29*, 8 (2012), 1013–1035.
13. Buchanan, T., and Paine, C. Development of measures of online privacy concern and protection for use on the internet. *Journal of the American Society for Information Science and Technology*, *58*, 2 (2006), 157–165.
14. Cao, Y.; Gruca, T. S.; and Klemz, B. R. Internet pricing, price satisfaction, and customer satisfaction. *International Journal of Electronic Commerce*, *8*, 2 (2003), 31-50.
15. Cole, D. A.; Ciesla, J. A.; and Steiger, J. H. The insidious effects of failing to include design-driven correlated residuals in latent-variable covariance structure analysis. *Psychological Methods*, *12*, 4 (2007), 381-398.
16. Conversocial. The definitive guide to social customer service, 2014. http://www.conversocial.com (accessed on March 16, 2017).
17. Crepeau, N. Customer stalking – When is your Twitter response too fast? 2014. http://www.convinceandconvert.com/social-media-strategy/when-is-your-twitter-response-too-fast/ (accessed on March 16, 2017).
18. Cronin, J. J.; Brady, M. K.; and Hult, G. T. M. Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of Retailing*, *76*, 2 (2000), 193-218.
19. Davis, F. D. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, *13*, 3 (1989), 319–340.
20. Davis, F. D.; Bagozzi, R.; and Warshaw, P. User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, *35*, 8 (1989), 982-1003.

21. Debatin, B.; Lovejoy, J. P.; Horn, A. K.; and Hughes, B. N. Facebook and online privacy: Attitudes, behaviors, and unintended consequences. *Journal of Computer-Mediated Communication*, *15*, 1 (2009), 83-108.
22. De Beule, S. Top 10 social customer service stats, 2016. http://www.engagor.com/blog/top-10-social-customer-service-stats-2016/ (accessed on March 16, 2017).
23. Dienlin, T., and Metzger, M. J. An extended privacy calculus model for SNSs: Analyzing self-disclosure and self-withdrawal in a representative U.S. sample. *Journal of Computer-Mediated Communication*, *21*, 5 (2016), 1–16.
24. Dinev, T., and Hart, P. Internet privacy concerns and social awareness as determinants of intention to transact. *International Journal of Electronic Commerce*, *10*, 2 (2005), 7-29.
25. Edwards, S. M.; Li, H.; and Lee, J. H. Forced exposure and psychological reactance: Antecedents and consequences of the perceived intrusiveness of pop-up ads. *Journal of Advertising 31*, 3 (2002), 83–95.
26. Ellison, N. B., and Boyd, D. Sociality through Social Network Sites. In Dutton, W. H. (Ed.), *The Oxford Handbook of Internet Studies*. Oxford: Oxford University Press, pp. 151-172, 2013.
27. Erickson, G. S., and Eckrich, D. W. Consumer affairs responses to unsolicited customer compliments. *Journal of Marketing Management*, *17*, 3-4 (2001), 321-340.
28. European Commission. Special Eurobarometer 431: Data Protection. 2015, http://ec.europa.eu/public_opinion/archives/ebs/ebs_431_en.pdf (accessed on March 16, 2017).
29. Fournier, S., and Avery, J. The uninvited brand. *Business Horizons*, *54*, 3 (2011), 193–207.
30. Froehle, C. M., and Roth, A. V. New measurement scales for evaluating perceptions of the technology-mediated customer service experience. *Journal of Operations Management*, *22*, 1 (2004), 1-21.
31. Goldfarb, A., and Tucker, C. Online display advertising: Targeting and obtrusiveness. *Marketing Science*, *30*, 3 (2011), 389–404.
32. Harman, H. H. *Modern Factor Analysis*. Chicago: University of Chicago Press, 1976.
33. Hayes, A. F., and Preacher, K. J. Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology*, *67*, 3 (2014), 451-470.
34. Hennig-Thurau, T.; Gwinner, K. P.; Walsh, G.; and Gremler, D. D. Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the internet? *Journal of Interactive Marketing*, *18*, 1 (2004), 38–52.
35. Hill, K. Verizon Is Twitter-Stalking Competitors' Angry Customers, 2014. http://www.forbes.com/sites/kashmirhill/2014/07/12/verizon-twitter-beast/ (accessed on Marcg 16, 2017).
36. Homans, G. C. *Social Behavior: Its Elementary Forms*. New York: Harcourt Brace, 1974.
37. Jaiswal, A. K.; Niraj, R.; and Venugopal, P. Context-general and context-specific determinants of online satisfaction and loyalty for commerce and content sites. *Journal of Interactive Marketing*, *24*, 3 (2010), 222–238.
38. Jansen, B., and Zhang, M. Twitter power: Tweets as electronic word of mouth. *Journal of the American Society for Information Science and Technology*, *60*, 11 (2009), 2169–2188.
39. Joinson, A. N.; Houghton, D. J.; Vasalou, A.; and Marder, B. L. Digital crowding: privacy, self-disclosure, and technology. In Trepte, S. and Reinecke, L. (Eds.), *Privacy Online: Perspectives on Privacy and Self-Disclosure in the Social Web*. Heidelberg: Springer Berlin Heidelberg, pp. 33-45, 2012.
40. Jones, M., and Suh, J. Transaction-specific satisfaction and overall satisfaction: an empirical analysis. *Journal of Services Marketing*, *14*, 2 (2000), 147–159.
41. Knox, G. and Van Oest, R. Extending the BG/NBD: A simple model of purchases and complaints. *International Journal of Research in Marketing*, *28*, 1 (2011), 30–37.
42. Kokolakis, S. Privacy attitudes and privacy behaviour: A review of current research on the privacy paradox phenomenon. *Computers & Security*, *64*, 1 (2017), 122–134.

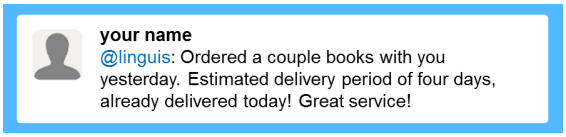
43. Kraft, F. B., and Martin, C. L. Customer compliments as more than complementary feedback. *Journal of Consumer Satisfaction Dissatisfaction and Complaining Behavior*, *14* (2001), 1-13.
44. Lee, C. H., and Cranage, D. A. Personalisation–privacy paradox: The effects of personalisation and privacy assurance on customer responses to travel Web sites. *Tourism Management*, *32*, 5 (2011), 987–994.
45. Lee, Y., and Song, S. An empirical investigation of electronic word-of-mouth: Informational motive and corporate response strategy. *Computers in Human Behavior*, *26*, 5 (2010), 1073-1080.
46. Leggett, K. Trends 2016: The future of customer service. 2016, Forrester Research: https://www.forrester.com/report/Trends+2016+The+Future+Of+Customer+Service/-/E-RES61372 (accessed on March 16, 2017).
47. Luo, X., and Seyedian, M. Contextual marketing and customer-orientation strategy for e-commerce: an empirical analysis. *International Journal of Electronic Commerce*, *8*, 2 (2003), 95-118.
48. Ma, L.; Sun, B.; and Kekre, S. The squeaky wheel gets the grease - An empirical analysis of customer voice and firm intervention on Twitter. *Marketing Science*, *34*, 5 (2015),
49. Madden, M., and Rainie, L. Americans' attitudes about privacy, security and surveillance. Pew Research Center Research Report, 2015. http://www.pewinternet.org/2015/05/20/americans-attitudes-about-privacy-security-and-surveillance/(accessed on March 16, 2017).
50. Magnini, V. P.; Ford, J. B.; Markowski, E. P.; and Honeycutt Jr, E. D. The service recovery paradox: justifiable theory or smoldering myth? *Journal of Services Marketing*, *21*, 3 (2007), 213-225.
51. Mattila, A. S., and Wirtz, J. Consumer complaining to firms: the determinants of channel choice. *Journal of Services Marketing*, *18*, 2 (2004), 147–155.
52. Maxham, J. G. Service recovery's influence on consumer satisfaction, positive word-of-mouth, and purchase intentions. *Journal of business research*, *54*, 1 (2001), 11-24.
53. Metzger, M. J. Privacy, trust, and disclosure: Exploring barriers to electronic commerce. *Journal of Computer-Mediated Communication*, *9*, 4 (2004).
54. Metzger, M. J. Communication privacy management in electronic commerce. *Journal of Computer-Mediated Communication*, *12*, 2 (2007), 335-361.
55. Morimoto, M., and Chang, S. Consumers' attitudes toward unsolicited commercial e-mail and postal direct mail marketing methods: Intrusiveness, perceived loss of control, and irritation. *Journal of Interactive Advertising*, *7*, 1 (2006), 1–11.
56. Ofir, C., and Simonson, I. The effect of stating expectations on customer satisfaction and shopping experience. *Journal of Marketing Research*, *44*, 1 (2007), 164-174.
57. Oliver, R. L. A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, *17*, 11 (1980), 460–69.
58. Orsingher, C.; Valentini, S.; and De Angelis, M. A meta-analysis of satisfaction with complaint handling in services. *Journal of the Academy of Marketing Science*, *38*, 2 (2010), 169-186.
59. Payne, A., and Frow, P. A strategic framework for customer relationship management. *Journal of Marketing*, *69*, 4 (2005), 167–76.
60. Peltier, J.W.; Milne, G.R.; and Phelps, J.E. Information privacy research: A framework for integrating multiple publics, information channels, and responses. *Journal of Interactive Marketing*, *23*, 2 (2009), 191–205.
61. Rust, R. T., and Chung, T. S. Marketing models of service and relationships. *Marketing Science*, *25*, 6 (2006), 560-580.
62. Salomon, M. Why customer service surprises are hazardous online and off. 2014, http://www.forbes.com/sites/micahsolomon/2014/08/22/why-customer-service-surprises-are-hazardous-online-and-off/ (accessed on March 16, 2017).

63. Schamari, J., and Schaefers, T. Leaving the home turf: How brands can use webcare on consumer-generated platforms to increase positive consumer engagement. *Journal of Interactive Marketing*, *30* (2015), 20–33.
64. Scraperwiki. https://scraperwiki.com/ (accessed on March 16, 2017).
65. Sheehan, K., and Hoy, M. Dimensions of privacy concern among online consumers. *Journal of Public Policy & Marketing*, *19*, 1 (2000), 62–73.
66. Spreng, R. A.; Harrell, G. D.; and Mackoy, R. D. Service recovery: impact on satisfaction and intentions. *Journal of Services Marketing*, *9*, 1 (1995), 15-23.
67. Suh, B., and Han, I. The impact of customer trust and perception of security control on the acceptance of electronic commerce. *International Journal of Electronic Commerce*, *7*, 3 (2003), 135-161.
68. Taddei, S., and Contena, B. Privacy, trust and control: Which relationships with online self-disclosure? *Computers in Human Behavior*, *29*, 3 (2013), 821–826.
69. Taddicken, M. The 'privacy paradox' in the social web: The impact of privacy concerns, individual characteristics, and the perceived social relevance on different Forms of self-disclosure. *Journal of Computer-Mediated Communication*, *19*, 2 (2014), 248-273.
70. Tax, S.; Brown, S.; and Chandrashekaran, M. Customer evaluations of service complaint experiences: Implications for relationship marketing. *Journal of Marketing*, *62*, 2 (1998), 60–76.
71. Tsai, J.; Egelman, S.; Cranor, L.; and Acquisti, A. The effect of online privacy information on purchasing behavior: An experimental study. *Information Systems Research*, *22*, 2 (2010), 254–268.
72. Tucker, C. E. Social networks, personalized advertising and privacy controls. *Journal of Marketing Research*, *51*, 5 (2014), 546–562.
73. Utz, S. Social network site use among Dutch students: Effects of time and platform. In Comunello, F. (Ed.), *Networked Sociability and Individualism: Technology for Personal and Professional Relationships*, Hershey: IGI Global, pp. 103–125, 2011.
74. Van Noort, G. and Willemsen, L. Online damage control: The effects of proactive versus reactive webcare interventions in consumer-generated and brand-generated platforms. *Journal of Interactive Marketing*, *26*, 3 (2012), 131-140.
75. White, T.;Zahay, D.; Thorbjørnsen, H.; and Shavitt, S. Getting too personal: Reactance to highly personalized email solicitations. *Marketing Letters*, *19*, 1 (2007), 39–50.
76. Williams, L. J.; Hartman, N.; and Cavazotte, F. Method variance and marker variables: A review and comprehensive CFA marker technique. *Organizational Research Methods*, *13*, 3 (2010), 477–514.
77. Wilson, D., and Valacich, J. Unpacking the privacy paradox: Irrational decision-making within the privacy calculus. In *Proceedings of the 33rd International Conference on Information Systems*, Orlando, 2012.
78. Wirtz, J.; Lwin, M.; and Williams, J. Causes and consequences of consumer online privacy concern. *International Journal of Service Industry Management*, *18*, 4 (2007), 326–348.
79. Wisniewski, P.; Lipford, H.; and Wilson, D. Fighting for my space: Coping mechanisms for SNS boundary regulation. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, Texas, pp. 609-618, 2012.
80. Youn, S. Determinants of online privacy concern and its influence on privacy protection behaviors among young adolescents. *Journal of Consumer Affairs*, *43*, 3 (2009), 389–418.
81. Zhang, N.; Wang, C.; and Xu, Y. Privacy in online social networks. In *Proceedings of the 2011 International Conference on Information Systems*, Shanghai, China, 2011.
82. Zeithaml, V. A.; Parasuraman, A.; and Berry, L. L. *Delivering quality service: Balancing customer perceptions and expectations*. New York: The Free Press, 1990.
83. Zeithaml, V. A.; Leonard, B. L.; and Parasuraman, A. The nature and determinants of customer expectations of service. *Journal of the Academy of Marketing Science*, *21*, 1 (1993), 1-12.

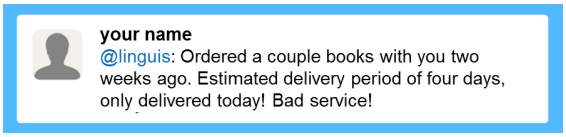
84. Ziegele, M., and Quiring, O. Privacy in social network sites. In Trepte, S., and Reinecke, L. (eds.), *Privacy Online: Perspectives on Privacy and Self-disclosure in the Social Web*, Heidelberg: Springer Verlag, 2011, pp. 175-189.
85. Zimmer, J. C.; Arsal, R.; Al-Marzouq, M.; Moore, D.; and Grover, V. Knowing your customers: Using a reciprocal relationship to enhance voluntary information disclosure. *Decision Support Systems*, *48*, 2 (2010), 395–406.

# APPENDIX A

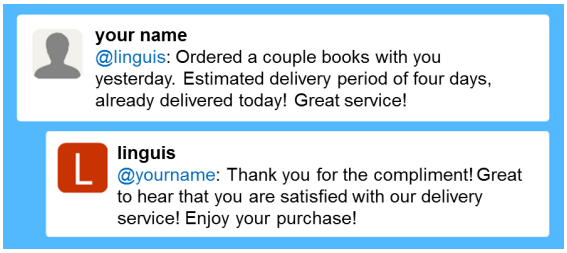
@firm, positive, no response



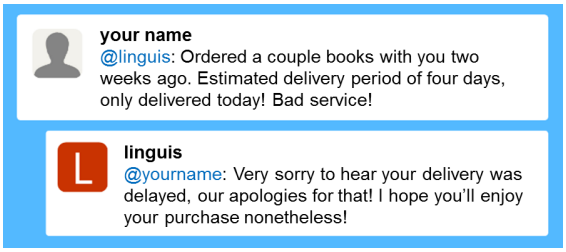

@firm, negative, no response



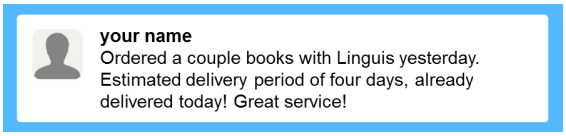

@firm, positive, response



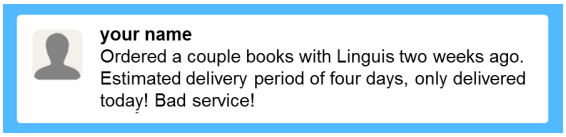

@firm, negative, response




Not @firm, positive, no response

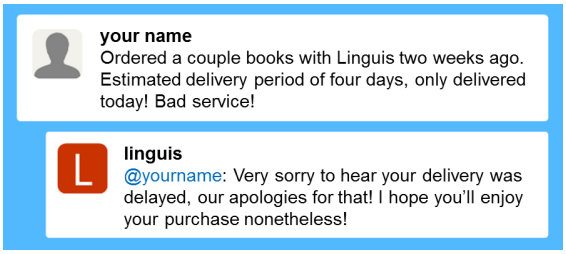



Not @firm, negative, no response




Not @firm, positive, response

Not @firm, negative, response



## APPENDIX B

**TABLE 1: SCALES STUDY 1**

**Perceived privacy violation** (ρ = .96, AVE = .69)

Linguis is intruding my personal territory.
Linguis is violating my personal right to determine who I want to interact with.
I feel Linguis is imposing itself upon me.
Linguis knows more about me than I would like them to.
Linguis is collecting too much of my personal information.
Linguis is violating my right to have a private space that others cannot enter without my permission.
Linguis is entering my personal space.
Linguis is unsolicitedly trying to initiate a conversation with me.
I feel the extent to which Linguis is using my personal information is inappropriate.
Linguis is violating my right to determine what happens with my personal information.

**Service encounter satisfaction** (ρ = .95, AVE = .91)

Please evaluate the described experience with Linguis?

Dissatisfied – Satisfied
Displeased – Pleased

**TABLE 2: MEASUREMENT MODEL STUDY 2**

| | Standardized factor loading | Error Variance |
|---|---|---|
| **Perceived privacy violation** (ρ = .95, AVE = .87) | | |
| Linguis is violating my privacy | .934 | .128 |
| Linguis is imposing itself on me | .930 | .135 |
| Linguis is abusing my personal information | .939 | .118 |
| **Service encounter satisfaction** (ρ = .96, AVE = .89) | | |
| Please evaluate the described experience with Linguis? | | |
| Dissatisfied – Satisfied | .932 | .131 |
| Displeased – Pleased | .970 | .059 |
| Unfavorable – Favorable | .921 | .152 |
| **Perceived usefulness** (ρ = .83, AVE = .51) | | |
| Communicating with Linguis was useful | .586 | .657 |
| Communicating with Linguis had added value | .642 | .588 |
| After communicating with Linguis I have more positive feelings | .553 | .694 |
| After communicating with Linguis I have less negative feelings | .877 | .230 |
| Communicating with Linguis has improved my situation | .838 | .297 |
| **Repurchase intentions** (ρ = .97, AVE = .92) | | |
| If you wanted to order books again, would you again order at Linguis? | | |
| Unlikely – Likely | .945 | .107 |
| Improbable – Probable | .976 | .047 |
| Impossible – Possible | .961 | .076 |

**TABLE 3: CORRELATION MATRIX STUDY 2**

| | Perceived privacy violation | Perceived usefulness | Service encounter satisfaction | Repurchase intentions |
|---|---|---|---|---|
| Perceived privacy violation | 1.00 | | | |
| Perceived usefulness | 0.01 | 1.00 | | |
| Service encounter satisfaction | -0.23* | 0.49* | 1.00 | |
| Repurchase intentions | -0.19* | 0.41* | 0.82* | 1.00 |

* $p < .0001$

# Chapter 3:

## Caring about your privacy today and ignoring it tomorrow: How construal level fit drives the privacy paradox

Authors: Joris Demmers, Alfred Zerres, Willemijn M. van Dolen

Earlier versions of this work were presented at the 46th European Marketing Academy Conference 2016, Leuven, Belgium, and the 44th Association for Consumer Research Conference 2017, San Diego, CA, US.

## ABSTRACT

Consumers' privacy attitudes are often poor predictors of their actual behavior. The current research proposes and tests the idea that consumers' privacy preferences are driven by construal level congruency: the fit between a consumer's mindset and the specific psychological distances of positive and negative consequences of disclosure. In a set of five studies, we find that different cognitive procedures in attitudinal and behavioral privacy preference contexts influence the mental salience of benefits and costs of disclosure, which drives privacy preferences. Specifically, attitudinal contexts are associated with a more abstract, higher-level mindset than behavioral contexts, which in turn increases the salience of psychologically distant consequences compared to behavioral contexts. As typical disclosure decision situations often have psychologically close benefits and distant costs, construal level congruency leads to higher salience of costs and thus high privacy preferences in attitudinal contexts, but higher salience of benefits and thus low privacy preferences in behavioral contexts. As such, these findings suggest a novel comprehensive yet parsimonious explanatory framework for the privacy paradox.

## 3.1 INTRODUCTION

Attitudinal preferences with regards to privacy are often poor predictors of behavior (see Kokolakis, 2015, for an overview). People often disclose considerable amounts of sensitive information about themselves or others despite being (very) concerned about their privacy (Athey, Catalini, & Tucker, 2017; Gross & Acquisti, 2005). This discrepancy between privacy concerns and privacy-related behavior has become known as "the privacy paradox" (Norberg, Horne, & Horne, 2007); a term that is typically used in situations in which people are willing to trade off considerable privacy concerns against relatively small incentives such as a small monetary discount, the convenience of logging in with a social media account or a minor product tasting. Interestingly, in other situations consumers go through considerable lengths and forego substantial benefits to protect their privacy (Acquisti, Brandimarte, & Loewenstein, 2015; John, Acquisti, & Loewenstein, 2011). In the current work, we propose and test a novel explanation for this apparent flexibility and inconsistency in consumers' privacy preferences.

Prior work has identified several factors that contribute to the discrepancy between attitudinal and behavioral privacy preferences, including that consumers may often be unaware that their behavior is being tracked and as a result do not adequately protect their privacy (Hoy & Milne, 2010), benefits of disclosure outweighing the loss of privacy (Culnan & Armstrong, 1999), and several cognitive biases such as optimism bias, affect bias, and hyperbolic discounting that distort people's perception of privacy risks (Kokolakis, 2017). To date, however, overarching theoretical frameworks that provide a comprehensive explanation of the flexibility of privacy preferences are lacking, and it is not well understood why the privacy paradox is observed in some contexts but not in others (Baruh, Secinti, & Cemalcilar, 2017). As a result, several scholars have called for additional research on underlying mechanisms (Kokolakis, 2017; Martin & Murphy, 2017; Peltier, Milne, & Phelps, 2009). In addition, the Marketing Science Institute has also identified understanding consumers' privacy behavior as a top research priority, and calls for research on "how consumers trade off privacy concerns versus the benefits of personalization, sharing data versus convenience, customization versus intrusion, and annoyance versus effectiveness" (Marketing Science Institute, 2016). With the current work, we introduce a novel theoretical perspective to the discussion on the flexibility of privacy preferences and disclosure behavior, which also contributes to resolving the privacy paradox. Our account is embedded in a construal level theory framework (cf. Liberman, Trope, & Wakslak, 2007) and builds on privacy calculus theory (Culnan & Armstrong, 1999; Laufer & Wolfe, 1977), which assumes that privacy preferences are formed through an evaluation of perceived benefits and costs of disclosing information. Specifically, we suggest that this calculus is affected by the salience of benefits and costs in a given situation: consequences that are more salient in one's mental representation when forming privacy preferences have a higher likelihood of being included in the calculus, and thus have a stronger influence

on the decision. Construal level theory provides a powerful framework to explain when and why particular pieces of information are mentally salient dependent on a) characteristics of the information (i.e., its psychological distance) and b) characteristics of the situation triggering either a concrete or more abstract mindset. Our core argument posits that the salience of a specific consequence (benefit or cost) of self-disclosure in a privacy sensitive situation is dependent on "construal level congruency": the fit between one's current mindset (abstract vs. concrete) and the psychological distance (e.g., temporal or hypothetical) of the consequence.

Our attempt to apply this general argument to explain the privacy paradox rests on two additional considerations. First, based on the work by Gollwitzer (1990), we argue that situations in which people state their attitudes towards privacy disclosures (i.e., *attitudinal* contexts) systematically evoke more abstract mindsets as compared to situations in which they make the actual decision to either or not disclose private information (i.e., *behavioral* contexts). The second relevant consideration looks at the configuration of costs and benefits of disclosure in privacy sensitive situations. Consequences of disclosure can for instance be temporally close (i.e., the consequence has immediate effect) or temporally distant (i.e., the consequence materializes at a later moment in time) and hypothetically close (i.e., the consequence happens with great certainty) or hypothetically distant (i.e., it is uncertain whether the consequence will ever materialize). Although privacy disclosure situations can have any configuration of psychologically close and/or distant benefits and close and/or distant costs, many contexts in which consumers have to decide whether they will disclose their information are characterized by relatively proximal benefits and distant costs (Acquisti et al., 2015; Acquisti & Grossklags, 2004; Kokolakis, 2017; Trepte & Reinecke, 2011; Son & Kim, 2008; Wilson & Valacich, 2012). This systematical configuration of proximal benefits and distal costs may be an important factor underlying many instances of the privacy paradox: in situations where benefits of disclosure are psychologically close and costs are distant, our construal level congruency argument predicts that distant costs have a higher fit with an abstract mindset and thus become more salient in attitudinal contexts, as compared to proximal benefits which have low fit with the abstract mindset triggered by attitudinal contexts. This in turn results in increased preferences for privacy in attitudinal contexts. In contrast, in behavioral contexts with the same configuration of benefits and costs, the concrete mindset associated with the behavioral contexts has high fit with the proximal benefits but low fit with distant costs, making benefits more salient than costs. Importantly, in one of our studies we also find evidence for an opposite pattern when we reverse the respective psychological distance configuration of benefits and costs. We further elaborate on the elements of our theoretical account in the theory section of this paper.

With this paper we aim to make important contributions to the privacy literature and practice. First, we answer the call to advance understanding of how consumers trade off privacy concerns with the benefits of privacy disclosure (Marketing Science Institute, 2016) by extending privacy calculus theory (Culnan & Armstrong, 1999; Laufer & Wolfe, 1977) with our construal level congruency account. In doing so, we introduce a contingent model that uses characteristics of the disclosure situation to predict the salience of privacy disclosure consequences for consumers, and in turn their consideration in the privacy calculus when forming privacy preferences. Specifically, dependent on the configuration of the disclosure consequences (psychological distance of costs and benefits) consumers are more inclined to disclose private information in behavioral as compared to attitudinal contexts or show an opposite pattern (i.e. exhibit even *more* stringent privacy preferences in behavioral than in attitudinal contexts). As such, we also contribute to the privacy paradox literature by offering a novel explanation for the observed deviance between attitudinal and behavioral privacy preferences. Our construal level congruency explanation differs from other mechanisms used to explain the privacy paradox such as positivity bias, affect bias, and hyperbolic discounting, by focusing on the mental salience of consequences in specific situations, rather than on the distortion of perceived privacy risks and/or benefits (Acquisti & Grossklags, 2004; Kokolakis, 2017). That is, we argue that in addition to these cognitive biases, privacy preferences can also simply be explained by what consequences come to mind in a specific situation. As such, our construal level congruency account offers a novel and parsimonious explanation for the discrepancy between privacy concerns and behavior. At the same time, whereas explanations such as positivity and affect bias and hyperbolic discounting explain why people assign more value to benefits of disclosure as compared to privacy risks in their decision making processes, our proposed construal level congruency account is also comprehensive in the sense that it not only explains why people tend to structurally demonstrate relatively low privacy preferences in behavioral situations, but also why they consistently report high privacy preferences in attitudinal situations. Finally, our results offer valuable insights for practice. Access to customer data has been identified as one of the most important sources of competitive advantage (Morey, Forbath, & Schoop, 2015), but in the wake of the developments in customer data collection practices, consumers have grown more concerned about their online privacy and may become more selective with whom they share their personal data. It is therefore paramount to understand how contextual cues affect consumers' willingness to share their data, both for policy makers or other regulatory bodies aiming to persuade consumers to protect their privacy and for marketers looking to encourage consumers to consent to the collection and use of their data.

In the following section, we explain the theoretical foundations for the proposed mechanism, before presenting a series of five studies that were conducted to empirically test our theory.

## 3.2 CONCEPTUAL FRAMEWORK

### *Privacy calculus theory*

The need for privacy is a universal human trait that exists across cultures and times (Acquisti et al., 2015). Privacy has been defined as "the right to be left alone" (Warren & Brandeis, 1890), "the selective control of access to the self" (Altman, 1975), and "the ability of individuals, groups, or institutions to determine themselves when, how, and to what extent information about them is communicated to others" (Westin, 1967). Central to these conceptualizations of privacy is the desire to keep personal information out of the hands of others, which can be linked back to a basic psychological need for autonomy and respite from social influence (Goodwin, 1991). Privacy calculus theory posits that an individual's preference for either or not disclosing personal information is based on a cost-benefit analysis (Culnan & Armstrong, 1999; Laufer & Wolfe, 1977). If the net outcome of this analysis is positive, i.e. the perceived benefits of disclosing personal information outweigh the perceived costs, the individual will accept the costs accompanying the benefits. That is, consumers will disclose personal information if they perceive that the overall benefits of disclosure are greater than the perceived loss of privacy associated with *any* disclosure of personal information (Dinev & Hart, 2006). For instance, when faced with the option to use our Facebook credentials to create an account with Yelp, we weigh the perceived benefits of doing so (e.g. the convenience of not having to fill out a registration form and remember login details) against the costs (e.g., giving Yelp access to our Facebook data). Similarly, when determining one's preferences with regards to usage-based car insurance programs in which one's driving behavior is tracked in exchange for a potential discount on the insurance premium, any privacy concerns associated with the tracked driving behavior are weighed against the perceived benefit of the potential discount.

The notion that expected risks and benefits affect people's behavior originally comes from economic theory and has later been adopted by social sciences (Dienlin & Metzger, 2016). However, the notion that people sometimes are willing to disclose large amounts of personal information for relatively minor benefits, whereas in other situations they forego substantial benefits in order to protect their privacy (Acquisti et al., 2015) illustrates that an individual's privacy calculus is not necessarily a fully rational mathematical calculation of all benefits and costs. In the following section we explain how construal level theory may determine which consequences of disclosure are included in the privacy calculus cost-benefit analysis and how they are weighed.

### *Construal level congruency*

Construal level theory posits that people's mental representations of objects and events are dependent on the psychological distance of a stimulus. Objects and events that are psychologically close are construed concretely, whereas objects and events that are distant are construed more abstractly (Liberman & Trope, 1998). A large body of research has identified four dimensions of psychological distance (temporal, spatial, social, and hypothetical) that affect people's motivations, preferences, and behavior through their impact on mental representations of the focal object. The link between psychological distance and abstraction results from an association between direct experience and information. When people directly experience an event, they think of it in concrete, low-level terms, making use of the rich and contextualized details that are available as a consequence of the fact that the event is occurring "here and now". When the event is further removed from direct experience, people construe it in a more abstract and schematic manner because a) less detailed information is available (Wakslak, 2007), and b) highly detailed processing is not required, allowing people to process the event in the light of its greater meaning (Trope & Liberman, 2010).

Construal level theory assumes that this association between experience and information is overgeneralized, which means that it influences mental representation even in situations where the amount and reliability of information is constant (Wakslak, 2007) (Bar-Anan, Liberman, & Trope, 2006). For instance, although we *know* that the operating procedure for finding information online includes opening a web browsing page, entering a relevant search query and clicking the "search" button, when we are not currently running a search we are unlikely to think of the event in such terms. Instead, it is likely that we think about the event in more general terms, e.g. as the internet being a rich source of information. Similarly, even if we feel that using social network sites is a useful means in fulfilling the important human need of maintaining social relations, we are unlikely to think of Facebook in such abstract terms when "liking" a funny video. Hence, whether we think of an event in terms of its general, abstract features or its more detailed, contextual, and concrete features depends on the extent to which the event is directly experienced.

The overgeneralization of the association between direct experience and information is caused by the activation of general cognitive procedures or "mindsets" that tune information processing towards a high or low level of abstraction. A mindset caused by one event affects mental accessibility and vividness of information regarding other, either or not related, objects or events (Hansen & Wänke, 2010; Higgins, 2000; Higgins, Idson, Freitas, Spiegel, & Molden, 2003; Lee, Keller, & Sternthal, 2010; Wright et al., 2012). This can be explained by processing fluency: information that is congruent with recipients' mindset is easier to process than incongruent information, making congruent information more salient (Labroo & Lee, 2006; Lee & Aaker, 2004; Lee et al., 2010; White & Dahl, 2011). In other

words, contexts that evoke a low-level, concrete mindset facilitate the processing of low-level, psychologically proximal information while impeding the processing of high-level, psychologically distant information, and vice versa. A large body of literature shows that the effects of mindsets on behavior are quite substantial (e.g. Galinsky, Gruenfeld, & Magee, 2003; Gollwitzer, 1990; Murphy & Dweck, 2016; Nenkov, 2012; Roedder & Kyung, 2016; White, MacDonnell, & Dahl, 2011), and congruency between message cues and mindset has been linked to higher message persuasiveness (Cesario, Grant, & Higgins, 2004; Nenkov, 2012), purchase intentions (Labroo & Lee, 2006), perceptions of truthfulness (Hansen & Wänke, 2010; Wright et al., 2012), and choice probability (Novemsky, Dhar, Schwarz, & Simonson, 2007). Linking this back to the context of privacy preferences, whether or not a specific consequence of disclosure is included in the privacy risk-benefit calculus is determined by its mental availability and the ease with which it comes to mind (Schwarz et al., 1991). Hence, features of a privacy disclosure situation that are congruent with one's mindset are more likely to be included in one's privacy calculus of benefits and costs of disclosure and therefore more influential than incongruent information. For instance, when we hold a concrete mindset, we are likely to think about the immediate discount we get on our purchase in an online store by sharing our email address, whereas the more distant consequence of receiving weekly mailings from the web shop is less salient in our mental representation and therefore less likely to affect our decision making. However, if we hold an abstract mindset while evaluating the same situation, the weekly mailings should be more salient in our mental representation than the immediate discount and, hence, have a stronger effect on our decision making. In further support of the idea that privacy preferences are determined by consequences that are mentally salient, Baek (2014) showed that the dichotomy between privacy concerns and behavioral intention disappeared when both pros and cons of disclosure were explicitly outlined by the researchers.

### *Diverging privacy contexts and configuration of consequences*

The mechanism outlined in the previous section offers a parsimonious but comprehensive explanation for the observation that consumers' ultimate privacy behavior often deviates from their previously stated attitudinal privacy preferences. Prior work by Gollwitzer (1990) has demonstrated that attitudinal and behavioral contexts lead to the activation of different mindsets. Specifically, behavioral contexts, being part of one's direct experience "here and now", tune cognitive operations to a lower level of abstraction, causing individuals to focus on lower level identities such as what specific steps need to be taken to execute the task. In contrast, information processing operates at a higher level of abstraction in attitudinal contexts in which the event is not directly experienced. In such contexts

people tend to focus on general implications of actions and their greater meaning (Freitas, Gollwitzer, & Trope, 2004; Nenkov, 2012; Wan & Agrawal, 2011). Such diverging mindsets are also likely to occur in the context of privacy preferences. Privacy concerns are typically measured using surveys in which consumers are asked about their attitudes towards privacy and their intentions to disclose (e.g. Acquisiti & Gross, 2006; KPMG, 2017; Norberg et al., 2007; Pew Research Center, 2015; Preibusch, 2013; TRUSTe, 2016), which should tune cognitive procedures towards a high level of abstraction. Privacy behavior, on the other hand, is typically operationalized as consumers' actual disclosure in a concrete privacy situation (e.g. Acquisiti & Gross, 2006; John, Acquisti, & Loewenstein, 2011; Norberg et al., 2007; Spiekermann, Grossklags, & Berendt, 2001). In such behavioral contexts, consumers' mindsets will be tuned towards low-level, concrete information processing. As such, moving from an attitudinal to a behavioral privacy disclosure context should cause a shift in mindset. According to our construal level congruency account, this, in turn, should affect the accessibility and salience of the different consequences of disclosing privacy sensitive personal information, depending on their psychological distance.

These differences in the salience of the consequences of disclosing personal information between attitudinal and behavioral disclosure contexts affect privacy preferences – possibly even to the extent of a full reversal – depending on the configuration of the psychological distances of the benefits and costs of disclosure. Disclosure decision situations are characterized by multiple relevant cues regarding the consequences of disclosure, some perceived as benefits, others as costs. In principle, these situations can have all possible combinations of benefits and costs varying in psychological distance. For instance, by signing up for a mailing list one might either get an immediate discount on one's current purchase – representing a psychologically close benefit both in terms of temporal and hypothetical distance – or alternatively a discount on one's next purchase, which would represent a more distant benefit. Similarly, the web shop may immediately share one's personal data with third parties – an immediate loss of privacy – or one may anticipate that this may cause future spam mailings – a more distant cost both temporally and hypothetically. Hence, both benefits and/or costs of disclosure may be more salient in attitudinal versus behavioral contexts, depending on the extent to which their psychological distance is congruent with the consumer's mindset in that situation. Interestingly, however, many of the privacy disclosure situations where the privacy paradox can be observed seem to share a specific configuration of benefits and costs associated with disclosure. Specifically, the respective situations are characterized by a combination of psychologically close perceived benefits versus distant costs of disclosure (Acquisti et al., 2015; Acquisti & Grossklags, 2004; Kokolakis, 2017; Trepte & Reinecke, 2011; Son & Kim, 2008; Wilson & Valacich, 2012). For instance, a consumer making the decision to either or not use his/her Facebook credentials to create an account

with Yelp, will immediately experience a more convenient and streamlined sign-up procedure. In contrast, the potential loss of privacy, behavioral-based price discrimination, intrusive advertising, or data security issues that could result from linking different accounts to each other are less likely to be experienced immediately, or in fact to be experienced at all. Thus, benefits of choosing the high disclosure option – signing up with one's Facebook credentials – are psychologically closer than the costs both in terms of temporal distance (when they occur) and hypothetical distance (the probability of occurring). Applying our construal level congruency argument to this situation, the psychologically close and low-level benefits associated with using one's Facebook credentials fit with consumers' low-level mindset in the behavioral context of going through the registration process, which should result in increased ease of processing and greater mental accessibility of the benefits as compared to the distant and therefore high-level costs. However, in attitudinal contexts where one is asked about his/her preferences with regards to using social login, consumers' abstract mindset should make the distant costs more salient and therefore more influential. In line with this argumentation, industry reports show that over three quarters of internet users use social sign-up systems rather than traditional registration forms (LoginRadius, 2016), despite surveys showing that the majority of US consumers do not trust social network site providers with their personal data and hold negative attitudes towards sharing their personal data with them (Pew Research Center, 2015). Other settings in which the privacy paradox has been empirically demonstrated include behaviors such as revealing social security numbers (Acquisti & Grossklags, 2004), sharing phone numbers with raffle organizers (Acquisti & Grossklags, 2004), posting personal information on social network sites (Norberg et al., 2007), sharing financial information (Huberman, Adar, & Fine, 2005), accepting website cookies (Jensen, Potts, & Jensen, 2005), using Facebook credentials to sign up for websites (Egelman, 2013), and answering sensitive questions posed by chat bots while shopping online (Spiekermann et al., 2001). In these situations, too, consumers willingly traded their perceived long-term privacy risks against direct benefits in concrete, behavioral situations, despite reporting substantial attitudinal privacy concerns. As the above examples illustrate, the combination of a low-level mindset in behavioral privacy disclosure contexts and a specific configuration of benefits and costs can explain why people sometimes willingly disclose large amounts of sensitive personal information in exchange for small benefits despite being genuinely concerned about their privacy. As such, our theoretical account explains dichotomies between attitudinal and behavioral privacy preferences in many settings in which the privacy paradox is observed. At the same time, it may also explain why in other situations people go through great lengths to protect their privacy at the expense of foregoing substantial benefits (Acquisti et al., 2015). If our theoretical account holds, an opposite pattern (compared to the one described above) should occur in situations with a reversed configuration of benefits and costs, i.e., when costs of disclosure are psychologically *close* (instead of distant) and benefits are *distant* (instead of close). In this case, the now *proximal* costs of disclosure fit

better with consumers' concrete mindset in a behavioral situation, while the *distant* benefits fit less. As an illustration of such a situation, consider the example of usage-based insurance (UBI) programs that are offered by a growing number of car insurance companies (LexisNexis, 2016), in which a range of driving behaviors such as mileage, location, speed, and braking are tracked in exchange for a potentially substantial premium discount, depending on one's driving behavior. Actual sign-up rates for UBI programs are around 5%, whereas about 20% of all US car owners are interested in these programs on an attitudinal level (LexisNexis, 2016). It is interesting that sign-up rates for UBI programs are relatively low, given that they provide users with feedback about their driving behavior and provide substantial premium discounts for driving safer without raising rates for unsafe driving, amounting to a potential benefit of hundreds of dollars and safer driving behavior. However, customers will only experience these benefits after an initial period of several months during which their driving behavior is tracked. Hence, in the case of UBI programs the costs of a potential loss of privacy – being the main reason why people refrain from signing up (Derikx, de Reuver, & Kroesen, 2016; Paefgen, Staake, & Thiesse, 2012) – are psychologically closer than the potential but quite substantial benefits of participating.

In summary, we theorize that privacy preferences are primarily driven by the consequences of disclosure that fit with consumers' mindset. Attitudinal contexts trigger a relatively abstract mindset, which in turn makes consumers focus on the psychologically distant, abstract, consequences of disclosure. Behavioral contexts, in contrast, trigger a lower-level, more concrete mindset, under which people more fluently process the psychologically close, more concretely construed consequences of disclosure. Thus, in constructing their privacy preferences, consumers focus on benefits and costs that fit with their general cognitive procedures that are triggered by the context (attitudinal versus behavioral) in terms of psychological distance. Because many important privacy disclosure decision situations seem to be characterized by psychologically close benefits versus distant costs, the mental accessibility of benefits is typically higher in behavioral contexts when consumers hold a low-level mindset, whereas costs of disclosure – e.g. loss of privacy – more easily come to mind in attitudinal contexts. We refer to this mechanism as construal level congruency, as both the psychological distance of disclosure consequences and consumers' mindset are related to the way in which the disclosure decision situation and the consequences of disclosure are mentally construed. This construal level fit between mindset and costs (in attitudinal contexts) or benefits (in behavioral contexts) therefore explains how moving from attitudinal preferences to actual behavior may cause a reversal in privacy preferences, i.e. why people often have high privacy preferences in attitudinal contexts, but show low privacy preferences in behavioral situations.

### *Overview of studies*

We test our construal level congruency account as possible explanation for the flexibility of privacy preferences and the privacy paradox in a set of five studies. We start by substantiating our assumption that many typical disclosure situations where the privacy paradox is observed are characterized by a configuration of psychologically close benefits and distant costs in pilot Study 1, by exposing participants to a number of typical online disclosure decision situations, and testing whether self-reported benefits of disclosure are systematically perceived as temporally and hypothetically closer and are construed more concretely than costs. In Study 2, we test the assumption that consumers' mindsets are characterized by more abstract thinking and high-level construal in attitudinal privacy preference contexts as compared to behavioral situations, by exposing participants to either an attitudinal privacy preference survey or a number of behavioral disclosure decision situations and measuring their subsequent mindsets. In Study 3 we demonstrate our basic effect of mindset on actual disclosure behavior in an online setting: when benefits of disclosure are proximal and costs are distant, people are more likely to disclose personal information when holding a concrete mindset. Study 4 replicates this basic effect and provide process support by demonstrating the mediating role of consequence salience; when benefits of disclosure are proximal and costs are distant, benefits are more salient when holding a concrete mindset whereas costs are more salient under abstract mindset conditions. In Study 5 we provide causal evidence for our construal level congruency account by demonstrating that the effect of mindset on disclosure reverses when the distance structure of consequences is inverted.

## 3.3 PILOT STUDY 1: PSYCHOLOGICAL DISTANCE OF CONSEQUENCES

In Study 1 we test the assumption that, in a number of typical disclosure decision situations that a) people are likely to encounter on a regular basis in their daily lives and b) have been used in research where the privacy paradox has been observed (Baek, 2014; Egelman, 2013; Jensen et al., 2005; Martínez-Pérez, de la Torre-Díez, & López-Coronado, 2015), benefits of disclosure are perceived as psychologically closer than costs of disclosure. We simultaneously test whether benefits of disclosure are construed more concretely than costs, as construal level theory would predict.

### *Method*

We exposed 115 participants (71 females, $M_{age}$ = 27.49) who were recruited online to three descriptions of online disclosure choice situations they are likely to encounter on a regular basis in their daily life. Each situation consisted of a binary choice task, with one option representing a relatively high and the

other a relatively low degree of disclosure. The first situation concerned a "website cookies" decision in which users were asked to either accept (high disclosure option) or reject (low disclosure option) tracking cookies upon entering a website. In the second situation participants were asked to choose between setting up an account for a mobile application by either creating a new user name and password (low disclosure option) or linking a social network site account to the application (high disclosure option). In the third situation participants had to choose between accepting (high disclosure option) or rejecting (low disclosure option) a mobile health application to collect and analyze one's activity levels. We counter-balanced the order in which the three situations were presented. No consequences of either of the choice alternatives were mentioned in the descriptions of the situations to avoid priming effects. After each situation, participants wrote down as many potential consequences (both benefits and costs) of the high disclosure option as they could think of. Next, they were asked to assess the temporal and hypothetical distance (probability) of each self-reported consequence on a 7-point scale (temporal distance: 1 = "immediately", 7 = "in the very far future"; hypothetical distance: 1 = "absolutely certain", 7 = "certainly not") (Mcgrath, 2007). Finally, participants indicated to what extent they regarded each consequence as a benefit or cost of the high disclosure option on a 5-point scale (1 = large benefit, 5 = large cost), and indicated their inclination to choose the high disclosure option. For each consequence, the level of abstractness was rated by two independent judges unaware of the hypotheses of the study on a 5-point scale (1 = "very concrete", 5 = "very abstract") (Stöber, Tepperwien, & Staak, 2000) (interrater reliability: Spearman's $\rho$ = .51, $p$ < .001). Level of abstractness of a consequence was calculated as the mean of the scores by the two independent judges.

### *Results*

On average, participants generated a total of 8.70 consequences (*SD* = 3.06) of the high data-sharing choice alternatives across the three situations, consisting of 3.50 self-reported pros (scores of 4 and 5 on the benefit/cost measure) (*SD* = 2.80), 4.32 cons (scores of 1 and 2) (*SD* = 1.54), and 0.89 consequences (*SD* = 1.01) that were regarded as neither a benefit nor a cost (score of 3). The number or combination of consequences did not differ significantly between situations. To investigate whether participants' generated benefits and costs differed in perceived hypothetical and temporal distance, we estimated two cross-classification multilevel models to take into account that reported consequences are separately nested within participants and situations. For both hypothetical and temporal distance, the final model including random effects for situation and participant significantly better predicted the data than the baseline model with only the fixed effect of pros versus cons (hypothetical distance: $\chi^2(2) = 72.79$, $p < .001$; temporal distance: $\chi^2(2) = 66.15$, $p < .001$). Specifically, the relationship between consequence valence and both types of psychological distance showed significant variance in intercepts

across participants (hypothetical distance: var($u_{0j}$) = .27, $\chi^2(1) = 54.57$, $p < .001$; temporal distance: var($u_{0j}$) = .33, $\chi^2(1) = 27.60$, $p < .001$) but not across situations. Slopes did not vary across participants or situations. In line with our expectations, the models revealed a significant (fixed) effect of consequence valence on psychological distance. In these typical disclosure situations, both hypothetical distance (reversely measured as probability; $b = -.41$, SE = .08, $F(1,845.03) = 24.70$, $p < .001$) and temporal distance ($b = .74$, SE = .11, $F(1,852.20)$ 44.81, $p < .001$) were perceived as larger for cons than for pros.

To test whether benefits and costs differed in construal level, we conducted an additional analysis. In addition to a significant random effect of participant (var($u_{0j}$) = .22, $\chi^2(1) = 4.84$, $p < .001$), the results revealed a significant fixed effect of consequence valence. In line with our theorizing, benefits were construed more concretely than costs ($b = -.18$, SE = .07, $F(1,835.25) = 7.11$, $p < .01$).

Finally, we tested whether inclination to choose the high disclosure option could be predicted by a calculus of benefits and costs. We assigned positive weights to each benefit and negative weights to each cost based on the valence a participant assigned to a specific consequence and calculated, for each participant, the sum of the subsequent scores of all reported consequences in the three situations. Results showed that this calculus score significantly predicted inclination to choose the high data-sharing option in all three situations (accepting cookies: $r(113) = .35$, $p < .01$; social signup: $r(113) = .56$, $p < .01$; sharing usage data: $r(113) = .29$, $p < .01$).

### *Discussion*

The findings of pilot Study 1 show that across a number of typical online disclosure decision situations benefits of disclosure were perceived as more immediate and more probable than costs of disclosure. Hence, benefits were perceived as both temporally and hypothetically closer than costs. In line with construal level theory, the findings also showed that benefits of disclosure were construed more concretely than costs. These findings provide support for the assumption regarding the perceived psychological distance of benefits versus costs in typical disclosure decision situations on which our core argumentation is build. Note that we do not argue that benefits of disclosure are always perceived as psychologically closer than the costs, nor do these results show that benefits objectively precede costs. For example, it may be the case that participants' perceptions were affected by the way in which similar situations are typically framed in real life. However, these results do illustrate that at least in these three typical disclosure decision situations, benefits of disclosure are perceived as closer than costs. Furthermore, the finding that inclination to disclose could be modelled through a calculus of the self-reported benefits and costs supports the idea that privacy preferences are driven by the mental

availability of benefits and costs. That is, privacy preferences were a function of the benefits and costs that were reported by participants, i.e. the consequences that were salient when forming preferences.

## 3.4 STUDY 2: DIVERGING MINDSETS

In study 2 we test the idea that consumers' mindsets are different under attitudinal as compared to behavioral privacy preference contexts. Given that in the behavioral context the disclosure event takes place "here and now", whereas in the attitudinal context the disclosure event is not part of one's direct experience, we expect to observe a more abstract, high-level mindset under attitudinal conditions than under behavioral conditions.

### *Method*

A total of 75 participants (21 females) were recruited online and randomly allocated to one of two conditions, corresponding with either an attitudinal or behavioral privacy preference situation. Participants assigned to the attitudinal condition answered a questionnaire used in previous research on privacy and disclosure preferences and intentions (Pew Research Center, 2015). Participants in the behavior condition were directed to a website and presented with three actual successive disclosure decision tasks (accepting cookies upon entering the website, either or not using social sign-up, and allowing the website host to track the messages sent and received on one's mobile phone in return for a chance to win a smartwatch). Note that the website was carefully designed to hide that these decision tasks were part of the study. Participants were debriefed about this upon completing the study. After having completed either the privacy concern survey or going through the disclosure decision tasks, participants filled out the Behavioral Identification Form (BIF) as a measure of mindset (Vallacher & Wegner, 1989).

### *Results and discussion*

Results showed that participants who filled out the privacy concern questionnaire scored significantly higher on the behavioral identification task than people who were presented with the disclosure decision tasks on the website ($M_{attitudinal}$ = 16.86, $SD$ = 4.21; $M_{behavioral}$ = 14.03, $SD$ = 5.16; $F(1,74) = 6.73$, $p < .05$), demonstrating that participants in the attitudinal condition indeed held more abstract, high-level mindsets than participants in the behavioral condition. In the following studies, we test whether these diverging mindsets may drive the privacy paradox.

## 3.5 STUDY 3: EFFECT OF MINDSET

The purpose of Study 3 is to test whether disclosure behavior is affected by the mindset (abstract vs. concrete) one holds. Thus, whereas mindset was the dependent variable in Study 2, we now manipulate mindset and use it as independent variable. We use three typical disclosure decision tasks similar to those used in pilot Study 1 as our dependent variables, although we replaced one scenario (sharing usage data) with an even more sensitive privacy disclosure decision situation (sharing phone number and allowing messages to be tracked). We theorize that privacy preferences are driven by the consequences of disclosure that fit with one's mindset. In pilot Study 1 we found that benefits of disclosure in a number of typical privacy disclosure situations were perceived as psychologically closer than the associated costs. Hence, we expect that based on their psychological distance, benefits of disclosure in these situations should fit with a concrete, low-level mindset, whereas the respective costs have a better fit with a more abstract, high-level mindset. This in turn leads to the prediction that participants holding a concrete mindset will be more likely to choose the high disclosure alternatives than people holding a more abstract mindset.

### *Method*

One hundred sixty-three undergraduate students (59 males; $M_{age}$ = 26.35) participated in this online study. Participants were randomly assigned to one of three mindset conditions: abstract mindset, concrete mindset, or to a non-factorial control group (no mindset manipulation). To manipulate mindset we followed procedures used in previous research (Freitas et al., 2004; Fujita, Henderson, Eng, Trope, & Liberman, 2006; Trope & Liberman, 2010). All participants were presented with the statement "Maintain good physical health". Participants assigned to the abstract mindset condition were then asked to answer the question why they would maintain good physical health. Their answer to this first question was subsequently displayed on the following screen, and participants were again asked why. For example, if a participant answered the question "Why would I maintain good physical health" by writing "To look attractive", s/he was subsequently presented with the question "To look attractive. Why?". Participants provided four responses in this manner. In the concrete mindset condition, the word "why" was replaced by "how". Prior work has shown that asking why one engages in an action activates an abstract mindset, whereas asking how one engages in an action activates a concrete mindset (Freitas et al., 2004; Vallacher & Wegner, 1989). Participants in the control condition were asked to write down their associations with the statement "Maintain good physical health". The control group was included to get an indication as to whether respondents' responses in the current behavioral context would be similar to responses under an explicitly primed concrete or abstract mindset.

Next, participants were directed to a website with the instruction to browse to a specific page where they could ostensibly complete the second part of the study. Upon entering the website, participants were presented with a sequence of three disclosure decision tasks of increasing privacy sensitivity in which they had to make a choice between a high disclosure and a low disclosure option. The first task consisted of accepting or rejecting tracking cookies. To ensure that participants would actually perceive the stimulus as a choice situation, the notification explicitly stated that it was still possible to use the website if cookies were rejected. For the second task, participants were presented with a registration page and were asked to setup an account, either by filling out a registration form or by linking a social media account to the website (social sign-up). The third and final task consisted of a popup screen on which the participant could fill out their mobile number and check a consent box which stated that they allowed the website to monitor and use all the messages sent and received on their mobile phone. In return for participating in the study, one's mobile number would be entered in a raffle for a smartwatch. Participants' choices on the three choice tasks were recorded. The website was carefully designed to hide that these decision tasks were part of the study, and the stimuli used in this study were specifically designed to resemble online decision tasks people may encounter in real life. Upon completing the third decision task, participants were debriefed about the true nature of the tasks and were informed that only their choices on the decision tasks would be used for this study, and that regardless of their choices we would not collect their social network site data or track their phone messages. Four observations were excluded because due to a technical error IP addresses were identical, making it impossible to link onsite behavior to the mindset manipulations, leaving 159 valid responses. Follow up tests to the main effects were conducted using Bonferroni adjusted alpha levels.

## *Results*

*Tracking cookies*

There was a significant association between respondents' mindset and their inclination to accept cookies ($\chi^2(2) = 12.09$, $p < .01$). In line with our expectations, the results revealed that participants in the abstract mindset manipulation were more likely to reject cookies than participants in the concrete mindset. A total of 72% of participants holding an abstract mindset allowed the website to track their onsite behavior using cookies, versus 93.9% in the concrete mindset condition ($\chi^2(1) = 8.33$, $p < .01$). In the control condition, 92.0% of respondents accepted cookies, which was significantly more than in the abstract mindset condition ($\chi^2(1) = 6.78$, $p < .01$) but not significantly different as compared to the concrete mindset condition ($\chi^2(1) = .13$, $p = .72$).

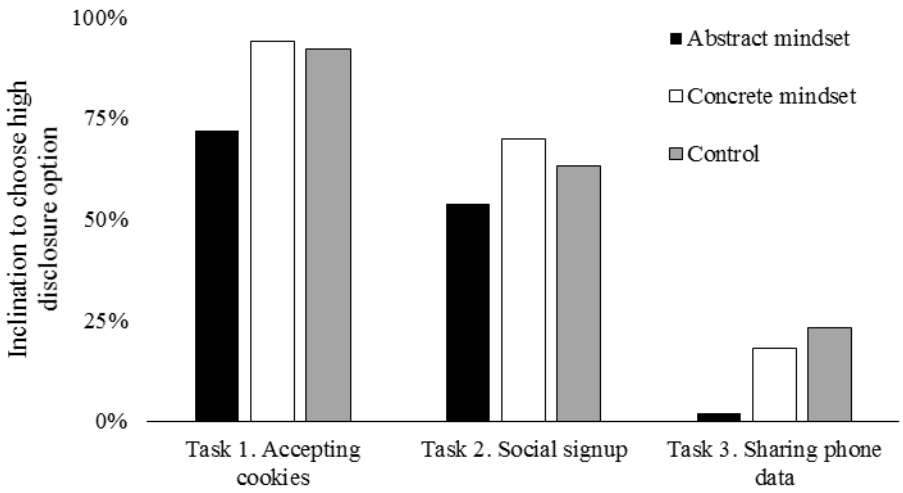
*Social sign-up*

Results for the second task were not significant but did point in the same direction. Firstly, when confronted with the request to setup an account for the website, 43 participants left the website without registering. These overall registration rates did not differ significantly between conditions ($\chi^2(2) = 3.17$, $p = .21$). For the remaining 116 participants that did register, however, there was a marginally significant association between respondents' mindset and their sign-up method ($\chi^2(2) = 4.96$, $p = .08$). The likelihood of choosing the high disclosure social signup option was marginally significantly higher when primed with a concrete mindset as compared to an abstract mindset (70,0% vs. 53.8%, $\chi^2(1) = 4.62$, $p = .03$). For participants in the control group, social signup rate was 63.3%, which was not significantly different than in the concrete ($\chi^2(1) = .33$, $p = .57$) or abstract mindset condition ($\chi^2(1) = 2.20$, $p = .14$).

*Phone tracking*

Finally, there was a significant association between participants' mindset and their inclination to allow their phone messages being tracked ($\chi^2(2) = 9.90$, $p < .01$). Specifically, results showed that the remaining respondents who were primed with a concrete mindset were more willing to give up the privacy of their phone data for an undefined chance to win a smartwatch than respondents holding an abstract mindset (18.0% vs. 2.0%, $\chi^2(1) = 7.11$, $p < .01$). Participation rates in the control condition (23.1%) did not significantly differ from the concrete mindset condition ($\chi^2(1) = .40$, $p = .53$) but was significantly higher than in the abstract mindset condition ($\chi^2(1) = 10.18$, $p < .01$).

**FIGURE 1: INCLINATION TO CHOOSE HIGH DISCLOSURE OPTION BY MINDSET**




### *Discussion*

The results of Study 3 demonstrate that respondents' inclination to choose high disclosure options over low disclosure alternatives was affected by their mindset. In line with expectations, participants were more likely to choose high disclosure options when they were primed with a concrete mindset as compared to a low-level mindset. We found this pattern across three disclosure decision tasks of increasing privacy sensitivity. Moreover, the behavioral response to the privacy disclosure tasks did not differ between participants that were primed with a concrete mindset and participants from the control condition, which provides further support for the findings from Study 2 that behavioral disclosure contexts may evoke a concrete mindset, similar to the ones achieved through the explicit priming used in this study.

Study 2 confirmed our assumption that attitudinal privacy preference contexts are associated with a more abstract mindset than behavioral preference situations. The findings of Study 3 provide support for the idea that these different mindsets influence disclosure behavior. In Study 4, we test the proposed underlying process that this this effect is driven by differences in the mental accessibility of benefits and costs under concrete versus abstract mindset conditions.

## 3.6 STUDY 4: MENTAL ACCESSIBILITY

Study 4 tests whether mindset affects the salience of benefits and costs of disclosure. In addition, we test how these benefits and costs subsequently influence participants' inclination to choose high disclose options. We predict that the accessibility of specific consequences is contingent upon the fit

between a consumer's mindset and the psychological distance of the benefits versus costs. Hence, given that in Study 1 we found that across a number of typical disclosure decision situations benefits of disclosure were perceived as psychologically closer than costs, we expect for such disclosure decision situations benefits will be more salient when holding a concrete mindset whereas costs should be more salient when holding an abstract mindset, which should in turn affect privacy preferences.

## *Method*

One hundred fifty-three individuals (114 females, $M_{age}$ = 34.41) that were recruited online participated in the experiment. First, we manipulated mindset (concrete vs. abstract) using similar procedures as in Study 3. Upon completion of the mindset manipulation, participants were presented with a description of the 'social sign-up' task that was also used in Studies 1, 2, and 3. Similar to procedures used in Study 1, participants were asked to write down all potential consequences of the high disclosure option they could think of. Next, participants indicated to what extent they regarded each consequence as a benefit or a cost of the high disclosure option on a 7-point scale (-3 = "very important benefit"; 3 = "very important cost"). Finally, inclination to choose the high disclosure option was measured on a 5-point scale (1 = "certainly not", 5 = "certain"). As in Study 1, a privacy calculus score was computed for each participant by summing the self-reported valence and weights of the generated consequences (-3 to 3).

## *Results*

We first examined the effect of mindset on inclination to choose the high disclosure option, i.e. to use social sign-up. As expected, participants in the abstract mindset condition reported a significant lower likelihood of using social signup than participants in the concrete mindset condition ($M_{abstract}$ = 2.50, *SD* = 1.50; $M_{concrete}$ = 3.48, *SD* = 1.49; $t(151) = 3.29$, $p < .01$).

Next, to better understand the underlying mechanism of this effect, we conducted a mediation analysis using a bootstrapping procedure (n samples = 5,000), with mindset as the independent variable, inclination to use social signup as dependent variable, and privacy calculus score as the dependent variable. The results showed a significant direct effect of mindset on privacy calculus score ($B$ = 1.24, $t$ = 2.20, $p < .05$), such that an abstract mindset (as compared to a concrete mindset) significantly increased the calculus score (i.e., the perceived costs of disclosure). Higher values of the calculus score were in turn associated with an increased inclination to use social login ($B$ = 0.15, $t$ = 8.01, $p < .01$). The indirect path of mindset on social signup inclination via calculus score was also significant (95% CI [.02, .36]), indicating mediation. When controlling for the indirect effect via calculus score, the direct effect

of mindset on inclination to use social sign-up became non-significant (95% CI [-.17, .34]), indicating full mediation.

### *Discussion*

Findings of Study 4 provide additional support for the effect of mindset on consumers' inclination to choose high disclosure options. In addition, the results of Study 4 provide evidence for the process underlying this relationship: Respondents holding a concrete, low-level mindset imagine and incorporate more benefits and less costs in their privacy calculus than respondents holding an abstract mindset, which in turn predicts their preference for high disclosure options. Thus, the effect of mindset on privacy preferences seems to be driven by the different salience of benefits and costs of disclosure.

So far, we employed a typical configuration of proximal benefits and distal costs of privacy disclosure. To further test the proposed theory of construal level congruency as outlined in our second argument, in the next study we show that the salience of benefits and costs not only depends on the mindset one is in, but also on the psychological distance of the specific consequences. Specifically, we predict that the previously demonstrated relationship between mindset and disclosure consequences reverses when the situation is characterized by proximal (instead of distant) costs and distant (instead of proximal) benefits. In the next study, we thus manipulate both mindset and psychological distance of benefits and costs of disclosure.

## 3.7 STUDY 5: MODERATION

Study 5 tests whether the effect of mindset on disclosure preferences is dependent on the psychological distance of the consequences. We theorized that the mental accessibility of benefits and costs of disclosure depends on the fit between their psychological distance and the consumer's mindset, which in turn drives privacy preferences. In privacy disclosure choice situations where benefits are more proximal than costs, as used in Studies 1, 3, and 4, the psychological distance of the costs fits with the abstract mindset associated with attitudinal contexts, leading to high privacy preferences and low inclination to disclose. Under these conditions, psychological distance of the benefits fits with the concrete mindset associated with behavioral contexts, which in turn leads to a higher inclination to disclose. However, in situations where costs of disclosure are closer than the associated benefits, we should expect to see an opposite pattern. That is, now the costs should more easily come to mind under concrete mindset conditions instead, leading to lower inclination to disclose. Hence, we predict that under concrete mindset conditions, people are more inclined to disclose their personal data when the benefits are close and costs are distant, as compared to when costs are close and benefits are distant.

Subsequently, under abstract mindset conditions, psychologically distant consequences of disclosure should come to mind more easily and have a greater impact on privacy preferences. Thus, when people hold an abstract mindset, inclination to disclose should be larger (smaller) when benefits of disclosure are distant (close) and costs are close (distant).

## *Method*

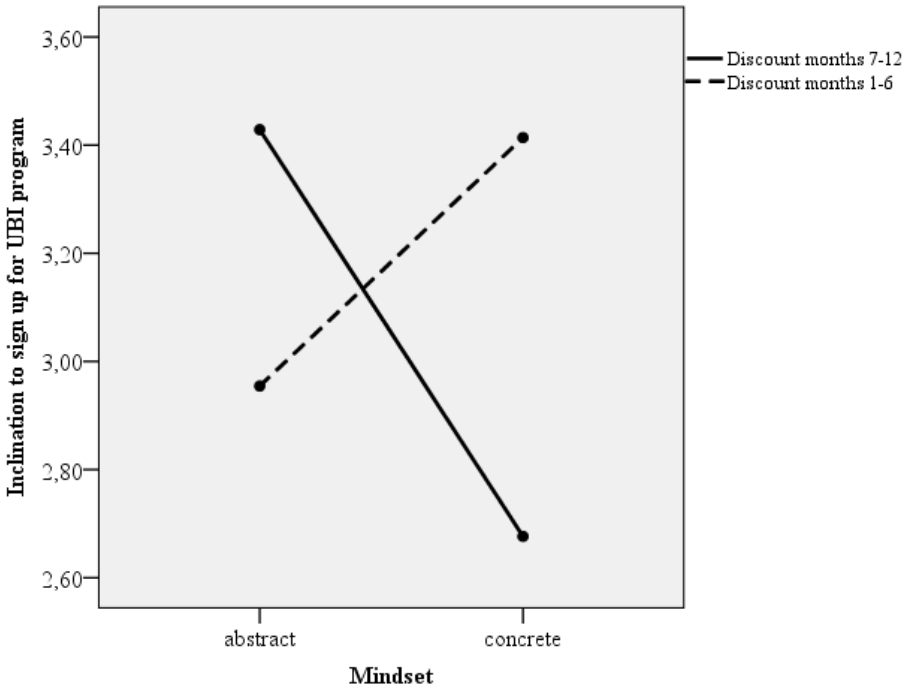
One hundred fifteen undergraduate students (65 females, $M_{age}$ = 25.67) participated in this 2 (mindset: abstract vs. concrete) by 2 (close benefits/distant costs vs. distant benefits/close costs) between subjects experiment. First, mindset was manipulated using a category/exemplar task consisting of 40 words. For each word, respondents in the abstract condition were asked, "_____ is an example of what?" to generate superordinate categories, whereas respondents in the concrete condition were asked, "an example of _____ is what?" to generate subordinate exemplars. This task has been used in previous studies to manipulate mindset (Fujita et al., 2006; Kyung, Menon, & Trope, 2014). Next, respondents were exposed to a description of a usage-based insurance (UBI) program of a fictional car insurance company. Respondents were instructed to imagine having selected this particular insurance provider in a search for a new car insurance. Upon completing the application on the website of the insurance company, they would subsequently come across the option of participating in the UBI program in exchange for a discount on the insurance premium. The UBI program consisted of tracking the driving behavior of participants (mileage, location, speed, braking, cornering, night driving, and distracted driving such as texting and calling) via an application on the participant's smartphone during six months of the one-year contract in exchange for a 20% discount on the insurance premium during the other six months. In the proximal benefits / distant costs condition the discount preceded the tracking, i.e. the discount was received in the first six months of the contract and driving behavior was tracked in the last six months of the contract. In the distant benefits / proximal costs condition, this order was reversed. After reading through the description of the UBI program, participants indicated the likelihood of choosing the high disclosure option, i.e. signup for the UBI program.

## *Results*

Results of a factorial between subject ANOVA showed a significant interaction effect of mindset and distance on inclination to sign up for the UBI program ($F(1,109) = 6.63$, $p < .05$, $\eta^2 = .06$; see figure 2). Simple effect tests showed that participants in the concrete mindset conditions were more inclined to sign up when benefits were immediate ($M_{immediate_benefit} = 3.41$, $SD = .23$; $M_{distant_benefit} = 2.68$, $SD = .21$; $F(1,109) = 5.58$, $p < .05$, $\eta^2 = .05$). Moreover, when costs preceded benefits, inclination to sign up was

higher under abstract mindset conditions ($M_{abstract}$ = 3.43, *SD* = .23; $M_{concrete}$ = 2.68, *SD* = .21; *F*(1,109) = 5.69, $p < .05$, $\eta^2 = .05$). Main effects of mindset or distance were not significant.

**FIGURE 2: INTERACTION MINDSET X DISTANCE ON UBI SIGNUP**




## *Discussion*

Study 5 shows that the psychological distance of benefits and costs moderates the effect of mindset on likelihood of disclosing. Specifically, when benefits were psychologically closer than costs, probability to disclose was higher under concrete mindset conditions. However, when costs were closer than benefits, probability to disclose was higher under abstract mindset conditions. These findings provide support for our theorizing that consumers' inclination to choose high disclosure options over protecting one's privacy is driven by the fit between mindset and psychological distance of benefits of disclosure. The finding that a concrete mindset leads to higher inclination to choose high self-disclosure options, as established in Studies 3 and 4, only holds when the psychological distance of the benefits matches with this concrete mindset. In situations when a consumer's concrete mindset matches with the psychological distance of the costs instead, s/he will be less inclined to choose the high disclosure

option. Moreover, the findings of Study 5 may also explain why consumers seem to assign higher weight to privacy costs under attitudinal contexts. As shown in Study 2, people hold a more abstract mindset in attitudinal privacy preference contexts, which matches with the psychological distance of costs of disclosure in many real-life disclosure decision situations. The results of Study 5 show that inclination to disclose is indeed lower, i.e. inclination to protect privacy is higher, when there is a fit between the psychological distance of costs and one's mindset. This suggests that the privacy paradox (high privacy concerns in attitudinal contexts, low privacy preferences in behavioral situations) may disappear or even reverse when the configuration of costs and benefits of disclosure changes. That is, in situations where the psychological distance of benefits fits with the abstract mindset associated with attitudinal contexts and the distance of costs fits with the concrete mindset under behavioral conditions, people would hold positive attitudes towards disclosure in attitudinal contexts but, as are findings here also suggest, be less likely to disclose because of higher privacy concerns in behavioral contexts.

## 3.8 GENERAL DISCUSSION

Consumers' attitudinal privacy preferences are often poor predictors of actual privacy disclosure behavior. Although in most situations people disclose more than their attitudinal privacy preferences would predict, sometimes people also forego substantial benefits to protect their privacy (Acquisti et al., 2015). Across a series of five studies, we found that when consumers hold a concrete, low-level mindset, the psychologically close consequences of disclosure are more mentally salient and drive privacy preferences. In contrast, when consumers hold an abstract, high-level mindset, psychologically distant consequences come to mind more easily and determine whether a consumer prefers high or low disclosure alternatives.

Taken together, the results provide support for our assertion that the discrepancy between attitudinal privacy preferences and privacy behavior can be explained by construal level congruency; the fit between psychological distance of consequences of disclosure and consumers' mindset. We showed that consumers hold relatively high-level, abstract mindsets in attitudinal privacy preference contexts, whereas they hold more concrete, low-level mindsets in behavioral contexts, which is in line with the idea to which an event is directly experienced determines the way it is mentally processed (Wakslak, 2007). In disclosure situations that are characterized by the common configuration of psychologically close benefits versus distant costs of disclosure, these diverging mindsets cause people to focus on the psychologically close benefits in behavioral privacy preference contexts, but on the psychologically distant, more abstractly construed costs in attitudinal contexts. Thus, the fit between psychological distance and mindset causes people to think about the privacy costs of disclosure in attitudinal contexts but about the benefits in behavioral contexts. We demonstrated that this effect is

contingent upon the interplay of mindset and psychological distance. When a disclosure situation is characterized by a configuration of close costs and distant benefits, as in Study 5, the effect of mindset on inclination to disclose reverses.

By identifying that privacy preferences are driven by construal level congruency of mindset and consequences of disclosure, our findings theoretically contribute to the literature on consumer privacy behavior in general and the privacy paradox specifically. There is ample evidence that consumers' privacy preferences are inconsistent across time and contexts (Acquisti et al., 2015; Kokolakis, 2017). With the current work we introduce construal level theory as an explanatory framework for discrepancies between privacy attitudes and behavior. By looking at the privacy paradox through the lens of construal level theory, we extend current knowledge by presenting an explanation that is both novel, comprehensive, parsimonious, and embedded in a broader theoretical framework. Firstly, our construal level congruency account is novel because although prior studies have looked at the trade-off between immediate versus delayed benefits of disclosure versus privacy decision situations (Acquisti & Grossklags, 2004), none have looked at the role of diverging mindsets in attitudinal and behavioral privacy preference contexts in explaining privacy attitude – behavior inconsistencies. Our results show that mindset is a crucial factor in the privacy preference construction process, supporting prior work which demonstrates the effect of general cognitive procedures on consumer behavior (Galinsky et al., 2003; Murphy & Dweck, 2016; Rucker & Galinsky, 2016) and the impact of congruency between cognitive procedures and event features on preferences (Nenkov, 2012; White & Dahl, 2011).

Secondly, this construal level congruency account is comprehensive because not only is it able to explain why consumers are typically willing to give up their privacy in behavioral contexts, but also why they consistently report high privacy concerns in attitudinal contexts. Assuming the common configuration of close benefits and distant costs, the abstract mindset associated with attitudinal contexts makes the psychologically distant costs particularly salient. Here, our findings diverge from other factors that have been shown to contribute to the privacy paradox. For example, affect bias – underestimating privacy risks because they like the benefits of disclosure – explains why consumers would have low privacy preferences in behavioral contexts, but does not necessarily predict an opposite pattern in attitudinal contexts. The same holds for optimism bias, which posits that people underestimate the probability that negative events will happen to them as compared to others.

Thirdly, our explanation for the privacy paradox is parsimonious, as our findings demonstrate that privacy preferences are driven by the consequences that come to mind in a specific context. As such, our findings support the idea that disclosure behavior is driven by a calculus of privacy costs and disclosure benefits (Culnan & Bies, 2003). Prior work posits that privacy preferences are affected by cognitive biases and heuristics. For example, hyperbolic discounting theory predicts that people

discount future privacy costs associated with disclosure more strongly as the actual decision comes closer (Acquisti & Grossklags, 2005). It is important to note that our construal level congruency account does not deny that such mechanisms contribute to the privacy paradox. Rather, in addition to the biases and heuristics that distort the weight that people assign to benefits and costs of disclosure, our findings suggest that customers' general cognitive procedures also determine simply which consequences come to mind and as such are included in the privacy calculus in the first place. That is, psychologically close consequences are more mentally salient under a concrete, low-level mindset, whereas distant consequences are more salient under abstract, high-level conditions. Interestingly, our findings provide support for the idea that the privacy paradox is in part driven by an information asymmetry regarding the privacy risks associated with disclosure between customers and providers and the fact that consumers make privacy decisions having incomplete information about risks and benefits (Kokolakis, 2017). Given the diverging mental accessibility of benefits and costs in attitudinal versus behavioral contexts, it could be argued that privacy preferences are indeed construed under conditions of information asymmetry and incomplete information. However, where prior work attributes these conditions to external sources, such as firms not being open about their data collection practices, our findings suggest that they may in fact partially be self-inflicted, to the extent that they are driven by internal processes that tune cognitive procedures to processing information that is congruent with the distance to the direct experience.

Finally, our findings link the privacy paradox to construal level theory. In the last two decades, a vast and rich body of research has established construal level theory as a comprehensive framework underlying many forms of consumer behavior, including several preference reversals (Fiedler, 2007; Trope & Liberman, 2003). Although in recent years the body of literature on consumer privacy preferences has expanded substantially, to date research remains rather fragmented. Our findings suggest that the widely observed privacy attitude – behavior inconsistencies in the privacy paradox may also fit under the construal level theory "umbrella". As such, our construal level congruency explanation embeds the privacy paradox phenomenon in a broader theoretical framework.

Our findings also have important practical implications. Marketers increasingly rely on the collection and use of personal consumer data to target the right audience and obtain profitable outcomes, while at the same time concerns about consumer privacy are growing, understanding what drives information sharing is of critical importance (Malhotra, Kim, & Agarwal, 2004; Marketing Science Institute, 2016; Martin & Murphy, 2017; Morey et al., 2015; Peltier et al., 2009). Many popular services such as social network sites that offer unique combinations of utility, social interaction, entertainment, convenience and personalization, have based their business models on users' willingness to share their personal information. If privacy has become "a currency that consumers can exchange for free access to web content, personalized services or discounts" (Motiwalla, Li, & Liu, 2014), understanding what

drives consumers' "willingness to pay" is paramount. More specifically, our construal level congruency account about the way in which consequences of disclosure are construed in the mind of the consumer ultimately drive their salience and hence impact on the ultimate decision, is important for marketers as prior work has demonstrated that the relation between psychological distance and construal level is bi-directional (Wakslak, 2007). That is, not only does psychological distance affect the level of construal, construal level also influences the perceived psychological distance. Hence, by presenting or framing benefits and costs of disclosure in such a way that its psychological distance and construal level match with one's general mental processes, marketers can influence people's privacy calculus and therefore their disclosure decisions. For example, for the usage-based insurance programs, insurance companies may be able to increase sign up rates by presenting the benefits in a very concrete manner, e.g. in absolute monetary value rather than a relative discount percentage (McKechnie, Devlin, Ennew, & Smith, 2012).

For policy makers, our findings suggest that although consumers may often willingly disclose their personal data at the expense of their privacy, this does not mean that consumers are not genuinely concerned with their privacy. Rather, the loss of privacy is simply not as salient as the associated benefits in behavioral contexts. As such, traditional tools that are built on the notion of individual responsibility such as choice or consent alone may not provide adequate protection. Awareness campaigns aimed at increasing the salience of privacy risks of disclosure in the mind of the consumer, for example by presenting them in a very concrete, low-level manner, may persuade consumers to act more in line with their privacy concerns. This recommendation is in line with research showing that the dichotomy between privacy concerns and behavioral intentions disappears when individuals are explicitly presented with arguments either for or against the use of personal information by online businesses, hence increasing the salience of counterarguments (Baek, 2014).

One specific practical implication that is relevant both for marketers and policy makers is related to the timing of consent to the sharing of their personal data. Our findings suggest that when consumers are asked to consent with the sharing of personal information at the moment when they will immediately experience the benefits – such as a being asked to accept cookies upon entering a website – will be likely to consent because they hold a concrete mindset. However, when the moment of consent is pushed forward consumers are likely to hold a relatively abstract mindset, which is likely to lead to a lower inclination to share their personal information. As an illustration of this, consider an electronic health file system where people are asked to consent to sharing medical information across healthcare providers. When one is asked to consent to this while visiting a family doctor who wants to immediately refer the patient to a specialist, one would be more likely to consent than when consent is asked on a less specific moment.

Finally, several limitations of the current work call for further research. First, in Study 3 we show how mindset drives privacy preferences in a behavioral context. In the remaining studies, the dependent variable is intention to disclose. Whether privacy preferences are attitudinal or behavioral is not at the core of our argumentation – it is the mindset resulting from these attitudinal versus behavioral contexts that drive mental accessibility of benefits and costs of disclosure and in turn privacy preferences. However, it would be interesting to see whether the procedures that in Study 3 had an impact on disclosure behavior would have similar - albeit reversed – effects on attitudinal privacy preferences. Moreover, our theorizing is based on the argument that congruency between one's mindset and psychological distance of benefits and costs of disclosure enhances the ease of cognitive processing and as such drives privacy preferences. Future work could directly manipulate ease of processing to further investigate its role as potential underlying mechanism. Finally, future work should further disentangle the effects of the extent to which a disclosure event is a part of one's direct experience and the psychological distance of the consequences of disclosure on construal level.

## REFERENCES


Acquisti, A., Brandimarte, L., & Loewenstein, G. (2015). Privacy and human behavior in the age of information. *Science*, *347*(6221), 509–514.

Acquisti, A., & Gross, R. (2006). Imagined communities:awareness, information sharing, and privacy on the Facebook. In *International Workshop on Privacy Enhancing Technologies*. (pp. 36–58). Berlin: Springer.

Acquisti, A., & Grossklags, J. (2004). Privacy attitudes and privacy behavior: Losses, gains, and hyperbolic discounting. *The Economics of Information Security*, *3*(1), 26–33.

Acquisti, A., & Grossklags, J. (2005). Privacy and rationality in individual decision making. *IEEE Security and Privacy*, *3*(1), 26–33.

Altman, I. (1975). *The environment and social behavior: Privacy, personal space, territory, and crowding*. Monterey, CA: Brooks/Cole Publishing.

Athey, S., Catalini, C., & Tucker, C. (2017). The digital privacy paradox: Small money, small costs, smal talk. *National Bureau of Economic Research*, (w23488).

Baek, Y. M. (2014). Computers in human behavior solving the privacy paradox : A counter-argument experimental approach. *Computers in Human Behavior*, *38*, 33–42.

Bar-Anan, Y., Liberman, N., & Trope, Y. (2006). The association between psychological distance and construal level: Evidence from an implicit association test. *Journal of Experimental Psychology: General*, *135*(4), 609–622.

Baruh, L., Secinti, E., & Cemalcilar, Z. (2017). Online privacy concerns and privacy management: A meta-analytical review. *Journal of Communication*, *67*(1), 26–53.

Cesario, J., Grant, H., & Higgins, E. (2004). Regulatory fit and persuasion: Transfer from "feeling right." *Journal of Personality and Social Psychology*, *86*(3), 388–404.

Culnan, M., & Armstrong, P. (1999). Information privacy concerns, procedural fairness, and impersonal trust: An empirical investigation. *Organization Science*, *10*(1), 104–115.

Culnan, M., & Bies, J. (2003). Consumer privacy: Balancing economic and justice considerations. *Journal of Social Issues*, *59*(2), 323–342.

Derikx, S., de Reuver, M., & Kroesen, M. (2016). Can privacy concerns for insurance of connected cars be compensated? *Electronic Markets*, *26*(1), 73–81.

Dienlin, T., & Metzger, M. J. (2016). An Eextended privacy calculus model for SNSs: Analyzing self-disclosure and self-withdrawal in a representative U.S. sample. *Journal of Computer-Mediated Communication*, *21*(5), 368–383.

Dinev, T., & Hart, P. (2006). An extended privacy calculus model for e-commerce transactions. *Information Systems Research*, *17*(1), 61–80.

Egelman, S. (2013). My profile Is my password, verify me! The privacy/convenience tradeoff of Facebook Connect. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (pp. 2369–2378).

Fiedler, K. (2007). Construal level theory as an Integrative framework for behavioral decision-making research and consumer psychology. *Journal of Consumer Psychology*, *17*(2), 101–106.

Freitas, A. L., Gollwitzer, P., & Trope, Y. (2004). The influence of abstract and concrete mindsets on anticipating and guiding others' self-regulatory efforts. *Journal of Experimental Social Psychology*, *40*(6), 739–752.

Fujita, K., Henderson, M. D., Eng, J., Trope, Y., & Liberman, N. (2006). Spatial distance and mental construal of social events. *Psychological Science*, *17*(4), 278–280.

Galinsky, A. D., Gruenfeld, D. H., & Magee, J. C. (2003). From power to action. *Journal of Personality and Social Psychology*, *85*(3), 453–466.

Gollwitzer, P. M., Heckhausen, H., & Steller, B. (1990). Deliberative and implemental mind-sets: Cognitive

tuning toward congruous thoughts and information. *Journal of Personality and Social Psychology*, *59*(6), 1119–1127.

Goodwin, C. (1991). Privacy: Recognition of a consumer right. *Journal of Public Policy & Marketing*, *10*(1), 149–166.

Gross, R., & Acquisti, A. (2005). Information revelation and privacy in online social networks. In *Proceedings of the 2005 ACM workshop on Privacy in the Electronic Society* (pp. 71-80).

Hansen, J., & Wänke, M. (2010). Truth from language and truth from fit: The impact of linguistic concreteness and level of construal on subjective truth. *Personality and Social Psychology Bulletin*, *36*(11), 1576–1588.

Higgins, E. (2000). Making a good decision: Value from fit. *American Psychologist*, *55*(11), 1217–1230.

Higgins, E., Idson, L. C., Freitas, A. L., Spiegel, S., & Molden, D. C. (2003). Transfer of value from fit. *Journal of Personality and Social Psychology*, *84*(6), 1140–1153.

Hoy, M. G., & Milne, G. (2010). Gender differences in privacy-related measures for young adult Facebook users. *Journal of Interactive Advertising*, *10*(2), 28–45.

Huberman, B. A., Adar, E., & Fine, L. R. (2005). Valuating privacy. *IEEE Security and Privacy*, *3*(5), 22–25.

Jensen, C., Potts, C., & Jensen, C. (2005). Privacy practices of Internet users: Self-reports versus observed behavior. *International Journal of Human Computer Studies*, *63*(1–2), 203–227.

John, L. K., Acquisti, A., & Loewenstein, G. (2011). Strangers on a plane: Context-dependent willingness to divulge sensitive information. *Journal of Consumer Research*, *37*(5), 858–873.

Kokolakis, S. (2017). Privacy attitudes and privacy behaviour: A review of current research on the privacy paradox phenomenon. *Computers and Security*, *64*, 122–134.

KPMG. (2016). *Crossing the line: Staying on the right side of consumer privacy*. Retrieved December 12, 2017, from assets.kpmg.com/content/dam/kpmg/xx/pdf/2016/11/crossing-the-line.pdf

Kyung, E. J., Menon, G., & Trope, Y. (2014). Construal level and temporal judgments of the past: The moderating role of knowledge. *Psychonomic Bulletin & Review*, *21*(3), 734–739.

Labroo, A. A., & Lee, A. Y. (2006). Between two brands: A goal fluency account of brand evaluation. *Journal of Marketing Research*, *43*(3), 374–385.

Laufer, R., & Wolfe, M. (1977). Privacy as a concept and a social issue: A multidimensional developmental theory. *Journal of Societal Issues*, *33*(3), 22–42.

Lee, A. Y., & Aaker, J. L. (2004). Bringing the frame into focus: The influence of regulatory fit on processing fluency and persuasion. *Journal of Personality and Social Psychology*, *86*(2), 205–218.

Lee, A. Y., Keller, P. A., & Sternthal, B. (2010). Value from regulatory construal fit: The persuasive impact of fit between consumer goals and message concreteness. *Journal of Consumer Research*, *36*(5), 735–747.

LexisNexis. (2016). 2016 *Usage-based insurance (UBI) research results for the US consumer market*. Retrieved December 12, 2017, from https://www.lexisnexis.com/risk/downloads/whitepaper/2016-ubi-study-white-paper.pdf

Liberman, N., & Trope, Y. (1998). The role of feasibility and desirability considerations in near and distant future decisions: A test of temporal construal theory. *Journal of Personality and Social Psychology*, *75*(1), 5–18.

Liberman, N., Trope, Y., & Wakslak, C. (2007). Construal level theory and consumer behavior. *Journal of Consumer Psychology*, *17*(2), 113–117.

LoginRadius. (2016). *Customer Identity Preference Trends – Q2 2016*. Retrieved December 12, 2017, from https://blog.loginradius.com/2016/08/customer-identity-preference-trends-q2-2016/

Malhotra, N. K., Kim, S. S., & Agarwal, J. (2004). Internet users' information privacy concerns (IUIPC): The construct, the scale, and a causal model. *Information Systems Research*, *15*(4), 336–355.

Marketing Science Institute. (2016). *Research Priorities 2016-2018*. Cambridge, Massachusetts: Marketing Science Institute. Retrieved December 12, 2017 from https://www.msi.org/uploads/articles/MSI_RP16-18.pdf

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.

Martínez-Pérez, B., de la Torre-Díez, I., & López-Coronado, M. (2015). Privacy and security in mobile health apps: A review and recommendations. *Journal of Medical Systems*, *39*(181), 1–8.

McGrath, A. L. (2007). The perception of time heals all wounds: Temporal distance affects willingness to forgive following an interpersonal transgression. *Personality and Social Psychology Bulletin*, *33*(7), 1023-1035.

McKechnie, S., Devlin, J., Ennew, C., & Smith, A. (2012). Effects of discount framing in comparative price advertising. *European Journal of Marketing*, *46*(11/12), 1501–1522.

Morey, T., Forbath, T., & Schoop, A. (2015). Customer data: Designing for transparency and trust. *Harvard Business Review*, *93*(5), 93–105.

Motiwalla, L., Li, X., & Liu, X. (2014). Privacy paradox: Does stated privacy concerns translate into the valuation of personal information? *Proceedings of the 18th Pacific Asia Conference on Information Systems* (pp. 281–297).

Murphy, M. C., & Dweck, C. S. (2016). Mindsets shape consumer behavior. *Journal of Consumer Psychology*, *26*(1), 127–136.

Nenkov, G. Y. (2012). It's all in the mindset: Effects of varying psychological distance in persuasive messages. *Marketing Letters*, *23*(3), 615–628.

Norberg, P. A., Horne, D. R., & Horne, D. A. (2007). The privacy paradox: Personal information disclosure intentions versus behaviors. *The Journal of Consumer Affairs*, *41*(1), 100–126.

Novemsky, N., Dhar, R., Schwarz, N., & Simonson, I. (2007). Preference fluency in choice. *Journal of Marketing Research*, *44*(3), 347–356.

Paefgen, J., Staake, T., & Thiesse, F. (2012). Resolving the misalignment between consumer privacy concerns and ubiquitous IS design: The case of usage-based insurance. In *Proceedings of the 33rd International Conference on Information Systems (ICIS)*. Orlando, USA.

Peltier, J. W., Milne, G. R., & Phelps, J. E. (2009). Information privacy research: Framework for integrating multiple publics, information channels, and responses. *Journal of Interactive Marketing*, *23*(2), 191–205.

Pew Research Center. (2015). *Americans' attitudes about privacy, security and surveillance*. Retrieved December 12, 2017, from http://www.pewinternet.org/2015/05/20/americans-attitudes-about-privacy-security-and-surveillance/

Preibusch, S. (2013). Guide to measuring privacy concern: Review of survey and observational instruments. *International Journal of Human Computer Studies*, *71*(12), 1133–1143.

Rucker, D. D., & Galinsky, A. D. (2016). Growing beyond growth: Why multiple mindsets matter for consumer behavior. *Journal of Consumer Psychology*, *26*(1), 161–164.

Schwarz, N., Bless, H., Strack, F., Klumpp, G., Rittenauer-Schatka, H., & Simons, A. (1991). Ease of retrieval as information: Another look at the availability heuristic. *Journal of Personality and Social Psychology*, *61*(2), 195–202.

Son, J., & Kim, S. (2008). Internet users' information privacy-protective responses: A taxonomy and a nomological model. *Mis Quarterly*, *32*(3), 503–529.

Spiekermann, S., Grossklags, J., & Berendt, B. (2001). E-privacy in 2nd Generation E-Commerce: Privacy Preferences versus actual Behavior. In *Proceedings of the ACM Conference on Electronic Commerce* (pp. 38–47).

Stöber, J., Tepperwien, S., & Staak, M. (2000). Worrying leads to reduced concreteness of problem elaborations: Evidence for the avoidance theory of worry. *Anxiety, Stress and Coping*, *13*(3), 217–227.

Trepte, L., & Reinecke, S. (2011). *Privacy Online: Perspectives on privacy and self-disclosure in the social web*. Springer Science & Business Media: New York, NY.

Trope, Y., & Liberman, N. (2003). Temporal Construal. *Psychological Review*, *110*(3), 403–421.

Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review*, *117*(2), 440–463.

TRUSTe. (2016). Consumer Privacy Index. Retrieved December 12, 2017, from https://www.trustarc.com/resources/privacy-research/ncsa-consumer-privacy-index-us/

Vallacher, R. R., & Wegner, D. M. (1989). Levels of personal agency: Individual variation in action identification. *Journal of Personality and Social Psychology*, *57*(4), 660–671.

Wakslak, C. (2007). Construal levels and psychological distance: Effects on representation, prediction, evaluation, and behavior. *Journal of Consumer Psychology*, *17*(2), 83–95.

Wan, E. W., & Agrawal, N. (2011). Carryover effects of self-control on decision making: A construal-Level perspective. *Journal of Consumer Research*, *38*(1), 199–214.

Warren, S., & Brandeis, L. (1890). The Right to Privacy. *Harvard Law Review*, *4*(5), 193–220.

Westin, A. F. (1967). *Privacy and freedom*. New York: Atheneum.

White, K., & Dahl, D. W. (2011). It's the mind-set that matters: The role of construal level and message framing in influencing consumer efficacy and conservation behaviors. *Journal of Marketing Research*, *48*(3), 472-485.

Wilson, D. W., & Valacich, J. S. (2012). Unpacking the privacy paradox: Irrational decision-making within the privacy calculus. In *Proceedings of the 33rd international conference on information systems (ICIS2012)*.

Wright, S., Manolis, C., Brown, D., Guo, X., Dinsmore, J., Chiu, C. P., & Kardes, F. R. (2012). Construal-level mind-sets and the perceived validity of marketing claims. *Marketing Letters*, *23*(1), 253-261.

# Chapter 4:

## Be open with me and I will share my data with you: The reciprocal effect of corporate transparency on consumer personal data sharing

Authors: Joris Demmers, Rosanne de Vos

## ABSTRACT

Persuading consumers to voluntarily share their personal data is becoming a critical challenge in an emergent landscape of increasing reliance on large amounts of personal data and societal sensitization to privacy. The present research proposes and examines the idea that corporate transparency triggers a process of reciprocity which leads to voluntary disclosure of personal data. In a between-subjects experiment, disclosure of generic information about a firm's performance led to greater probability of consumer sharing, but only when the information was disclosed by the firm. In contrast, disclosure of specific information regarding the use of the personal data led to increased sharing propensity regardless of the source of the information. Mediation analyses show that decreased privacy concerns account for the effect of specific information disclosure, whereas increased trust in the firm accounts for the effects of generic information disclosure. These findings advance understanding of the role of transparency and reciprocity in building stronger business-consumer relationships.

## 4.1 INTRODUCTION

Firms increasingly rely on the collection and use of large amounts of personal consumer data to craft marketing strategies and provide optimal value to consumers. By combining and analyzing fine-grained data about consumers' demographics, interests, activities, and histories from a multitude of sources, marketers are able to generate detailed individual consumer profiles which are subsequently used to personalize marketing offerings. Without access to personal consumer data, firms would not be able to use many of the marketing techniques that have fast gained ground in the last decade, such as personalized advertising, behavioral retargeting, location-based targeting, and dynamic pricing. As technologies will continue to advance and a large proportion of everyday objects will become connected to the internet, the reliance on personal consumer data will further increase and shape the marketing landscape (Kauffman, 2011; Tanner, 2014).

While offering new opportunities, the increasing importance of large amounts of personal consumer data also presents challenges to marketers. Extensive media attention for data collection practices of "internet giants" like Google, Facebook, and Instagram illustrates the general sensitization in society towards the issue of privacy in relation to consumer data collection. Studies consistently show that consumers are concerned about how and to what extent companies collect their personal information and to what ends this information is used (Graeff & Harmon, 2002; Phelps, Nowak, & Ferrell, 2000), and new privacy regulations restrict the use of online tracking techniques and use of personal data without the explicit consent of the consumer (Goldfarb & Tucker, 2011; Schwartz, 2013). As consumers become increasingly aware of data collection practices and the value their personal data represents to companies, they are likely to become more selective with regard to when and to whom they will disclose their personal information (Davenport & Harris, 2007; Hagel & Rayport, 1997; Thaler & Tucker, 2013). Hence, persuading consumers to voluntarily share their data is and will increasingly be a critical challenge for companies in the marketing era of big data (Pentland, 2009; Peppers & Rogers, 2012).

Previous work has demonstrated that offering immediate and concrete benefits such as access to websites, use of social network sites or monetary incentives in exchange for the disclosure of personal information will often persuade consumers to forego their concerns and, either or not consciously, share their personal data with companies (Acquisti & Grossklags 2004; Andrejevic, 2002; Benndorf & Normann, 2014; Norberg, Horne, & Horne, 2007). These strategies aim at stressing benefits rather than addressing the concerns that people may have (Acquisti & Grossklags, 2004). As such, they may be unlikely to induce sustainable consumer trust, which has been identified as a key requisite for successful relationship marketing (Dabholkar, Van Dolen, & De Ruyter, 2009; Morgan & Hunt, 1994; Sirdeshmukh, Singh, & Sabol, 2002). The current study examines whether corporate transparency can

induce consumer trust and persuade consumers to voluntarily share their data. Specifically, it is theorized that when a company openly shares information about itself with consumers, this will trigger a process of reciprocity which will move consumers to also share their personal information with that company. Disclosure of information and the source of the information are experimentally manipulated after which participants are asked to share their personal data to directly test the causal impact of corporate transparency on willingness to disclose personal information. Results show that disclosure of generic information about a firm's performance leads to an increase in trust and greater willingness to share personal consumer data when the information is shared by the firm itself, but not when the information is shared by another source. Disclosure of specific information about the use of the personal data reduces privacy concerns which subsequently leads to increased sharing propensity regardless of the source of the information.

With the current work, we aim to contribute to the literature in several ways. This study contributes to a growing body of work on corporate transparency in a business context. It provides new support for the role of risk reduction and trust as consequences of corporate transparency and identifies consumer data sharing as a new area of consumer behavior where corporate transparency may be particularly effective due to its ability to entice disclosure reciprocity. Effectively obtaining customer information is becoming increasingly important in personalizing relationships with customers. Using transparency to persuade consumers to voluntarily share their data over strategies that downplay or conceal data collection practices is that it builds rather than harms consumer trust, and as such may be a more sustainable way to build long-term customer relationships. Finally, the present study adds to a large body of work on reciprocity. Self-disclosure reciprocity is typically seen as a process of mutually exchanging information similar in terms of amount, topic, and degree of intimacy between individuals. Our findings suggest that reciprocity does not require equivalence between exchange partners. This implies that general policies of corporate transparency may persuade consumers to share their data even if the information made available by the firm is unrelated to the information requested from the consumer in terms of breadth or depth.

## 4.2 THEORETICAL FRAMEWORK

In the last decade, transparency has become a business buzzword. Although to date there is no univocal definition of corporate transparency in the literature, words such as openness, honesty, information disclosure, visibility, accountability, and trust are used in most conceptualizations (see Schnackenberg & Tomlinson, 2014, for an overview). Sometimes transparency is conceptualized as a situation in which information about firms is available to stakeholders, regardless of the source of the information. Fournier and Avery (2011, p. 198), for example, state that the increased availability of and convenient

access to information about firms through social media have empowered consumers in what they call "the age of transparency", whereas yet others define transparency as the public availability of information (e.g. Bloomfield & O'Hara, 1999; Bushman, Piotroski, & Smith, 2004; Zhu, 2004). More often, however, conceptualizations of corporate transparency include the notion of the firm as an active agent in the dissemination of the information. Rawlins (2008, p. 75), for example, defines transparency as the deliberate attempt to make available all legally releasable information – whether positive or negative in nature – in a manner that is accurate, timely, balanced and unequivocal, for the purpose of enhancing the reasoning ability of publics and holding organizations accountable for their actions, policies, and practices. Schnackenberg and Tomlinson (2014), in an attempt to synthesize prior research, define organizational transparency as the perceived quality of intentionally shared information, with quality being the product of the relevancy, clarity, and accuracy of the information. Others also specifically mention the active role of the firm in making information available (e.g. Gupta, 2008; Murphy, Laczniak, & Wood, 2007; Prahalad & Ramaswamy, 2004). Adopting the understanding of transparency including the active role of the organization, in the current work corporate transparency is defined as a firm being open and forthright about matters relevant to stakeholders (Dapko, 2012). As such, corporate transparency requires the active disclosure of information by a firm.

In the wake of the financial crisis, transparency is often invoked as an instrument to restore damaged relationships between companies and consumers (Cohn & Wolfe, 2014; Peppers & Rogers, 2012; Schnackenberg & Tomlinson, 2014). Indeed, several studies have linked transparency to more favorable product and brand evaluations (Granados, Gupta, & Kauffman, 2010), as well as higher customer-based brand equity (Peppers & Rogers 2012), perceived service value (Buell & Norton, 2013), firm credibility (Eisend, 2006), purchase intentions (Dapko, 2012), product choice (Cohn & Wolfe, 2014), and willingness to pay (Carter & Curry, 2010). Within certain boundaries, these positive effects persist even if transparency compels firms to disclose unfavorable information about their products or brands (Demmers, Erbé, van Strijp, & Wientjes, 2015; Eisend, 2006).

Information disclosure as a component of corporate transparency strategies can range from very specific and directly addressing a consumer's immediate information needs to a broad general attitude of being open and forthright about various aspects of business. The literature offers several explanations for the effects of transparency on consumer behavior, depending on whether the disclosed information is specific or generic. In the context of this study, we define specific transparency as a firm being open and forthright about the use and collection of personal consumer data. Specific transparency may have positive effects on consumer behavior because it reduces the perceived risk associated with consumer decision making. According to the theory of consumers' perceived risk, every purchase decision exposes consumers to the risk of undesirable outcomes (Bauer, 1960; Mitchell, 1999;

Taylor, 1974). As human behavior is often driven by a motivation to avoid undesirable outcomes and losses (Avnet & Higgins, 2006; Elliot, 1999; Higgins, 1998), perceived risk is a powerful predictor of consumer behavior (Mitchell, 1999). The more risk a consumer perceives, the lower his or her valuation of a product will be and the less likely s/he is to purchase (Roselius, 1971). In order to reduce the risk associated with the decision making process, consumers are motivated to acquire additional information about a product and/or the seller, which allows them to make better informed decisions (Dowling & Staelin, 1994). As such, the theory of perceived risk explains why people read nutritional labels, use review sites, and value transparency. A large number of studies show that consumers also perceive high risks when it comes to sharing their personal data online (Awad & Krishnan, 2006; Dinev & Hart, 2006; Malhotra, Kim, & Agarwal, 2004; Sheehan, 2002; Taddei & Contena, 2013). According to the theory of perceived risk, providing consumers with information that directly addresses these privacy concerns would reduce the perceived risks and lead to a higher willingness to share personal data. Indeed, previous work demonstrates that disclosure of specific information regarding the collection and use of personal consumer data can have a positive effect on consumers' willingness to disclose personal information (Acquisti, Brandimarte, & Loewenstein, 2015; Meinert, Peterson, Criswell, & Crossland, 2006; Zimmer, Arsal, Al-Marzouq, Moore, & Grover, 2010), and many common disclosure practices such as cookie notifications and privacy policy statements draw on the mechanism of risk reduction. Hence, the following hypotheses are proposed:

*H1a:* Disclosure of specific information regarding the use of personal consumer data increases consumers' willingness to share their personal information.

*H1b:* The effect of specific information disclosure on willingness to share personal information is mediated by decreasing privacy concerns.

In addition to being transparent by disclosing specific information about the use of the requested personal information and hereby directly addressing the concerns consumers may have regarding sharing their data, transparency may also persuade consumers to share their data when the disclosed information does not directly address consumers' concerns. We refer to generic transparency when a firm is open and forthright about matters deemed relevant by consumers that are unrelated to the collection or use of personal consumer data. This is important because although a firm may have adopted corporate strategy as a general business principle, it may not always be able to directly address every consumer's immediate information need. In the case of disclosure of generic information, reciprocity theory may account for an increased sharing propensity. The concept of reciprocity refers

to the mutual exchange processes that occur between individuals (Gouldner, 1960). Reciprocity is considered as a strong determining factor of human behavior. It has been used to explain a wide variety of social exchange behaviors, including helping (Wilke & Lanzetta, 1970), negotiating (Eyuboglu & Buja, 1993), gift-giving (Eisenberger, Cotterell, & Marvel, 1987), favor-doing (Greenberg & Frisch, 1972), purchasing (Bodur & Grohmann, 2005; Edlund, Sagarin, & Johnson, 2007; Miller & Keane, 1997), and participating in the sharing economy (Hellwig, Morhart, Girardin, & Hauser, 2015). Prior work has demonstrated that disclosure of information too is often a dyadic process (Cohn & Strassberg, 1983; Ehrlich & Graeven, 1971; Miller & Kenny, 1986). That is, the inclination to share personal information with another individual is influenced by the self-disclosure received from the other person, such that we are more likely to disclose to those who disclose to us. Although reciprocity, both on a conceptual level and in most empirical work, primarily focuses on the exchange processes between persons, a number of studies suggest that reciprocity is not exclusive to interpersonal interactions. Moon (2000), for example, found that people were willing to reciprocate with computers in making intimate disclosures. In another study, Morales (2005) showed that consumers reciprocated a firm's extra effort in displaying and making products by increasing their willingness to pay and store choice. Research also suggests that although a person's level of disclosure in terms of breadth (amount of information) and depth (degree of intimacy) as well as the nature of disclosed information often matches the level and nature of disclosure one receives (Derlega & Berg, 1987; Collins & Miller, 1994), reciprocity is not always equivalent within dyadic exchange processes. In a recent study, Schumann, Von Wangenheim, and Groene (2014) demonstrated that reciprocity appeals enhance web users' likelihood of sharing their personal data online, more so than utilitarian appeals. Indeed, receiving small initial favors can lead to giving substantially larger favors in return (Cialdini, 1993). Similarly, self-disclosure is not always equal during social interactions (Sprecher, Treger, Wondra, Hilaire, & Wallpe, 2013). Rather than by a perceived moral obligation to reciprocate to gifts, favors, or self-disclosure in similar kind (Cialdini, 1993; Gouldner, 1960), such non-equivalent reciprocity may be explained by the notion that being the recipient in a dyadic interaction typically leads to increased liking of and trust in the sender (Berg, Dickhaut, & McCabe, 1995; Collins & Miller, 1994; Sprecher et al., 2013), which subsequently enhances the general likelihood of reciprocation (Pillutla, Malhotra, & Murnighan, 2003). Indeed, voluntary disclosure by a firm has been shown to lead to inferences of the firm as being open, honest, trustworthy (Crowley & Hoyer, 1994; Eisend, 2006), and information may affect consumers' behavior even if it is of trivial importance (Brown & Carpenter, 2000). Following this line of reasoning, if a firm adopts transparency as a general business principle and voluntarily discloses information to consumers, consumers should be likely to reciprocate this disclosure and share their personal data with the firm. This effect should occur even if the information disclosed by the firm, albeit meaningful and relevant to the consumer in a general sense, is neither directly related to the information requested from the

consumer, nor directly addresses the concerns consumers may have regarding the disclosure of their personal data.

*H2a:* Disclosure of generic firm-related information increases consumers' willingness to share their personal information.

*H2b:* The effect of generic information disclosure on willingness to share personal information is mediated by trust in the firm.

Although H1a and H2a predict that disclosure of specific information about the collection and use of personal consumer data as well as disclosure of generic information about the firm will enhance consumers' propensity to share their personal data with the firm, distinct mechanisms are likely to drive these proposed effects. In the case of generic information disclosure, the dyadic nature of reciprocity implies that the generic information disclosure associated with corporate transparency will only evoke reciprocity, and hence lead to a greater willingness to share personal data with the firm, if the firm itself discloses the information. In contrast, in the case of specific information disclosure, it is the information itself that should reduce the uncertainty and risks associated with sharing personal data with the firm, which subsequently enhances sharing propensity. Hence, unlike the effect of generic information disclosure, the effect of specific information disclosure is unlikely to be dependent upon the source of the information.

*H3:* The effect of generic information disclosure on willingness to share personal information is moderated by disclosure source, such that disclosure of generic information enhances consumers' willingness to share personal information when the firm discloses the information, whereas disclosure of specific information enhances willingness to share personal information regardless of the source of the information.

## 4.3 METHOD

*Participants and design*

A total of 145 people (63.5% female) participated in a web-based study with a 2 x 2 + 1 between-subjects experimental design. The first factor tested was the type of information that was disclosed: specific information versus generic information. The second factor was information source: firm versus third-party. One control condition, in which no information was disclosed and hence there was no

disclosure source, was added to enable comparisons on the dependent variables between the four experimental conditions and a baseline condition. The mean age of the participants was 26.4 (*SD* = 9.3). A total of 73.8% of all participants held at least a bachelor's degree, hence the sample was somewhat skewed towards highly educated females.

*Procedure*

Participants were randomly assigned to one of the five experimental conditions. In all conditions, participants were told that they would take part in a study on health-conscious shopping behavior conducted by a large Western-European university. Participants were then asked to complete an extensive personal profile consisting of questions about gender, year of birth, nationality, place of residence, height, weight, level of education, marital status, household composition, income, primary supermarket and weekly shopping budget, as well as seven questions regarding health and food preferences and health-conscious shopping behavior adapted from the Food Choice Questionnaire (Steptoe, Pollard, & Wardle 1995). After completing the personal profile questions, every participant was told that s/he was assigned to a specific consumer category on the basis of his/her personal profile. In reality, this was only done to strengthen the perception that the provided personal data was meaningful, and every participant was assigned to the same bogus category. The obtained personal profiles were irrelevant to the goals of the study. Only after having submitted their personal profile, participants were told that the university collaborated with a number of firms on different projects, and that a specific large firm in the food industry had indicated interest in obtaining the data collected in the current study. The firm was selected on the basis of being generally well-known but unlikely to evoke strong prior associations among participants. Next, participants were exposed to the experimental manipulations as below.

In the specific information disclosure conditions, participants were exposed to a statement containing information about the consumer data collection practices of the firm that had supposedly indicated interest in the participant's data. In the generic information disclosure conditions, participants were exposed to a statement containing information regarding the firm's performance in the area of corporate social responsibility. Both statements were derived from the firm's website. In the firm disclosure conditions, the information was framed as being communicated by the firm, using the first-person plural personal pronoun ('we'). The information was accompanied with the company logo positioned at the top of the text. Moreover, the information was accompanied by a statement saying that the firm chose to share the information with the participants of the study. In the non-firm disclosure conditions, the same information was framed as being communicated by the university, including the university's logo at the top of the text, and using the firm's name or the third-person plural personal pronoun ('they'). The information was accompanied by a statement saying that the university

had conducted a study on either the data collection practices (specific information disclosure conditions) or the corporate social responsibility performance (generic information disclosure conditions) of firms in the food industry, and that the university chose to share this particular piece of information with the participants. In the control condition, no information about the firm was provided. Similar manipulations of information type (Zimmer et al., 2010) and information source (Groza, Pronschinske & Walker, 2011; Liu, Austin, & Jin, 2011) have been used in prior research. In appendix A, the exact wording for each of the conditions is shown.

*Measures*

Following the manipulations, each participant was given an overview of their personal profile, and subsequently asked whether s/he either or not chose to share their information with the firm. It was explicitly mentioned that the data would not be shared anonymously and that if the participant chose to share the information with the firm, the firm would be able to integrate the shared information with data from other sources on the basis of participants' IP-address. After the binary choice to either or not share personal information, which served as our main dependent variable, participants were asked to indicate their trust in the firm and their privacy concerns with regards to sharing their personal information with the firm. Trust in the firm was measured using a four-item seven-point Likert-type scale (Chaudhuri & Holbrook, 2001). Privacy concerns were measured by adapting six seven-point Likert-type items of the privacy concerns scale by Smith, Milberg, and Burke (1996) to suit the specific context of this study. Finally, a manipulation check was performed by asking participants about the source of the firm-related information they were exposed to, before debriefing participants that their personal data would in fact not be shared with the firm. All measurement items are shown in appendix B.

*Pretest*

A pretest (N = 20) was conducted in which the perceived relevance as well as the perceived valence of the information stimuli was measured on a seven-point scale. In line with the understanding of transparency as the disclosure of relevant information, the information disclosed across experimental conditions should be perceived as relevant by consumers. The pretest showed that the information used in the specific and generic information conditions were perceived as relevant ($M_{specific}$ = 5.48, *SD* = .99; $M_{generic}$ = 5.63, *SD* = .97). The pretest furthermore showed that both information stimuli were perceived as moderately positive ($M_{specific}$ = 5.17, *SD* = 1.23; $M_{generic}$ = 5.19, *SD* = 1.59). A series of ANOVA's showed that perceived relevance and valence did not significantly differ between the specific and generic information stimuli ($p > .05$). Hence, any effects of information type on the dependent variables are likely to be driven by the type of information rather than the perceived relevance or

valence of the information. Finally, the pretest confirmed that participants on average did not hold particularly negative or positive attitudes towards the selected firm (*M* = 2.92 on a five-point scale, *SD* = 1.11).

## 4.4 RESULTS

*Manipulation check*

In answering the disclosure source manipulation check, a total of 22 participants failed to correctly identify the information source corresponding with the experimental condition they were assigned to. These participants were excluded from the sample before continuing with the subsequent analyses, thus retaining a total of 123 participants.

*Consumer data sharing*

To test H1a and H2a about the effect of type of disclosure on personal data sharing propensity, a binary logistic regression was conducted with type of information as categorical predictor and participants' decision to either or not share their personal data as dichotomous dependent variable. The control group was included as a separate level of the information type variable. To control for any potential effects of age, gender, and level of education, these variables were included in the initial model, but as none of the control variables had a significant effect on the dependent variable, they were not included in the final model. In line with H1a, the analysis showed that, compared to the control condition, participants were significantly more likely to share their personal profile with the firm when they were exposed to specific information about the use of their personal data by the firm ($P(\text{sharing})_{\text{control}}$ = 52.0% vs. $P(\text{sharing})_{\text{specific}}$ = 75.6%; $B$ = 1.05, $SE$ = 0.53, $p < .05$). Disclosure of generic information about the firm, however, did not significantly increase data sharing propensity compared to the control condition ($P(\text{sharing})_{\text{specific}}$ = 69.8%, $B$ = 0.76, $SE$ = 0.50, $p$ = .13). Table 1 summarizes the results of the first logistic regression analysis.

Although the results of the first binary logistic regression seem to contradict H2a in which it was proposed that disclosure of generic information enhanced sharing propensity, H3 predicted that this effect is only manifest when the firm itself discloses the information. To test to what extent the effect of information type on sharing propensity is indeed dependent on disclosure source, two additional binary logistic regressions were conducted. First, type of information, disclosure source, and the interaction between type of information and disclosure source were modeled as predictors on participants' decision to either or not share their personal data. Because of the perfect multicollinearity between control levels of the independent variables due to the fact that disclosure source is nested in information type (i.e. there is no disclosure source for participants who were not exposed to any

informational stimuli), participants in the control condition were not included in the analysis. The results showed a significant main effect of disclosure source ($B$ = 1.48, $SE$ = 0.67, $p$ < .05; see table 2). In line with H3, this main effect was qualified by a significant interaction effect with disclosure source ($B$ = 1.90, $SE$ = 0.97, $p$ < .05). A closer examination of this effect showed that participants in the generic disclosure conditions were more likely to share their personal data when the firm disclosed the information ($B$ = 1.48, $SE$ = 0.67, $p$ < .05); however, among participants that were exposed to specific information about the use of their personal data, those in the firm disclosure condition were as likely to share their data with the firm as those in the third-party disclosure condition ($B$ = -0.42, $SE$ = 0.70, $p$ = .55). In the final binary logistic regression, experimental condition (including the control condition) was modeled as predictor on the data sharing decision. The results confirmed that, as hypothesized, only disclosure of generic information by the firm enhanced participants' sharing propensity as compared to the control condition ($P(\text{sharing})_{\text{generic, firm}}$ = 84.6%; $B$ = 1.62, $SE$ = 0.68, $p$ < .05; see table 3). The data sharing probabilities per condition are displayed in figure 1.

**TABLE 1: LOGISTIC REGRESSION: INFORMATION TYPE ON SHARING PROPENSITY**

| | B | SE | *p* | OR (95% CI) |
|---|---|---|---|---|
| Constant | 0.08 | 0.40 | NS | 1.08 (0.49 – 2.37) |
| Information type | | | | |
| Control vs. specific | 1.05 | 0.53 | < .05 | 2.95 (1.01 – 8.06) |
| Control vs. generic | 0.76 | 0.50 | NS | 2.13 (0.80 – 5.69) |

Pseudo $R^2$ = .03, model $\chi^2$ = 4.07, N = 123

**TABLE 2: LOGISTIC REGRESSION: INFORMATION TYPE AND SOURCE ON SHARING PROPENSITY**

| | B | SE | *p* | OR (95% CI) |
|---|---|---|---|---|
| Constant | 1.70 | 0.54 | < .01 | 5.50 (1.90 – 15.96) |
| Information type | 0.79 | 0.73 | NS | 0.45 (0.11 – 1.89) |
| Disclosure source | 1.48 | 0.67 | < .05 | 0.23 (0.06 – 0.84) |
| Info type x source | 1.90 | 0.97 | < .05 | 6.69 (1.01 – 44.34) |

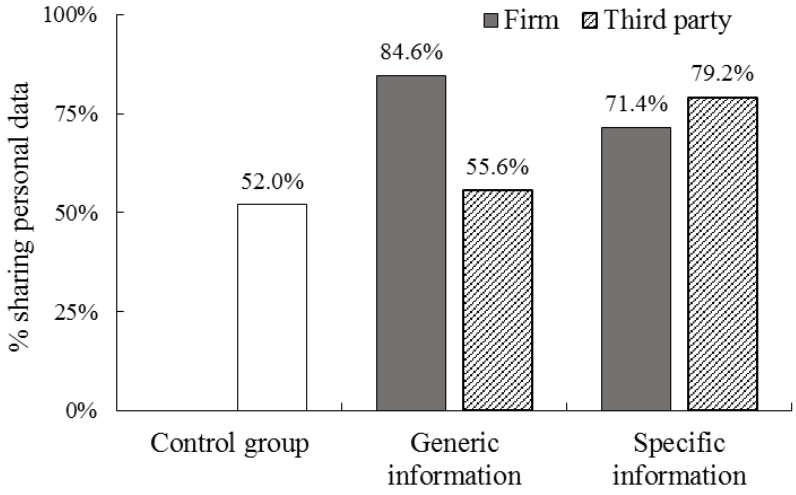
Pseudo $R^2$ = .05, model $\chi^2$ = 6.27, N = 98

**TABLE 3: LOGISTIC REGRESSION: CONDITION ON SHARING PROPENSITY**

| | B | SE | *P* | OR (95% CI) |
|---|---|---|---|---|
| Constant | 0.08 | 0.40 | NS | 1.08 (0.49 – 2.37) |
| Condition | | | | |
| Control vs. specific, firm | 0.83 | 0.63 | NS | 2.31 (0.67 – 7.89) |
| Control vs. specific, third party | 1.25 | 0.64 | 0.51 | 3.51 (1.00 – 12.36) |
| Control vs. generic, firm | 1.62 | 0.68 | < .05 | 5.08 (1.35 – 19.06) |
| Control vs. generic, third party | 0.14 | 0.56 | NS | 1.15 (0.39 – 3.44) |

Pseudo $R^2$ = .06, model $\chi^2$ = 9.93, N = 123

**FIGURE 1: PERSONAL DATA SHARING PROPENSITY**




*Mediation models*

To test H1b about the mediating effect of privacy concerns on the relationship between disclosure of specific information about the use of participants' personal information and willingness to share, a mediation analysis was conducted using a bootstrap approach (Preacher & Hayes, 2004). Preliminary analyses showed that neither probability of sharing information nor privacy concerns or trust were dependent upon the source of the specific information, hence specific disclosure conditions were grouped. In line with procedures recommended by Hayes and Preacher (2014), experimental condition was modeled as binary independent variable, privacy concerns and trust as mediators, and sharing decision as binary dependent variable. The bootstrapping test (n iterations = 10,000) showed that the indirect effect of disclosure of specific information about the use of the personal information on

consumer sharing through privacy concerns was positive and significant, with a 95% confidence interval excluding zero (0.01, 2.32). As expected, disclosure of specific information significantly reduced privacy concerns ($B$ = -0.78, $p$ < .05), which in turn positively affected sharing propensity ($B$ = -1.09, $p$ < .05). The direct effect of specific information disclosure on consumer sharing after the path through privacy concerns was accounted for was no longer significant ($B$ = 0.35, NS). The indirect effect through trust yielded a 95% confidence interval including zero (-0.03, 2.15), indicating non-significance.

To test H2b about the role of trust as mediator on the effect of disclosure of generic information on willingness to share, a second mediation analysis was conducted, following similar procedures. As preliminary analyses showed that trust and sharing propensity were dependent upon the source of generic information (trust: $M_{\text{firm}}$ = 4.07, $SD$ = 0.96; $M_{\text{third party}}$ = 3.40, $SD$ = 1.02; $t$(118) = 2.36, $p$ < .05; sharing propensity: see Table 2), but no significant differences were observed between the control condition and generic information by a third party, the latter conditions were grouped and a dummy variable was created. The bootstrapping test showed that the indirect effect of the dummy variable on consumer sharing through trust was significant, with a 95% confidence interval excluding zero (0.07, 1.76). Compared to the control condition and the condition in which generic information was disclosed by a third party, disclosure of generic information by the firm significantly enhanced trust ($B$ = 0.54, $p$ < .05), which in turn positively affected sharing propensity ($B$ = 1.12, $p$ < .05). When accounting for the indirect path through trust, the direct effect of the binary independent variable on consumer sharing was no longer significant ($B$ = 1.21, NS). In contrast with the first mediation analysis, the indirect path through privacy concerns was not significant (95% confidence interval: [-0.29, 1.11]).

## 4.5 DISCUSSION

The present study focused on the question how corporate transparency may affect consumers' willingness to share their personal data with firms. It was hypothesized that both the disclosure of specific information about a firm's use of the personal data, and the disclosure of generic information about the firm can persuade consumers to share their personal data, albeit through different underlying mechanisms. Specifically, the expectation was that specific information about the use of the personal data reduces an individual's concerns associated with making one's data available to firms, whereas a firm's disclosure of information relevant to the consumer in a general sense but not directly related to the firm's use of the personal data was hypothesized to enhance trust in the firm and elicit a reciprocal effect of sharing. The results of a web-based experiment provide support for our hypotheses. Consistent with the theory of perceived risk, exposing participants to specific information on how a firm was going to use their personal data significantly increased consumers' propensity to voluntarily share their data with that firm. This effect occurred regardless of the source of the information and was

mediated by participants' privacy concerns with regards to sharing their data with the firm. More importantly, exposing participants to generic information on a firm's performance in an area unrelated to the requested personal data also enhanced willingness to share personal data with the firm. This effect, however, was moderated by disclosure source such that it only occurred when the firm itself disclosed the information. Furthermore, the effect of disclosing generic information on sharing propensity was mediated by participants' trust in the firm but not by their privacy concerns. The concept of reciprocity helps explain these results. Being the recipient of self-disclosure enhances liking of and trust in the disclosing party and entices reciprocal self-disclosure (Berg, Dickhaut, & McCabe, 1995; Collins & Miller, 1994; Sprecher et al., 2013). Hence, when the firm disclosed something about itself, this enhanced participants' trust in the firm and persuaded them to reciprocate the firm's self-disclosure by sharing their personal data, even if the received information did not directly address any privacy concerns participant may have had about sharing their data with the firm.

Our findings contribute to several areas of research and have important implications for practitioners. First, this study contributes to a growing body of work on corporate transparency in a business context. Corporate transparency has been identified as a critical component of creating and maintaining in the relationships between organizations and its customers (Schnackenberg & Tomlinson, 2014). Recent work has linked corporate transparency to several forms of consumer perceptions and behavior, including firm evaluations (Granados, Gupta, & Kauffman 2010), willingness to pay (Carter & Curry, 2010; Demmers et al., 2015) and product choice (Cohn & Wolfe, 2014). These effects have mostly been attributed to the risk-reducing and trust-enhancing properties of being open and forthright about matters relevant to stakeholders. The present study confirms the role of risk reduction and trust as consequences of corporate transparency and identifies consumer data sharing as a new area of consumer behavior where corporate transparency may be particularly effective due to its ability to entice disclosure reciprocity. The identification of reciprocity as a mechanism to enhance consumer data sharing may present marketers with additional advantages. The act of reciprocating self-disclosure has been shown to lead to increased liking of and trust in the recipient of the disclosed information (Pillutla, Malhotra, & Murnighan, 2003; Sprecher et al., 2013). As such, the present study also adds considerably to the literature on consumer data collection. Effectively obtaining customer information is becoming increasingly important in personalizing relationships with customers. Previous studies have shown that consumers often submit to sharing their personal data because they underestimate the comprehensiveness or implications of corporate data collection practices (Acquisti & Grossklags, 2004), or in response to offers of convenience (Andrejevic, 2002). These findings suggest that marketers may benefit from trivializing or concealing data collection practices. Our findings suggest that doing quite the opposite, i.e. being open and forthright about the collection and use of consumer data, will also

persuade consumers to share their personal data. In line with risk reduction theory and previous work on disclosure (Carl, 2008), the communication of motives and providing additional information can mitigate any concerns one may have with regards to complying with a data sharing request. In the light of the increasing sensitization in society towards privacy-related issues, providing more accessible specific information about the collection and use of consumer data may become a dominant strategy in persuading consumers to share their data. More importantly, our findings suggest that general corporate transparency may also enhance consumers' propensity to share their personal data with firms. The main advantage of transparency as a means of persuading consumers to voluntarily share their data over strategies that aim at downplaying or concealing data collection practices is that it builds rather than harms consumer trust. Both in the present study and in previous work (Cohn & Wolfe, 2014; Dapko, 2012), corporate transparency is associated with trust, whereas many of the current untransparent data collection strategies evoke consumer reactance (Peppers & Rogers, 2012). Finally, the present study adds to a large body of work on reciprocity. Typically, self-disclosure reciprocity is conceptualized as the mutual information exchange process that exist between individuals, with exchanged information being similar in terms of amount, topic, and degree of intimacy. In line with other studies, our findings suggest that reciprocity may also apply to interactions between consumers and other entities such as organizations (Morales, 2005; Zimmer et al., 2005) or computers (Moon, 2000). Moreover, in our experiment, the information disclosed by the firm in the generic information conditions was unrelated to the information requested from participants. As such, our findings provide support for the findings in previous studies suggesting that reciprocity does not require equivalence between exchange partners (Cialdini, 1993; Schumann, Von Wangenheim, & Groene, 2014; Sprecher et al., 2013). For marketers, this implies that general policies of corporate transparency may persuade consumers to share their data even if the information made available by the firm is unrelated to the information requested from the consumer in terms of breadth or depth.

Our findings raise a number of interesting questions that merit further research. First, given that the effects of specific and generic information disclosure on willingness to share personal data operate through different underlying mechanisms, could the disclosure of both specific and generic information have an additional effect over the separate effects of either type of information? In the present study, participants were exposed to either generic or specific information, which both increased participants' willingness to share their data compared to a control condition. It would be interesting to investigate how exposure to both specific and generic information affects data sharing behavior. To prevent ceiling effects – sharing probability was over 80% in one of the conditions – the personal data consumers are requested to share should be rather sensitive, as to ensure a low baseline sharing propensity. In the current study, over 50% of participants in the control condition chose to share their

data with the firm, even though no information about the firm whatsoever was provided. Although this finding is in line with studies showing that people often readily disclose their data in spite of any privacy concerns they may have (Acquisti & Grossklags, 2004; Norberg, Horne, & Horne, 2007), asking consumers to disclose more sensitive information may lower baseline sharing propensity. Second, is the effect of corporate transparency on consumer data sharing dependent upon the timing of information disclosure? In the present study, in the firm disclosure conditions, the request to share personal data with the firm directly followed disclosure of information by the firm. In real firm-customer relationships, the exchange of information will often be indirect and time lags between exchanges will be larger. That is, corporate transparency may be a general policy of openness and honesty rather than a targeted disclosure preceding a data sharing request. Although previous work has demonstrated that reciprocal exchange processes take place within extended time frames and the type of information that is exchanged does not have to be equal, especially in ongoing relationships (Derlega & Berg, 1987), future research could focus on the effect of corporate transparency on consumer data sharing in a broader understanding of the concept. Third, will the effects of corporate transparency on consumer data sharing hold under conditions in which negative information about the firm is disclosed? Or will disclosure of negative information even persuade consumers to more easily share information, given that disclosure of unfavorable information leads to attributions of honesty (Eisend, 2006) that may entice sharing of more intimate information. In a recent series of studies, Demmers et al. (2015) demonstrate that disclosure of negative information may increase product and willingness to pay, and it would be interesting to investigate if this effect generalizes to data sharing.

## REFERENCES


Acquisti, A., Brandimarte, L., & Loewenstein, G. (2015). Privacy and human behavior in the age of information. *Science*, *347*(6221), 509–514.

Acquisti, A., & Grossklags, J. (2004). Losses, gains, and hyperbolic discounting: An experimental approach to personal information security attitudes and behavior. In J. Camp and R. Lewis (Eds.), *The Economics of Information Security* (pp. 165-178). Norwell, MA: Kluwer Academic Publishers.

Andrejevic, M. (2002). The work of being watched: Interactive media and the exploitation of self-disclosure. *Critical Studies in Media Communication*, *19*(2), 230-248.

Avnet, T., & Higgins, E. T. (2006). How regulatory fit affects value in consumer choices and cpinions. *Journal of Marketing Research*, *43*(1), 1-10.

Awad, F. N., & Krishnan, M. S. (2006). The personalization privacy paradox: An empirical evaluation of information transparency and the willingness to be profiled online for personalization. *MIS Quarterly*, *30*(1), 13–28.

Bauer, R. A. (1960). Consumer behavior as risk taking. In Hancock, R. S. (Ed.), *Dynamic Marketing for a Changing World* (pp. 389-98). Chicago, IL: American Marketing Association.

Benndorf, V., Normann, H (2014): The willingness to sell personal data (DICE Discussion Paper No. 143).

Berg, J., Dickhaut, J., & McCabe, K. (1995). Trust, reciprocity, and social history. *Games and economic behavior*, *10*(1), 122-142.

Bloomfield, R., & O'Hara, M. (1999). Market transparency: Who wins and who loses? *Review of Financial Studies*, *12*(1), 5-35.

Bodur, H. O., & Grohmann, B. (2005). Consumer responses to gift receipt in business-to-consumer contexts. *Psychology & Marketing*, *22*(5), 441-456.

Brown, C., & Carpenter, G. (2000). Why is the trivial important? A reasons-based account for the effects of trivial attributes on choice. *Journal of Consumer Research*, *26*(4), 372–385.

Buell, R. W., & Norton, M. I. (2011). The labor illusion: How operational transparency increases perceived value. *Management Science*, *57*(9), 1564–1579.

Bushman, R. M., Piotroski, J. D., & Smith, A. J. (2004). What determines corporate transparency? *Journal of Accounting Research*, *42*(2), 207-252.

Carl, W. J. (2008). The role of disclosure in organized word-of-mouth marketing programs. *Journal of Marketing Communications*, *14*(3), 225-241.

Carter, R. E., & Curry, D. J. (2010). Transparent pricing: Theory, tests, and implications for marketing practice. *Journal of the Academy of Marketing Science*, *38*(6), 759–774.

Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. *Journal of Marketing*, *65*(2), 81-93.

Cialdini, R. B. (1993). *Influence: Science and practice*. New York, NY: HarperCollins College Publishers.

Cohn, N. B., & Strassberg, D. S. (1983). Self-disclosure reciprocity among preadolescents. *Personality and Social Psychology Bulletin*, *9*(1), 97-102.

Cohn & Wolfe (2014). *From transparency to full disclosure*. Retrieved December 12, 2017, from http://www.cohnwolfe.com.

Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: A meta-analytic review. *Psychological Bulletin*, *116*(3), 457.

Crowley, A. E., & Hoyer, W. D. (1994). An integrative framework for understanding two-sided persuasion. *Journal of Consumer research*, *20*(4), 561-574.

Dabholkar, P. A., van Dolen, W. M., & de Ruyter, K. (2009). A dual-sequence framework for B2C relationship formation: Moderating effects of employee communication style in online group chat. *Psychology & Marketing*, *26*(2), 145-174.

Dapko, J. (2012). *Perceived Firm Transparency: Scale and Model Development* (Doctoral dissertation). University of South-Florida.

Davenport, T., & Harris, J. (2007). The dark side of customer analytics. *Harvard Business Review*, *85*(5), 37–48.

Demmers, J., Erbé, A., van Strijp, J., & Wientjes, C. (2015). The value of transparent marketing communication: How proactive disclosure affects consumer behavior. In P. Williams and A. Morales (Eds.), *Advances in Consumer Psychology*, *7*. Washington, DC: Society for Consumer Psychology.

Derlega, V. J., & Berg, J. H. (1987). *Self-disclosure: Theory, research and therapy*. New York, NY: Springer Science & Business Media.

Dinev, T., & Hart, P. 2006. An extended privacy calculus model for e-commerce transactions. *Information Systems Research*, *17*(1), 61-80.

Dowling, G. R., & Staelin, R. (1994). A model of perceived risk and intended risk-handling activity. *Journal of Consumer Research*, *21*(1), 119–134.

Edlund, J. E., Sagarin, B. J., & Johnson, B. S. (2007). Reciprocity and the belief in a just world. *Personality and Individual Differences*, *43*(3), 589-596.

Ehrlich, H. J., & Graeven, D. B. (1971). Reciprocal self-disclosure in a dyad. *Journal of Experimental Social Psychology*, *7*(4), 389-400.

Eisenberger, R., Cotterell, N., & Marvel, J. (1987). Reciprocation ideology. *Journal of Personality and Social Psychology*, *53*, 743–750.

Eisend, M. (2006). Two-sided advertising: A meta-analysis. *International Journal of Research in Marketing*, *23*(2), 187–198.

Elliot, A. J. (1999). Approach and avoidance motivation and achievement goals. *Educational Psychologist*, *34*, 169–189.

Eyuboglu, N., & Buja, A. (1993). Dynamics of channel negotiations: Contention and reciprocity. *Psychology & Marketing*, *10*(1), 47-65.

Fournier, S., & Avery, J. (2011). The uninvited brand. *Business Horizons*, *54*(3), 193–207.

Goldfarb, A., & Tucker, C. E. (2011). Privacy regulation and online advertising. *Management Science 57*(1), 57-71.

Gouldner, A. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, *25*, 161-178.

Graeff, T. R., & Harmon, S. (2002). Collecting and using personal data: Consumers' awareness and concerns. *Journal of Consumer Marketing*, *19*(4), 302-318.

Granados, N. F., Gupta, A., Kauffman, R. J. (2010). Information transparency in business-to-consumer markets: Concepts, framework, and research agenda. *Information Systems Research*, *21*(2), 207-226.

Groza, M. D., Pronschinske, M. R., & Walker, M. (2011). Perceived organizational motives and consumer responses to proactive and reactive CSR. *Journal of Business Ethics*, *102*(4), 639-652.

Greenberg, M. S., & Frisch, D. M. (1972). Effect of intentionality on willingness to reciprocate a favor. *Journal of Experimental Social Psychology*, *8*, 99–111.

Gupta, A. (2008). Transparency under scrutiny: Information disclosure in global environmental gGovernance. *Global Environmental Politics*, *8*(2), 1-7.

Hagel, J. I., & Rayport, J. F. (2007). The coming battle for customer information. *Harvard Business Review 75*(1), 53–65.

Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology*, *67*(3), 451-470.

Hellwig, K., Morhart, F., Girardin, F., & Hauser, M. (2015). Exploring different types of sharing: A proposed segmentation of the market for "sharing" businesses. *Psychology & Marketing*, *32*(9), 891-906.

Higgins, E. T. (1998). Promotion and prevention: Regulatory focus as a motivational principle. In E. M. Zanna (Ed.), *Advances in Experimental Social Psychology*, *30* (pp. 1–46). New York, NY: Academic Press Inc.

Kauffman, R., Lee, Y., Prosch, M., & Steinbart, P. (2011). A survey of consumer information privacy from the accounting information systems perspective. *Journal of Information Systems*, *25*(2), 47-79.

Liu, B. F., Austin, L. L., & Jin, Y. (2011). How publics respond to crisis communication strategies: The interplay of information form and source. *Public Relations Review*, *37*, 345-353.

Miller, N. J., & Keane, R. C. (1997). Reciprocal exchange in rural communities: Consumers' inducements to inshop. *Psychology & Marketing*, *14*(7), 637-661.

Pentland, A. (2009). Reality mining of mobile communications: Toward a new deal on data. In S. Dutta and I. Mia (Eds.), *The Global Information Technology Report 2008–2009* (pp. 75–80). Geneva, Switzerland: World Economic Forum.

Peppers, D., & Rogers, M. (2012). *Extreme trust: Honesty as a competitive advantage*. New York, NY: Portfolio/Penguin.

Phelps, J., Nowak, G., & Ferrell, E. (2000). Privacy concerns and consumer willingness to provide personal information. *Journal of Public Policy & Marketing*, *19*(1), 27–41.

Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, *58*(7), 20-38.

Malhotra, N. K., Kim, S. S., & Agarwal, J. (2004). Internet users' information privacy concerns (IUIPC): The construct, the scale, and a causal model. *Information Systems Research*, *15*(4), 336-355.

Meinert, D. B., Peterson, D. K., Criswell, J. R., & Crossland, M. D. (2006). Privacy policy statements and consumer willingness to provide personal information. *Journal of Electronic Commerce in Organizations*, *4*(1), 1-17.

Miller, L. C., & Kenny, D. A. (1986). Reciprocity of self-disclosure at the individual and dyadic levels: A social relations analysis. *Journal of Personality and Social Psychology*, *50*, 713–719.

Mitchell, V. W. (1999). Consumer perceived risk: Conceptualisations and models. *European Journal of Marketing*, *33*(1/2), 163-195.

Moon, Y. (2000). Intimate exchanges: Using computers to elicit self-disclosure from consumers. *Journal of Consumer Research*, *26*(4), 323–339.

Morales, A. C. (2005). Giving firms an "E" for effort: Consumer responses to high-effort firms. *Journal of Consumer Research*, *31*(4), 806-812.

Murphy, P., Laczniak, G., & Wood, G. (2007). An ethical basis for relationship marketing: A virtue ethics perspective. *European Journal of Marketing*, *41*(1/2): 37-57.

Norberg, P. A., Horne, D. R., & Horne, D. A. (2007). The privacy paradox: Personal information disclosure intentions versus behaviors. *Journal of Consumer Affairs*, *41*(1), 100-126.

Pillutla, M. M., Malhotra, D., & Murnigham, J. K. (2003). Attributions of trust and the calculus of reciprocity. *Journal of Experimental Social Psychology*, *39*, 448–455.

Prahalad, C., & Ramaswamy, V. (2004). Co-Creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, *18*(3), 5-14.

Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, *36*(4), 717–731.

Rawlins, B. (2008). Give the emperor a mirror: Toward developing a stakeholder measurement of organizational transparency. *Journal of Public Relations Research*, *21*(1), 71-99.

Roselius, T. (1971). Consumer rankings of risk reduction methods. *Journal of Marketing*, *35*(1), 56-61.

Schnackenberg, A. K., & Tomlinson, E. C. (2014). Organizational transparency: A new perspective on managing trust in organization-stakeholder relationships. *Journal of Management*, *42*(7), 1784-1810.

Schumann, J. H., Von Wangenheim, F., & 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.

Schwartz, P. M. (2013). The E.U.-U.S. privacy collision: A turn to institutions and procedures. *Harvard Law Review*, *126*, 1966-2009.

Sheehan, K. B. (2002). Toward a typology of Internet users and online privacy concerns. *The Information Society*, *18*(1), 21-32.

Sirdeshmukh, D., Singh, J., & Sabol, B. (2002). Consumer trust, value, and loyalty in relational exchanges. *Journal of Marketing*, *66*(1), 15-37.

Smith, H. J., Milberg, S. J., & Burke, S. J. (1996). Information privacy: measuring individuals' concerns about organizational practices. *MIS quarterly*, 167-196.

Sprecher, S., Treger, S., Wondra, J. D., Hilaire, N., & Wallpe, K. (2013). Taking turns: Reciprocal self-disclosure promotes liking in initial interactions. *Journal of Experimental Social Psychology*, *49*(5), 860–866.

Steptoe, A., Pollard, T. M., & Wardle, J. (1995). Development of a measure of the motives underlying the selection of food: the food choice questionnaire. *Appetite*, *25*(3), 267-284.

Taddei, S., & Contena, B. (2013). Privacy, trust and control: Which relationships with online self-disclosure? *Computers in Human Behavior*, *29*(3), 821–826.

Tanner, A. (2014). *What stays in Vegas: The world of personal data - lifeblood of big business - and the end of privacy as we know it*. New York, NY: PublicAffairs.

Taylor, J. W. (1974). The role of risk in consumer behavior. *The Journal of Marketing*, *38*(2), 54-60.

Thaler, R., & Tucker, W. (2013). Smarter information, smarter consumers. *Harvard Business Review*, *91*(1/2), 44-54.

Wilke, H., & Lanzetta, J.T. (1970). The obligation to help: The effects of amount of prior help on subsequent helping behavior. *Journal of Experimental Social Psychology*, *6*, 488–493.

Zhu, K. (2004). Information transparency hypothesis: Economic implications of information transparency in electronic markets. *Advances in the economics of information systems. Hershey, PA: IGI Global*.

Zimmer, J. C., Arsal, R., Al-Marzouq, M., Moore, D., & Grover, V. (2010). Knowing your customers: Using a reciprocal relationship to enhance voluntary information disclosure. *Decision Support Systems*, *48*(2), 395–406.

## APPENDIX A: EXPERIMENTAL STIMULI

| SPECIFIC, FIRM | SPECIFIC, THIRD PARTY |
|---|---|
| Collecting and storing customer information is essential for us. Customer information can include personal demographics such as age or income level of our customers; it can exist of geographic demographics or it attitudinal demographics. We analyzed this data to explore buying patterns and get insight into our customers' perception towards our company. We collect the customer data from internal and external sources. Internal customer data is generated by any customer interaction with our sales team and is typically stored in our corporate database. Data external to the organization is gathered from many different online and offline sources, such as social media websites like Facebook and Twitter and call centers. The goal of collecting customer information is to understand our customer motivations better. It helps us to develop products that meet and exceed customer preferences. We use the customer data with the sole purpose to improve products. Customer information is never shared with third parties and is stored in a secure manner. | Collecting and storing customer information is essential for Kraft Foods. Customer information can include personal demographics such as age or income level of their customers; it can exist of geographic demographics or attitudinal demographics. Kraft Foods analyzes this data to explore buying patterns and get insight into their customers' perception towards their company. They collect the customer data from internal and external sources. Internal customer data is generated by any customer interaction with the sales team and is typically stored in their corporate database. Data external to the organization is gathered from many different online and offline sources, such as social media websites like Facebook and Twitter and call centers. The goal of Kraft Foods in collecting customer information is to understand their customer motivations better. It helps them to develop products that meet and exceed customer preferences. Kraft Foods uses the customer data with the sole purpose to improve products. Customer information is never shared with third parties and is stored in a secure manner. |
| GENERIC, FIRM | GENERIC, THIRD PARTY |
| While we have made progress in our own manufacturing operations, the total environmental footprint of our products including consumer use has increased for greenhouse gas (GHG) emissions across the value chain (+5% since 2010) and use of plastic (+15%). We are making improvements in our current business, for example, by minimizing the use of water. However, other parts of our portfolio are evolving in ways that are increasing our footprint: our beverage department has expanded in the use of plastic products and our raw nuts business has experienced high levels of growth that leads to more energy use. Our goal is to halve greenhouse gas emissions and water waste by 2020. | While Kraft Foods has made progress in their manufacturing operations, the total environmental footprint of their products including consumer use has increased for greenhouse gas emissions (GHG) across the value chain (+5% since 2010) and use of plastic (+15%). Kraft Foods is making improvements in their current business, for example, by minimizing the use of water. However, other parts of the portfolio are evolving in ways that are increasing their footprint: their beverage business has expanded in the use of plastic products and their raw nuts business has experienced high levels of growth that leads to more energy use. Their goal is to halve greenhouse gas emissions and water waste by 2020. |

## APPENDIX B: MEASUREMENT ITEMS

| | |
|---|---|
| Data sharing | Do you agree to share the data you have provided in this study with …? |
| Trust<br>(α = .87) | I trust …<br>I rely on …<br>… is an honest company<br>… is a safe company |
| Privacy concerns<br>(α = .90) | Providing my personal data to … will / would put my online personal privacy at risk.<br>I am concerned that …<br>will / would share my personal information with other parties.<br>will / would not take the necessary steps to ensure that other parties access my personal information.<br>will / would use my personal information to send me intrusive marketing messages.<br>will / would know too much about me based on my personal information. |

# Chapter 5:

## Engagement with brand posts during consecutive stages of the customer journey

Authors Joris Demmers, Jesse W. J. Weltevreden, Willemijn M. van Dolen

Earlier versions of this work were presented at the Direct/Interactive Marketing Research Summit 2014, San Diego, CA, the European Marketing Academy Conference 2017, Groningen, the Netherlands, and Australian & New Zealand Marketing Academy Conference 2017, Melbourne, Australia.

## ABSTRACT

Brands use social media to engage with customers in all stages of the customer journey. Prior work on customer engagement with brand posts has not taken into account the different needs and gratifications sought by customers during consecutive temporally defined stages of the customer experience. We propose that what drives customer engagement with brand posts on social media may depend on the stage of the customer experience. We test our hypotheses by analysing over 24,000 brand posts by event organisers in both B2B and B2C contexts. Adopting a multilevel approach, we find that informative posts generate more "likes", "shares", and "comments" in the pre-consumption stage whereas entertaining posts generate higher levels of engagement in the post-consumption stage. A higher degree of activating elements in brand posts is associated with higher engagement in the pre- and post-consumption stage, but not in the consumption stage. Finally, brand posts with a medium level of vividness are associated with higher levels of engagement during all stages of the customer experience. These findings have important implications for marketers in designing their social media programs, and contribute to the current understanding of social media and customer engagement with branded content throughout the customer journey.

## 5.1 INTRODUCTION

Social media have rapidly become an important element of brands' marketing communication mix. Companies' spendings on social media marketing in the US are projected to rise from $8.2 billion in 2014 to $18.7 billion in 2019 (Miglani, 2014). More than 80 percent of Fortune 500 brands actively use social network sites such as Facebook, Twitter, Instagram, and Youtube to transmit their marketing messages and engage with consumers in all stages of the customer journey (Barnes & Daubitz, 2016; Barnes, Lescault, & Holmes, 2015), while 73% of consumers interact with brands through social media (Nisar & Whitehead, 2016).

One of the main goals for marketers of using social media is to establish and reinforce ongoing relationships with customers throughout all stages of the customer journey (Malthouse et al., 2013; Weinberg et al., 2013). The ability to engage customers online is considered paramount in reaching this goal (Dessart et al., 2015; Labrecque, 2014; Vivek et al., 2012). Customer engagement has been shown to contribute to superior performance outcomes in terms of sales, brand referrals and word of mouth, collaborative product development processes, co-creative experiences, and profitability (Hollebeek, Glynn, & Brodie, 2014; Kim & Ko, 2012; Schamari & Schaefers, 2015; Srinivasan, Anderson, & Ponnavolu, 2002). In recent years, several studies have investigated what drives customer engagement with social media content posted by brands. In these studies, researchers have used post characteristics such as content, vividness, activating elements, text length, and timing to predict the number of "likes", "shares", and "comments" brand posts generate (De Vries, Gensler, & Leeflang, 2012; Dessart, Veloutsou, & Morgan-thomas, 2015; Gummerus, Liljander, Weman, & Pihlström, 2012; Luarn, Lin, & Chiu, 2014; Pletikosa Cvijikj & Michahelles, 2013; Sabate, Berbegal-Mirabent, Cañabate, & Lebherz, 2014; Tsai & Men, 2013; Zadeh & Sharda, 2014). Such behavioral manifestations of customer engagement not only contribute to the customer-brand relation on an individual level, but also constitute to the virality of brand-generated content; By "liking" or "commenting on" brand posts consumers automatically share the brand-related content with peers in their network and hence facilitate the potential impact of the branded content on the attitudes and behavior of an extended audience (Bonsón & Ratkai, 2013; Sabate et al., 2014; Swani, Brown, & Milne, 2014; Swani, Milne, & Brown, 2013; van Doorn et al., 2010; Zadeh & Sharda, 2014).

In this study, we investigate what factors drive customer engagement with brand-generated content in different stages of temporally defined customer experiences. Customers today interact with brands through myriad touchpoints, and improving the customer experience throughout different stages of the customer journey is now a top priority for managers (Forrester, 2015). To date, studies that investigate behavioral manifestations of customer engagement with brand posts on social media have looked at the number of "likes", "shares", and/or "comments" without distinguishing between the

different stages in the customer journey. Prior work has called for more research on drivers of customer engagement throughout the customer experience (Lemon & Verhoef, 2016). With this study, we answer this call by developing a deeper understanding of how brands' social media activities drive customer engagement throughout the customer journey. We draw on uses-and-gratifications theory (Katz, 1959) and findings from the online customer engagement literature to develop a conceptual model in which we postulate hypotheses about the effects of several brand post characteristics on engagement with brand-generated content. Our core argument is that consumers have different needs in different stages of the customer journey (Engel, Blackwell, & Kollat, 1979; Häubl & Trifts, 2000; Verhoef, Kannan, & Inman, 2015), and that the extent to which a brand is able to fulfil the stage-specific needs of customers affects consumer responses (De Ruyter et al., 1997; Kohli, Devaraj, & Mahmood, 2004). For example, a brand post offering information on a product benefit may generate many "likes" during the information search stage, whereas a more hedonic brand post that focuses on deepening the customer-brand relationship may generate higher levels of engagement in the post-consumption stage. In sum, in the current work we propose that what triggers customer engagement in one stage of the customer journey may differ from what drives engagement during other stages, depending on the extent to which a post fulfills consumer needs during a specific stage.

To test our hypotheses we collected data regarding more than 24,000 brand posts and their engagement level from the Facebook pages of more than 200 of conference and fair organizers. Conferences and fairs provide a unique opportunity to study the use of social media to engage with consumers during consecutive stages of the customer journey. Firstly, conferences, fairs, and festivals have an inherent experiential nature, making them an appropriate venue for studying customer experiences (Manthiou, Lee, Tang, & Chiang, 2014). Furthermore, different types of events are widely used by marketers to enhance customer relations in both B2B and in B2C settings, and previous work has used temporally defined events like motion picture releases, product launches, trade shows, and music festivals as venues to study online word or mouth (Dellarocas, Zhang, & Awad, 2007; Duan, Gu, & Whinston, 2008), brand consideration (Baxendale, Macdonald, & Wilson, 2015), market performance (Divakaran, Palmer, Søndergaard, & Matkovskyy, 2017), firm value (T. Kim & Mazumdar, 2016), customer engagement (Hudson & Hudson, 2013), and customer loyalty (Lee, Lee, Lee, & Babin, 2008; Manthiou et al., 2014). Finally, planned events are characterized by clearly defined temporal boundaries, which facilitates breaking down the customer journey in a sequential progression through a pre-consumption, consumption, and post-consumption stage along chronological borders (Getz & Page, 2007).

Besides contributing to the customer engagement literature by distinguishing between consecutive stages of the customer journey, with the current work we also aim to extend the nascent

literature on social media use and effectiveness in B2B contexts by including both B2B and B2C events (Swani et al., 2014, 2013). For marketers, these insights provide directly applicable implications for brands' social media strategies for temporally defined customer experiences and for personalized marketing communication efforts.

The remainder of this article is structured as follows. First, we review relevant literature to make inferences about our expectations with regards to the current study. Then, we describe our sample and methodological approach, and subsequently present the empirical results of our analysis. In the final section we summarize our findings and discuss the results and their theoretical and managerial implications together with the limitations of this study.

## 5.2 CONCEPTUAL DEVELOPMENT

### *Customer engagement*

Customer engagement has been defined as "a psychological state that occurs through interactive, co-creative customer experiences with a brand in service relationships" (Brodie, Hollebeek, Jurić, & Ilić, 2011). It is often regarded as a motivational construct (Algesheimer, Dholakia, & Herrmann, 2005; Baldus, Voorhees, & Calantone, 2014; van Doorn et al., 2010), driving the voluntary investment of consumers' resources into brand interactions that go beyond the core transaction (Hollebeek, 2011; Hollebeek, Srivastava, & Chen, 2016). One stream of literature regards customer engagement as a multidimensional construct. Some scholars identify dimensions based on consumer motivations for interacting with a brand (Baldus et al., 2014) or on distinct customer experiences (Calder, Malthouse, & Schaedel, 2009), but most conceptualizations build on the work by Brodie and Hollebeek and distinguish between cognitive, affective, and behavioral dimensions of customer engagement (Brodie et al., 2011; Hollebeek et al., 2014; Hollebeek, Srivastava, et al., 2016; Vivek, Beatty, Dalela, & Morgan, 2014). A second stream views engagement primarily as specific customer activities or action patterns beyond purchase and hence focus on the behavioral aspect of engagement (Gummerus et al., 2012; Harmeling, Moffett, Arnold, & Carlson, 2017; Jaakkola & Alexander, 2014; Pletikosa Cvijikj & Michahelles, 2013; van Doorn et al., 2010; Verleye, Gemmel, & Rangarajan, 2014). Studies with a more behavioral focus implicitly incorporate cognitive and affective components of customer engagement as drivers of engagement behaviors (Hollebeek, Srivastava, et al., 2016), as they typically acknowledge the multidimensional nature of engagement as driver of the investment in behavioral interaction with the brand (van Doorn et al., 2010). Similarly, multidimensional conceptualizations that incorporate

cognitive, affective, and social dimensions, include the notion of the interactive nature of engagement that requires "a mutual or reciprocal action" (Hollebeek et al., 2016).

Contrasting conceptualizations across the customer engagement domain and different research contexts have led to different operationalizations of customer engagement. In recent years, several measurement scales have been developed that aim to capture the multidimensionality of customer engagement (see Baldus et al., 2014, for an overview). For instance, whereas some scales directly measure consumers' self-reported cognitive processing, affection, and activation to capture the investment of cognitive, affective, and behavioral resources (Hollebeek et al., 2014), others include the measurement of a social connection dimension (Vivek et al., 2014), display considerable overlap with broader measurement of motivations to interact online (Baldus et al., 2014), measure consumers' tendency to include brands as part of their self-concept (Sprott, Czellar, & Spangenberg, 2009), or focus on measuring different customer experiences (Calder et al., 2009). In the context of social network sites, however, most studies focus on capturing the behaviors associated with customer engagement and use behavioral metrics such as consumer "likes" "comments", and "shares" in response to branded content to capture customer engagement (Gummerus et al., 2012; He, Zha, & Li, 2013; Kabadayi & Price, 2014; Kurniawan et al., 2010; Pletikosa Cvijikj & Michahelles, 2013; Schivinski, Christodoulides, & Dabrowski, 2016). These metrics represent the interactive nature of customer engagement that requires reciprocal actions in response to the content posted by the brand and hence directly measure customer engagement behavior, but also reflect the affective, cognitive, and social dimensions of customer engagement, albeit more implicitly. For instance, by "liking" branded content, a customer indicates his/her positive cognitions and/or emotions towards the engagement object, whereas commenting on brand posts is likely to also reveal a customer's cognitions and feelings towards the brand. Finally, sharing branded content throughout one's personal social network can be linked to the voluntary investment of the customer's social resources into brand interactions. Harmeling et al. (2017) identify four types of customer-owned resources, two of which are of particular interest in the context of social media marketing. *Customer network assets* refer to the number, diversity, and structure of a customer's interpersonal ties within his or her social network. These networks provide firms with access to broad audiences that may otherwise not be easily reached. For instance, when a customer "shares" a brand post on Facebook, the post becomes visible to his/her connections. *Customer persuasion capital* is the degree of trust and influence a customer has with fellow consumers. Given that information from familiar fellow consumers engenders high levels of trust and has great influence on the receiving consumer's purchase decision, brand posts that are "liked" or "shared" by consumers may exert great influence on the extended audience. Hence, by investing and integrating resources into brand

interactions, engaged customers are a fundamental potential source of strategic benefit (Hollebeek, Srivastava, et al., 2016).

In sum, following the work by Brodie and Hollebeek we adopt an interaction-centric, multidimensional conceptual view of customer engagement as the motivationally driven investment of cognitive, affective, behavioral, and social resources into brand interactions (Brodie et al., 2011; Hollebeek, 2011; Hollebeek, Srivastava, et al., 2016). However, we focus on the behavioral manifestations of the investment of these customer-owned resources in the context of a social network site, following previous work in similar settings (Gummerus et al., 2012; He et al., 2013; Kabadayi & Price, 2014; Kurniawan et al., 2010; Pletikosa Cvijikj & Michahelles, 2013; Schivinski et al., 2016).

### *Uses and Gratifications Framework*

In our investigation of customer engagement with brand posts we adopt a consumer-centric uses and gratifications (UG) framework. UG theory posits that people's media use is goal-oriented such that the extent to which an individual can obtain his/her sought gratifications determines one's use of a specific medium (Katz, 1959). Research has identified a number of key goals for media usage (McQuail, 1983), which have later been confirmed to also apply to social media use (Calder et al., 2009; Muntinga, Moorman, & Smit, 2011; Tsai & Men, 2013): entertainment, information, integration and social interaction, and personal identity. Entertainment refers to hedonic goals of enjoyment, leisure, relaxation, and emotional relief generated by temporarily escaping from daily routines (Kaye, 2007; Park, Kee, & Valenzuela, 2009; Shao, 2009; Tsai & Men, 2013). Information is related to the utilitarian goal of acquiring information regarding products, services, and brands (Kaye, 2007; Muntinga et al., 2011; Park et al., 2009). Integration and social interaction motivation is about gaining a sense of belonging by connecting with friends, family and society (Muntinga et al., 2011), whereas personal identity motivation refers to self-related goals such as self-expression, impression management, and self-fulfillment (Papacharissi, 2007; Tsai & Men, 2013). Recently, several studies have focused on identifying specific motivations for using social media in relation to brands, such as affiliating with brands, seeking information through brand-generated and consumer-generated content, communicating with brands, being part of a brand community, and seeking entertainment through brand-generated content (Enginkaya & Yılmaz, 2014; Muntinga et al., 2011; Nisar & Whitehead, 2016).

Prior work has applied the principles of UG theory in an online context to explain how the content of branded messages may drive customer engagement (Calder et al., 2009; De Vries & Carlson, 2014; Pletikosa Cvijikj & Michahelles, 2013). This conceptual link between engagement and UG theory is based on the notion that "both perspectives' focus on proactively generated, interactive, co-creative

interactions and relationships" (Hollebeek, Malthouse, & Block, 2016). In other words, both customer engagement and UG theory regard consumers as proactive contributors to their personal experiences with brands.

Based on the notion that consumers' goals drive their subsequent behavior in relation to the use of media and brand interactions, we propose that customer engagement may be driven by different factors in consecutive stages of temporally defined customer experiences. Consumer goals for using different media vary as a function of the stage in the customer journey (Engel, Blackwell, & Kollat, 1978; Häubl & Trifts, 2000; Verhoef, Kannan, & Inman, 2015). Most models of consumer behavior distinguish between consecutive stages in consumer decision making. For example, in the traditional model of buyer behavior, the customer journey consists of three stages: pre-consumption, consumption and post-consumption (e.g. Steinfield & Bouwman, 2002). In the pre-consumption stage, consumers first recognize a need and acquire information before they arrive at a set of solutions and eventually select and purchase the preferred option. In this stage, consumers' main goal is to acquire information about products and services that is relevant to their final purchase decision, which marks the end of the consumption stage. Next, in the consumption stage customers experience the benefits which are delivered by the product or service provider. In the post-consumption stage consumers evaluate services by comparing the service they perceived they have received with their expectations about what they should have received. Following a satisfactory consumption experience, in this stage consumers sometimes share their satisfaction with others and seek to establish a more structural relationship with the brand (Dholakia, Bagozzi, & Pearo, 2004; Gummerus et al. 2012). These varying goals during the different stages of the customer experience may affect consumer responses (De Ruyter et al., 1997; Kohli, Devaraj, and Mahmood, 2004). For example, consumers often use different channels during consecutive stages of the customer journey (Konuş, Verhoef, & Neslin, 2008; Neslin et al. 2006; Rangaswamy & Van Bruggen, 2005; Van Baal & Dach, 2005; Verhoef, Neslin, & Vroomen, 2007), because the different channels vary in the degree to which they fulfil the gratifications sought by consumers in specific stages (Balasubramanian, Raghunathan, & Mahajan, 2005; Schröder & Zaharia, 2008).

Research has shown that consumer engagement with branded content on social media is influenced by post characteristics such as hedonic versus utilitarian content, vividness, and activating elements (De Vries et al., 2012; Pletikosa Cvijikj & Michahelles, 2013; Luarn, Lin, & Chiu, 2014). Based on UG framework presented above, we propose that the impact of these factors on engagement may vary between the consecutive stages of temporally defined customer experiences. In the following subsections, we discuss how we expect consumer engagement with brand posts on social media to be

influenced by these factors in the pre-consumption, consumption, and post-consumption stage of the customer experience.

### *Utilitarian versus hedonic content*

Information seeking and entertainment have been identified as two important consumer goals for using social media (Calder, Malthouse, & Schaedel, 2009; Tsai & Men, 2013) and online interactions with brands (Enginkaya & Yılmaz, 2014; Muntinga et al., 2011; Nisar & Whitehead, 2016). Information seeking is driven by the utilitarian goal to gather information that is relevant to the purchase decision and consumption experience (Janiszewski, 1998), whereas entertainment seeking is linked to a hedonic motivation of fun, playfulness and enjoyment (Ahtola & Batra, 1999; Babin, Darden, & Griffin, 1994). Prior work has found that utilitarian versus hedonic motivations affect consumer behavior as well as customer responses to branded content (Arnold & Reynolds, 2003; Babin et al., 1994; Batra, Ahuvia, & Bagozzi, 2012; Dhar & Wertenbroch, 2000; Hirschman & Holbrook, 1982). Conceptually, hedonism and utilitarianism are not necessarily two ends of a one-dimensional scale (Voss, Spangenberg, & Grohmann, 2003). That is, consumers may engage in brand-related activities for both utilitarian and hedonic motives (Babin et al., 1994; Crowley, Spangenberg, Hughes, & Crowley, 2015). Similarly, products, online environments, and brand-generated content in themselves or in their features may be hedonic or utilitarian, or a mixture of both (Bernardo, Marimon, & Alonso-Almeida, 2012; Kim, Galliers, Shin, Ryoo, & Kim, 2012; Pöyry et al., 2013). However, traditional scales for measuring utilitarian and hedonic values divide motives into having either rational utilitarian value or fun hedonic value (Babin et al., 1994). In addition, prior work suggests that utilitarian and hedonic value are created through different activities and by different information system types (Cotte, Chowdhury, Ratneshwar, & Ricci, 2006; Hartman, Shim, Barber, & O'Brien, 2006; Pöyry, Parvinen, & Malmivaara, 2013), and has classified products as either hedonic utilitarian based on the relative importance of the hedonic and utilitarian value they generate for customers (Babin et al., 1994; Chaudhuri & Holbrook, 2002; Dhar & Wertenbroch, 2000; O'Curry & Strahilevitz, 2001; Okada, 2005). In line with this work, we categorize brand-generated content as being primarily or relatively more hedonic or utilitarian.

Brands benefit from offering online content that gratifies consumer goals of information and entertainment; research has shown that both brand posts offering utilitarian content and posts that have a primarily hedonic focus can lead to higher levels of customer engagement (De Vries et al., 2012; Pletikosa Cvijikj & Michahelles, 2013; Luarn, Lin, & Chiu, 2014). We propose that the extent to which the primary focus of brand posts on either providing utilitarian or hedonic value affects customer engagement may vary across consecutive stages of the customer journey.

Consumer search behavior precedes all purchasing, choice, and consumption behavior and as such is a defining feature of the pre-consumption stage (Peterson and Merino, 2003). Consumers are driven by a goal to acquire information from both internal and external sources about products or services to make potentially better consumption decisions (Moothy, Ratchford, & Talukdar, 1997; Murray, 1991; Punj & Staelin, 1983; Schmidt & Spreng, 1996) and typically develop positive attitudes towards the source of this information (Klebba & Unger, 1983; Luo, 2002). Hence, brand posts that provide consumers with the information about events, products, and services in the pre-consumption stage are likely to elicit positive affect, which in turn should generate particularly high levels of behavioral engagement. In contrast, brand posts that primarily offer hedonic content, are less likely to fulfil consumers' utilitarian goals in the pre-consumption stage and may even make the information search process less efficient (Rothwell, 2010), and as a result are likely to generate relatively low levels of engagement.

During the consumption and post-consumption stage, however, entertaining posts may generate higher levels of consumer engagement. When the direct need to acquire information in order to optimize purchase and consumption decisions has been fulfilled, entertainment becomes an important motive to interact with brands through social media (Enginkaya & Yılmaz, 2014; Nisar & Whitehead, 2016). In the consumption stage, content offering hedonic value may enrich the consumption experience itself (Lemon & Verhoef, 2016). That is, entertaining brand posts on social media may serve as a customer touchpoint that provides additional hedonic value beyond the utilitarian value of the primary product or service itself, to the extent that it becomes an integrated part of the total customer experience (Verhoef, Kannan, & Inman, 2015). In the post-consumption stage, assuming a satisfactory experience, consumers are more likely to develop more structural relationships with the brand, and may continue to follow the brand online (Brodie et al., 2011; Dessart, Veloutsou, & Morgan-Thomas, 2015; Muntinga, Moorman, & Smit, 2011; Veloutsou, 2015). Studies on online virtual communities have demonstrated that maintaining interpersonal connectivity and seeking entertainment are important motivations to participate in online communities (Dunne, Lawlor, & Rowley, 2010; Dholakia, Bagozzi, & Pearo, 2004; Gummerus et al. 2012). Hence, in the post-consumption stage, entertaining brand posts may resonate with consumers as they fulfil consumers' hedonic goals and as a result lead to higher levels of engagement.

In sum, we propose that in the pre-consumption stage informative posts will lead to higher levels of engagement than entertaining posts, whereas in the consumption and post-consumption stage, entertaining posts will generate higher levels of engagement.

*H1a:* In the pre-consumption stage, informative posts generate higher levels of engagement than entertaining posts.

*H1b:* In the consumption stage, entertaining posts generate higher levels of engagement than informative posts.

*H1c:* In the post-consumption stage, entertaining posts generate higher levels of engagement than informative posts.

In addition to the hypothesized impact of utilitarian versus hedonic content of brand posts on customer engagement depending on the stage of the customer experience, customer engagement with utilitarian versus hedonic brand posts may also vary as a function of the context. Swani et al. (2014, 2013), in their analysis of the effectiveness of brand-generated content on social network sites, distinguish between B2B and B2C. In B2B contexts, product offerings are typically more technical and functional then in B2C contexts, and decision making processes tend to be more formalized (Swani et al., 2013). As a result, traditionally B2B marketers generally make more functional appeals in their marketing communication efforts (Turley & Kelley, 1997), although the findings by Swani et al. (2014) show that brand posts were more likely to contain emotional than functional appeals in both B2B and B2C contexts. Based on the notion that B2B settings generally constitute a more utilitarian context as compared to B2C settings in terms of both product offerings and customer decision making, we expect that brand posts that are primarily informative will be more likely to fulfill utilitarian goals throughout the customer journey, and will therefore generate higher levels of customer engagement in all stages of the customer journey.

*H2:* In all customer experience stages, the effect of post content (informative vs. entertaining) (H1a, H1b, H1c), is moderated by event type, such that for B2B events, informative posts always generate higher engagement than entertaining posts.

### *Vividness*

Vividness is defined as “the representational richness of a mediated environment as defined by its formal features, that is, the way in which an environment presents information to the senses” (Steuer 1992, p. 81). It is also referred to as “media richness” (Daft and Lengel, 1986). The level of vividness of a message is determined by the number of sensory dimensions it stimulates, as well as the quality of

the presentation (Coyle & Thorson, 2001). For instance, a video is more vivid than a photo because it not only stimulates sight but also hearing (De Vries, Gensler, & Leeflang, 2012). Research has demonstrated that high levels of message vividness generally elicit positive emotional reactions, for example in the context of instructional messages (Miller & Marks, 1997), online shopping (Coyle & Thorson, 2001; Jiang & Benbasat, 2007; Park, Lennon, & Stoel, 2005), and online advertising (Fortin & Dholakia, 2005; Lohtia, Donthu, & Yaveroglu, 2007). A number of studies explicitly link the concept of vividness to brand post popularity and show that higher levels of vividness lead to more consumer engagement (De Vries, Gensler, & Leeflang, 2012; Pletikosa Cvijikj & Michahelles, 2013; Sabate et al., 2014). Based on these results, we propose that more vivid posts by event organizers lead to higher levels of engagement, irrespective of stage of the customer journey.

*H3*: In all stages of the customer journey, the higher the level of vividness of a post, the higher the level of engagement.

### *Activating elements*

The term activating elements refers to the elements of a brand post that facilitate and invite two-way communication between the brand and the consumer. Although in previous work the degree to which branded content or websites contain activating elements is typically referred to as interactivity (e.g. Coyle & Thorson, 2001; De Vries, Gensler, & Leeflang, 2012; Luarn, Lin, & Chiu, 2014; Pletikosa Cvijikj & Michahelles, 2013; Yoon, Choi, & Sohn, 2008), in the conceptual context of customer engagement it is important to distinguish between characteristics of the branded content and consumers' behavioral response to that content. That is, activating elements are features related to the content of the brand posts such as links, questions, or polls, that either implicitly or explicitly invite the customer to interact with the brand, and as such are related to the interactive potential of brand-generated content. Customer engagement, on the other hand, is about customers' actual interaction with the brand, and as such refers to the customer response to the branded content. Hence, the degree to which posts contain activating elements is related to its interactive potential, which is defined as the degree to which two or more parties can act on each other, on the communication medium and on the messages, and the degree to which such actions are synchronized (Liu & Shrum, 2002). For example, posts containing a link are slightly more activating than posts containing merely text or a picture, because consumers can click the link. In this example, the link constitutes the activating element of the branded content. In turn, a post containing a question again has larger interaction potential than a link, as a question invites

the consumer to write a response, which constitutes a higher level of activation than clicking a link (Muntinga et al., 2011).

Research on the effects of activating elements in online settings has yielded mixed results. Some studies find positive effects of activating elements on branded content on social networks sites (Luarn, Lin, & Chiu, 2014), while other studies find a negative effect (Pletikosa Cvijikj & Michahelles, 2013) or suggest there might exist an optimal level of activating content (De Vries, Gensler, & Leeflang, 2012; Fiore, Jin, & Kim, 2005; Fortin & Dholakia, 2005). We propose that these inconsistent results might be explained in part by different optimal levels of activation, depending on the stage of the customer journey. Interacting with brands online requires an investment of customer-owned resources (Fiore, Jin, & Kim, 2005; Hollebeek, Srivastava, et al., 2016; Pletikosa Cvijikj & Michahelles, 2013). This notion of engagement as investment is central to the customer engagement construct and can be conceptually linked to the effort customers are willing to exert in the interaction with brands (Sweeney, Danaher, & McColl-Kennedy, 2015). For example, answering a multiple-choice poll requires less effort than answering an open question in terms of the cognitive resources that need to be invested in the interaction. Hence, the degree to which a brand post includes elements aimed at activating its audience is inversely related to the investment or effort required from the consumer. In their work on value co-creation, Sweeney et al. (2015) propose a hierarchy of activities that require increasing effort and that represent increasingly difficult tasks, and find that activities that are relatively simple, requiring minimal effort, are undertaken by more customers than activities that are more difficult and require greater effort. In the context of the current work, these findings would suggest a negative relation between the degree of activating elements of a brand post and the likelihood a customer will engage with it. In the pre-consumption stage, during which consumers are primarily driven by the utilitarian goal to acquire relevant information, consumers are unlikely to exert substantial amounts of effort into interacting with the brand. In support of this notion, Muntinga et al. (2011) found that information acquisition is an important motive for consuming brand-related content, which requires little effort, but not for activities that require substantially higher effort such as contributing to or creating brand-related content. In contrast, in the consumption and post-consumption stage, assuming a satisfactory experience, consumers will be more involved with a brand (Bowden, 2009), which in turn increases their willingness to exert effort and invest resources into interactions with the brands (Gummerus et al., 2012; Sweeney et al., 2015). Further support for the link between involvement and willingness to invest customer-owned resources can be found in the brand community engagement literature, where highly involved customers have been shown to invest substantial amounts of effort and resources into brand-related interactions both with the brand itself and with fellow consumers (Adjei, Noble, & Noble, 2009; Dessart, Veloutsou, & Morgan-Thomas, 2015; Gummerus et al., 2012). Finally, in the consumption and post-

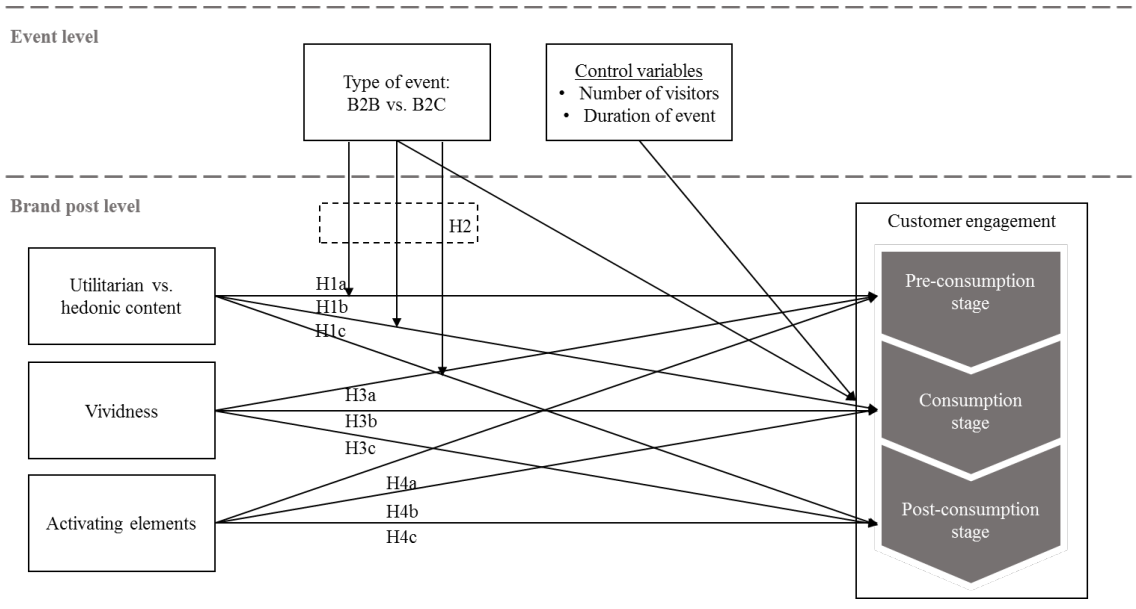
consumption stage customer motivations have shifted from rational utilitarian to hedonic and seeking entertainment. As such, higher degrees of activation in these stages may be perceived as having hedonic value rather than making the information search process less efficient, and hence lead to higher levels of engagement. In sum, we expect a negative relation between the level of activating elements of a brand post and the level of customer engagement in the pre-consumption stage, but a positive relation during the consumption and post-consumption stages of the customer experience. To summarize our expectations, all proposed relations are presented in Figure 1.

*H4a:* In the pre-consumption stage, the higher the level of activating elements of a post, the lower the level of engagement.

*H4b:* In the consumption stage, the higher the level of activating elements of a post, the higher the level of engagement.

*H4c:* In the post-consumption stage, the higher the level of activating elements of a post, the higher the level of engagement.

**FIGURE 1: CONCEPTUAL MODEL**



## 5.3 METHOD

### *Data*

We used Facebook messages posted by conferences and fair organizers to study the impact of brand post characteristics on customer engagement throughout the customer journey. The temporal boundaries of planned events facilitate the investigation of consumer responses during consecutive stages of the customer journey without the need to capture individual level customer data on the stage of the customer journey s/he is in. That is, because events take place at a given time and place, we can distinguish between brand posts in the pre-consumption stage (before the event), consumption stage (during the event), and post-consumption stage (after the event). We collected a total of 24,333 Facebook messages event organizers posted on the Facebook fan pages of 219 fairs and conferences that took place in the Netherlands during 2012. Given the aim of the study to investigate engagement with brand posts, only original Facebook posts by the event organizers were captured, excluding messages on the fan page of the event posted by consumers. The topics of the selected conferences and fairs included (but were not limited to) art, business, career, food, lifestyle, logistics, and sports, and both B2C and B2B events were included (see Table 1 for an overview of the types and topics of the selected events). The average duration of an event was 3.23 days (*SD* = 1.75). Of all events, 20.6% attracted over 25,000 visitors, 33.5% between 10,000 and 25,000 visitors, 22.9% between 5,000 and 10,000 visitors, and 22.9% less than 5,000 visitors. For each annual event, we gathered posts from six months before until six months after the event. For bi-annual events, we gathered posts from three months before until three months after each event. The average number of posts per event was 111.11 (*SD* = 127.75). Of all posts, 57.6% was posted before the event, 10.6% during the event, and 31.8% after the event. For each post, we gathered the number of likes, shares, and comments it generated. All likes, shares, and comments, were in response to the original brand post. Hence, consumer responses to comments or shares by fellow consumers were not included. Together, all brand posts generated a total of 244,547 likes, 47,206 comments, and 43,069 shares. Moreover, we recorded whether the post contained text, links, photos, and videos. A subset of 10,000 Facebook updates was manually coded with regards to topic and each post was assigned to one of a total of eleven different topical categories.

**TABLE 1: NUMBER OF EVENTS BY TYPE AND TOPIC**

| Topic | Type | |
|---|---|---|
| | B2C | B2B |
| Agriculture | - | 6 |
| Animals | 4 | 1 |
| Apparel / Fashion | 2 | 4 |
| Arts | 18 | 1 |
| Automobile / Boats / Bikes | 13 | 2 |
| Collector fairs | 19 | 1 |
| Construction & Engineering | - | 2 |
| Financials / career | 15 | - |
| Health care | 3 | 8 |
| Hotels & catering | 1 | 10 |
| Household & Garden | 26 | 2 |
| Industrials | - | 9 |
| Information technology | 1 | 8 |
| Lifestyle | 26 | 1 |
| Management & Education | 1 | 3 |
| Media / Communication | - | 6 |
| SME | - | 10 |
| Sports & Leisure | 16 | 3 |
| Transport / Logistics | - | 4 |
| Other | - | 6 |

## *Variables*

*Customer journey stage* For each post we determined whether it was posted before, during, or after the event. For annual events, a post was regarded as being posted before the event if it was posted in the six months preceding the event, and as being posted after the event if it was posted in the six months following the event. This was done to prevent posts to be falsely categorized as being posted before the event when in fact it was posted after the preceding year's edition of the event. Similarly, this procedure prevented posts that were posted preceding next year's edition of an event to be falsely coded as being posted after the event. For bi-annual events, a similar time restraint of three months preceding and following the event was used.

*Content* The 10,000 posts that were assigned to the eleven different topical categories were categorized as predominantly informative or entertaining on the basis of their topic. For example, posts containing information about the registration procedure or the program were coded as informative, whereas posts containing quizzes or contests were coded as entertaining. Other studies have used comparable procedures to determine informative and entertaining value of social media content (De Vries, Gensler, & Leeflang, 2012; Fortin & Dholakia, 2005; Luarn, Lin, & Chiu, 2015; Pletikosa Cvijikj & Michahelles, 2013).

*Vividness* In line with previous work (De Vries, Gensler, & Leeflang, 2012; Fortin & Dholakia, 2005; Luarn, Lin, & Chiu, 2015; Pletikosa Cvijikj & Michahelles, 2013), we distinguished different levels of vividness: low vividness for posts containing only text, medium vividness for posts containing photos, and high vividness for posts containing videos.

*Activating elements* We distinguished four different levels of interactivity. Posts containing status updates without any invitation to engage were coded as the lowest level (no interactivity). Posts containing links were coded as the second level (low interactivity) because people can follow this link. Contests, quizzes, and polls were coded as the third level (medium interactivity) because these types of posts invite people to respond. Finally, questions directed at followers were coded as the highest level (high interactivity), as here people are actively invited to interact. Similar categories were used in previous studies (De Vries, Gensler, & Leeflang, 2012; Fortin & Dholakia, 2005; Pletikosa Cvijikj & Michahelles, 2013).

*Customer engagement* Social networking sites provide users with various options to express their interest in or opinion about content posted by other users. Many studies use “likes”, “shares”, “comments”, “retweets”, and other forms of responses from the public as a behavioral manifestation of customer engagement with a company or brand on social media. Although it is sometimes argued that the different forms of expression represent different levels of user engagement and hence should be treated as separate outcome variables (De Vries, Gensler, & Leeflang, 2012; Luarn, Lin, & Chiu, 2015; Pletikosa Cvijikj & Michahelles, 2013), other studies only use one of these metrics or do not differentiate between them (Gummerus et al. 2012; Kwok & Yu, 2012). Because in our Facebook dataset the number of likes, shares, and comments per post were highly correlated ($r$ ranging from .49 to .61, all $p < .01$), a univariate engagement variable was used. Total consumer engagement with a post was determined as the sum of all likes, shares, and comments.

### *Data analysis*

We adopted a multilevel (two levels) approach with negative binomial regression models to take into account the hierarchical structure of the data: social media posts are nested within events. A multilevel approach is more appropriate than traditional regression techniques because the observations in our sample were correlated (intraclass correlation $\rho$ = .12). In addition to the fixed effects for post-level characteristics and the random effect to control for random heterogeneity between events, we also included a number of control variables on the event-level as fixed effects to our model (type of event: B2B vs. B2C, duration of the event, number of visitors). We used negative binomial regression rather than Poisson regression because the dependent variable was overdispersed. Because Levene's test demonstrated unequal variances for the engagement variable across the different stages of the customer experience ($p$ < .001), we estimated separate models for posts in the pre-consumption, consumption, and post-consumption stage.

## 5.4 RESULTS

### *Descriptive statistics*

On average, a post generated 10.05 likes (*SD* = 48.99), 1.94 shares (*SD* = 20.24), and 1.77 comments (*SD* = 21.63), amounting to an average engagement score of 13.76 (*SD* = 77.36). The average level of engagement significantly decreased in the three consecutive customer experience stages (pre-consumption vs. consumption: incidence rate ratio (IRR) = 0.71, $p$ < 0.001; consumption vs. post-consumption: IRR = 0.76, $p$ < 0.001). In Table 2, descriptive statistics of the different explanatory variables during the consecutive stages of the customer experience are shown. The proportion of informative and entertaining posts differs significantly across the different stages ($\chi^2(4) = 150.75$, $p$ < 0.001). In the pre-consumption stage the majority of posts is informative (59.9%), whereas most posts in the post-consumption stage are entertaining (54.5%). In the consumption stage, informative and entertaining posts are roughly equally divided (51.1% informative). The vividness of posts also differs significantly across the different stages ($\chi^2(4) = 339.38$, $p$ < 0.001). Specifically, compared to before and after events, more posts with medium vividness (photos) are posted during events at the expense of posts with low vividness (text only). Finally, event organizers use more posts with no interactivity and less posts with low interactivity (links), medium interactivity (contests and quizzes), or high interactivity (questions) in the consumption stage events than in the pre- or post-consumption stage ($\chi^2(6) = 208.15$, $p$ < 0.001).

**TABLE 2: FREQUENCIES OF DIFFERENT TYPES OF BRAND POSTS AND LEVEL OF ENGAGEMENT BY STAGE OF THE CUSTOMER EXPERIENCE**

| Variable | | Pre | | Consumption | | Post | | Total | |
|---|---|---|---|---|---|---|---|---|---|
| | | N | % | N | % | N | % | N | % |
| Content | Utilitarian | 2,891 | 59.90% | 209 | 51.10% | 1,059 | 45.50% | 4,159 | 54.40% |
| | Hedonic | 2,013 | 41.00% | 200 | 48.90% | 1,271 | 54.50% | 3.484 | 45.60% |
| | Unknown | 10,218 | - | 1,182 | - | 5,290 | - | 16,690 | - |
| Vividness | Low | 8,806 | 58.50% | 566 | 35.60% | 4,342 | 57.20% | 13,714 | 56.60% |
| | Medium | 5,755 | 38.20% | 966 | 60.80% | 2,914 | 38.40% | 9,635 | 39.70% |
| | High | 500 | 3.30% | 57 | 3.60% | 335 | 4.40% | 892 | 3.70% |
| | No | 10,647 | 70.40% | 1,332 | 83.70% | 5,141 | 67.50% | 17,120 | 70.40% |
| Activating elements | Low | 3,887 | 25.70% | 234 | 14.70% | 2,215 | 29.10% | 6,336 | 26.00% |
| | Medium | 330 | 2.20% | 14 | 0.90% | 94 | 1.20% | 438 | 1.80% |
| | High | 258 | 1.70% | 11 | 0.70% | 170 | 2.20% | 439 | 1.80% |
| | | M | SD | M | SD | M | SD | M | SD |
| Engagement | | 16.43 | 94.09 | 11.72 | 37.87 | 8.87 | 34.72 | 13.76 | 77.36 |

## *Model evaluation*

For all three stages of the customer journey, the final model performed significantly better than a baseline model without any predictors (before: $\chi^2(10) = 3807.48$, $p < 0.001$; during: $\chi^2(10) = 141.60$, $p < 0.001$; after: $\chi^2(10) = 2450.53$, $p < 0.001$). We compared the final models including fixed effects for the explanatory variables and random intercepts for events to negative binomial regression models with only the fixed effects. These comparisons show that there is enough variability between events to favor the mixed-effects models (before: $\chi^2(1) = 4748.07$, $p < 0.001$; during: $\chi^2(1) = 1115.52$, $p < 0.001$; after: $\chi^2(1) = 2330.39$, $p < 0.001$). Comparisons between the mixed-effects negative binomial models and mixed-effects Poisson models confirm that the negative binomial models are preferable due to overdispersion of the data (pre-consumption: $\chi^2(1) = 545089.94$, $p < 0.001$; consumption: $\chi^2(1) = 49056.95$, $p < 0.001$; post-consumption: $\chi^2(1) = 154578.71$, $p < 0.001$). The final models, with parameters reported as incidence rate ratios for reasons of interpretability, are presented in Table 3.

**TABLE 3: MULTILEVEL NEGATIVE BINOMIAL REGRESSION OF POST AND EVENT CHARACTERISTICS ON ENGAGEMENT BY STAGE OF THE CUSTOMER EXPERIENCE ^**

| Parameter | Pre | | Consumption | | Post | |
|---|---|---|---|---|---|---|
| | IRR | (SE) | IRR | (SE) | IRR | (SE) |
| *Fixed post-level* | | | | | | |
| Constant | 1.033 | 0.260 | 1.009 | 0.483 | 1.107 | 0.327 |
| Content (utilitarian) | | | | | | |
| Hedonic | 0.789 | 0.041*** | 1.346 | 0.200* | 0.912 | 0.073 |
| Vividness (low) | | | | | | |
| Medium | 4.080 | 0.145*** | 2.756 | 0.334*** | 2.889 | 0.154*** |
| High | 2.240 | 0.167*** | 1.810 | 0.363** | 1.536 | 0.158*** |
| Acitivating elements (no) | | | | | | |
| Low | 1.475 | 0.057*** | 0.983 | 0.128 | 1.009 | 0.060 |
| Medium | 4.780 | 0.453*** | 0.999 | 0.374 | 2.489 | 0.421*** |
| High | 1.994 | 0.206*** | 0.904 | 0.416 | 1.563 | 0.216** |
| *Fixed event-level* | | | | | | |
| Duration | 0.990 | 0.004 | 1.073 | 0.079 | 0.992 | 0.005 |
| Type (B2C) | | | | | | |
| B2B | 0.460 | 0.086*** | 0.382 | 0.134** | 0.360 | 0.082*** |
| Visitors | 1.480 | 0.113*** | 1.533 | 0.212** | 1.560 | 0.139*** |
| *Cross-level interaction* | | | | | | |
| Post content * Event type | 0.911 | 0.031** | 1.130 | 0.148 | 1.091 | 0.060 |
| *Random* | | | | | | |
| Event-level variance | 1.355 | 0.152 | 1.491 | 0.256 | 1.461 | 0.191 |

^ posts with unknown content were included in the analysis as a separate category of content but not reported.

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The results show that the effect of providing information versus entertainment varies across the different stages of the customer experience. In line with H1a, in the pre-consumption stage, informative posts are related to significantly higher engagement than posts with entertaining content (IRR = 0.79, $p < 0.001$). In the consumption stage, entertaining posts generate significantly higher engagement than informative posts (IRR = 1.35, $p < 0.05$), which is in line with H1b. In the post-event stage, there is no

difference between informative and entertaining posts (IRR = 0.91, NS), where H1c predicted that entertaining posts would generate more engagement in this stage.

Unlike content type, vividness has the same effect in different stages of the customer experience. Results show that medium levels of vividness are always related to significantly higher engagement than low vividness (pre-consumption: IRR = 4.08, $p < 0.001$; consumption: IRR = 2.76, $p < 0.001$; post-consumption: IRR = 2.89, $p < 0.001$). This is also true for high levels of vividness (pre-consumption: IRR = 2.24, $p < 0.001$; consumption: IRR = 1.81, $p < 0.01$; post-consumption: IRR = 1.54, $p < 0.001$). Interestingly, additional tests reveal that a medium level of vividness (photos) leads to significantly higher engagement than high vividness (videos). This is also true in all stages (pre-consumption: $\chi^2(2) = 1564.46$, $p < 0.001$; consumption: $\chi^2(2) = 70.09$, $p < 0.001$; post-consumption: $\chi^2(2) = 401.12$, $p < 0.001$). These results partially support H3 that predicted a positive relation between post vividness and engagement.

The degree to which a post contains activating elements significantly influences engagement in the pre-consumption and post-consumption stage, but not during consumption. In line with H4b, higher levels of activating elements lead to higher engagement in the post-consumption stage (no vs. medium: IRR = 2.49, $p < 0.001$; medium vs. high: $\chi^2(2) = 341.96$, $p < 0.001$), with two notable exceptions. Firstly, a low level of activating elements does not lead to higher engagement than no activating elements (IRR = 1.01, NS), and high levels of activation generate significantly higher levels of engagement than very high levels of activation ($\chi^2(2) = 35.34$, $p < 0.001$). Similar patterns were observed in the pre-consumption stage (low vs. medium: IRR = 1.04, $p < 0.001$; medium vs. high: $\chi^2(2) = 341.96$, $p < 0.001$; high vs. very high: $\chi^2(2) = 284.93$, $p < 0.001$), which contradicts H4a in which we predicted an opposite pattern. Interestingly, the level of activating elements of a brand post does not affect engagement during the consumption stage (for all comparisons between levels of activating elements $p > .05$).

With regards to event type, B2B events generate lower levels of customer engagement than B2C event in all stages of the customer journey (pre-consumption: IRR = 0.46, $p < 0.001$; consumption: IRR = 0.38, $p < 0.01$; post-consumption: IRR = 0.36, $p < 0.001$). In addition, the difference between informative and entertaining posts differed significantly between B2B and B2C events in the pre-consumption stage. Specifically, informative brand posts on average generate higher levels of engagement than hedonic posts in the context of B2C events (IRR = .79, $p < .001$), but this difference is even more pronounced in the context of B2B events (IRR of the interaction effect = .91, $p < .03$). Although this is line with H2, in the subsequent stages of the customer experience, the difference between B2B and B2C events in terms of the effect of content type on engagement is not significant. Hence, H2 is only partially supported by the results.

Finally, the results reveal a positive relation between the number of visitors of an event and the engagement a post by the organizer of the event generates in all event stages (before: IRR = 1.48, $p < 0.001$; during: IRR = 1.53, $p < 0.01$; after: IRR = 1.56, $p < 0.001$). Event duration did not affect engagement with posts in any of the stages (all $p > .05$).

## 5.5 DISCUSSION

Brands use social media to engage with consumers during all stages of the customer journey. In this study, we investigated what drives customer engagement with brand posts in the consecutive stages of customer journeys by analyzing data from the Facebook pages of conference and fair organizers. We found that in the pre-consumption stage that precedes an event, the primary use of Facebook is to inform potential attendees about the program, participants, and other event-related topics, whereas in the post-consumption stage after an event, most brand posts contain entertaining rather than informative content. Results showed that informative brand posts led to higher levels of engagement than entertaining posts in the pre-consumption stage. This is in line with our theorizing that such utilitarian content fulfils customers' need for information during this stage of the customer journey and hence leads to higher engagement than entertaining content. We expected entertaining posts to generate higher levels of engagement than informative posts in the consumption and post-consumption stage. We argued that entertaining brand posts during the consumption stage would provide additional hedonic value beyond the value of the primary experience itself. Results confirmed that during the consumption stage, entertaining posts indeed generated more "likes", "shares", and "comments" than informative posts. In the post-consumption stage, however, no difference was observed between informative and entertaining posts. One possible explanation might be that following the consumption stage consumers still develop positive attitudes towards informative brand posts because the information will typically acknowledge that the consumers has made the right choice (Nickerson, 1998). Another explanation could be that if the consumption experience was satisfactory, consumers may "like" brand posts to voice their satisfaction towards the firm or fellow consumers (Chu & Kim, 2011; Hennig-Thurau et al., 2004; Hennig-Thurau, Hofacker, & Bloching, 2013; Kucuk, 2008; Labrecque et al., 2013). If this is the case, whether a brand post is entertaining or informative would be insignificant.

With regards to vividness, we found that in the pre- and post-consumption stages, the majority of brand posts is not vivid. In the consumption stage, most posts had a higher level of vividness, e.g. contained photos. The results of our explanatory analysis demonstrate that a medium level of vividness (photos) generated the highest levels of engagement. In line with H3, this is true in all stages of the customer journey. In contrast with H3, however, highly vivid brand posts (videos) were less popular than post with medium vividness. One explanation for this could be that watching photos requires

considerably less time and effort than watching a video while still offering a fairly vivid representation of branded content, which may be more congruent with typical social media reading patterns (Crawford, 2009).

Finally, we found that in all stages but especially in the pre- and post-consumption stage the majority of posts does not contain any activating elements. This is interesting because our results link posts containing activating elements such as links (medium activation), quizzes and polls (high activation), and questions (very high activation) to higher levels of engagement in the pre- and post-consumption stage. Only in the consumption stage higher levels of activating elements are not associated with higher engagement. One explanation for this could be that during the consumption stage, the event itself fulfils customers' needs for interaction and hence additional activating offers no additional value.

### *Theoretical contributions and implications*

Our findings contribute to the literature in several ways. Improving the customer experience throughout different stages of the customer journey is a top priority for managers (Forrester, 2015). First and foremost, with the current work we answer the call more research on drivers of customer engagement in consecutive stages of the customer journey by deepening the understanding of how brands' social media activities drive customer engagement throughout the customer journey (Lemon and Verhoef, 2016). Prior work on factors that drive customer engagement with brand posts primarily focus on the characteristics of the brand post itself (De Vries et al., 2012; Fiore, Jin, & Kim, 2005; Gensler, & Leeflang, 2012; Luarn, Lin, & Chiu, 2014; Pletikosa Cvijikj & Michahelles, 2013; Sabate et al., 2014), and do not differentiate between the different stages of the customer journey. Our findings demonstrate that the way in which these brand post characteristics affect engagement depends on the stage of the customer journey. This finding supports the idea that the different motivations consumers have during consecutive stages of the customer experience have an impact on how brand-generated content is perceived. In line with the UG approach applied in prior work (Brodie, Ilic, Juric, & Hollebeek, 2013), it seems that the extent to which marketers are able to fulfil the different goals consumers have for interacting with brands in different stages of the customer journey determines their ability to entice customer engagement. On a more general level, these findings suggest that, in addition to factors on the brand post level, context characteristics – such as the stage of the customer journey – have an impact on the likelihood of engaging with brands on social media.

Second, the current work demonstrates the importance of informativeness of branded content as a driver of customer engagement on social media. The ability to entertain customers is often regarded

as the key to effective online customer engagement strategies (Gummerus et al., 2012; Muniz & O'Guinn, 2001; Muntinga, Moorman, & Smit, 2011; Tsai & Men, 2013), but the current work shows that informative value may be equally or even more important, especially in the pre-consumption stage when consumers are motivated to acquire information. As such, our results offer support for the effectiveness of so-called "content marketing" strategies, in which brands focus on producing, curating, and sharing relevant content that is based upon consumers' information needs (Forouzandeh, Soltanpanah, Sheikhahmadi, 2014; Neff, 2015; Swift, 2014). Although global spending on such online content generation and distribution activities is estimated at $144 billion, empirical evidence on the effectiveness of content marketing is scarce.

Third, our findings extend the work by Brodie et al. (2013), who find that consumer engagement is dynamic and may emerge at different levels of intensity over time. In support of this, we find that customer engagement levels not only differ between consecutive stages of the customer journey, but that the impact of features that drive customer engagement also differs across the stages of the customer journey, depending on the goals consumers hold during the consecutive stages and the effort they are willing to invest in brand interactions.

Fourth, the current work contributes to the literature on the use of social media in B2B contexts, with several recent calls for more research on social media in B2B marketing (Guesalaga, 2016; Lacka & Chong, 2016; Wang, Pauleen, & Zhang, 2016). Specifically, the current study extends the work by Swani et al. (2014, 2013), who investigate how marketers use social network sites differently across B2B versus B2C contexts, by investigating how the effectiveness of brand post features in generating customer engagement may differ for B2B as compared to B2C contexts. Although traditionally functional appeals are considered to be more effective for B2B marketers (Turley & Kelley, 1997), Swani et al. (2014) found that B2B marketers are even more likely than B2C marketers to use emotional appeals in their social media posts. Our findings suggest that this may indeed be an effective strategy in the post-consumption stage, where brand posts focusing on offering hedonic value generate higher levels of engagement in B2B and B2C contexts alike. In the pre-consumption stage, however, informative posts generate higher levels of engagement, and this effect is even more pronounced in B2B settings.

Fifth, our study contributes to the event management literature as it is the first to study the drivers of online customer engagement on social media for planned events. Previous work has been largely descriptive in that it focuses on the use of social media by event planners (Davidson, 2011; Gunz, 2015). In identifying and determining the factors that affect online customer engagement in different event stages, this study takes a more explanatory approach and as such takes the next step in understanding online customer engagement for temporally defined events.

Finally, to the best of our knowledge, the current study is one of the first to adopt a multilevel approach to investigate branded content online (with the work by Swani, Milne, & Brown, 2013, as a notable exception). Other studies control for total exposure of a post by using an engagement ratio rather than an absolute measure (Pletikosa Cvijikj & Michahelles, 2013) or ignore the nested structure of the data (De Vries et al., 2012; Luarn, Lin, & Chiu, 2014). These solutions may lead to serious underestimation of standard errors and strongly biased results (Hox, 2010), especially given the substantial random level variance between events that was identified in our data. Moreover, the current study is one of the first to adopt a negative binomial approach to account for the fact that the data is overdispersed. Because most online engagement data is likely to be nonparametric, parametric tests such as ordinary least squares regression are therefore likely to lead to biased results (Gardner et al., 1995).

## *Managerial implications*

From a practical perspective, our findings provide marketers with practical guidelines with regard to the use of social media and generating online engagement. A marketer's ability to generate customer engagement online is important because not only does it deepen customers' level of engagement with a firm, on most social media platforms manifestations of online customer engagement are spread throughout customers' online networks (Bonsón & Ratkai, 2013; Sabate et al., 2014; Zadeh & Sharda, 2014). Our findings suggest that marketers may benefit from adapting branded content to the stage in the customer experience. This can be done either on an aggregate level, such as in the case of event marketing, but social network sites also facilitate the customization of online interactions on a more specific or even individual customer level. Marketers already adapt their marketing messages to the different stages of consumer decision making, for example by focusing on achieving different goals on the basis of traditional hierarchy-of-effect models such as the renowned AIDA model, but social network sites allow them to do so on a more personalized customer level. As such, our findings have important implications both for generic customer engagement efforts as for personalized marketing communication efforts.

## *Limitations and future research*

This research is subject to several limitations that merit future research. First, although conferences and fairs offer an excellent context to explore the drivers of online engagement throughout the sequential stages of temporally defined customer journeys because the different event stages allow for a chronological breaking up of customer journeys along the temporal boundaries that are inherent

to these events, planned events also have unique characteristics as compared to other products and services. As a result, the findings in the current work should be interpreted with some caution. For example, we find that in the consumption stage, that is, during events, entertaining brand posts generate higher levels of engagement then informative posts. During a conference, however, attendants may rely on other sources of information during an event (e.g. information stands), and hence may use social media primarily to deepen the customer experience through entertainment. For products and services such alternative information channels may not be available and hence consumers may rely more on information acquired through brand posts, resulting in higher customer engagement for informative content. Moreover, one of the main advantages of using temporally defined events as research context is that it facilitates the distinction of consecutive stages of the experience without the need for individual level data, because all customers will progress through the consecutive stages simultaneously. However, this inherently means that our data does not account for individual level differences in progression throughout the customer experience. For example, the lack of individual level data does not allow us to distinguish between a pre-purchase and purchase stage of decision making. That is, at any given point during the pre-consumption stage some consumers have purchased a ticket to attend the event, whereas others are still considering their purchase decision. In sum, although the current research context offers an excellent venue to explore drivers of customer engagement throughout temporally defined customer experiences, and a suitable venue to explore the drivers of customer engagement throughout the customer experience, it is clear that further research is needed to investigate the generalizability of the findings in the current study to other contexts.

Secondly, the lack of individual consumer data in the current study presents an interesting venue for future research. The gratifications sought for using social media vary as a function of stage in the consumer experience, but there are also large differences on the level of individual consumer characteristics in motivations to engage with brands online which may affect their responses to branded content (Enginkaya & Yılmaz, 2014; Muntinga et al., 2011; Nisar & Whitehead, 2016). Recent work shows that such consumer characteristics impact posting behavior on Facebook (Bachrach et al. 2012; Balling, Van de Poel, & Bogaert, 2015), and it is conceivable that these characteristics will also affect responses to posts by others, including brands. Moreover, although our findings regarding the factors that affect brand post popularity during consecutive stages of the customer experience are generally in line with our predictions based on the different gratifications sought during specific stages, we did not directly measure consumers' motivations for using the Facebook pages of the event organizers but rather derived them from the stage of customer experience. Hence, although our findings offer initial evidence that UG theory may explain the diverging results under different stages of the customer experience, future research in which gratifications sought and obtained are directly measured is needed to provide more conclusive evidence regarding the applicability of UG theory in this context.

Thirdly, given that the aim of our research was to investigate consumer engagement with brand posts, we only used messages proactively posted by conference organizers. Hence, messages posted by consumers about the event or the brand and messages posted by the organizer in response to consumer messages were not included in the data. Similarly, the engagement score which was used as outcome variable in our analysis was solely comprised of likes, comments, and shares in response to the initial brand post. That is, responses (likes, shares, or comments) to comments posted by fellow consumers were excluded. Although this allows us to study the direct engagement of consumers with brand posts, future research could look at more indirect forms of consumer engagement such as online discussions about a brand, product, service, or event that are not initiated by the brand itself.

Finally, we operationalized consumer brand engagement by measuring the number of “likes”, “shares”, and “comments”. Although these measures capture direct behavioral responses to brand posts, with our study we only indirectly capture the more cognitive or affective dimensions of consumer brand engagement (Hollebeek, Glynn, & Brodie, 2014). Future research is needed to investigate how cognitive and affective dimensions of consumer engagement differs in consecutive stages of the customer journey and how brands can successfully facilitate this.

## REFERENCES


Adjei, M. T., Noble, S. M., & Noble, C. H. (2009). The influence of C2C communications in online brand communities on customer purchase behavior. *Journal of the Academy of Marketing Science*, *38*(5), 634–653.

Ahtola, O. T., & Batra, R. (1999). Measurng the hedonic and utilitarian sources of consumer attitudes. *Marketing Letters*, *2*(2), 159–170.

Algesheimer, R., Dholakia, U. M., & Herrmann, A. (2005). The social influence of brand community: Evidence from European car clubs. *Journal of Marketing*, *69*(3), 19–34.

Arnold, M. J., & Reynolds, K. E. (2003). Hedonic shopping motivations. *Journal of Retailing*, *79*(2), 77–95.

Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or fun - measuring hedonic and utilitarian shopping value. *Journal of Consumer Research*, *20*(4), 644–656.

Baldus, B. J., Voorhees, C., & Calantone, R. (2014). Online brand community engagement: Scale development and validation. *Journal of Business Research*, *68*(5), 978–985.

Barnes, N. G., & Daubitz, C. (2016). Follow the lLeader: The adoption and use of Instagram by the Inc. 500 and the Fortune 500. Retrieved December 12, 2017, from http://www.umassd.edu/cmr/socialmediaresearch/followtheleader/

Barnes, N. G., Lescault, A. M., & Holmes, G. (2015). The 2015 Fortune 500 and Social Media. Retrieved December 12, 2017, from http://www.umassd.edu/cmr/socialmediaresearch/2015fortune500/

Batra, R., Ahuvia, A., & Bagozzi, R. P. (2012). Brand love. *Journal of Marketing*, *76*(2), 1–16.

Baxendale, S., Macdonald, E. K., & Wilson, H. N. (2015). The impact of different touchpoints on brand consideration. *Journal of Retailing*, *91*(2), 235–253.

Bernardo, M., Marimon, F., & Alonso-Almeida, M. D. M. (2012). Functional quality and hedonic quality: A study of the dimensions of e-service quality in online travel agencies. *Information and Management*, *49*(7–8), 342–347.

Bessete. (2014). Fortune 500: the top companies using social media. *Fortune*. Retrieved December 12, 2017, December 12, 2017, from http://fortune.com/2014/06/02/500-social-media/

Bonsón, E., & Ratkai, M. (2013). A set of metrics to assess stakeholder engagement and social legitimacy on a corporate Facebook page. *Online Information Review*, *37*(5), 787–803.

Bowden, J. L.-H. (2009). The process of customer engagement: A conceptual framework. *The Journal of Marketing Theory and Practice*, *17*(1), 63–74.

Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research*, *14*(3), 252-271.

Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, *66*(1), 105–114.

Calder, B. J., Malthouse, E. C., & Schaedel, U. (2009). An experimental study of the relationship between online engagement and advertising effectiveness. *Journal of Interactive Marketing*, *23*(4), 321–331.

Cotte, J., Chowdhury, T. G., Ratneshwar, S., & Ricci, L. M. (2006). Pleasure or utility? Time planning style and web usage behaviors. *Journal of Interactive Marketing*, *20*(1), 45–57.

Coyle, J. R., & Thorson, E. (2001). The effects of progressive levels of interactivity and vividness in web marketing sites. *Journal of Advertising*, *30*(3), 65–77.

Crowley, A. E., Spangenberg, E. R., Hughes, K. R., & Crowley, A. Y. N. E. (2015). The hedonic and utilitarian dimensions measuring of attitudes product toward categories. *Marketing Letters*, *3*(3), 239–249.

de Vries, L., Gensler, S., & Leeflang, P. S. H. (2012). Popularity of brand posts on brand fan pages: An investigation of the effects of social media marketing. *Journal of Interactive Marketing*, *26*(2), 83–91.

De Vries, N. J., & Carlson, J. (2014). Examining the drivers and brand performance implications of customer engagement with brands in the social media environment. *Journal of Brand Management*, *21*(6), 495–

515.
Dellarocas, C., Zhang, M., & Awad, N. (2007). Exploring the value of online product reviews in forecasting sales: The case of motion pictures. *Journal of Interactive Marketing*, *21*(4), 23–45.
Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2015). Consumer engagement in online brand communities: a social media perspective. *Journal of Product & Brand Management*, *24*(1), 28–42.
Dhar, R., & Wertenbroch, K. (2000). Consumer choice between hedonic and utilitarian goods. *Journal of Marketing Research*, *37*(1), 60–71.
Divakaran, P. K. P., Palmer, A., Søndergaard, H. A., & Matkovskyy, R. (2017). Pre-launch prediction of market performance for short lifecycle products using online community data. *Journal of Interactive Marketing*, *38*(2), 12–28.
Duan, W., Gu, B., & Whinston, A. B. (2008). The dynamics of online word-of-mouth and product sales-An empirical investigation of the movie industry. *Journal of Retailing*, *84*(2), 233–242.
Enginkaya, E., & Yılmaz, H. (2014). What drives consumers to interact with brands through social media? A motivation scale development study. *Procedia - Social and Behavioral Sciences*, *148*, 219–226.
Fiore, A. M., Jin, H. J., & Kim, J. (2005). For fun and profit: Hedonic value from image interactivity and responses toward an online store. *Psychology and Marketing*, *22*(8), 669–694.
Guesalaga, R. (2016). The use of social media in sales: Individual and organizational antecedents, and the role of customer engagement in social media. *Industrial Marketing Management*, *54*(2016), 71–79.
Gummerus, J., Liljander, V., Weman, E., & Pihlström, M. (2012). Customer engagement in a Facebook brand community. *Management Research Review*, *35*(9), 857–877.
Harmeling, C. M., Moffett, J. W., Arnold, M. J., & Carlson, B. D. (2017). Toward a theory of customer engagement marketing. *Journal of the Academy of Marketing Science*, *45*, 312–335.
Hartman, J. B., Shim, S., Barber, B., & O'Brien, M. (2006). Consumer perceptions of online shopping environments. *Psychology & Marketing*, *23*(10), 813–839.
He, W., Zha, S., & Li, L. (2013). Social media competitive analysis and text mining: A case study in the pizza industry. *International Journal of Information Management*, *33*(3), 464–472.
Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: Emerging concepts, methods and propositions. *Journal of Marketing*, *46*(3), 92.
Hollebeek, L. D. (2011). Demystifying customer brand engagement: Exploring the loyalty nexus. *Journal of Marketing Management*, *27*(7–8), 785–807.
Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer brand engagement in social media: Conceptualization, scale development and validation. *Journal of Interactive Marketing*, *28*(2), 149–165.
Hollebeek, L. D., Malthouse, E. C., & Block, M. P. (2016). Sounds of music: exploring consumers' musical engagement. *Journal of Consumer Marketing*, *33*(6), 417–427.
Hollebeek, L. D., Srivastava, R. K., & Chen, T. (2016). S-D logic-informed customer engagement: integrative framework, revised fundamental propositions, and application to CRM. *Journal of the Academy of Marketing Science*, *45*(3), 1–25.
Hudson, S., & Hudson, R. (2013). Engaging with consumers using social media: A case study of music festivals. *International Journal of Event and Festival Management*, *4*(3), 206–223.
Jaakkola, E., & Alexander, M. (2014). The role of customer engagement behavior in value co-creation: A service system perspective. *Journal of Service Research*, *17*(3), 247–261.
Janiszewski, C. (1998). The influence of display characteristics on visual exploratory search behavior. *Journal of Consumer Research*, *25*(3), 290–301.
Kabadayi, S., & Price, K. (2014). Consumer – brand engagement on Facebook: Liking and commenting behaviors. *Journal of Research in Interactive Marketing*, *8*(3), 203–223.
Kaye, B. K. (2007). Web site story: an exploratory study of blog use motivations. In M. Tremaye (Ed.), *Blogging, Citizenship and the Future of Media* (pp. 127–148). New York, NY: Routledge.

Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business Research*, *65*(10), 1480–1486.

Kim, C., Galliers, R. D., Shin, N., Ryoo, J. H., & Kim, J. (2012). Factors influencing Internet shopping value and customer repurchase intention. *Electronic Commerce Research and Applications*, *11*(4), 374–387.

Kim, T., & Mazumdar, T. (2016). Product Concept Demonstrations in Trade Shows and Firm Value. *Journal of Marketing*, *80*(July), 90–108.

Kurniawan, I. T., Seymour, B., Talmi, D., Yoshida, W., Chater, N., & Dolan, R. J. (2010). Choosing to make an effort: The role of striatum in signaling physical effort of a chosen action. *Journal of Neurophysiology*, *104*(1), 313-321.

Lacka, E., & Chong, A. (2016). Usability perspective on social media sites' adoption in the B2B context. *Industrial Marketing Management*, *54*(July), 80–91.

Lee, Y. K., Lee, C. K., Lee, S. K., & Babin, B. J. (2008). Festivalscapes and patrons' emotions, satisfaction, and loyalty. *Journal of Business Research*, *61*(1), 56–64.

Luarn, P., Lin, Y.-F., & Chiu, Y.-P. (2014). Influence of Facebook brand-page posts on online engagement. *Online Information Review*, *39*(4), 505-519.

Manthiou, A., Lee, S., Tang, L., & Chiang, L. (2014). The experience economy approach to festival marketing: Vivid memory and attendee loyalty. *Journal of Services Marketing*, *28*(1), 22–35.

Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducting COBRAs: Exploring motivations for brand-related social media use. *International Journal of Advertising*, *30*(1), 13–46.

Nisar, T. M., & Whitehead, C. (2016). Brand interactions and social media: Enhancing user loyalty through social networking sites. *Computers in Human Behavior*, *62*(2016), 743–753.

O'Curry, S., & Strahilevitz, M. (2001). Probability and mode of aquisition effects on choices between hedonic and utilitarian options. *Marketing Letters*, *12*(1), 37–49.

Okada, E. M. (2005). Justification effects on consumer choice of hedonic and utilitarian goods. *Journal of Marketing Research*, *42*(1), 43–53.

Park, N., Kee, K. F., & Valenzuela, S. (2009). Being immersed in social networking environment: Facebook groups, uses and gratifications, and social outcomes. *Cyberpsychology & Behavior*, *12*(6), 729–733.

Pletikosa Cvijikj, I., & Michahelles, F. (2013). Online engagement factors on Facebook brand pages. *Social Network Analysis and Mining*, *3*(4), 843–861.

Pöyry, E., Parvinen, P., & Malmivaara, T. (2013). Can we get from liking to buying? Behavioral differences in hedonic and utilitarian Facebook usage. *Electronic Commerce Research and Applications*, *12*(4), 224–235.

Sabate, F., Berbegal-Mirabent, J., Cañabate, A., & Lebherz, P. R. (2014). Factors influencing popularity of branded content in Facebook fan pages. *European Management Journal*, *32*(6), 1–11.

Schamari, J., & Schaefers, T. (2015). Leaving the home turf: How brands can use webcare on consumer-generated platforms to increase positive consumer engagement. *Journal of Interactive Marketing*, *30*(2), 20–33.

Schivinski, B., Christodoulides, G., & Dabrowski, D. (2016). Measuring consumers ' engagement with brand-related social-media content: Development and validation of a scale that identifies levels of social-media engagement with brands. *Journal of Advertising Research*, *56*(1), 64–80.

Shao, G. (2009). Understanding the appeal of user-generated media: a uses and gratification perspective. *Internet Research*, *19*(1), 7–25.

Shively, K. (2015). The state of social marketing. Retrieved December 12, 2017, from http://simplymeasured.com/library/2015-06-state-of-social/

Sprott, D., Czellar, S., & Spangenberg, E. (2009). The importance of a general measure of brand engagement on market behavior: Development and validation of a scale. *Journal of Marketing Research*, *46*(1), 92–104.

Srinivasan, S. S., Anderson, R., & Ponnavolu, K. (2002). Customer loyalty in e-commerce: An exploration of its

antecedents and consequences. *Journal of Retailing*, *78*(1), 41–50.

Swani, K., Brown, B. P., & Milne, G. R. (2014). Should tweets differ for B2B and B2C? An analysis of Fortune 500 companies' Twitter communications. *Industrial Marketing Management*, *43*(5), 873–881.

Swani, K., Milne, G., & Brown, B. P. (2013). Spreading the word through likes on Facebook: Evaluating the message strategy effectiveness of Fortune 500 companies. *Journal of Research in Interactive Marketing*, *7*(4), 269–294.

Sweeney, J. C., Danaher, T. S., & McColl-Kennedy, J. R. (2015). Customer effort in value cocreation activities. *Journal of Service Research*, *18*(3), 318–335.

Tsai, W.-H. S., & Men, L. R. (2013). Motivations and antecedents of consumer engagement with brand pages on social networking sites. *Journal of Interactive Advertising*, *13*(2), 76–87.

Turley, L. W., & Kelley, S. W. (1997). A comparison of advertising content: Business to business versus consumer services. *Journal of Advertising*, *26*(4), 39–48.

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.

Verleye, K., Gemmel, P., & Rangarajan, D. (2014). Managing engagement behaviors in a network of customers and stakeholders: Evidence from the nursing home sector. *Journal of Service Research*, *17*(1), 68–84.

Vivek, S. D., Beatty, S. E., Dalela, V., & Morgan, R. M. (2014). A generalized multidimensional scale for measuring customer engagement. *Journal of Marketing Theory and Practice*, *4*(4), 401–421.

Voss, K. E., Spangenberg, E. R., & Grohmann, B. (2003). Measuring the hedonic and utilitarian dimensions of consumer attitude. *Journal of Marketing Research*, *40*(3), 310–320.

Wang, W. Y. C., Pauleen, D. J., & Zhang, T. (2016). How social media applications affect B2B communication and improve business performance in SMEs. *Industrial Marketing Management*, *54*(2016), 4–14.

Yoon, D., Choi, S. M., & Sohn, D. (2008). Building customer relationships in an electronic age: The role of interactivity of e-commerce web sites. *Psychology & Marketing*, *25*(7), 602–618.

Zadeh, A. H., & Sharda, R. (2014). Modeling brand post popularity dynamics in online social networks. *Decision Support Systems*, *65*, 59–68.

# Chapter 6:

## Conclusion and discussion

The aim of this dissertation was to study 1) how consumers integrate privacy considerations into their decision making processes with regards to sharing their data with companies, and 2) how companies' activities with regard to company-consumer interactions affect consumers' data sharing. Scholars and practitioners agree that access to and use of consumer data will be an increasingly important driver of competitive advantage in the future. In order to persuade consumers to voluntarily share their data, either directly or indirectly through their brand engagement behaviors, it is paramount that we understand how consumers incorporate privacy considerations into their decision making processes. The importance of studying this topic is illustrated by surveys that consistently show that the majority of consumers are increasingly concerned with their privacy in commercial settings (Pew Research Center, 2015), the designation of consumer privacy and data disclosure as top research priority by the MSI (Marketing Science Institute, 2014, 2016), and calls from scholars to further understanding of these topics from a consumer behavior perspective (Kokolakis, 2017; Lemon & Verhoef, 2016; Martin & Murphy, 2017; Morey, Forbath, & Schoop, 2015; Peltier, Milne, & Phelps, 2009). In my attempt to fulfil these research aims, in chapters 2 to 5, I presented the results of four (series of) empirical studies. Chapter 2 focused on understanding how consumers incorporate privacy concerns in their evaluations of companies in the specific setting of online customer service encounters, drawing on privacy regulation theory and using privacy calculus theory as underlying framework. In chapter 3, I zoomed in further on privacy calculus theory and presented a novel theoretical perspective on the flexibility of privacy preferences and data sharing tendencies using construal level theory. These chapters help to better understand how consumers integrate privacy considerations into their decision making processes with regards to sharing their data with companies. In chapter 4 I studied the effects of corporate transparency on consumers' data sharing behavior. This chapter helps to understand how consumer data sharing may be a process of reciprocity, which suggests that companies can persuade consumers to share personal data by adopting a strategy of corporate transparency. Finally, in chapter 5 I looked beyond 'overcoming privacy concerns' as a means of persuading consumers to share data. Here, I studied how branded content can stimulate consumer engagement behaviors in different stages of the customer experience, providing additional data regarding consumers' preferences and perceptions of branded content. In this final chapter, I discuss the main findings of the empirical work presented in chapters 2 to 5 in relation to their contributions to the marketing domain, both from a theoretical and a managerial perspective.

## 6.1 THEORETICAL CONTRIBUTIONS

The findings of the empirical work presented in this dissertation contribute to a better understanding of how consumers integrate privacy considerations into their decision-making processes with regards to sharing their data with companies in a number of ways. The theoretical contributions of each individual empirical study (or series of studies) are outlined in the corresponding chapters. Here, I discuss the most important overarching contributions on a broader level.

First and foremost, the findings of chapter 2 and 3 extend privacy calculus theory – one of the most prominent frameworks explaining when people share personal information – in different ways. Specifically, in chapter 2, by showing that consumer responses to proactive customer service interventions on social media can be modelled through the separate effects of perceived usefulness and feelings of privacy infringement associated with the intervention, we extend privacy calculus theory in two ways. Privacy calculus theory aims to explain disclosure behavior by modelling the decision as a trade-off between the benefits derived from disclosure against the perceived privacy risks associated with disclosure as the cost factor (Culnan & Armstrong, 1999; Laufer & Wolfe, 1977). We firstly show that privacy calculus theory can also explain customer satisfaction as the outcome of the cost-benefit analysis. Secondly, we show that instead of modelling the anticipation of a loss of privacy as the cost factor (privacy risks), the actual realization of such a privacy loss (perceived privacy infringement) can also be modelled as the cost factor. In chapter 3, we draw on construal level theory to better understand consumers' flexibility with regards to their privacy preferences. Our findings show that consumers hold different mindsets in attitudinal versus behavioral contexts, which affects which consequences of data sharing come to mind and hence get included in the privacy calculus. Whether it is the benefits or costs that come to mind more easily, depends on the extent to which their psychological distance is congruent with one's mindset at that moment. This 'construal level congruency' account extends privacy calculus theory by offering a novel theoretical perspective on which risks and benefits of disclosure are included in the privacy calculus, and how this depends on the psychological distance of these risks and benefits and consumers' current mindset. These findings help explain people's privacy calculus inconsistencies over time, and in addition enhance understanding about the commonly observed discrepancy between consumer privacy concerns and privacy behavior, or the "privacy paradox" (Norberg, Horne, & Horne, 2007).

The findings of chapter 4 and 5 also fit within the privacy calculus framework. In chapter 4 we found that being open and forthright about the collection and use of customer data reduces perceived privacy risks, which represents a reduction of the 'cost' side of the privacy calculus. The findings of chapter 5 suggest that by optimizing online branded content based on the stage of the customer experience, the consumer engagement this elicits persuades people to indirectly share additional

insights regarding their preferences. Although privacy concerns were not measured in this study, one could speculate that generating customer engagement may cause consumers to some extent disregard their privacy concerns with regards to sharing their data. This would be in line with the notion that customer engagement can lead to a state of flow that is characterized by focused attention on the branded content itself, and a loss of self-consciousness (Brodie et al., 2011). However, the major contributions of chapters 4 and 5 lie beyond the scope of privacy calculus theory. With regards to chapter 4, many scholars have argued that transparency may lead to trust which then leads to favourable company outcomes, including an increase in customers' willingness to share their personal data with the company (Granados, Gupta, & Kauffman, 2010; Kirby, 2012; Morey et al., 2015; Peppers & Rogers, 2012; Schnackenberg & Tomlinson, 2014). The study presented in chapter 4 is one of the first to test this link in an experimental setting, thereby providing stronger support for a causal relationship between transparency, trust, and customers' disclosure of personal data. Moreover, our findings demonstrate that this effect may operate through a process of reciprocity such that consumers, in response to a company's openness, in turn also become more willing to share their personal data with the company. For chapter 5, the most important theoretical contribution lies in the domains of customer engagement and customer experience management. The idea of engaged customers is crucial to service-dominant logic, that considers customers as co-creators of value in an integrated customer experience (Vargo & Lusch, 2008), and relationship marketing, that attempts to involve and integrate customers into a firm's developmental and marketing activities in order to build long-term sustainable relationships (Grönroos, 1997). Despite the clear conceptual link between customer experience marketing and customer engagement on a conceptual level (Brodie, Hollebeek, Jurić, & Ilić, 2011; Hollebeek, Srivastava, & Chen, 2016; Lemon & Verhoef, 2016; van Doorn et al., 2010), empirical work has so far addressed them separately. In chapter 5 we investigated what drives customer engagement with brand posts on social media in the consecutive stages of customer experiences. Our finding that what drives customer engagement depends on the stage of the customer experience, shows that customer engagement should not be studied in isolation, but should be integrated in a customer experience framework not only on a conceptual level, but also empirically. Our findings also support the idea that consumer engagement is dynamic and may emerge at different levels of intensity over time (Brodie, Ilic, Juric, & Hollebeek, 2013).

## 6.2 PRACTICAL IMPLICATIONS

The studies in this dissertation also have important implications for practitioners. In addition to the concrete practical implications of the separate studies as presented in the respective chapters – e.g. the

implications for proactive online service interventions in chapter 2 – the findings in this dissertation offer valuable practical insights for marketers into how their actions affect consumers' evaluations and decision making processes on a broader, more general level. For example, the findings of chapter 2 support the idea that people trade off privacy costs against benefits derived from an online customer service interaction. In line with privacy calculus theory, these findings show that consumers are willing to forego a loss of privacy if the benefits derived from the intervention are substantial enough. This suggests that proactive customer service strategies should be implemented with some caution, as the perceived loss of privacy may backfire. This does not mean that companies should never proactively initiate interactions with consumers through various channels. They should however make sure that the benefits a customer derives from the interaction, which could be either utilitarian of affective, is greater than the costs of privacy loss. Chapter 3 further refines these insights; the extent to which such privacy considerations are incorporated in consumers' decisions depends on their mindset at a given moment, which is in turn determined by when the consequences of disclosure come into effect. This implies that it matters *when* companies ask consumers to share their data. From the perspective of a marketer hoping to persuade consumers to share their data, it makes sense to position the moment of consent at the psychological distance from the actual sharing event that is congruent with the psychological distance with the benefits of disclosure but incongruent with the distance of the associated costs. From the perspective of a policy maker aiming to persuade people to act more in line with their privacy values, the opposite applies; the moment of consent should be congruent with psychological distance of the costs rather than benefits of data sharing. Chapter 4, however, shows that strategies that primarily focus on emphasizing the benefits of disclosure and less on reducing privacy concerns may not be the only effective means to persuade consumers to share their data. Companies can also directly address privacy concerns simply by openly disclosing what the data will be used for. Secondly, they can trigger a process of reciprocity by being generally open and forthright about matters relevant to the customer, even when the disclosed information does not directly address the collection and use of customer data. Such policies of openness and equality are of paramount importance in creating sustainable consumer trust, which in turn is a key requisite for sustainable company-customer relationships (Morey et al., 2015; Sirdeshmukh, Singh, & Sabol, 2002). To further deepen these relationships, marketers use social media to engage with customers in all stages of the customer journey, which in turn leads to the generation of more information on consumers perceptions of the customer experience (Lemon & Verhoef, 2016; Malthouse, Haenlein, Skiera, Wege, & Zhang, 2013; Weinberg, Ruyter, Dellarocas, Buck, & Isobel, 2013). The findings of chapter 5 show that what drives customer engagement behavior depends on the stage of the customer experience a consumer is in. In order to generate high levels of customer engagement, marketers can benefit from mapping consumers' goals in a specific stage, and adapting the content of their brand posts to fulfil these goals.

## 6.3 DIRECTIONS FOR FUTURE RESEARCH

Privacy has become an exchangeable currency that can be exchanged for services, goods, safety, convenience or usability. Consumers are becoming more aware of the monetary value their data represent to companies. If privacy is a currency (Motiwalla, Li, & Liu, 2014), understanding what drives "willingness to pay" is paramount to marketers. Indeed, persuading consumers to voluntarily share their data is seen as a critical challenge for companies (Morey et al., 2015; Pentland, 2009; Peppers & Rogers, 2012). The empirical work presented in this dissertation advances understanding about how consumers integrate privacy considerations into their decision making processes with regards to sharing their data with companies. Moreover, the different studies provide insights into how companies' activities or choices affect consumers' data sharing. In each empirical chapter we reflected on how the findings from the presented studies lead to specific and concrete suggestions for future research. In addition to these specific suggestions, the findings presented in this dissertation also provide some suggestions for interesting directions for future research on a broader level.

New digital technologies have been transforming the marketing landscape. These advancements in digital technologies lead to new challenges for marketing researchers. On the one hand, the unprecedented streams of – often unstructured – customer data from a plethora of sources are often so large and complex that they require new and advanced unique data storage, management, analysis, and visualization technologies (Chen, Chian, & Storey, 2012). In order to generate customer insights from this data that are also actionable from the companies' perspective, interdisciplinary collaboration between marketing researchers and other disciplines, such as computer science, econometrics, and information systems, will be a critical success factor. Simultaneously, from a consumer behavior perspective, understanding how customers manage their relationships with companies in this digitalized data-rich environment will remain a key priority for marketing research. How do customer expectations and experiences change as companies will become able to track more and more touchpoints throughout individual customer journeys in new multi-media, multi-screen, and multi-channel environment? Findings from chapter 2 and 3 showed that, given the 'right' benefits, consumers are willing to forego substantial losses of privacy of their personal data. This raises two interesting questions. Firstly, what comprises these 'right' benefits? Research shows that consumers are disproportionately susceptible to 'free' services, but also to monetary incentives, and to convenience (Shampanier, Mazar, & Ariely, 2007). Future research may focus on comparing the effectiveness of different types of benefits in the privacy calculus, as well as identifying the underlying mechanisms through which these benefits persuade consumers to accept a loss of privacy. Specifically, as the MSI formulates in its 2016-2018 research priority list; how exactly do consumers trade off privacy concerns versus the benefits of personalization, sharing data versus convenience, customization

versus intrusion, and annoyance versus effectiveness (Marketing Science Institute, 2016)? Secondly, do consumers seek to compensate the loss of control that is inherent to sharing personal data despite having privacy concerns in other domains of their relationships with firms? For example, many consumers engage in co-production or co-creation activities, through which they have a certain level of control over their customer experience (Chan, Yim, & Lam, 2010; Jaakkola & Alexander, 2014; Nuttavuthisit, 2010; Xie, Bagozzi, & Troye, 2008). It will be interesting to see to what extent such customer behaviors are driven by a general sense (or specific episodes) of disempowerment caused by the collection and use of consumer data (Labrecque, vor dem Esche, Mathwick, Novak, & Hofacker, 2013). In addition, would such a process of compensation also work in the opposite direction? Would empowering consumers in specific domains of customer-firm interactions, such as the ability to engage and interact with brands via a plethora of channels and media throughout the customer journey, make them more likely to accept a loss of control in other domains, such as the control over their personal data? In sum, future research may try to integrate existing theories of customer engagement, privacy management, and self-disclosure within a broader interconnected framework of human needs for autonomy and control on the one hand, and efficiency and convenience on the other.

In conclusion, it is clear that the digital revolution in marketing, characterized by the increasing availability and dependence on consumer data as a driver of competitive advantage, creates both enormous challenges and opportunities for companies ánd consumers. The marketing landscape is changing faster than ever before. Studying how consumers and companies together navigate while simultaneously also shaping this landscape will be a magnificent academic challenge.

## REFERENCES


Brodie, R. J., Hollebeek, L. D., Jurić, B., & Ilić, A. (2011). Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of Service Research*, *14*(3), 252-271.

Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research*, *66*(1), 105–114.

Chan, K. W., Yim, C. K., & Lam, S. S. (2010). Is customer participation in value creation a double-edged sword? Evidence from professional financial services across cultures. *Journal of Marketing*, *74*(3), 48–64.

Culnan, M., & Armstrong, P. (1999). Information privacy concerns, procedural fairness, and impersonal trust: An empirical investigation. *Organization Science*, *10*(1), 104–115.

Granados, N., Gupta, A., & Kauffman, R. J. (2010). Information transparency in business-to-consumer markets: Concepts, framework, and research agenda. *Information Systems Research*, *21*, 207–226.

Grönroos, C. (1997). From marketing mix to relationship marketing - towards a paradigm shift in marketing. *Management Decision*, *35*(4), 322–339.

Hollebeek, L. D., Srivastava, R. K., & Chen, T. (2016). S-D logic-informed customer engagement: Integrative framework, revised fundamental propositions, and application to CRM. *Journal of the Academy of Marketing Science*, *45*(3), 1–25.

Jaakkola, E., & Alexander, M. (2014). The role of customer engagement behavior in value co-creation. *Journal of Service Research*, *17*(3), 247–261.

Kirby, J. (2012). Trust in the age of transparency. *Harvard Buiness Review*, *90*(7/8), 158–159.

Kokolakis, S. (2017). Privacy attitudes and privacy behaviour: A review of current research on the privacy paradox phenomenon. *Computers and Security*, *64*, 122–134.

Labrecque, L. I., vor dem Esche, J., Mathwick, C., Novak, T. P., & Hofacker, C. F. (2013). Consumer power: Evolution in the digital age. *Journal of Interactive Marketing*, *27*(4), 257–269.

Laufer, R., & Wolfe, M. (1977). Privacy as a concept and a social issue: A multidimensional developmental theory. *Journal of Societal Issues*, *33*(3), 22–42.

Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing*, *80*(6), 69–96.

Malthouse, E. C., Haenlein, M., Skiera, B., Wege, E., & Zhang, M. (2013). Managing customer relationships in the social media era: Introducing the social CRM house. *Journal of Interactive Marketing*, *27*(4), 270–280.

Marketing Science Institute. (2014). *Research Priorities 2014-2016. Marketing Science Institute*. Cambridge, Massachusetts. Retrieved December 12, 2017, from https://www.msi.org/uploads/articles/MSI_RP14-16.pdf

Marketing Science Institute. (2016). *Research Priorities 2016-2018*. Cambridge, Massachusetts: Marketing Science Institute. Retrieved December 12, 2017, from https://www.msi.org/uploads/articles/MSI_RP16-18.pdf

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.

Morey, T., Forbath, T., & Schoop, A. (2015). Customer data: Designing for transparency and trust. *Harvard Business Review*, *93*(5), 93–105.

Motiwalla, L., Li, X., & Liu, X. (2014). Privacy paradox: Does stated privacy concerns translate into the valuation of personal information? *Proceedings of the 18th Pacific Asia Conference on Information Systems*, 281–297.

Norberg, P. A., Horne, D. R., & Horne, D. A. (2007). The privacy paradox: Personal information disclosure intentions versus behaviors. *The Journal of Consumer Affairs*, *41*(1), 100–126.

Nuttavuthisit, K. (2010). If you can't beat them, let them join: The development of strategies to foster

consumers' co-creative practices. *Business Horizons*, *53*(3), 315–324.

Peltier, J. W., Milne, G. R., & Phelps, J. E. (2009). Information privacy research: Framework for integrating multiple publics, information channels, and responses. *Journal of Interactive Marketing*, *23*(2), 191–205.

Pentland, A. (2009). Reality mining of mobile communications: Toward a new deal on data. In *The Global Information Technology Report 2008–2009* (pp. 75–80).

Peppers, D., & Rogers, M. (2012). *Extreme trust: Honesty as a competitive advantage*. New York, NY: Penguin Group Inc.

Pew Research Center. (2015). *Americans' attitudes about privacy, security and surveillance*. Retrieved December 12, 2017, from http://www.pewinternet.org/2015/05/20/americans-attitudes-about-privacy-security-and-surveillance/

Schnackenberg, a. K., & Tomlinson, E. C. (2014). Organizational transparency: A new perspective on managing trust in organization-stakeholder relationships. *Journal of Management*, *42*(7), 1748-1810.

Shampanier, K., Mazar, N., & Ariely, D. (2007). Zero as a special price: The true value of free products. *Marketing Science*, *26*(6), 742–757. .

Sirdeshmukh, D., Singh, J., & Sabol, B. (2002). Consumer trust, value, and loyalty in relational exchanges. *Journal of Marketing*, *66*(1), 15–37.

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.

Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: Continuing the evolution. *Journal of the Academy of Marketing Science*, *36*(1), 1–10.

Weinberg, B. D., Ruyter, K. De, Dellarocas, C., Buck, M., & Isobel, D. (2013). Destination social business: Exploring an organization's journey with social media, collaborative community and expressive individuality. *Journal of Interactive Marketing*, *27*(4), 299–310.

Xie, C., Bagozzi, R. P., & Troye, S. V. (2008). Trying to prosume: Toward a theory of consumers as co-creators of value. *Journal of the Academy of Marketing Science*, *36*(1), 109-122.

## SUMMARY

Companies' ability to collect, analyse, and use consumer data to gain insights into consumer preferences and behavior is pivotal in today's marketing landscape and will become even more important as more elements of human life become digitalized. At the same time, concerns about consumer privacy may increasingly become an obstacle to obtaining the consumer data required to get the in-depth knowledge about consumers' characteristics, preferences, and behavior that is needed to establish and maintain profitable customer relationships and gain a competitive advantage. The first aim of this dissertation is to study how consumers integrate privacy considerations into their decision-making processes with regard to sharing their personal data with companies. The second aim is to study how companies' activities with regard to company-consumer interactions throughout the customer journey affect consumers' data sharing.

The results of four empirical (series of) studies are presented. The first empirical chapter focuses on understanding how consumers incorporate privacy concerns in their evaluations of companies in the specific setting of online customer service encounters, drawing on privacy regulation theory and using privacy calculus theory as underlying framework. The next chapter zooms in further on privacy calculus theory and presents a novel theoretical perspective on the flexibility of privacy preferences and data sharing tendencies using construal level theory. The third chapter looks at the effects of corporate transparency on consumers' data sharing behavior. The final empirical chapter looks beyond 'overcoming privacy concerns' as a means of persuading consumers to share data, by investigating how branded content can stimulate consumer engagement behaviors in different stages of the customer experience.

## SAMENVATTING

De mate waarin bedrijven in staat zijn consumentendata te verzamelen, analyseren, en gebruiken om inzichten te verkrijgen in de voorkeuren en het gedrag van consumenten is cruciaal in het hedendaagse marketinglandschap. Dit zal zelfs nog belangrijker worden naarmate meer elementen van het dagelijks leven gedigitaliseerd worden. Tegelijkertijd kunnen zorgen omtrent privacy van consumenten in toenemende mate een obstakel worden voor het verkrijgen van toegang van deze consumentendata, die nodig is om winstgevende klantrelaties en daarmee een concurrentievoordeel op te bouwen. Het eerste doel van dit proefschrift is om te onderzoeken hoe consumenten privacyoverwegingen meenemen in hun besluitvormingsprocessen met betrekking tot het delen van hun persoonlijke data met bedrijven. Het tweede doel is om inzicht te krijgen in hoe de activiteiten van bedrijven in interacties met consumenten de bereidheid om persoonlijk data te delen beïnvloeden.

De resultaten van vier (series van) empirische studies worden gepresenteerd. Het eerste empirische hoofdstuk richt zich op de vraag hoe consumenten zorgen over hun privacy integreren in hun evaluaties van bedrijven in de specifieke context van online klantenservice. Hierbij wordt gebruik gemaakt van *privacy regulation theory* en *privacy calculus theory* als onderliggend theoretisch kader. In het volgende hoofdstuk wordt verder ingezoomd op *privacy calculus theory* en wordt op basis van *construal level theory* een nieuw theoretisch perspectief op de flexibiliteit van privacyvoorkeuren en de bereidheid om data te delen gepresenteerd. In het derde hoofdstuk wordt gekeken naar de effecten van bedrijfstransparantie op de bereidheid van consumenten om hun data te delen. In het vierde en laatste empirische hoofdstuk wordt tot slot een stap verder gekeken dan het verminderen of overwinnen van zorgen omtrent privacy als strategie om consumenten te overtuigen hun data te delen, door te onderzoeken hoe communicatie van merken via sociale media klantverbinding kan stimuleren in verschillende fases van de totale klantervaring.

## ACKNOWLEDGEMENTS

Working in academia is the best job in the world. Sure, you make long hours, and you are never really done. And of course, you have the failed manipulation checks, the mistakes in the materials you find only after rolling out a study, the non-significant results, the new papers coming out on exactly the topic that you have been working on for more than a year, the radio silences by companies you were planning to do a great research project with, the suggestions by co-authors to change the storyline back to pretty much what it was before they suggested to change it in the first place, the desk rejections, the first round rejections, the second round rejections, the impossible demands by reviewers, and the fact that once you finally do get a paper published very few people in your environment actually read it. Oh, and then there's also the grading of open question exams including those by students with impossible handwriting and the ones that "just write down everything they know because the right answer might just be in there somewhere", not to mention the students that "want to change workgroups", "cannot find the hand-in link for the assignment on blackboard", or miss too many classes because they "did not know attendance was mandatory". Or the student administration that needs proof from the exam committee that you are indeed the course coordinator in order to be able to process the grade list you are handing in, or insists on needing empty but nevertheless signed grade lists for exam resits that never took place. But… in what other job do you have the freedom to observe a random phenomenon that triggers your interest (people that claim to care about their privacy but display completely opposite behavior, consumers that want corporate transparency but only until it hits them in the face, statements that seem more true just because they rhyme, colors that should lead to people being more careful that all of a sudden trigger more risky behavior, …), and decide to spend a year on trying to find out what is going on? In what other job can you talk about your new favorite topic in lecture halls packed with some of the brightest millennials in the world, or have challenging in-depth discussions on it with the most intelligent colleagues you could wish for? And what could be more fulfilling than helping students understand statistics, dissect research articles, or helping them in setting up their own research project, and then see them leave university with a master diploma? The truth is that working in academia is like getting paid for a hobby.

I started my PhD in February 2012. And although of course there were some challenges along the way, I enjoyed almost every second of it. For that I am very grateful to a number of people. First of all, Willemijn. In 2011, you arranged not one but two PhD positions for me. Then, you helped me get a teaching position at Hogeschool van Amsterdam, and a few years later, when I was interested in switching to the Amsterdam Business School, you actively supported that too. Recently, you have been a great advocate of keeping me in Amsterdam on a tenure track position, but you also wrote a glowing recommendation letter that helped me get the opportunity to work at Monash University. I greatly

enjoyed working with you. Despite your vastly superior status and experience in academia, you always work on the basis of equality. In addition to your sharp and open research mind, you have some of the best interpersonal skills I have ever seen; you always seemed to intuitively feel exactly when I needed guidance and support, and when it was better to take back one step and let me work on my ideas by myself for a while. I think it is fair to say that collaborating with you is one of the main factors that made me actually enjoy doing a PhD, and if it weren't for your support my academic career would have started very differently or might not have taken off at all. I very much hope we will continue to work together even when I will be on the other side of world.

Jesse, I want to thank you for your incredible involvement and support throughout my PhD. When there was the occasional bump in the road, you always kept a very clear focus on the end goal of bringing my PhD to a successful end. You enabled me to kickstart my PhD journey by funding a big research project and have invested very substantial amounts of funding but also data, time and effort in our other joint research projects as well. I also want to thank you for taking me to the GOR conferences, and for actively supporting my move to the commercial economics group at HvA in 2015. Your involvement with the people you work with and their research projects is unparalleled, and your support has been invaluable in substantiating my research interests into actual research projects. Over the years, I have seen CAREM, the Digital Commerce group, and the Centre for Market Insights grow under your dedicated leadership. It makes me feel proud to have been part of it.

Both in the research presented in this dissertation as in some 'side projects', I was lucky enough to work with fantastic co-authors. Chuck, thank you for your willingness to use your incredible experience, thoroughness, curiosity, and research versatility to support and mentor young researchers such as myself. You are a true and great academic role model. Ravi, if I would have had to make the call, I would have cut loose our child helpline paper at least five times. The lessons you have taught me in positioning a story and in sheer perseverance will stay with me for the rest of my career. Thank you both for writing glowing recommendation letters; they have been an invaluable asset to my job market package. Freddy, thank you for your academic rigor and dedication in our construal level project, as well as for helping me not letting my teaching activities get in the way of finishing my PhD. I hope we will continue to work together on many interesting projects in the future.

I owe a great deal of gratitude to the Hogeschool van Amsterdam for funding and facilitating my research time from 2011 to 2016. In relation to this, I want to specifically thank Ans Kolk for her efforts in setting up the collaboration agreement between UvA and HvA as well as her support especially in the early stages of my PhD journey. I want to thank Irith Kist for first getting me on board at HvA back in 2011 as a lecturer in the business economics program despite the fact that I am not a business economist. I also want to thank Gerard Dukker and Marlies Sandee for their continued support in my pursuit of a PhD degree while working as a lecturer at HvA. Furthermore, I want to thank Mark

van der Veen for offering me a teaching position including research time – allowing me to actually finish my PhD – at the ABS in 2016, as well as for giving me the opportunity to teach and coordinate courses and supervise students at the pre-master and master level.

Of course I want to thank all my (former) colleagues at HvA and UvA, for contributing to a pleasant, positive, intellectually challenging, and inspiring working environment. Getting on with your colleagues has been shown to be the most important driver of happiness at work. I can honestly say that working together with you has generally made me feel very happy at work. I also want to thank all the students I have had the pleasure of working and collaborating with over the years.

Just like having good colleagues is a powerful driver of happiness at work, having strong ties to family and friends and being able to spend time with them has been shown to be the number one driver of happiness in life. I am extremely lucky in this regard, and for that I feel grateful on a level that far exceeds being thankful for the direct or indirect support during my PhD process. I hope you will forgive me for not making my "thank you" to you more personal here; I feel there are more suitable contexts for doing that, such as during our family holidays, or after a few beers (and then a few more) at a festival.

I think my parents Leo and Neeltje and sister Anneloes (including Klaas and Mees), as well as Rob, Toos, Laurens, and my friends (including my paranymphs Onno and Alper) will probably let me get away with this. I also know one person will not, although by the time you are reading this I hope to have said it all – and in a more romantic way – at our 'Big Day'... Anne, you have stood by me at every step of my PhD journey, whether it was a happy moment, exciting, challenging, stressful, disappointing, or boring. I don't know if I could have done it without you, but I do know that I wouldn't have wanted to do it without you. At the end of the day, although it may not always seem like it when I am working until late in the evening or during the weekend, your love is infinitely more important to me than any article, publication, job, or degree.