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**SERVICE WITH EMOTICONS: HOW CUSTOMERS  
INTERPRET SERVICE EMPLOYEES' USE OF  
EMOTICONS IN ONLINE SERVICE ENCOUNTERS**

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**Service with Emoticons: How Customers Interpret  
Service Employees' Use of Emoticons in Online Service  
Encounters**

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A thesis submitted in partial fulfilment of the requirements for the  
degree of Doctor of Philosophy

[MAY] [2017]

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## ABSTRACT

Although emoticons have become remarkably popular in various marketing campaigns, few marketing studies have theoretically and empirically examined how customers interpret service employees' use of emoticons in online service encounters. To fill this gap, as well as to reconcile prior work documenting both positive and negative effects of emoticons, this thesis decomposes customers' inferences about online service employees who use emoticons in terms of warmth and competence perceptions. I show that service employees' use of emoticons exerts opposing effects of increasing customers' perception of the employees' warmth but reducing their perception of the employees' competence. These effects apply to both positive and negative emoticons and are conditional on customers' relationship norm orientation. Specifically, communal-oriented (exchange-oriented) customers are more likely to infer higher warmth (lower competence) and thus are more (less) satisfied with the service when an employee uses emoticons. I further examine unsatisfactory service outcomes and employees' extra-role service behaviors (i.e., discretionary customer service behaviors that go beyond formal job requirements) as contextual factors that influence customers' inferential processes of service employees' use of emoticons. The current thesis is also the first to explore an emoticons' unique characteristic that is distinctive from nonverbal cues in face-to-face interactions and to compare emoticons with other online casual languages such as internet slangs.

Across seven studies, including both laboratory and field experiments, I showed that customers infer that a service employee who uses emoticons is higher in warmth but lower in competence than one who does not (study 1). I also identified an emoticons' unique characteristic that is distinctive from nonverbal cues in face-to-

face communications (study 2), and compared emoticons with other online casual languages, particularly internet slangs (study 3). I further showed that the proposed emoticon effects are conditional on customers' relationship norm orientation (study 4), that can apply to both positive and negative emoticons (study 5). I also examine two practically important contextual factors, unsatisfactory service outcomes (study 6) and employees' extra-role service behaviors (study 7), that can situationally override customers' general relationship norm orientation and thus influence customers' attitude toward the service and actual purchasing behaviors. These findings also provide important implications for the strategic implementation of emoticons in online service encounters.

*Keywords:* emoticons, warmth, competence, relationship norm orientation, unsatisfactory service outcomes, extra-role service behaviors

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## CHAPTER 1: INTRODUCTION

Computer-mediated communications have dramatically changed how services are conceived, developed, and delivered (Bitner, Brown, and Meuter 2000; Schlosser, Shavitt, and Kanfer 1999). Their impact has been especially profound in the service industry, which has traditionally relied on close, personal interactions between customers and service employees. However, online service encounters tend to lack important social cues, such as body language, tone of voice and facial expressions, thus reducing the sense of social presence (Short, Williams, and Christie 1976). To address this challenge, firms have looked for other devices to convey a sense of connection to their customers. One such device is the use of emoticons (text-based or graphical representations of facial expressions), which represent a unique tool in digital communications.

In 2015, for the first time, the Oxford Dictionary's Word of the Year was not a textual word; rather, it was an emoticon, 😂. More than 92% of the online population uses emoticons, and approximately six billion emoticons are sent per day (Hof 2016). Emoticons have also become a valuable social currency of marketers in digital business practices in various channels (Bennet 2016; Hess 2016), including social networks (Beese 2015), emails (Stiglitz 2015) and live chats (Kang, Tan, and Zhao 2013; Zhang, Erickson, and Webb 2011). Also, emoticon use is becoming increasingly popular in customer service (Hajric 2016; Wroten 2016). For instance, a wide range of companies, such as Goldman Sachs, Domino's Pizza, Bud Light, and Hyatt, use emoticons when interacting with customers (Beese 2015; Wroten 2016; see appendix A for more examples). In addition to this anecdotal evidence, I also conducted pilot studies with different populations, one with Western participants (United States (US) participants = 131) and another with Eastern participants (Hong

Kong (HK) participants = 97), to more systematically understand the popularity of emoticon use in business practices that consumers encounter in their daily lives. The pilot studies revealed that 77% US and 84% HK participants have seen service employees, brands, or companies use emoticons in business practices such as advertisements and online service encounters through various platforms, including Facebook, emails, and instant messengers (see appendix B). Hence, consumers perceive the use of emoticons to be popular among business practices.

However, the use of emoticons in marketing and service activities is not always successful. For example, whereas Domino's Pizza benefited from implementing emoticons of pizza slices in its pizza delivery service via Twitter, Goldman Sachs's use of emoticons in its 2015 company report has been criticized by the company's customers (Hof 2016). Similarly, luxury department store House of Fraser's tweets with emoticons made their customers feel confused (McCarthy 2016). Thus, despite the vast interest in the use of emoticons in various industries, business practitioners appear to lack systematic guidelines for the successful implementation of emoticons in digital marketing communications.

Despite this evident gap, the influence of service employees' use of emoticons on service outcomes (e.g., customer satisfaction and purchasing behaviors) has received scant attention in the consumer behavior literature. Moreover, there is an increasing trend of using various casual languages, such as internet slang, in online interactions (Barseghyan 2013), but questions pertaining to emoticons' unique characteristics compared with other casual languages remain unexplored. Although a few studies in the information system and computer science literature have examined the role of emoticons in digital communications, most of them have been confined to non-commercial relationships (Wang et al. 2014;

Haberstroh, 2010; Thoresen and Andersen 2013), and their findings are inconclusive, documenting both positive (Taesler and Janneck 2010; Wang et al. 2014; Zhang et al. 2011) and negative effects of emoticons (Haberstroh 2010; Ellensburg 2012; Thoresen and Andersen 2013).

Against this background, the current research aims to build the conceptualization of emoticons by specifying its nature and characteristics and investigating origins of positive and negative effects of emoticons to understand when and why each effect occurs. Specifically, I examine the influence of service employees' use of emoticons on customers' warmth and competence perceptions of the employees and on subsequent service outcomes.

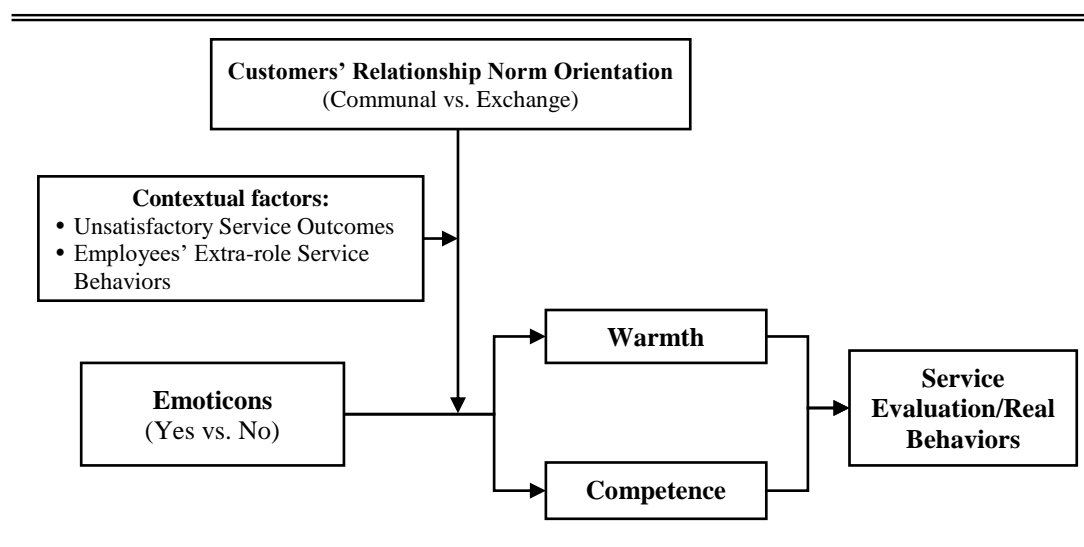
Warmth and competence represent the two fundamental dimensions in person perception (Fiske et al. 2007; Judd et al. 2005; Kervyn et al. 2009). Thus, in the current research, I decompose customers' inferences about service employees in terms of warmth and competence perceptions to reconcile the mixed findings in prior work. In doing so, I reveal opposing effects of emoticons on warmth and competence perceptions. Specifically, I show that a service employee's use of emoticons (either positive or negative) can lead customers to perceive the service employee to be warmer but less competent.

I further propose that whether customers infer higher warmth or lower competence from a service employee's use of emoticons depends on the customers' relationship norm orientation (Aggarwal 2004; Liu and Gal 2011). Specifically, I argue that communal-oriented (exchange-oriented) customers are more likely to infer higher warmth (lower competence) from a service employee's use of emoticons. Consequently, communal-oriented (exchange-oriented) customers will be more (less) satisfied with the service when a service employee uses emoticons.

I also explore two practically important contextual factors that can further influence the moderating effect of the relationship norm orientation: unsatisfactory service outcomes and employees' extra-role service behaviors. Specifically, I propose that when unsatisfactory service outcomes occur (e.g., unavailable hotel room due to overbooking), both generally communal-oriented and generally exchange-oriented customers are more likely to infer lower competence, rather than higher warmth, when the service employee uses emoticons than when he or she does not. In contrast, when a service employee performs extra-role service behaviors (e.g., proactively providing customers with information about product warranty without being explicitly asked to do so), both generally communal-oriented and generally exchange-oriented customers are more likely to infer higher warmth, rather than lower competence, when the service employee uses emoticons. Figure 1 depicts the conceptual framework for customers' inferential processes of emoticon use. In the next sections, I review the relevant literature and develop my hypotheses.

**FIGURE 1**

**A CONCEPTUAL FRAMEWORK FOR CUSTOMERS' INFERENTIAL PROCESSES OF SERVICE EMPLOYEES' USE OF EMOTICONS**



## CHAPTER 2: CONCEPTUALIZATION OF EMOTICONS

### Definition and history

The word *emoticon* is a portmanteau of *emotion* and *icon*. Social information processing theory suggests that emoticons replace facial expressions and facilitate social interactions in text-based electronic media (Walther 1992, 1994). Early emoticons are typed out with alphabets and punctuations and are read sideways; some of them enjoy longevity and are still very popular today (e.g., :-), :-). The first documented emoticon was found in a draft of an 1862 speech of Abraham Lincoln, in which a winking emoticon “;)” was inserted after the phrase “applause and laughter”; this symbol is believed to be an intended representation of a smiling face and not a typographical error (Lee 2009). A series of emoticons with a complex configuration was later published in the U.S. magazine *Puck* in 1881 (HuffingtonPost 2013). In 1982, Fahlman of Carnegie Mellon University explicitly stated, “I propose... the following character sequence for joke marketers: :-). Read it sideways. Actually, it is probably more economical to mark things that are not jokes, given current trends. For this use :-(.” The popular graphic round yellow faces were said to be first created by Harvey Ball in 1963 (Sixl-Daniell and Williams 2005).

Linguistics and communication literature has documented the use of emoticons for more than twenty years, defining emoticons as surrogates for facial expressions in computer-mediated-communication. For example, Thompsen and Foulger (1996, pp. 230) referred emoticons to pictographs that are “suggestive of facial expression”, adding a paralinguistic emotional component to a message. Walther and D’Addario (2001, pp. 324) defined emoticons as “graphic representations of facial expressions” that are used by internet users to substituting nonverbal cues in text-based computer-mediated-communication. Similarly,



emoticons are construed as a “combination of keyboard characters designed to show an emotional facial expression” by respected linguist David Crystal (2001, pp. 36).

As time goes on, graphical forms of emoticon (e.g., 😊, 😞) are getting more popular<sup>1</sup>, but its definition persists the same. For instance, Derks (2007, pp. 10) defines emoticons as “(typo)graphic depictions of facial behavior”, and Skovholt, Grønning, and Kankaanranta (2014, pp. 780) refers emoticons to “graphic representations of facial expressions, which often follow utterances in written computer-mediated communication”. Following these prior works, I define emoticons as textual or graphical symbols designed to mimic facial expressions in the current thesis.

Although the way emoticons mimic human face is highly abstract (e.g., genderless and ageless), there are nuanced variations of emoticons across users and situations. For example, while westerners favor representing different facial expression with the change of “mouth” of emoticons (e.g., :) and :( ), easterners rely more on eyes (e.g., ^\_^ and T\_T; Yuki, Maddux, and Masuda 2007). More subtly, Schnoebelen (2012) identified the different situations that internet users type a smiley with or without a nose (i.e., :- ) vs. :)). Nevertheless, majority of emoticons can convey universally recognized facial expressions without congruent words explanation (e.g., ☹ represent an unhappy face; Garrison et al. 2011; Adams 2013). Supporting this, researchers utilized fMRI technique and found that emoticons activated same inferior frontal gyrus regions as photorealistic facial expressions did

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<sup>1</sup> Graphical emoticons are often confused with emoji. Emoji, a combination word of *e* (絵, "picture") and *moji* (文字, "character") from Japanese, refers to *all* pictographs. While graphical emoticons are mainly graphical symbols for facial expression, emoji include graphical symbols for all things (e.g., common objects, animals, types of weathers). The Japanese word Emoji's resemblance to English word emoticon is purely coincidental.

(Yuasa, Saito, and Mukawa, 2006), although it is obvious that emoticons are much less subtle and complex than real facial expressions.

### **Functions of emoticon**

It is widely recognized that emoticons function as nonverbal cues to express emotions in computer-mediated-communication (Walther 1992; Walther and D’Addario 2001; Thompsen and Foulger 1996; Derks et al. 2008; Lo 2008). Early studies (e.g., Cooke and Bauhs 1996) showed that online group chatters are more satisfied with a chat system that can send and receive emoticons, due to the improved emotional exchange (Thompsen and Foulger 1996). Similar to nonverbal cues that can facilitate communication in face-to-face interactions, emoticons are also found to enable receivers more correctly perceive senders’ emotion, attitude and intention on the internet (Lo 2008). Moreover, people tend to use emoticons more frequently when interact with friends (vs. strangers) and in a socio-emotional (vs. task-orientated) conversation, a way that is very close to the use of emotional nonverbal cues in face-to-face interactions (Derks 2007; Derks et al. 2007, 2008).

Emoticons also convey pragmatic meaning, entailing an illocutionary force (i.e., a speaker’s intention behind what is explicitly said) to an utterance (Dresner and Herring 2014; Vandergriff 2014). For example, adding a smiley at the end of “I can’t get rid of the stupid thing! :)” helped to convert a rude, selfish gripe to a mild, humorous complaint (Dresner and Herring 2014). In the same vein, emoticons can also enable the senders’ to regulate the interaction and to manage their online impression (Derks 2007).

### **A unique characteristic: intentionality**

Based on the aforementioned functions of emoticons, an important distinction between emoticons and facial expressions in traditional face-to-face

communications become apparent: emoticons are *intentional* facial expressions. Specifically, nonverbal cues in face-to-face communications are generally perceived as direct and involuntary representations of an individual's internal state (Kendon 1987), whereas the use of emoticons is perceived as more conscious and controlled (Derks 2007; Walther and D'Addario 2001; Yoo 2007). Even though some nonverbal cues can be controlled, observers may not be able to distinguish controlled nonverbal cues from involuntary ones. In contrast, the use of emoticons usually involves either keying in textual symbols or choosing from a list of graphical symbols, and therefore observers tend to perceive the use of emoticons as more deliberate and voluntary (Derks, Bos, and Grumbkow 2007), intentionally signaling affective information (Vandergriff 2014). Since emoticons are intentionally added, receivers can infer the sender's personality traits from his or her use of emoticons. Thus, I identify intentionality as a unique characteristic of emoticons that is distinct from nonverbal cues in face-to-face interactions.

### **Emoticons and internet slang**

Emoticons are also distinct from other casual languages such as internet slang (e.g. acronyms and abbreviations). Emoticons are pictorial representations of facial expressions that are mainly used to deliver information regarding emotions, whereas most internet slang does not contain any emotional information. For instance, BRB (be right back) and IMHO (in my humble opinion) are examples of internet slang, but they are not necessarily expressions of emotions. Moreover, even in the case of some internet slang that does contain emotional expression (e.g., LOL, OMG), receivers might infer different intentions behind the use of these terms. Unlike emoticons that represent facial expressions whose meaning is usually immediately clear, most examples of popular internet slang are acronyms or abbreviations that

must be learned in order to understand what they mean (e.g., the receiver must learn that LOL stands for “laugh out loud”). Hence, using internet slang assumes that the conversation partner also knows the terms, which may convey the sender’s intention to save time and effort in communicating with others (Barseghyan 2013). In contrast, the use of emoticons is perceived to be more other-directed from the receiver’s perspective because by definition, emoticons are intended to help the receiver better understand emotional information the sender wants to deliver (Walther and D’Addario 2001). Based on these differences, I argue that, compared to the use of emoticons, the use of internet slang conveys less other-directed intentions.

Moreover, in the aforementioned pilot studies, I also compared emoticons and internet slang in terms of the extent to which they are considered to be proper in business practices. The results showed that relative to internet slang, emoticons are perceived to be more acceptable and less offensive to use in various industries, including retails, tourism, fitness, and restaurants (see appendix B). Therefore, my research focuses on emoticons, which are more popular and more acceptable in business practices than other casual languages like internet slang.

In the following section, I derived my hypotheses regarding customers’ inferential processes of service employees’ emoticon use in the focal context of this thesis, online customer-service interaction.

## CHAPTER 3: THEORETICAL DEVELOPMENT

### Warmth and competence perceptions

Social psychologists have consistently found that warmth and competence are the two fundamental dimensions in person perception (Abele and Wojciszke 2014; Fiske et al. 2007; Judd et al. 2005; Kervyn et al. 2009). Warmth judgments capture perceptions of friendliness, helpfulness, and trustworthiness, whereas competence judgments capture perceptions of capability, skillfulness, and efficacy (Fiske et al. 2007; Judd et al. 2005). These two dimensions of person perception have been repeatedly identified not only in general interpersonal contexts (Abele and Wojciszke 2014; Kervyn et al. 2009) but also in marketing contexts such as relationships with brands and companies (Aaker, Vohs, and Mogilner 2010; Kervyn, Fiske, and Malone 2012; Scott, Mende, and Bolton 2013). In the current research, I show that these two fundamental dimensions constitute an effective theoretical model that allows us to reconcile seemingly contradictory findings in the previous research that demonstrate both positive and negative effects of emoticons (Park and Sundar 2015; Thoresen and Andersen 2013), thus providing a more nuanced understanding of the effect of emoticon use in service encounters.

Regarding the warmth dimension, I propose that customers might infer greater warmth from service employees' emoticon use for three reasons. First, individuals use emoticons with friends and family much more often than with other individuals (Derks et al. 2008), as people in general are more willing to express both positive and negative emotions in close and intimate relationships (Clark and Taraban 1991; Reis and Shaver 1988). Hence, emoticons can cognitively ignite inferences of warmth, such as friendliness and helpfulness. For instance, emoticons embedded in negative feedback were found to enhance the receiver's perception of

goodwill from the feedback sender (Wang et al. 2014). Second, emoticons can provide additional social information in digital communications (Tung and Deng 2007) that can improve understanding between communicators and relieve possible tensions (Moye and Langfred 2004). In line with this notion, prior work shows that emoticon use reduced people's perception that their conversation partner was 'flaming' them (i.e., engaging in hostile and insulting behaviors on the internet; Thompsen and Foulger 1996). Thus, emoticons can make service employees appear to be more polite and socially approachable (i.e., warmer). Third, receivers perceive people who send emoticons to have warmth-related personality traits, such as agreeableness (Fullwood and Martino 2007) and sociability (Zhang et al. 2011).

On the other hand, regarding the competence dimension, I propose that a service employee's use of emoticons can backfire in terms of customers' perception of the employee's competence. By definition, emoticons are intended to express the sender's emotional information (Walther and D'Addario 2001), and prior work has shown that expression of emotions in professional contexts (e.g., workplace) can signal one's neediness, dependency, and lack of self-reliance (Argyris 1985; Ashforth and Humphrey 1995; Clark and Taraban 1991). For instance, emotional displays by leaders can lower subordinates' perceptions of the leaders' self-confidence, and executives are often taught to mask their emotions because displaying them may disrupt role performance (Argyris 1985; Lewis 2000). Moreover, expressions of emotion tend to be discouraged not only within organizations (Thoits 1985) but also in relationships with customers (Ashforth and Humphrey 1995). Thus, I argue that since emoticons are used to express the sender's emotions, the presence of emoticons in service encounters can also signal a lack of self-confidence, professionalism, and competence.

Supporting my argument, some guidelines in news articles for computer-mediated communications, or “netiquette,” advise people to limit their use of emoticons in workplace communications, mostly because their use may be perceived as overly casual and informal (Lebovits 2015). In other words, emoticons may defy customers’ expectations of formality and create negative perceptions of the sender’s professionalism (Ellensburg 2012; Haberstroh 2010). Formality and professionalism are important diagnostic features for competent service outcomes (Jeanne Hill, Garner, and Hanna 1989), so employees’ use of emoticons can make the service process appear to be more informal and less professional and consequently can signal an inability to deliver competent services.

On top of that, previous literature has well documented that customers’ perceptions of warmth and competence towards a service employee simultaneously plays vital and positive roles in customers’ service evaluation (e.g., Aaker, Vohs and Mogilner 2010; Bolton and Mattila 2015). In sum, I propose opposing effects of emoticons on warmth and competence perceptions as follows:

*H<sub>1</sub>: customers infer that a service employee who uses emoticons is higher in warmth but lower in competence than one who does not, and warmth and competence perceptions simultaneously mediate the effects of emoticon use on customers’ service evaluation.*

I further propose that, since social judgments are malleable and depend on various contexts (Blair 2002; Schwarz 2007), customers infer higher warmth or lower competence from service employees’ emoticon use is contingent on the type of relationship norms (communal vs. exchange, Aggarwal 2004) that is salient in

customers' mind due to either individual differences or situational factors at the time of service encounters. When communal relationship norms are salient, customers expect a service employee to play the role of a friend and/or family member and display behaviors such as taking genuine care of customers and keeping track of customers' needs and well-being (Aggarwal 2004; Clark and Mills 1993; Liu and Gal 2011; Scott et al. 2013). These communal relationship norms are related to the warmth dimension in social judgments (Fiske et al. 2007; Fiske et al. 2002). In contrast, when exchange relationship norms are salient, individuals are more likely to be calculative, expecting to receive benefits comparable to what they have provided, and thus they care more about each other's capabilities and professionalism (Clark and Mills 1993; Heide and Wathne 2006). These exchange relationship norms are related to the competence dimension (Fiske et al. 2007). Moreover, Scott et al. (2013) suggested that in an communal ( exchange) relationship, warmth ( competence) is more accessible and more diagnostic than competence (warmth) when customers interpret service employees' conspicuous consumption. Therefore, we propose that communal (vs. exchange) relationship norms will lead customers to interpret a service employee's use of emoticons in terms of higher warmth (lower competence).

This thesis explores both individual and situational factors that can determine what relationship norms are salient in customers' mind at the time of service encounter. In terms of individual factors, I examine customers' general relationship norm orientation. In terms of situational factors, I explore two practically important service situations that can make a certain type of relationship norms more salient: *unsatisfactory service outcomes* and *employee's extra-role service behaviors*. I explain them in detail one by one below.



### **Relationship Norm Orientation (Communal vs. Exchange)**

Prior work has shown that customers' relationships with service employees fall on a continuum ranging from exchange norm to communal norm orientations (Aggarwal 2004; Scott et al. 2013). Although service encounters always involve exchange relationships to a certain extent, such as monetary exchange, customers can also perceive some aspects of communal relationships in their interactions with employees (Aggarwal and Law 2005; Aggarwal and Zhang 2006; Goodwin 1996). Prior research has suggested that customers can treat a service employee as either a business partner or a friend (Heide and Wathne 2006; Price and Arnould 1999), corresponding with the exchange-oriented and communal-oriented relationship norms, respectively.

I suggest that customers' relationship orientation can influence their expectations about a service employee's role. In a communal-oriented relationship, customers expect a service employee to play the role of a friend and/or family member and display behaviors such as taking genuine care of customers and keeping track of customers' needs and well-being (Aggarwal 2004; Clark and Mils 1993; Liu and Gal 2011; Scott et al. 2013). These normative expectations are related to the warmth dimension in social judgments (Fiske et al. 2007; Fiske et al. 2002). In line with this notion, prior work has shown that people tend to interpret social cues in terms of warmth rather than competence in communal-oriented relationships (Fiske et al. 2007; Wojciszke 2005). For instance, Bolton and Mattila (2014) suggested that customers in communal relationships interpret corporate social responsibility in terms of warmth rather than competence. Therefore, I predict that communal-oriented customers will infer higher warmth, rather than lower competence, when a service employee uses emoticons.

In contrast, in an exchange relationship, relationship parties understand that receiving benefits should correspond to providing comparable benefits in return (Clark and Mills 1993). As a result, individuals in exchange relationships are more likely to be calculative, and their behaviors tend to be driven by a quid pro quo approach (Heide and Wathne 2006). That is, both parties in an exchange relationship expect to receive benefits comparable to what they have provided and will focus on evaluating each other's skillfulness and capabilities (i.e., competence). Supporting this notion, prior work has shown that competence takes primacy over warmth when individuals focus on whether the other person is instrumental to fulfill their own goals, a common characteristic of an exchange relationship (Abele and Wojciszke 2014; Wojciszke, Dowhyluk, and Jaworski 1998). For instance, if an individual is looking for a good teacher to improve his or her language, he or she will focus on evaluating the teacher's skills and efficiency rather than the teacher's friendliness and sociability (Abele and Wojciszke 2014; Wojciszke et al. 1998). Similarly, Scott et al. (2013) suggested that in an exchange relationship, competence is more accessible and more diagnostic than warmth when customers interpret service employees' conspicuous consumption. Therefore, I predict that customers in an exchange relationship will interpret emoticons from a service employee as evidence of lower competence rather than higher warmth.

Taken together, I propose that customers in a communal relationship will be more likely to interpret emoticons used by a service employee in terms of higher warmth rather than lower competence, whereas customers in an exchange relationship will be more likely to interpret emoticons in terms of lower competence rather than higher warmth. As a result, communal-oriented (exchange-oriented)

customers will be more (less) satisfied with the service when the service employee uses emoticons than when he or she does not. Put it formally:

*H<sub>2</sub>: communal-oriented customers infer higher warmth from the emoticon use of a service employee and thus evaluate the service more positively, whereas exchange-oriented customers infer lower competence from the emoticon use of a service employee and thus evaluate the service more negatively.*

### **Two Additional Moderators: Unsatisfactory Service Outcomes and Extra-Role Service Behaviors**

In addition, I explored two situational factors that can override the moderating effect of customers' relationship norm orientation: *unsatisfactory service outcomes* and *employee's extra-role service behaviors*. My logic for these two situational factors is based on the findings by Scott et al. (2013) showing that situational factors (e.g., salient persuasion knowledge) can override customers' general relationship norm orientation. That is, depending on the situation, generally communal-oriented customers might think and act like exchange-oriented customers, and vice versa.

I chose unsatisfactory service outcomes and extra-role services behaviors in particular because they represent disconfirmed situations in which service outcomes fall below or above customers' expectations, respectively. Following the expectancy disconfirmation paradigm (Oliver 1980; Oliver and DeSarbo 1988), unsatisfactory service outcomes represent a negatively disconfirmed service situation (i.e., service performance is lower than customers' expectations), while employees' extra-role service behaviors represent a positively disconfirmed service situation (i.e., service

performance is higher than customers' expectations). In addition, the inclusion of these two situational factors is also consistent with the key service situations in service encounters identified by Bitner, Booms, and Tetreault (1990). Accordingly, I propose that when a service outcome is disconfirmed, either negatively or positively, customers' relationship perception can be shifted, overriding their general relationship norm orientation.

First, I argue that unsatisfactory service outcomes create more of an exchange environment between a service employee and a customer. As a result, customers will focus more on evaluating the competence of a service employee because they want effective service recovery. Supporting my argument, prior work showed that customers valued exchange norms (e.g., a speedy corrective action) more than communal norms (e.g., a friendly and empathetic action) when the service outcome was unsatisfactory (Smith, Bolton, and Wagner 1999). Prior work has also shown that even generally communal-oriented customers may interpret unsatisfactory service outcomes as a violation of the obligation to serve customers (Wan, Hui, and Wyer 2011)—in other words, as a violation of exchange norms. That is, an unsatisfactory service outcome means a failure to meet customers' expectations of receiving a benefit comparable to the money they paid for the service. Such a violation of exchange norms can cause even generally communal-oriented customers' relationship perception to be more exchange-oriented, leading them to focus more on a *quid pro quo*.

Furthermore, existing literature also supports the link between unsatisfactory service outcomes and a focus on competence. Prior work suggests that unsatisfactory service outcomes lead customers to focus on whether the service employee can deliver service recovery competently to relieve their anxiety (Parasuraman, Berry,

and Zeithaml 1991). For example, when business equipment breaks down, customers expect fast and thorough repair services (Parasuraman et al. 1991), and warm gestures like an apology without redress have been shown to have no effect on improving customer satisfaction (Boshoff 1997). Moreover, the hospitality literature has shown that unsatisfactory service outcomes decrease customers' competence perception of hotel service, which became the primary determinant of customers' satisfaction (Gao and Mattila 2014).

Second, I propose that employees' display of extra-role service behaviors (i.e., discretionary behaviors of service employees that extend beyond formal job requirements to proactively address customers' needs; Bettencourt et al. 2001; Netemeyer et al. 2005) helps to create more of a communal environment, as unprompted and unrequested help from service employees signals socio-emotional support. As a result, both communal- and exchange-oriented customers come to focus more on warmth in the presence of extra-role service behaviors. Supporting my argument, prior work suggests that service employees' voluntary and spontaneous behaviors to help customers (e.g., providing information unrelated to the core service, offering unpaid assistance, etc.) serve as an indicator of communality and lead customers to perceive a friendlier role from the service employees (Goodwin 1996; Price and Arnould 1999). Literature on hospitality management also suggests that service employees' willingness to provide extra help promotes a friendship-like relationship by signaling sincerity (Ariffin and Maghzi 2012). Hence, I propose that the presence of employees' extra-role service behaviors can cause even generally exchange-oriented customers' relationship perception to be more communal-oriented, leading them to focus more on warmth than on competence.

In sum, I argue that unsatisfactory service outcomes and employees' extra-role service behaviors are two practically meaningful factors that situationally shift the customer-service relationship perception, and thus influence consumers' evaluations toward service with emoticons. Put it formally, I hypothesize that:

*H<sub>3</sub>: when customers experience unsatisfactory service outcomes, they would evaluate the service more negatively with a service employee who uses emoticons than with who does not, regardless of the customers' general relationship norm orientation.*

*H<sub>4</sub>: when customers experience extra-role service, they would evaluate the service more positively with a service employee who uses emoticons than with who does not, regardless of the customers' general relationship norm orientation.*

## CHAPTER 4: STUDIES

I tested these four hypotheses across seven studies, including both laboratory and field experiments. These seven studies follow the conceptual framework depicted by figure 1 (page 4) and investigate the customers' inferential processes of service employees' use of emoticons. Specifically, studies 1, 2, and 3 directly showed that the use of emoticons increases customers' warmth perceptions but decrease customers' competence perceptions (H<sub>1</sub>). And customers make such inferences because emoticons are intentional expressions of emotions on the internet, and customers do not make similar inferences when they see other online casual symbols such as internet slang. Furthermore, studies 4 and 5 tested a moderator, customers' relationship norm orientation, that can disentangle the opposing effects of emoticons on warmth and competence perceptions (H<sub>2</sub>). Results showed that customers' relationship norm orientation determines which route of these inferences (i.e. the increased warmth or decreased competence inference) is more salient over the other. Last, studies 6 and 7 respectively specified two situational factors that can override the moderating effect of relationship norm orientation. These two factors are unsatisfactory service outcomes (H<sub>3</sub>) and extra-role service behaviors (H<sub>4</sub>).

Studies 1 to 3 tested H<sub>1</sub>. These studies demonstrated the opposing effects of emoticons on warmth and competence by examining both text-based and graphical emoticons (study 1), identifying *intentionality* as a unique feature of emoticons (study 2), and comparing emoticons with other online casual languages, particularly internet slang (study 3). Results of study 1 revealed that both text-based and graphical emoticons led customers to perceive the service employee to be warmer but less competent. However, as showed by the results of study 2, such inferential processing of emoticons did not occur with emoticons that lack a feature of

intentionality, indicating that customers make such inferences because emoticons are *intentional* expressions of emotions on the internet. Furthermore, study 3 tested whether other online casual languages such as internet slang can increase warmth perceptions but decrease competence perceptions as well. Results that internet slang does not have the similar effects. Rather, they decreased both warmth and competence perceptions. These results indicate that not all online casual languages have similar effects to emoticons when used by employees in online service encounters.

Studies 4 and 5 tested H<sub>2</sub>. They showed that the opposing effects of emoticons on warmth and competence perceptions depend on the customers' relationship norm orientation. Specifically, communal-oriented (exchange-oriented) customers inferred the use of emoticons as higher warmth (lower competence), and were more (less) satisfied with the service. While study 4 measured customers' relationship norm orientation, I manipulated it in study 5 to show the robustness of hypothesis 2. By incorporating positive and negative emoticon conditions, study 5 also demonstrated my proposed hypotheses apply to emoticons that represent both positive (e.g., a smiley) and negative (e.g., a frown) facial expressions.

The last two studies tested H<sub>3</sub> and H<sub>4</sub> respectively, regarding two practically important contextual factors that can situationally override the customers' relationship norm orientation, namely unsatisfactory service outcomes and employees' extra-role service behaviors. Specifically, study 6 showed that when customers experience unsatisfactory service outcomes, they would be less satisfied with a service employee who uses emoticons than who does not, regardless of the customers' original relationship norm orientation. And study 7, with a field experiment, showed that when customers experience extra-role service, they would



be more satisfied with a service employee who uses emoticons than who does not, regardless of the customers' general relationship norm orientation.

Of note, different dependent variables representing various aspects of service outcomes are used across the studies. Studies 1 and 3 adopt customers' behavioral intentions to be served by the same service employee in the future (items were adapted from Zeithaml, Berry, and Parasuraman 1996); studies 2 and 4 adopt customers' service satisfaction (items were adapted from Aaker, Fournier, and Brasel 2004; Mende, Bolton, and Bitner 2013); studies 5 and 6 measure customers' general attitude towards service communication (items were adapted from Holbrook and Batra 1987; Ahluwalia 2002). Study 7 is a field experiment, so that the dependent variables are each real online shopper's indicated positive word-of-mouth intention and their purchase information which could be tracked from the company's database. These dependent variables provide converging evidence of emoticons' effects on service outcomes.

### **STUDY 1: Warmth and Competence Inferences from The Use of Emoticons**

The main purpose of study 1 was to test whether participants perceived a service employee to be warmer but less competent when he or she used emoticons than when he or she did not. I also tested whether warmth and competence perceptions simultaneously mediated the effect of emoticons on the evaluation of the sender. In addition, I examined two types of emoticons—graphical (e.g., 😊) and text-based (e.g., :) )—to show that the proposed effects of emoticons are not simply driven by the presence of colorful pictorial images. Unlike graphical emoticons, text-based emoticons consist of ASCII-based characters (i.e., letters and punctuation

marks). I predicted that these two types of emoticons would induce similar effects, enhancing warmth perception while reducing competence perception.

## **Method**

One hundred eighteen participants (59% female, 62.71% under the age of 26) from a large university in Hong Kong participated in this study for monetary compensation. The study employed a one-factor (emoticons: graphical emoticons vs. text-based emoticons vs. no emoticons) between-subjects design.

*Emoticon Manipulation.* One week before the study, a study coordinator who was blind to the study purpose sent an invitation email to potential participants. In the invitation email, I intentionally left out some important information (e.g., the time and venue of the study), to ensure that there would be at least one opportunity for the participant and study coordinator to interact. When participants replied to the invitation email, the study coordinator informed participants about the time and venue of the study (see appendix C). The text in the study coordinator's email was identical across the three conditions except that it included graphical emoticons, text-based emoticons, or no emoticons depending on the condition.

*Measures.* A different study coordinator than the one who sent the invitation email conducted the study session. Participants first completed a set of filler questions and then answered some questions regarding their impression of the previous study coordinator, with whom they had exchanged emails. To prevent a possible demand effect, participants were told that their honest feedback about the study coordinator was important to improve the process of recruiting participants for future studies. To refresh their memories, I provided a snapshot copy of their prior email interaction with the study coordinator.

Participants indicated the extent to which they perceived the study coordinator to be warm in a five-item 7-point bipolar Likert scale (i.e., “cold/warm,” “unfriendly/friendly,” “tough/kind,” “unfeeling/affectionate,” “unsociable/sociable”;  $\alpha = .91$ ; adapted from Fiske et al. 2002) and competent in another five-item 7-point bipolar Likert scale (e.g., “incompetent/competent,” “helpless/capable,” “inefficient/efficient,” “stupid/intelligent,” “clumsy/skillful”;  $\alpha = .90$ ; adapted from Fiske et al. 2002). Participants also indicated the extent to which they would be willing to interact with the same study coordinator again for future studies with a two-item 7-point semantic differential scale (“I will be very pleased to receive emails from the same study coordinator about future studies” and “I hope to be served by the same study coordinator,”; 1 = strongly disagree, 7 = strongly agree,  $\alpha = .96$ ). These items were derived from the service intention measures of Zeithaml, Berry, and Parasuraman (1996) and were modified to fit our context. Lastly, participants indicated the extent to which their current mood was positive (e.g., “excited,” “enthusiastic”;  $\alpha = .94$ ) or negative (e.g., “afraid,” “ashamed,”;  $\alpha = .94$ ). Participants’ positive and negative mood did not differ across the three conditions ( $ps > .30$ ); thus, the emoticon effects cannot be attributed to mood.

## **Results**

*Warmth Perception.* A one-way ANOVA revealed a marginally significant difference across the three conditions ( $F(2, 115) = 3.03, p = .052, \eta_p^2 = .050$ ; see figure 2). Planned contrasts showed that participants perceived the study coordinator to be warmer when they received either graphical ( $M = 5.88, SD = .73; t(115) = 2.23, p = .027, d = 0.55$ ) or text-based emoticons ( $M = 5.83, SD = .87; t(115) = 2.02, p = .046, d = 0.44$ ) than when they did not receive any emoticons ( $M = 5.48, SD = .72$ ). The two emoticon conditions did not significantly differ from each other

( $M_{\text{graphical}} = 5.88$ ,  $SD = .73$  vs.  $M_{\text{text-based}} = 5.83$ ,  $SD = 1.03$ ;  $t < 1$ , NS,  $d = 0.06$ ),

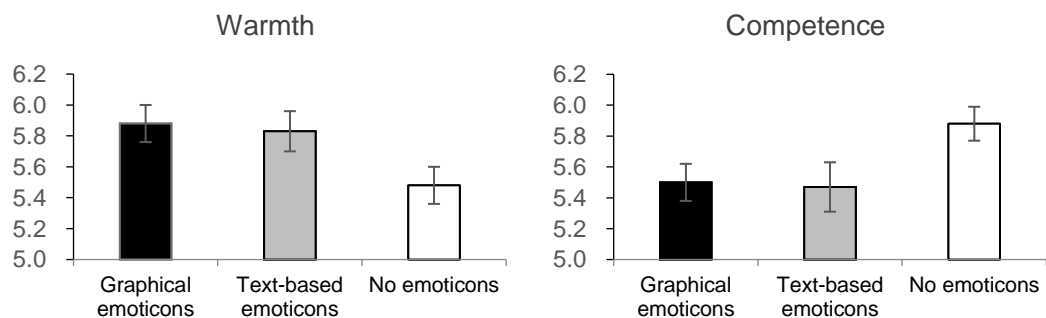
indicating that the emoticon effect was not driven by the presence of colorful pictorial images.

*Competence Perception.* A one-way ANOVA showed a marginally significant difference among the three conditions ( $F(2, 115) = 2.89$ ,  $p = .060$ ,  $\eta_p^2 = .048$ ; see figure 2). Planned contrasts revealed that participants in both the graphical ( $M = 5.50$ ,  $SD = .73$ ;  $t(115) = 1.97$ ,  $p = .051$ ,  $d = 0.53$ ) and text-based emoticon conditions ( $M = 5.47$ ,  $SD = 1.03$ ;  $t(115) = 2.18$ ,  $p = .031$ ,  $d = 0.47$ ) perceived the study coordinator to be less competent than did those in the no emoticon condition ( $M = 5.88$ ,  $SD = .70$ ). There was no significant difference between the graphical ( $M = 5.50$ ,  $SD = .73$ ) and text-based emoticon conditions ( $M = 5.47$ ,  $SD = 1.03$ ;  $t < 1$ , NS,  $d = 0.03$ ).

*Downstream Effects on Behavioral Intentions.* I examined the effect of emoticons on participants' willingness to interact with the same study coordinator again. I did not predict any specific effect of emoticons on participants' willingness to interact with the same coordinator, because I predicted that emoticons would have opposing effects on warmth and competence perceptions, which in turn would differently affect participants' willingness to interact with the same coordinator.

**FIGURE 2**

**WARMTH AND COMPETENCE INFERENCES (STUDY 1)**

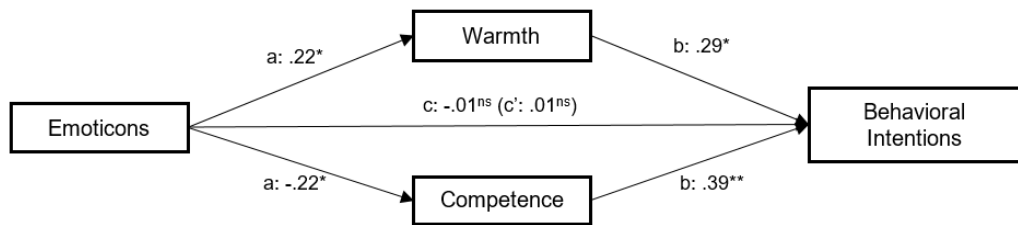


Consistent with my prediction, the direct effect of emoticons on participants' willingness to interact with the same coordinator was not significant ( $M_{\text{graphical}} = 6.21$ ,  $SD = .78$  vs.  $M_{\text{text-based}} = 6.21$ ,  $SD = .87$  vs.  $M_{\text{no-emoticon}} = 6.23$ ,  $SD = .74$ ;  $F < 1$ , NS).

In order to decompose the opposing effects of emoticons on warmth and competence, I conducted a multiple mediation model using the INDIRECT macro, which allowed us to examine warmth and competence perceptions simultaneously as mediators for the effect of emoticons on behavioral intentions (Preacher and Hayes 2004, 2008; Zhao, Lynch, and Chen 2010; see figure 3). Since I theorized that graphical and text-based emoticons would have similar effects, and my findings revealed no significant difference between the two types of emoticons in perceptions of either warmth or competence, I combined the two emoticon conditions and compared the combined emoticon condition with the no emoticon condition. Results revealed that emoticons significantly enhanced warmth perception ( $\beta = .22$ ,  $t(116) = 2.46$ ,  $p = .015$ ) but reduced competence perception ( $\beta = -.22$ ,  $t(116) = 2.41$ ,  $p = .018$ ). The pathways from the two mediators to the dependent measure, controlling the direct effect of emoticons, indicated that both warmth ( $\beta = .29$ ,  $t(114) = 2.52$ ,  $p = .013$ ) and competence perceptions ( $\beta = .39$ ,  $t(114) = 3.33$ ,  $p = .001$ ) positively influenced participants' willingness to interact with the same study coordinator again. Moreover, bootstrapped 95% confidence intervals confirmed that there were significant indirect effects of emoticons on participants' behavioral intentions through both warmth ( $ab = .11$ ,  $SE = .06$ ,  $CI [.015, .277]$ ) and competence ( $ab = -.14$ ,  $SE = .07$ ,  $CI [-.311, -.031]$ ). That is, findings indicate that both warmth and competence perceptions simultaneously mediate the effect of emoticons on behavioral intentions, but in the opposite directions. The results were identical when

I separately compared the graphical emoticon condition with the no emoticon condition and the text-based emoticon condition with the no emoticon condition.

**FIGURE 3**  
MEDIATION ANALYSIS (STUDY 1)



NOTE: Significance levels are denoted by \* at  $p < .05$  and \*\* at  $p < .01$ . Note that we did not predict a significant direct effect of emoticons on behavioral intentions (c path) because of the opposing effects of emoticons on warmth and competence perceptions.

## Discussion

Study 1 provides initial evidence for the opposing effects of the use of emoticons on individuals' warmth and competence perceptions of the emoticon sender. Specifically, the use of emoticons increased warmth perception but reduced competence perception. I observed no difference in these perceptions between graphical and text-based emoticons. Additionally, my effects cannot be attributed to mood, because the presence of emoticons did not change the participants' mood. However, the effect size of emoticons use on competence is relatively small. One possible explanation could be that as important information has been left out in the initial round of email exchange (in order to make sure there would be at least one round of interaction between the survey coordinator and the participant), participants made lower levels of inference about the survey coordinator's competence in the first place, and thus the contrast between the experiment groups with different emoticons manipulations was reduced.

Another point to address is that with PROCESS, the indirect effect of each mediator is conditional on the inclusion of the other mediator (Preacher and Hayes 2008). That is, the indirect effect of each mediator estimated by the Bootstrapping

method is the effect above and beyond the other mediator's effect. This point is crucial because prior work on person perception shows that warmth and competence perceptions can affect each other (Judd et al. 2005; Kervyn et al. 2009). Since PROCESS factors in the other mediator's effect when estimating the indirect effect of the target mediator, possible correlations between warmth and competence have already been controlled in my multiple mediation models.<sup>2</sup> In the next study, I examined intentionality as a unique feature of emoticons compared to nonverbal cues in face-to-face interactions.

### **STUDY 2: An Emoticons' Feature of Intentionality**

In study 2, I examined a unique characteristic of emoticons, which is distinct from nonverbal cues in face-to-face communications (e.g., facial expressions). Observers generally perceive that traditional nonverbal cues are direct and involuntary representations of an individual's internal states (Kendon 1987). Although some nonverbal cues can be voluntary, it may be difficult for observers to distinguish which are voluntary and which are not. Relatively, observers perceive that the use of emoticons is a more conscious and controlled behavior than the use of nonverbal cues (Derks 2007; Walther and D'Addario 2001; Yoo 2007). Using emoticons usually involves either keying in textual symbols or choosing from a list of graphic symbols, and such behaviors are more intentional and controllable from the receiver's perspective (Derks 2007; Walther and D'Addario 2001). Therefore, I

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<sup>2</sup> Correlations between warmth and competence were positive in all studies (correlations range from .23 to .67, all  $ps < .05$ ). Also, the opposing effects of emoticons still exist even when I allowed the causal links between warmth and competence with Structural Equation Modeling (all  $ps < 0.05$ ). Hence, I believe that the negative effect of emoticons on competence cannot be explained by an indirect effect of emoticons on competence via warmth.

argue that *intentionality* is a distinctive characteristic of emoticons. Since emoticons are intentionally used, receivers can infer the sender's personality traits (e.g., warmth and competence) from his or her emoticon use. In contrast, if emoticons were not intentionally used but rather automatically included (e.g. by the computer system), I predicted that such inferential processes would not occur.

## **Method**

One hundred forty-seven participants (70% female, mean age = 21.58) from a large university in Hong Kong participated in this study. The study employed a one-factor (emoticons: no emoticons vs. emoticons with intentionality vs. emoticons without intentionality) between-subjects design.

*Emoticon Manipulation.* Participants read a Facebook post with conversational comments between a service employee and customers about a referral program at a hypothetical fitness center (see appendix D). No emoticons were included in the no emoticon condition. In the intentionality condition, participants were told that the service employee sent emoticons (e.g., 😊) when answering the customers' questions. In the no intentionality condition, participants were told that "the emoticons you will see were NOT typed by the service employee, Chris, but were automatically added by the system."

*Measures.* Participants indicated how satisfied they would be with the service employee if they were the customer in the conversation (i.e., "how satisfied you would be with the service employee if you were the customer in the conversation?" 1 = not at all, 7 = very much), which served as my main dependent variable. The validity of using a single item measurement has been shown in the previous literature, especially in gauging customers' attitude (Bergkvist and Rossiter 2007). I also measured participants' warmth ( $\alpha = .94$ ) and competence ( $\alpha = .81$ ) perceptions



of the service employee as in study 1. In the two emoticon conditions, I also included a manipulation check item to measure participants' recognition of the intentionality of the emoticon use (1 = automatically added by the system, 7 = intentionally added by the employee).

## **Results and Discussion**

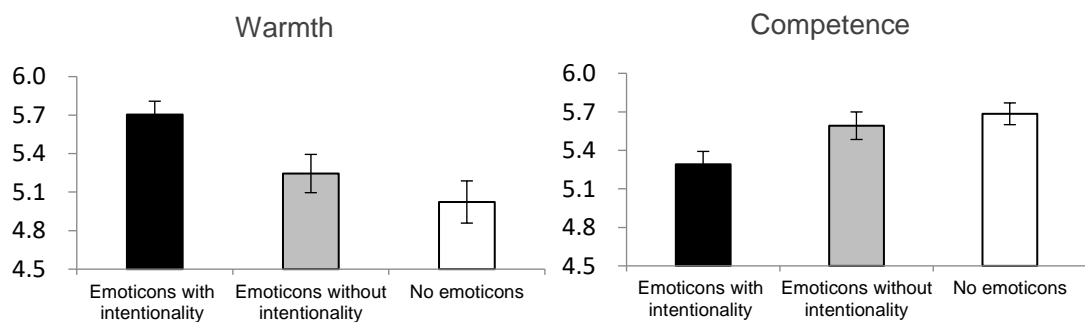
*Manipulation Check.* A one-way ANOVA revealed a significant difference between the two emoticon conditions ( $t(93) = 5.57, p < .001, d = 1.16$ ). Participants were less likely to think that the emoticons were intentionally added by the service employee when they were explicitly told that the emoticons were automatically added by the system ( $M = 3.82, SD = 1.88$ ) than when they were not given such information. ( $M = 5.61, SD = 1.15$ ), indicating that my intentionality manipulation was successful.

*Warmth Perception.* A one-way ANOVA revealed a significant difference across the three conditions ( $F(2, 144) = 5.74, p = .004, \eta_p^2 = .074$ ; see figure 4). Planned contrasts revealed that participants perceived the service employee to be warmer when they received emoticons sent by the service employee ( $M = 5.70, SD = 0.71$ ) than when they received emoticons ostensibly added by the computer system ( $M = 5.24, SD = 1.04; t(144) = 2.22, p = .028, d = 0.37$ ) or when they did not receive any emoticons ( $M = 5.02, SD = 1.18; t(144) = 3.34, p = .001, d = 0.56$ ). There was no significant difference between the no intentionality ( $M = 5.24, SD = 1.04$ ) and no emoticon conditions ( $M = 5.02, SD = 1.18; t(144) = 1.11, NS$ ).

*Competence Perception.* A one-way ANOVA revealed a significant difference across the three conditions ( $F(2, 144) = 4.36, p = .014, \eta_p^2 = .057$ ; see figure 4). Planned contrasts revealed that participants perceived the service employee to be less competent when they received emoticons sent by the service employee ( $M$

= 5.29, SD = 0.68) than when they received emoticons sent by the system ( $M = 5.59$ , SD = 0.75;  $t(144) = 2.15$ ,  $p = .033$ ,  $d = 0.36$ ) or when they did not receive any emoticons ( $M = 5.68$ , SD = 0.61;  $t(144) = 2.85$ ,  $p = .005$ ,  $d = 0.48$ ). There was no significant difference between the no intentionality ( $M = 5.59$ , SD = 0.75) and no emoticon conditions ( $M = 5.68$ , SD = 0.61;  $t < 1$ , NS).

**FIGURE 4**  
WARMTH AND COMPETENCE INFERENCES (STUDY 2)



*Downstream Effects on Service Satisfaction.* Similar to study 1, the direct effect of emoticons on service satisfaction was not significant ( $M_{\text{emoticons}} = 5.39$ ,  $M_{\text{unintentional emoticons}} = 5.73$ ,  $M_{\text{no-emoticons}} = 5.71$ ;  $F(2, 142) = 1.94$ , NS). As in study 1, I conducted a multiple mediation model to decompose the opposing mediating effects of warmth and competence perceptions. First, I compared the intentionality and no emoticon conditions, and my findings replicated those of study 1 (warmth  $ab = .15$ ,  $SE = .07$ , 95% CI [.046, .316]; competence  $ab = -.10$ ,  $SE = .05$ , 95% CI [-.215, -.025]). That is, the indirect effects of warmth and competence were significant. I then compared the two emoticon conditions. The results revealed that intentional (vs. unintentional) emoticons significantly enhanced the warmth perception ( $\beta = .25$ ,  $t(93) = 2.50$ ,  $p = .014$ ) but reduced the competence perception ( $\beta = -.21$ ,  $t(93) = 2.04$ ,  $p = .044$ ). Also, both warmth ( $\beta = .30$ ,  $t(91) = 3.30$ ,  $p = .001$ ) and competence perceptions ( $\beta = .51$ ,  $t(91) = 5.67$ ,  $p < .001$ ) positively influenced participants'

satisfaction. Moreover, indirect effects for both warmth ( $ab = .14$ ,  $SE = .07$ , 95% CI [.028, .306]) and competence ( $ab = -.19$ ,  $SE = .10$ , 95% CI [-.399, -.014]) were significant. Thus, the results of study 2 show that mere exposure to emoticons was not sufficient to produce their opposing effects (i.e., higher warmth but lower competence perceptions). Instead, the proposed inferential processes of emoticons occur only when emoticons use is perceived as intentional. In the next study, I compared emoticons with other online casual languages, particularly internet slang.

### **STUDY 3: Comparison of Emoticons and Internet Slang in Online Service**

#### **Encounters**

Internet slang is another common online casual language (Barseghyan 2013). However, there are important distinctions between emoticons and internet slang. Since emoticons mimic facial expressions, they usually do not require extra learning to understand their intended meaning. In contrast, most examples of internet slang are acronyms or abbreviations, so receivers must first learn what they mean in order to understand them. Accordingly, prior work has shown that the receiver tends to perceive that the sender uses internet slang to save time and effort (Barseghyan 2013). Therefore, I argue that compared to the use of emoticons, the use of internet slang can convey less other-directed intentions, which in turn can make service employees appear to be less warm when they use internet slang than when they do not, whereas the opposite prediction holds for emoticons. However, since both emoticons and internet slang are informal internet languages that may convey unprofessionalism and informality, I predicted that, similar to emoticons, internet slang would also decrease the competence perception of the service employees.

#### **Method**

One hundred seventy-seven participants (54% female, mean age = 40.23) from Amazon Mechanical Turk (MTurk) participated in this study. The study employed a one-factor (no emoticons/slang vs. emoticons vs. internet slang) between-subjects design.

*Pretest.* I conducted a pretest using MTurk (N = 131, 46% female, mean age = 38.03), in which I measured to what extent the use of emoticons or internet slang conveys other-directed intentions (i.e., “emoticons help [internet slang helps] the receiver easily identify the sender’s emotions” and “people use emoticons [internet slang] to help their conversation partner to more easily understand what they mean to say,” 1=strongly disagree to 7= strongly agree,  $\alpha = .67$ ). Results of the pretest show that compared to the use of emoticons, the use of internet slang conveys less other-directed intentions ( $M_{\text{emoticons}} = 5.51$ ,  $SD = 1.07$ ,  $M_{\text{slangs}} = 4.40$ ,  $SD = 1.57$ ;  $t(130) = 8.39$ ,  $p < .001$ ), which supports my argument that internet slang might lower the warmth perception of the sender.

*Emoticon and Internet Slang Manipulation.* Participants were told that a researcher was seeking feedback on a survey about general shopping behaviors (e.g., favorite fine dining places) before running the survey. I implemented my manipulation at the beginning of the survey, where the researcher explained the purpose of the survey. I either included emoticons or internet slang (e.g., LOL and OMG), or did not incorporate either of them (see appendix E).

*Measures.* Participants indicated the extent to which they would be willing to do a survey by the same researcher (i.e., “I look forward to seeing other surveys designed by this researcher again,” “I am happy in completing this survey (including this introduction page) designed by this researcher” 1 = strongly disagree, 7 = strongly agree;  $\alpha = .84$ ; adapted from Zeithaml, Berry, and Parasuraman 1996),

which served as my main dependent variable. I also measured participants' warmth ( $\alpha = .95$ ) and competence ( $\alpha = .97$ ) perceptions of the researcher, as in the previous studies.

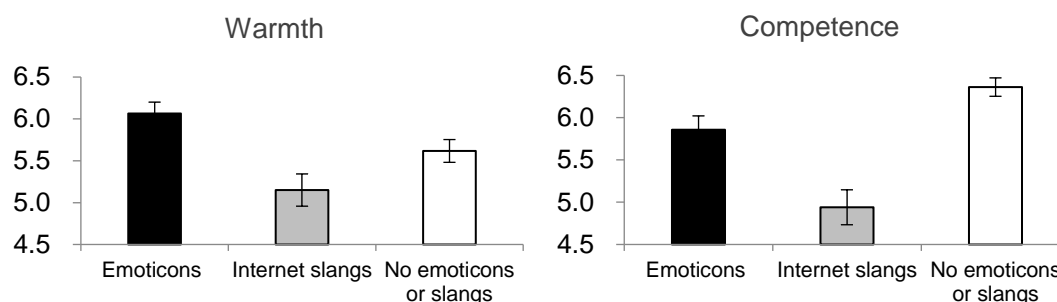
## **Results and Discussion**

*Warmth Perception.* A one-way ANOVA revealed a significant difference across the three conditions ( $F(2, 174) = 8.47, p < .001, \eta_p^2 = .089$ ; see figure 5). Planned contrasts revealed that, compared to the participants in the no emoticon condition ( $M = 5.62, SD = 1.05$ ), those in the emoticon condition perceived the researcher to be warmer ( $M = 6.06, SD = 1.04, t(174) = 2.00, p = .048, d = 0.42$ ), while those in the internet slang condition perceived the researcher to be less warm ( $M = 5.15, SD = 1.49, t(174) = 2.09, p = .038, d = 0.36$ ). Participants perceived the researcher to be warmer when they saw emoticons ( $M = 6.06, SD = 1.04$ ) than when they saw internet slang ( $M = 5.15, SD = 1.49; t(174) = 4.12, p < .001, d = 0.70$ ).

*Competence Perception.* A one-way ANOVA revealed a significant difference across the three conditions ( $F(2, 174) = 18.98, p < .001, \eta_p^2 = .179$ ; see figure 5). Planned contrasts revealed that both emoticons ( $M = 5.86, SD = 1.26; t(174) = 2.14, p = .034, d = 0.47$ ) and internet slang ( $M = 4.94, SD = 1.60; t(174) = 6.06, p < .001, d = 1.11$ ) lowered competence perception (no emoticons:  $M = 6.36, SD = 0.83$ ). Also, participants perceived the researcher to be less competent when they saw internet slang ( $M = 4.94, SD = 1.60$ ) than when they saw emoticons ( $M = 5.86, SD = 1.26; t(174) = 3.93, p < .001, d = 0.79$ ).

**FIGURE 5**

**WARMTH AND COMPETENCE INFERENCES (STUDY 3)**



*Downstream Effects on Behavioural Intentions.* A one-way ANOVA

revealed a significant difference in the participants' willingness to do a survey by the same researcher across the three conditions ( $F(2, 174) = 8.25, p < .001, \eta_p^2 = .087$ ).

There was no difference between the emoticon ( $M = 6.34, SD = 0.86$ ) and the control ( $M = 6.54, SD = 0.75; t(174) = 1.16, NS$ ) conditions. However, participants in the internet slang condition were less willing to do another survey by the same researcher ( $M = 5.85, SD = 1.19$ ) than those in the control ( $M = 6.54, SD = 0.75; t(174) = 3.94, p < .001, d = 0.69$ ) and emoticon conditions ( $M = 6.34, SD = 0.86; t(174) = 2.79, p = .006, d = 0.47$ ).

Similar to the previous studies, I conducted a multiple mediation model.

First, I compared the emoticon and the control conditions; the findings replicated those of study 1 (warmth  $ab = .16, SE = .10, 95\% CI [.027, .424]$ ; competence  $ab = -.13, SE = .07, 95\% CI [-.286, -.027]$ ). Then, I compared the internet slang and control conditions. The results revealed that internet slang significantly reduced both warmth ( $\beta = -.18, t(116) = -1.97, p = .051$ ) and competence perceptions ( $\beta = -.49, t(116) = 6.03, p < .001$ ). Also, both warmth ( $\beta = .23, t(114) = 2.69, p = .008$ ) and competence perceptions ( $\beta = .43, t(114) = 2.69, p < .001$ ) positively influenced participants' satisfaction. Moreover, both warmth ( $ab = -.04, SE = .03, 95\% CI$

[-.143, -.007]) and competence ( $ab = -.22$ ,  $SE = .09$ , 95% CI [-.427, -.055]) indirect effects were significant. Thus, the results of study 3 indicate that while emoticons increase warmth and decrease competence perceptions, internet slang decreases both warmth and competence perceptions. In the next study, I examined the opposing effects of emotions with different valences (i.e., positive and negative emoticons). I also examined the moderating role of customers' relationship norm orientation in the effect of emoticons on service satisfaction.

#### **STUDY 4: The Moderating Role of Customers' Relationship Norm Orientation**

Study 4 tested H<sub>2</sub> with measured relationship norm orientation. I propose that customers' inferences about a service employee in response to his or her use of emoticons depend on customers' relationship norm orientation. Based on previous work showing that communal-oriented customers placed more emphasis on warmth than on competence, whereas the opposite was true for customers in an exchange relationship (Scott et al. 2013; Bolton and Mattila 2014), I predicted that communal-oriented customers would be more likely to interpret a service employee's use of emoticons in terms of warmth, whereas exchange-oriented customers would be more likely to interpret the same in terms of competence. As a result, communal-oriented (exchange-oriented) customers would infer higher warmth (lower competence), and in turn would be more (less) satisfied with the service when the service employee used emoticons.

#### **Method**

Two hundred six undergraduate students (72% female, mean age = 20.26) from a large university in Hong Kong participated in this study for monetary compensation. Participants were randomly assigned to one of the two conditions

(emoticons: yes vs. no), and communal/exchange orientations were measured for all participants as an individual difference measure.

*Relationship Norm Orientation.* First, all participants completed a 3-item questionnaire for the relationship norm orientation with 7-point semantic differential scales (i.e., If you were to interact with a service employee, to what extent would you want your relationship with the service employee to be: “strictly for business/bonded like family and friends,” “formal and professional/informal and friendly,” and “purely transactional/based on friendship”;  $\alpha = .71$ ; adapted from Aggarwal 2004)<sup>3</sup>. In the analyses, I averaged and mean-centered the three items ( $M = 4.24$ ,  $SD = 1.08$ ) to create a relationship norm index; a high score indicated a preference for a communal (vs. exchange) relationship with a service employee.

*Emoticon Manipulation.* Next, in an ostensibly unrelated task, participants read a scenario and were asked to imagine themselves as a customer named Chris who was searching for a hotel in a foreign country through an online travel agency. Participants were told that Chris had some unresolved questions and thus decided to have an online conversation with a travel agent through an instant message service provided by the travel agency. Instead of showing the whole conversation at once, the conversation was shown one line at a time as the participants advanced through successive screens, so as to create the perception of a more realistic and interactive online conversation for the participants. During the conversation, Chris asked the online travel agent a few questions about a hotel he/she was considering (e.g.,

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<sup>3</sup> The original measures in Aggarwal (2004) have ten items with seven of them tapped into communal relationship norms, and only three of them tapped into exchange relationship norms. These items are modified to the three bipolar semantic differential scale based on the lesser exchange items in order to capture the relative nature of these two relationship norms studied in the current thesis.



amenities, pick-up service from the airport). The travel agent answered the questions either with or without emoticons (see appendix F).

*Measures.* Participants indicated how warm ( $\alpha = .96$ ) and how competent ( $\alpha = .88$ ) the travel agent appeared to be using the same items as in study 1. I also measured customer service satisfaction (i.e., If I were Chris, I would be: “satisfied with the service” and “satisfied with the travel agent”;  $\alpha = .90$ ; Aaker, Fournier, and Brasel 2004; Mende, Bolton, and Bitner 2013). The orders of the warmth, competence, and service satisfaction measures were counterbalanced, and the results indicated no significant order effect.

## **Results**

*Warmth Perception.* I regressed perceived warmth of the travel agent on emoticon condition, the mean-centered relationship norm index, and their interaction. The regression analysis revealed a significant main effect of emoticons ( $\beta = .21, t(202) = 3.13, p = .002$ ) and a non-significant main effect of the relationship norm index ( $\beta = -.05, t < 1, NS$ ). More importantly, however, this main effect of emoticons was qualified by a significant interaction ( $\beta = .20, t(202) = 2.88, p = .004$ ). To further examine this interaction, I graphed it using the Johnson-Neyman technique (i.e., floodlight analysis) to identify regions of the relationship norm index in which the effect of emoticons on warmth perception was significant (Johnson and Neyman 1936; Spiller et al. 2013). The floodlight analysis revealed that the use of emoticons significantly enhanced the perceived warmth of the travel agent ( $p < .05$ ) only for participants whose relationship norm index was higher than  $-0.38$  ( $B_{JN} = 0.19, SE = 1.00$ , see figure 6). This result is consistent with my argument that participants who prefer communal relationships with service employees interpret emoticons in terms of warmth. As a result, the hypothesized warmth effect (i.e.,

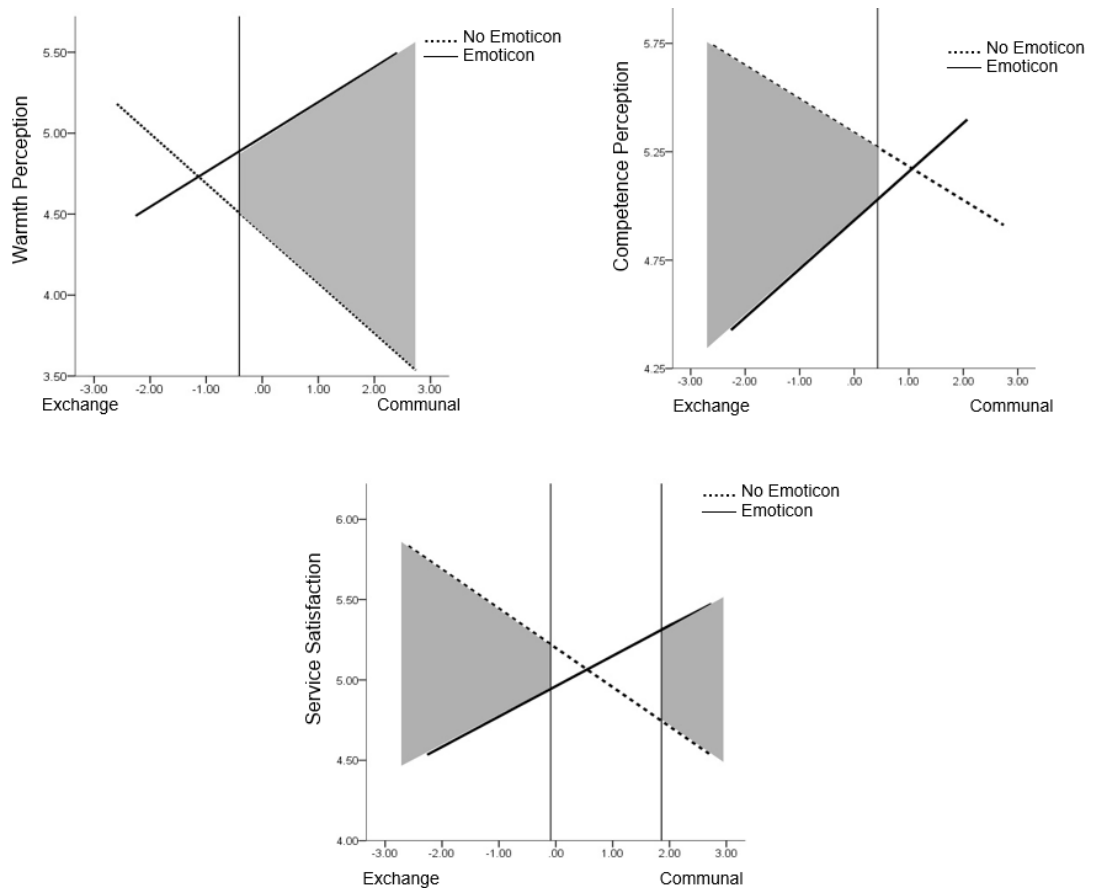
higher warmth perception) was stronger among participants who preferred communal relationships.

*Competence Perception.* I also regressed competence perception on emoticons, the relationship norm index, and their interaction. The analysis revealed a significant main effect of emoticons ( $\beta = -.23$ ,  $t(202) = 3.51$ ,  $p = .001$ ) and a non-significant main effect of the relationship norm index ( $\beta = .04$ ,  $t < 1$ , NS). More importantly, however, this main effect of emoticons was qualified by a significant interaction ( $\beta = .23$ ,  $t(202) = 3.47$ ,  $p = .001$ ). A floodlight analysis revealed that the use of emoticons by the travel agent resulted in significantly lower perceptions of the travel agent's competence ( $p < .05$ ) when participants' relationship norm index was lower than 0.43 ( $B_{JN} = -0.12$ ,  $SE = 0.06$ , see figure 6). That is, participants with a preference for exchange relationships with service employees interpreted the use of emoticons in terms of the travel agent's competence, and they perceived lower competence when the travel agent used emoticons.

*Downstream Effects on Satisfaction.* To test whether emoticons have a positive effect on communal-oriented participants' satisfaction but a negative effect on exchange-oriented participants' satisfaction, I regressed satisfaction on emoticons, the relationship norm index, and their interaction. The analysis showed a significant interaction effect ( $\beta = .22$ ,  $t(202) = 3.26$ ,  $p = .001$ ; see figure 6), a marginally significant main effect of emoticons ( $\beta = -.12$ ,  $t(202) = 1.73$ ,  $p = .085$ ) and a non-significant main effect of the participants' relationship norm orientation ( $\beta = -.03$ ,  $t < 1$ , NS). Consistent with my prediction, a floodlight analysis revealed a significant positive effect of emoticons on service satisfaction ( $p < .05$ ) for participants who preferred communal relationships with service employees (relationship norm index  $> 1.88$ ,  $B_{JN} = 0.28$ ,  $SE = 0.14$ ). In contrast, emoticons had a

negative effect on service satisfaction ( $p < .05$ ) for participants who preferred exchange relationships with service employees (relationship norm index  $< -0.08$ ,  $B_{IN} = -0.14$ ,  $SE = 0.07$ ).

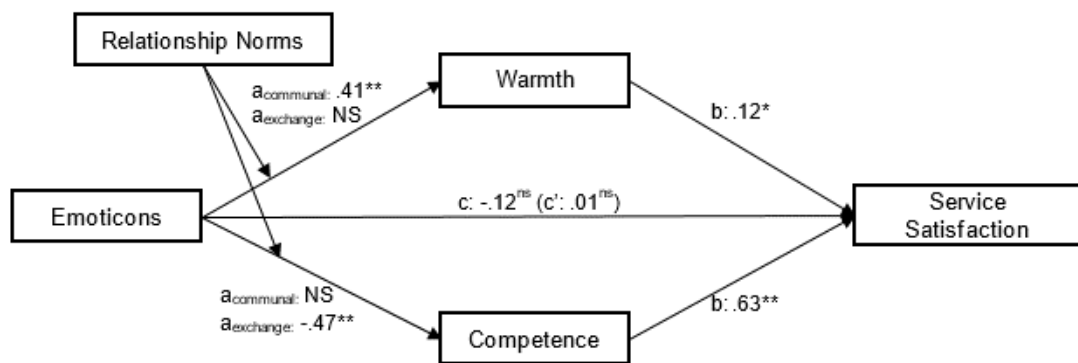
**FIGURE 6**  
FLOODLIGHT ANALYSES FOR WARMTH PERCEPTION, COMPETENCE PERCEPTION, AND SATISFACTION (STUDY 4)



*Mediation Analyses.* A bootstrap analysis was conducted with warmth and competence perceptions as multiple mediators to examine whether the interaction between emoticon usage and relationship norm orientation influenced satisfaction through warmth and competence perceptions (Hayes 2012; Preacher and Hayes 2004, 2008; Zhao et al. 2010). The results showed that warmth and competence perceptions mediated the interaction effect between emoticons and relationship norm orientation on satisfaction (Warmth  $ab = 0.02$ ,  $SE = 0.01$ , 95% CI [.001, .057]; Competence  $ab = 0.14$ ,  $SE = 0.05$ , 95% CI = [.060, .250]).

Further analyses indicated that, among participants who preferred communal relationships with service employees (+1SD), mediation through warmth perception was significant ( $ab = 0.05$ ,  $SE = .03$ , 95% CI [.002, .106]), whereas mediation through competence perception was not ( $ab = -0.01$ ,  $SE = .06$ , 95% CI [-.121, .127]), supporting my prediction that the positive effect of emoticons on satisfaction among communal-oriented participants would be mediated by warmth perception. In contrast, I found that, among exchange-oriented participants (-1SD), mediation through competence perception was significant ( $ab = -0.30$ ,  $SE = .07$ , 95% CI [-.479, -.182]), whereas mediation through warmth perception was not ( $ab = 0.01$ ,  $SE = 0.01$ , 95% CI [-.023, .033]). Therefore, the negative effect of emoticons on satisfaction among exchange-oriented participants was mediated by competence perception (see figure 7).

**FIGURE 7**  
MEDIATION ANALYSIS (STUDY 4)



NOTE: "communal" = communal-oriented (+1SD); "exchange" = exchange-oriented (-1SD).

## Discussion

In study 4, I found a moderating effect of the relationship norm orientation for the opposing effects of emoticons on warmth and competence perceptions. The results support my hypothesis that the positive effect of emoticons on warmth perception and service satisfaction with the service is more pronounced among communal-oriented customers, whereas the negative effect of emoticons on

competence perception and service satisfaction is more pronounced among exchange-oriented customers. To improve the validity and robustness of the findings, I will manipulate the relationship norm orientation in next study

### **STUDY 5: Replicating the Moderation Regardless of Emoticons' Valence**

Study 5 tested H<sub>2</sub> with manipulated customers' relationship norm orientation. In addition, following my conceptual development for the effect of emoticons, I further attempt to demonstrate that my proposed effects of emoticons do not differ depending on the valence of the emoticons.

#### **Method**

Three hundred participants (73% female, mean age = 19.98) from a large university in Hong Kong participated in this study. I employed a 3 (emoticons: no emoticons vs. positive emoticons vs. negative emoticons) × 2 (relationship norm orientation: exchange vs. communal) between-subject design.

*Relationship Norm Orientation Manipulation.* I used a bogus personality test feedback to manipulate the relationship norm orientation. Specifically, participants were asked to answer several questions about their consumption experiences, and they were told that their answers would reflect what kind of person they are in general when they interact with service employees (e.g., restaurant servers, bankers, physicians, etc.). Regardless of their answers, the computer system randomly informed them that they were either communal-oriented (e.g., "You are the kind of person who likes to have a friendship-like relationship with service providers") or exchange-oriented (e.g., "You are the kind of person who likes to have a purely transactional relationship with service providers"). As a manipulation check, I asked participants to recall the personality test feedback at the end of the survey (-10 = purely transactional relationship, 10 = friendship-like relationship).

*Emoticon Manipulation.* Next, participants read a Facebook post about a Hawaii tour package. Following the post, a customer raised several questions. Depending on the condition, the service employee answered the questions with positive emoticons (e.g., 😊 😄), negative emoticons (e.g., 😞 😓), or no emoticons (see appendix G). Note that the service employees' answers were identical, but I placed positive or negative emoticons in different places as appropriate for each condition. Then, participants indicated their perceived warmth ( $\alpha = .91$ ) and competence ( $\alpha = .87$ ), as in the previous studies, as well as their satisfaction with the service employee (i.e., your general attitude towards Alex is: 1 = very unfavorable/very negative, 7 = very favorable/very positive;  $\alpha = .90$ ; Holbrook and Batra 1987; Ahluwalia 2002).

## **Result**

*Manipulation Check.* A 3 (emoticons: no emoticons vs. positive emoticons vs. negative emoticons)  $\times$  2 (relationship norm orientation: exchange vs. communal) ANOVA revealed a significant main effect of the relationship norm orientation ( $F(1, 294) = 3006.24, p < .001, \eta_p^2 = .911$ ), with no other significant effects ( $ps > .42$ ). Participants in the communal condition ( $M = 7.49, SD = 1.21$ ) were more likely to indicate that they were communal-oriented based on the feedback than were those in the exchange condition ( $M = - 6.66, SD = 3.02; t(298) = 54.94, p < .001, d = 6.37$ ).

*Warmth Perception.* A 3 (emoticons: no emoticons vs. positive emoticons vs. negative emoticons)  $\times$  2 (relationship norm orientation: exchange vs. communal) ANOVA revealed a significant main effect of the relationship norm orientation ( $F(1, 294) = 23.45, p < .001, \eta_p^2 = .074$ ), a significant main effect of emoticons ( $F(2, 294) = 14.04, p < .001, \eta_p^2 = .087$ ), and, more importantly, a significant interaction effect ( $F(2, 294) = 12.11, p < .001, \eta_p^2 = .076$ ). Planned contrasts showed that in the

communal condition, both positive ( $M = 5.42$ ,  $SD = .93$ ;  $t(294) = 6.12$ ,  $p < .001$ ,  $d = 0.71$ ) and negative emoticons ( $M = 5.54$ ,  $SD = .77$ ;  $t(294) = 5.69$ ,  $p < .001$ ,  $d = 0.66$ ) increased warmth perception compared to the no emoticon condition ( $M = 4.46$ ,  $SD = 1.05$ ). However, there were no significant differences in the warmth perception in the exchange condition ( $ts < .84$ , NS), supporting my prediction that communal-oriented individuals perceive higher warmth from service employees' use of emoticons regardless of their valence.

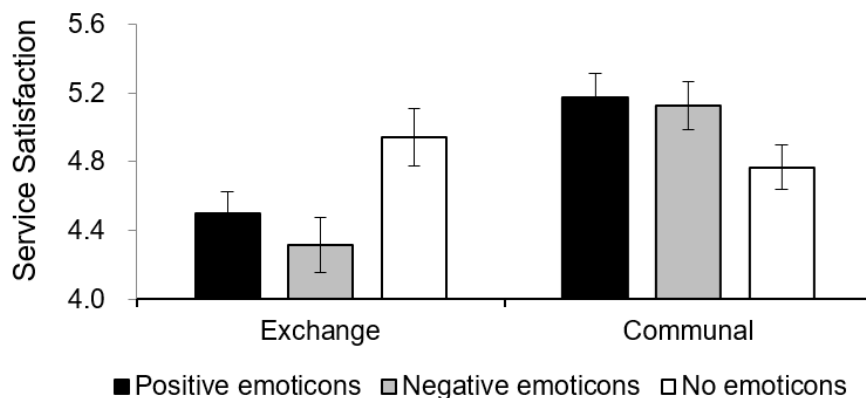
*Competence Perception.* A 3 (emoticons: no emoticons vs. positive emoticons vs. negative emoticons)  $\times$  2 (relationship norm orientation: exchange vs. communal) ANOVA revealed a significant main effect of the relationship norm orientation ( $F(1, 294) = 16.21$ ,  $p < .001$ ,  $\eta_p^2 = .052$ ) and a marginally significant main effect of emoticons ( $F(2, 294) = 2.82$ ,  $p = .062$ ,  $\eta_p^2 = .019$ ), which were qualified by a significant interaction ( $F(2, 294) = 4.78$ ,  $p = .009$ ,  $\eta_p^2 = .032$ ). Planned contrasts showed that, in the exchange condition, both positive ( $M = 4.58$ ,  $SD = .90$ ;  $t(294) = 3.11$ ,  $p = .002$ ,  $d = 0.36$ ) and negative emoticons ( $M = 4.55$ ,  $SD = .99$ ;  $t(294) = 3.27$ ,  $p = .001$ ,  $d = 0.38$ ) decreased competence perception compared to the no emoticon condition ( $M = 5.14$ ,  $SD = 0.72$ ). However, emoticons did not have significant effects on competence perception in the communal condition ( $ts < .68$ , NS). Thus, the exchange norm orientation led customers to infer lower competence when a service employee used emoticons regardless of their valence.

*Downstream Effect on Service Satisfaction.* A 3 (emoticons: no emoticons vs. positive emoticons vs. negative emoticons)  $\times$  2 (relationship norm orientation: exchange vs. communal) ANOVA on participants' attitudes toward the travel agent revealed a significant main effect of the relationship norm orientation ( $F(1, 294) = 13.49$ ,  $p < .001$ ,  $\eta_p^2 = .044$ ) and a non-significant main effect of emoticons ( $F < 1$ ,

NS), which were qualified by a significant interaction ( $F(2, 294) = 6.72, p = .001, \eta_p^2 = .044$ ; see figure 8). Planned contrasts showed that, in the communal condition, both positive ( $M = 5.17, SD = 1.08; t(294) = 2.09, p = .037, d = 0.24$ ) and negative emoticons ( $M = 5.13, SD = .92; t(294) = 1.80, p = .074, d = 0.21$ ) enhanced participants' satisfaction with the agent compared to the no emoticon condition ( $M = 4.77, SD = 1.04$ ) although the later effect was only marginally significant. Meanwhile, in the exchange condition, both positive ( $M = 4.50, SD = 1.07; t(294) = 2.06, p = .040, d = 0.24$ ) and negative emoticons ( $M = 4.32, SD = 1.13; t(294) = 2.94, p = .004, d = 0.34$ ) decreased participants' satisfaction with the agent compared to the no emoticon condition ( $M = 4.94, SD = 0.85$ ).

**FIGURE 8**

THE EFFECT OF EMOTICONS (POSITIVE AND NEGATIVE) AND RELATIONSHIP NORM ORIENTATION ON SERVICE SATISFACTION (STUDY 5)



*Mediation Analysis.* Since I theorized that positive and negative emoticons would have similar effects, and since my findings revealed no significant difference between these types of emoticons in perceptions of either warmth or competence, I combined the two emoticon conditions and compared the combined emoticon condition with the no emoticon condition. A bootstrap analysis (Hayes 2012; Preacher and Hayes 2004, 2008; Zhao et al. 2010) revealed that warmth and competence perceptions mediated the interaction effect between emoticons and



relationship norm orientation on attitude (Warmth  $ab = 0.42$ ,  $SE = 0.13$ , 95% CI [.213, .735]; Competence  $ab = 0.33$ ,  $SE = 0.13$ , 95% CI = [.118, .623]). Further analyses indicated that among participants primed with the communal orientation, the mediation through warmth perception was significant ( $ab = 0.44$ ,  $SE = .12$ , 95% CI [.223, .714]), whereas the mediation through competence perception was not ( $ab = 0.04$ ,  $SE = .07$ , 95% CI [-.087, .189]). In contrast, among participants primed with the exchange orientation, the mediation through competence perception was significant ( $ab = -0.29$ ,  $SE = .10$ , 95% CI [-.508, -.133]), whereas the mediation through warmth perception was not ( $ab = 0.01$ ,  $SE = 0.05$ , 95% CI [-.104, .116]). The results were identical when I examined positive and negative emoticons separately.

## **Discussion**

In study 5, I showed that, regardless of the emoticons' valence, participants primed with communal relationship norms perceived higher warmth from the travel agent's use of emoticons, whereas participants primed with exchange relationship norms perceived lower competence. As a result, when the travel agent used emoticons, participants primed with the communal (exchange) relationship norm orientation were more (less) likely to have a favorable attitude toward the service.

## **STUDY 6: A Situational Factor of the Presence of Unsatisfactory Service**

### **Outcomes**

In this study, I examined  $H_3$ , that is whether unsatisfactory service outcomes will shift customers' focus more toward evaluating a service employee's competence, rather than warmth, overriding the effect of customers' general relationship norm orientation.

In addition to the aforementioned support from previous literature (Parasuraman et al. 1991; Boshoff 1997), I also conducted an independent pretest ( $N = 140$ ) to provide more direct evidence for the link between unsatisfactory service outcomes and the competence focus (see appendix I). The findings indicated that customers focused more on evaluating the competence rather than the warmth of a service employee, regardless of their relationship norm orientation, when they experienced an unsatisfactory service outcome, whereas in the absence of an unsatisfactory service outcome, communal-oriented customers emphasized warmth and exchange-oriented customers emphasized competence. Based on the findings, I predicted that, in the presence of unsatisfactory service outcomes, a service employee's emoticons would exert a negative impact on the customers' attitude toward the service employee regardless of the customers' relationship norm orientation, presumably because the emoticons would lower their competence perception. In the absence of an unsatisfactory service outcome, I expected to replicate studies 4 and 5's findings that emoticons would have a positive effect on communal-oriented participants' attitude toward the service employee but a negative effect on exchange-oriented participants' attitude.

## **Method**

Four hundred forty-seven participants from MTurk participated in the study (48% female, mean age = 35.54). I employed a 2 (emoticons: yes vs. no)  $\times$  2 (unsatisfactory service outcomes: yes vs. no) between-subjects design and measured participants' relationship norm orientation.

*Relationship Norm Orientation.* First, all participants completed a 3-item questionnaire for the relationship norm orientation with the same items used in study 4 ( $\alpha = .88$ ). In the analyses, I averaged and mean-centered the three items to create a

relationship norm index ( $M = 3.06$ ,  $SD = 1.44$ ); a high score indicated a preference for a communal (vs. exchange) relationship with a service employee.

*Emoticon Manipulation.* Next, participants read a hypothetical conversation between a customer and an online service employee from a mobile service company. The service employee did not use any emoticons in the no emoticon condition, whereas in the emoticon condition he/she used three emoticons including both positive and negative emoticons (e.g., 😞 😊, see appendix H).

*Unsatisfactory Service Outcome Manipulation and Measures.* The messages by the service employee were identical in all conditions. However, in the unsatisfactory service outcomes condition, the customer was complaining about an unusually high bill (US\$512.20), whereas in the absence of unsatisfactory service outcomes condition, the customer was simply asking for more details about his/her bill (US\$51.22). After reading the conversation, participants indicated their service satisfaction toward the service employee with a 7-point scale (i.e., your general attitude towards Chris is? 1 = very unfavorable/very negative, 7 = very favorable/very positive;  $\alpha = .96$ ; Holbrook and Batra 1987; Ahluwalia 2002).

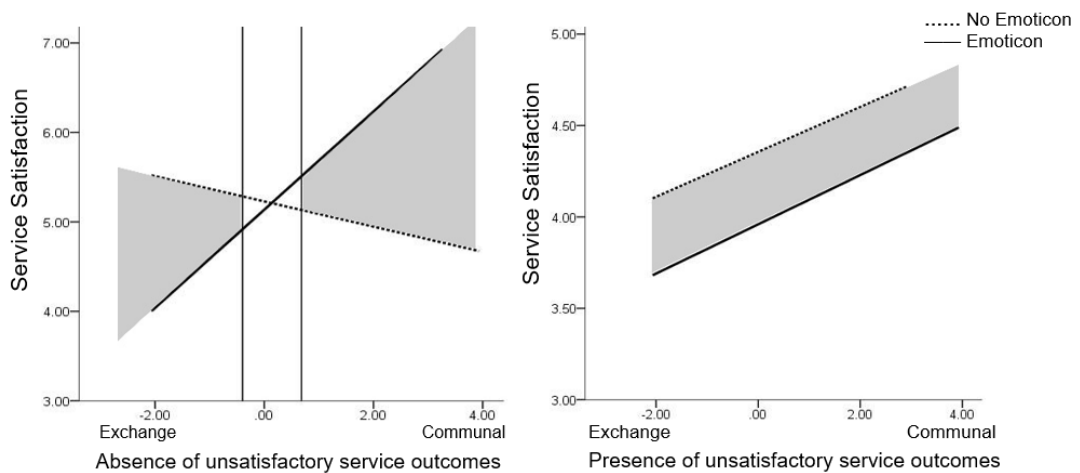
## **Results**

*Service Satisfaction.* A regression analysis showed a significant emoticon  $\times$  relationship norms  $\times$  unsatisfactory service outcome three-way interaction ( $\beta = -.35$ ,  $t(439) = 3.78$ ,  $p < .001$ ; see figure 9). Specifically, in the absence of unsatisfactory service outcomes, a regression of customers' satisfaction on emoticons, the relationship norm index, and their interaction revealed a significant interaction effect ( $\beta = .45$ ,  $t(216) = 5.46$ ,  $p < .001$ ). Replicating the findings in previous studies, a floodlight analysis showed a significant positive effect of emoticons on service satisfaction ( $p < .05$ ) among communal-oriented participants (relationship norm

index > 0.68,  $B_{JN} = 0.38$ ,  $SE = 0.19$ ) but a negative effect on service satisfaction ( $p < .05$ ) among exchange-oriented participants (relationship norm index < - 0.39,  $B_{JN} = - 0.37$ ,  $SE = 0.19$ ). In the presence of unsatisfactory service outcomes, emoticons had a negative effect on service satisfaction regardless of the relationship norm orientation ( $\beta = - .14$ ,  $t(223) = 2.14$ ,  $p = .034$ ), presumably because participants focused on the competence of the service employee, so the emoticons were interpreted in terms of lower competence of the service employee.

**FIGURE 9**

THE EFFECT OF EMOTICONS ON SERVICE SATISFACTION DEPENDING ON THE RELATIONSHIP NORM ORIENTATION AND UNSATISFACTORY SERVICE OUTCOMES (STUDY 6)



## Discussion

Study 6 showed that unsatisfactory service outcomes shifted customers' emphasis toward competence rather than warmth; in turn, a service employee's use of emoticons lowered service satisfaction when the customers experienced an unsatisfactory service outcome regardless of their general relationship norm orientation. These findings provide an important practical implication that using emoticons might not be an effective way to enhance service satisfaction during the recovery of unsatisfactory service outcomes. In addition, my findings cannot be

attributed to the possibility that upset customers dislike emoticons that express emotions contrary to their own feelings, because I used both positive and negative emoticons. In the final study, I conducted a field experiment to test the effect of service employees' use of emoticons on customers' actual spending and word-of-mouth intentions by examining another situational factor—namely, employees' extra-role service behaviors.

### **STUDY 7: A Field Experiment with Extra-role Service Behaviors**

Service employees are generally believed to take two types of roles when serving customers—namely, in-role and extra-role service (Bettencourt et al. 2001). In-role service refers to tasks that are prescribed or obligated in the employees' job description (e.g., answering the phone within three rings), whereas extra-role service refers to discretionary behaviors of service employees that extend beyond formal job requirements to proactively address customers' needs, thereby enhancing customer satisfaction (e.g., post-purchase assistance to provide extra information regarding product warranty without being explicitly asked to do so; Bettencourt et al. 2001; Netemeyer et al. 2005). In other words, extra-role service behaviors refer to employees' extra efforts to take initiative or “go the extra mile” in serving customers (e.g., pay extra attention or show extra care) during their interactions with the customers.

As discussed earlier, employees' display of extra-role service behaviors creates a communal environment; thus, customers will focus more on warmth rather than competence, overriding the effect of customers' general relationship norm orientation. My argument was further supported by an independent pretest (see appendix J). The results showed that the presence of extra-role service behaviors

made customers focus more on warmth than on competence regardless of their relationship norm orientation, whereas in the absence of extra-role service behaviors, communal-oriented customers emphasized warmth and exchange-oriented customers emphasized competence.

Overall, I posited that in the presence of extra-role service behaviors, emoticons would have a positive impact on customers' service responses (including actual spending and word-of-mouth) regardless of their relationship norm orientation, presumably because the emoticons would enhance warmth perception. In the absence of extra-role service behaviors, I expected to replicate studies 4 and 5's findings that emoticons have a positive effect on communal-oriented participants' attitude toward the employee but a negative effect on exchange-oriented participants' attitude. I conducted a field experiment in this study to test this hypothesis and to enhance the external validity of my findings in a real service setting.

## **Method**

I collected data from a Chinese e-commerce firm in Taobao. Founded in 2011, the online company sells clothes drying racks. Clothes drying racks are very common in Asia, where almost every household has one to dry their clothes (Reilly 2012; Richburg 2010). At the time I collected the data, this company had reached a large customer pool and was continuously attracting new customers. Company sales amounted to about 623,125 RMB (97,394 USD) across 9,392 customers in August 2015 alone, which is an impressive achievement among small to medium-sized e-commerce enterprises. In this field experiment, I employed a 2 (emoticons: yes vs. no)  $\times$  2 (extra-role service behaviors: present vs. absent) between-subjects design and measured participants' relationship norm orientation. I recruited 582 real online shoppers as my final sample (74% female, mean age = 28.12).

*Emoticon Manipulation.* In the no emoticon condition, service employees interacted with customers without sending any emoticons. In the emoticon condition, service employees sent at least three emoticons during their conversations with customers. The exact number of emoticons sent by each service employee was recorded and used as a covariate in the data analysis. The results were identical regardless of whether or not the number of emoticons was included as a covariate.

*Extra-Role Service Behaviors Manipulation.* I conducted in-depth interviews with the directors of the company to better understand the distinction between in-role and extra-role service behaviors at their company. My interview revealed that the company's official job requirement for its service employees (i.e., in-role) was to quickly and accurately answer each customer's questions on their instant messenger. Therefore, in the absence of the extra-role condition, I asked service employees only to address questions explicitly asked by customers. In the presence of the extra-role condition, however, I asked service employees to proactively interact with customers after answering customers' explicit questions. I provided service employees with a list of extra-role service behaviors and example scripts (see appendix K). The list consisted of extra-role service behaviors that the directors of the company considered to be the most common ways for their employees to proactively serve the customers. I instructed the service employees to randomly pick two of the four listed extra-role service behaviors. For example, after answering a customer's questions, a service employee might voluntarily provide additional information about product warranty or upcoming events. I spent one month training the service employees to implement my manipulations properly in their conversations with customers.

*Service Outcome Measures.* Customers who had been exposed to my manipulations were identified through their Taobao IDs and were approached

immediately via the company's instant messenger. They were asked to complete a short survey in exchange for compensation of 15 RMB (about 2.30 USD when the survey was conducted). In the survey, I used the same items to measure customers' relationship norm orientation as in study 4 ( $\alpha = .87$ ,  $M = 5.16$ ,  $SD = 1.69$ ) and included manipulation check items for extra-role service behaviors (the same as in the pretest,  $\alpha = .94$ ). I also measured age, gender, and general shopping frequency. In addition, I measured customers' likelihood to recommend the shop to others (i.e., word-of-mouth intentions, 0-100 percent) and actual amount of money spent (in RMB) as my main dependent variables. By tracking customers' Taobao IDs in the company's database, I was able to capture the exact amount of money each customer actually spent in the shop. From the company's database, I recorded additional control variables, including interaction length (i.e., number of words), date and dummy variables representing the specific types of extra-role service behaviors that the employee performed.<sup>4</sup> My results remained unchanged when these control variables were included as covariates.

## **Results**

*Manipulation Checks.* A 2 (emoticons: yes vs. no)  $\times$  2 (extra-role service behaviors: present vs. absent) ANOVA on manipulation check items showed that participants in the extra-role condition ( $M = 6.13$ ,  $SD = 1.26$ ) were more likely to perceive that the service employee proactively interacted with them and went the extra mile to serve them compared to those who did not receive any extra-role

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<sup>4</sup> There were four different types of extra-role customer service behaviors from which the service employees could choose to deliver to the customers. Two independent coders dummy coded the types of extra-role behaviors in all 582 conversation scripts (the average Cohen's  $\kappa = .816$ ). Our results remained unchanged when these dummies were included in the model.



behaviors ( $M = 5.43$ ,  $SD = 1.97$ ;  $F(1, 578) = 25.88$ ,  $d = 0.42$ ,  $p < .001$ ); moreover, the main effect of emoticons and the interaction effect were not significant (all  $ps > .27$ ); this indicated that my manipulation was successful, in that my participants were aware of the extra-role service behaviors I manipulated.

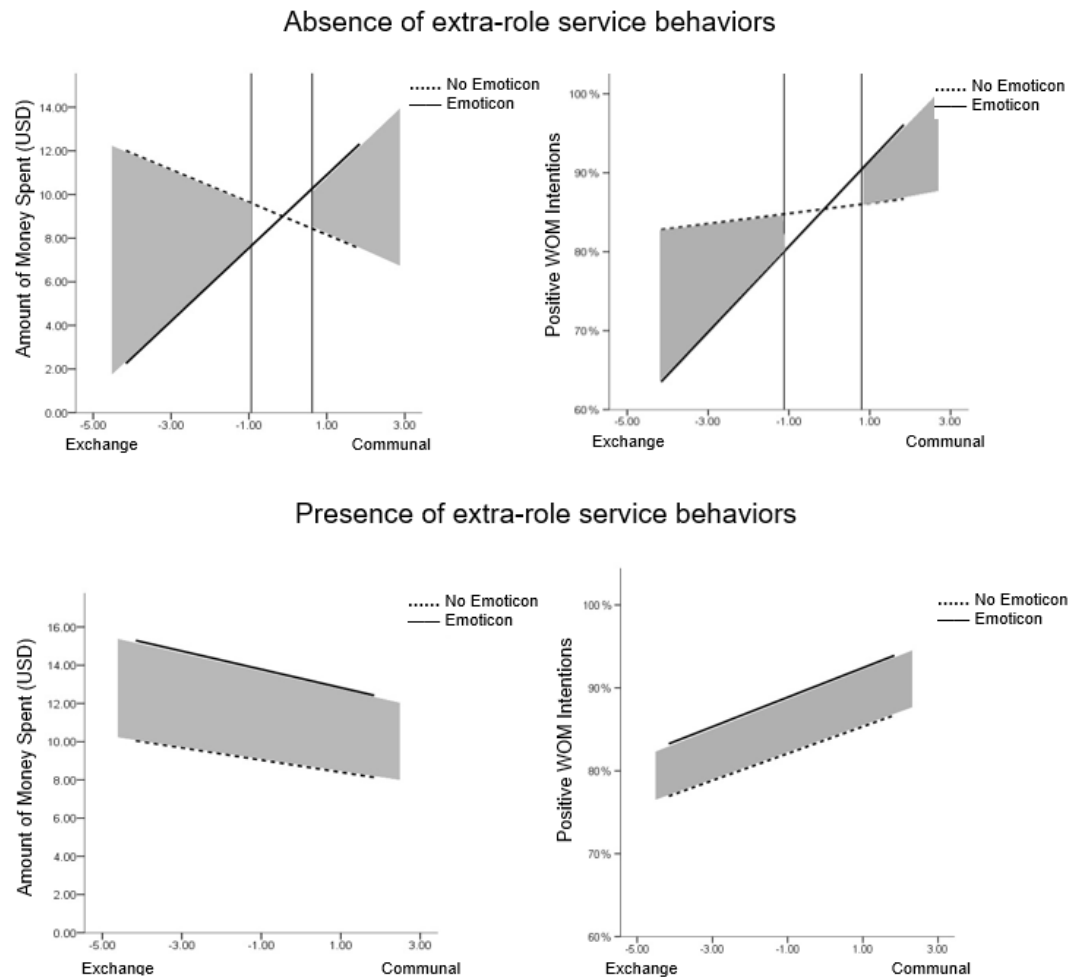
*Purchasing Behavior (Actual Spending).* I conducted a regression analysis with the amount of money spent as the dependent variable and emoticons, the mean-centered relationship norm index, extra-role service behaviors, and their two- and three-way interactions as the independent variables. As expected, the results revealed a significant three-way interaction ( $\beta = -.14$ ,  $t(574) = 3.42$ ,  $p = .001$ ; see figure 10). Further analyses revealed that in the absence of extra-role service behaviors, a regression analysis revealed a marginally significant main effect of the relationship norm orientation ( $\beta = .10$ ,  $t(292) = 1.76$ ,  $p = .080$ ), a non-significant main effect of emoticons ( $\beta = .02$ ,  $t < 1$ , NS), and a significant interaction effect ( $\beta = .26$ ,  $t(292) = 4.58$ ,  $p < .001$ ). A floodlight analysis further revealed a significant positive effect of emoticons on the amount of money spent ( $p < .05$ ) among communal-oriented participants (relationship norm index  $> 0.62$ ,  $B_{JN} = 0.92$ ,  $SE = 0.47$ ). In contrast, emoticons had a negative effect on the amount of money spent ( $p < .05$ ) among exchange-oriented participants (relationship norm index  $< -0.93$ ,  $B_{JN} = -0.97$ ,  $SE = 0.49$ ). Thus, I replicated the findings of study 4 in a real service context.

When employees performed extra-role service behaviors, a similar regression analysis revealed a significant main effect of emoticons ( $\beta = .28$ ,  $t(282) = 4.90$ ,  $p < .001$ ), whereas other effects were not significant ( $ps > .14$ ). Thus, emoticons increased participants' spending regardless of their relationship norm orientation when employees performed extra-role behaviors, supporting my prediction.

*Word-of-Mouth (WOM) Intentions.* I also examined participants' WOM intentions as another dependent variable. Similar to the analysis of actual purchases, a regression analysis showed a significant emoticon  $\times$  relationship norms  $\times$  extra-role three-way interaction ( $\beta = -.11$ ,  $t(574) = 2.73$ ,  $p = .007$ ; see figure 10). Specifically, when the employee did not perform extra-role service behaviors, a regression of WOM intentions on emoticons, the relationship norm index, and their interaction revealed a significant interaction effect ( $\beta = .21$ ,  $t(292) = 3.88$ ,  $p < .001$ ). A floodlight analysis showed a significant positive effect of emoticons on WOM intentions ( $p < .05$ ) among communal-oriented participants (relationship norm index  $> 0.8$ ,  $B_{JN} = 0.02$ ,  $SE = 0.01$ ). In contrast, emoticons had a negative effect on WOM intentions ( $p < .05$ ) among exchange-oriented participants (relationship norm index  $< -1.12$ ,  $B_{JN} = -0.02$ ,  $SE = 0.01$ ). In the extra-role condition, emoticons had a positive effect on WOM intentions regardless of the relationship norm orientation ( $\beta = .20$ ,  $t(282) = 3.41$ ,  $p = .001$ ).

**FIGURE 10**

THE EFFECT OF EMOTICONS ON ACTUAL SPENDING/WOM INTENTIONS  
DEPENDING ON THE RELATIONSHIP NORM ORIENTATION AND EXTRA-ROLE  
SERVICE BEHAVIORS (STUDY 7)



## Discussion

In study 7, I extended my findings to a real e-commerce service context with a field experiment. In the absence of employees' extra-role service behaviors, I replicated previous studies' findings that the service employees' use of emoticons resulted in positive service outcomes among communal-oriented customers but in negative service outcomes among exchange-oriented customers. However, when a service employee went the extra mile to proactively serve customers' needs, the moderating effect of the relationship norm orientation that I observed in studies 4 and 5 disappeared, and customers displayed positive responses to the service

employee's emoticon use in terms of actual spending and WOM intentions regardless of their relationship norm orientation.

In addition, I conducted a posttest with 145 participants (Chinese online shoppers, 64% female, mean age = 28.69) to address two potential concerns about study 7. First, regarding the commonness of extra-role service behaviors in online shopping contexts, 62% of the participants in my posttest indicated that they experienced some extra-role services during online shopping. They also provided a total of 232 illustrations of extra-role service behaviors that they had experienced. Two independent coders coded these behaviors and categorized 201 of them (87%) into the four types of extra-role service behaviors that I captured in this study. This finding is not surprising, because I developed the list of extra-role service behaviors after in-depth interviews with the directors of the company. Therefore, I believe that it is not unusual to encounter extra-role service behaviors during online shopping (especially the types of behaviors that I utilized in my study) and that customers tend to be aware of them.

Second, it is possible that not all extra-role service behaviors shift customers' focus to warmth (vs. competence). Rather, there might be some extra-role behaviors that also demonstrate an employee's competence. To address this issue, I further analyzed the data from the posttest. The two independent coders categorized the 232 extra-role service behaviors into three types of extra-role service behaviors: warmth-related, competence-related, or both. Warmth-related extra-role behaviors were defined as a service employee's voluntary caring behaviors to signal a friendly and warm gesture toward customers, for which no specific skills or professional knowledge are required to perform them. Competence-related extra-role behaviors, on the other hand, were defined as voluntary behaviors of a service employee to

address customers' needs through the demonstration of particular skills or professional knowledge. The category of "both" refers to the simultaneous presence of both warm gestures and a demonstration of professional skills. I found that 218 (94%) extra-role behaviors were categorized as warmth-related, 14 (6%) as both warmth and competence related, and none as "purely" competence-related. This finding make sense because, by definition, extra-role service refers to employees' discretionary behaviors to go for the extra mile to proactively address customers' needs. Thus, by definition, performing extra-role service behaviors can be assumed to help demonstrate employees' good intent (i.e., warmth). In other words, all extra-role service behaviors are warmth-related to some extent. Although I observed relatively few extra-role behaviors demonstrating both warmth and competence, this type of extra-role behaviors might be more common in the *offline* context because service employees not only can provide help verbally but also may be more capable of demonstrating competence through behavioral acts.

## CHAPTER 5: CONCLUSIONS AND SUGGESTIONS

In business practices, emoticons have received tremendous attention as a marketing tool in digital communications in various industries. Despite their popularity, however, how the use of emoticons affects people's perception of the emoticon sender has not been systematically investigated in consumer behavior research. In addition, questions pertaining to the nature of emoticons—for example, how they are similar to or different from nonverbal cues in face-to-face communications or other casual languages such as internet slang—remain unexplored. Moreover, findings of previous research on emoticons in non-commercial relationships are inconclusive, in that they have documented both positive and negative effects of emoticons without reconciling them (Haberstroh 2010; Wang et al. 2014). Filling these gaps, my research enriches the understanding of customers' inferential processes of emoticons, particularly in the context of online service encounters.

Across seven studies, my results consistently showed that customers infer that a service employee who uses emoticons is higher in warmth but lower in competence than one who does not, which subsequently influenced the customers' service evaluation and real behaviors. Decomposing the effect of emoticons in terms of warmth and competence perceptions also helps to provide a potential explanation for why some uses of emoticons in real business practices are successful while others are not. For instance, echoing the examples in the introduction, it is possible that customers of Domino's Pizza might be focused more on the warmth than on the competence of its employees, because Domino's Pizza highlights a friend-like relationship with its customers, whereas customers of Goldman Sachs might be focused more on the competence than on the warmth of its employees, because they

focus on satisfactory returns on investments. It may be for this reason that emoticons used by Domino's Pizza were successful while those used by Goldman Sachs were not.

Specifically, study 1 showed that the opposing effects of emoticons on warmth and competence perceptions occurred with both text-based and graphical emoticons. Study 2 replicated the opposing effects of emoticons and identified intentionality as a unique characteristic of emoticons that is distinct from nonverbal cues in face-to-face interactions. Study 3 also confirmed the opposing effects of emoticons and compared emoticons with other online casual languages, particularly internet slang. The findings indicated that, unlike emoticons, internet slang lowered both competence and warmth perceptions. Study 4 showed that the opposing effects of emoticon use on warmth and competence were conditional on the customers' relationship norm orientation. Specifically, communal-oriented (exchange-oriented) customers were more likely to infer higher warmth (lower competence) and thus tended to be more (less) satisfied with the service when a service employee used emoticons. Study 5 replicated study 4's findings by manipulating customers' relationship norm orientation. Study 5 also examined both positive and negative emoticons and showed that the proposed effects of emoticons occurred regardless of the valence of the emoticons.

In addition, I also examined two practically important contextual factors—unsatisfactory service outcomes and employees' extra-role service behaviors—that can situationally override customers' relationship norm orientation and thus influence customers' attitudes toward the service and actual purchasing behaviors. Specifically, Study 6 showed that unsatisfactory service outcomes shifted customers' focus more toward competence than warmth (the pretest in appendix I); thus,

emoticons decreased customers' attitude toward the service regardless of the customers' relationship norm orientation, presumably because the emoticons were interpreted as indicative of lower competence. Study 7 extended my findings to a real e-commerce service context with a field experiment. The findings showed that employees' extra-role service behaviors shifted customers' focus toward warmth (the pretest in appendix J), and emoticons led customers to exhibit positive attitudes and behaviors toward the service regardless of their relationship norm orientation, presumably because the emoticons were interpreted as indicative of higher warmth. Taken together, my exploration of the individual and situational factors in influencing the opposing effects of emoticons on customers' service evaluations helps to provide a more nuanced understanding of the existing inconclusive findings of emoticons use.

### **Theoretical and Managerial Implications**

The current research contributes to the existing literature in several ways. To the best of my knowledge, this research is the first to theoretically investigate the psychological mechanism underlying customers' perception of service employees who use emoticons in online service encounters. My findings bring new insights to the existing literatures by revealing the opposing effects of emoticons on warmth and competence perceptions, such that a service employee's use of emoticons (either positive or negative) leads customers to perceive the employee to be warmer but less competent than when no emoticons are used. Relatedly, the current research also contributes to the understanding of emoticons for both academic researchers and practitioners by enriching the conceptualization of emoticons. Specifically, I identified intentionality as a distinctive characteristic of emoticons that is distinct



from nonverbal cues in face-to-face communications and compared emoticons with other online casual languages such as internet slang.

The current research also extends the literature on communications and computer science by offering a better understanding of the seemingly diverse findings pertaining to the outcomes of emoticons use. Early work on emoticons in the communication and computer science literature focused on the functions of emoticons and characteristics of users that encourage emoticons usage (Rezabek and Cochenour 1998; Rivera, Cooke and Bauhs 1996; Walther and D'Addario, 2001). More recently, the literature has increasingly focused on the perception of emoticon recipients, but findings are mixed. Some have documented positive effects of emoticons on a recipient's perception of the emoticon sender (Park and Sundar 2015; Wang et al. 2014; Zhang et al. 2011), whereas others have documented negative effects (Haberstroh 2010; Ellensburg, 2012; Thoresen and Andersen 2013). My research in decomposing the effects of emoticons in terms of warmth and competence perceptions should potentially help to explain these mixed findings in prior work. For example, previous studies documenting positive effects of emoticons focus on warmth-related variables such as sociability, friendliness and an outgoing personality (Fullwood and Martino 2007; Taesler and Janneck 2010; Zhang et al. 2011), whereas those showing negative effects focus on competence-related variables such as professionalism, expertise, power and status (Ellensburg 2012; Haberstroh 2010; Thoresen and Andersen 2013). Hence, the current research reconciles these previous findings by distinguishing the opposing effects of emoticons on two fundamental aspects of social judgments—warmth and competence perceptions. This approach also enriches the literature on person perception (Judd et al. 2005; Kervyn et al. 2009) by demonstrating that customers

might interpret social cues (e.g., emoticons) in digital communications based on the two fundamental dimensions of warmth and competence, which have usually been examined in face-to-face social interactions.

In addition, this research sheds light on when and why employees' use of emoticons may or may not be effective in enhancing service outcomes. The findings indicate that the relative importance of warmth and competence determines whether emoticons will enhance or reduce service attitude, and that the relative importance varies depending on individual and contextual factors. Specifically, I examined customers' relationship norm orientation as an individual factor and showed that communal-oriented (exchange-oriented) customers place more emphasis on warmth (competence). I also investigated two practically important situational factors—unsatisfactory service outcomes and employees' extra-role service behaviors—that can override the effect of customers' relationship norm orientation. I showed that, depending on the situation, generally communal-oriented customers might think and act like exchange-oriented customers, and vice versa. Specifically, I suggest that unsatisfactory service outcomes can make the relationship shift more toward an exchange relationship, leading customers to focus more on competence than warmth. In contrast, an employee's extra-role service behavior shifts the relationship with a customer more toward a communal one, leading the customer to focus more on the warmth than on the competence of the service employee.

The current research also provides important marketing implications. Business practitioners have devoted notable efforts to incorporating emoticons into various marketing campaigns, because they can be easily embedded in marketing activities and can be spread quickly through social media (Hof 2016). However, the current research suggests that the use of emoticons should be approached with

caution, as they can backfire in certain situations. My findings show that service employees' emoticons can positively affect customers' service experiences when the customers interpret the emoticons in terms of friendliness and sociability (i.e., warmth), but emoticon usage can hamper service experiences when the customers interpret the emoticons in terms of effectiveness and capability (e.g., competence). Hence, service providers to whom it is vital to provide competent services may find it helpful to be aware about the potential drawbacks of their use of emoticons in digital communications, particularly when interacting with more exchange-oriented customers.

Relatedly, the current research suggests that it is crucial for companies to take customers' relationship norm orientation into consideration when implementing emoticons in their marketing communications. Specifically, emoticons can be beneficial in enhancing service satisfaction among communal-oriented customers, but their use can backfire among exchange-oriented customers. Moreover, although customers may have a general relationship norm orientation as shown in studies 4 and 5, my findings in studies 6 and 7 suggest that relationship norms can also be situationally induced, overriding customers' general relationship orientation. Thus, companies can maximize the utility of implementing emoticons in their marketing campaigns by inducing a more communal environment (e.g., display of employees' extra-role service behaviors) beforehand to lead customers to interpret the emoticons in terms of higher warmth rather than lower competence.

Business practitioners also need to be cautious about the use of emoticons (either positive or negative) when unsatisfactory service outcomes occur, as such outcomes can create a more exchange-oriented environment, leading both generally exchange-oriented and generally communal-oriented customers to infer that the

emoticon sender is lower in competence. In contrast, companies can enhance customers' service experiences through the use of emoticons by urging and motivating their employees to provide extra-role service behaviors. My findings indicate that if emoticons are accompanied by extra-role service behaviors from employees, the emoticons can create a more communal environment and induce positive service outcomes regardless of the customers' relationship norm orientation.

### **Future research**

The current research points to other fruitful avenues for future research. I suggest that employees' display of extra-role service behaviors can override the effect of customers' relationship norm orientation by leading both generally communal- and exchange-oriented customers to focus more on warmth rather than on competence. However, some extra-role behaviors might require employees' demonstration of particular skills or professional knowledge to address customers' needs. However, these types of extra-role behaviors might be more common in offline contexts as service employees' competence can be more easily demonstrated through their behavioral acts, which could thus shift customers' focus more toward competence. Future research can identify such extra-role service behaviors to further enrich the investigation of contextual factors for the emoticon effects.

Of note, emotional expressions via emoticons are likely to have disadvantageous consequences for the sender to the degree that they are perceived as inappropriate for the situation. Perceived inappropriateness entails a mismatch between what one perceives as normative and fitting in a particular context and what is actually shown (Shields 2005). My pilot study has demonstrated that emotions are perceived to be more appropriate to use in services encounters than other casual languages such as internet slang, and the study 3 shows that the negative impact of

emoticons on service satisfaction cannot be explained by perceived appropriateness of emoticons. However, it is possible that in certain situations emoticons might enhance warmth perceptions because customers perceive the use of emoticons as appropriate when communal norms are salient, while emoticons might reduce competence perceptions because customers perceive the use of emoticons as inappropriate when exchange norms are salient. Future research can further examine situations under which the perceived appropriateness of the emoticon use can be a mechanism for the effect of emoticons on service outcomes.

In addition, most of my studies (studies 1 to 5) focus on a new relationship between a customer and a service employee. Although my field experiment involved some established customers who revisited the target online shop, future research can examine emoticons' effect for repeated customers. For example, repeated interactions with the same employee might cause the relationship to become more communal, and in such a case the use of emoticons might be more likely to signal higher warmth and induce positive effects on service outcomes.

Also, I mainly examined pictographs that represent facial expressions, but there are other types of pictographs that represent various objects, such as an icon of thumbs-up or a small picture of a pink flower. Although I believe such images might not be appropriate to use in customer-service interactions, it would be meaningful to explore the effects of different types of emoticons in other business contexts to enrich my understanding of their effects. Another venue for future research is to examine different numbers of emoticons. In the current research, I compared situations in which service employees used emoticons or did not use any emoticons while fixing the number of emoticons (studies 1 to 6) or controlling the number of emoticons when they varied (study 7). However, it is appealing to intuition that too

few emoticons might not induce any significant effects, while too many might be too intrusive to induce any positive effects. If this is the case, then the “optimal” number of emoticons to use in order to maximize their utility needs to be further investigated.

Future research can also explore different types of service failures. In the current research, I focused on unsatisfactory service outcomes. However, for other types of service failures (e.g., a hotel desk clerk treating a customer rudely during check-in) might lead customers to focus more on evaluating the warmth of the service employee during service recovery, and, in turn, emoticons might help to improve satisfaction with the service recovery. Finally, future research can explore the type of service as another potential moderator for the emoticon effects that shift customers’ emphasis to either warmth or competence. For instance, customers might put more emphasis on competence when interacting with lawyers than with bartenders; thus, emoticons might less favorably influence service satisfaction for lawyers than for bartenders. Investigation of other possible moderators will further broaden my understanding of the role of emoticons in commercial relationships.

## APPENDICES

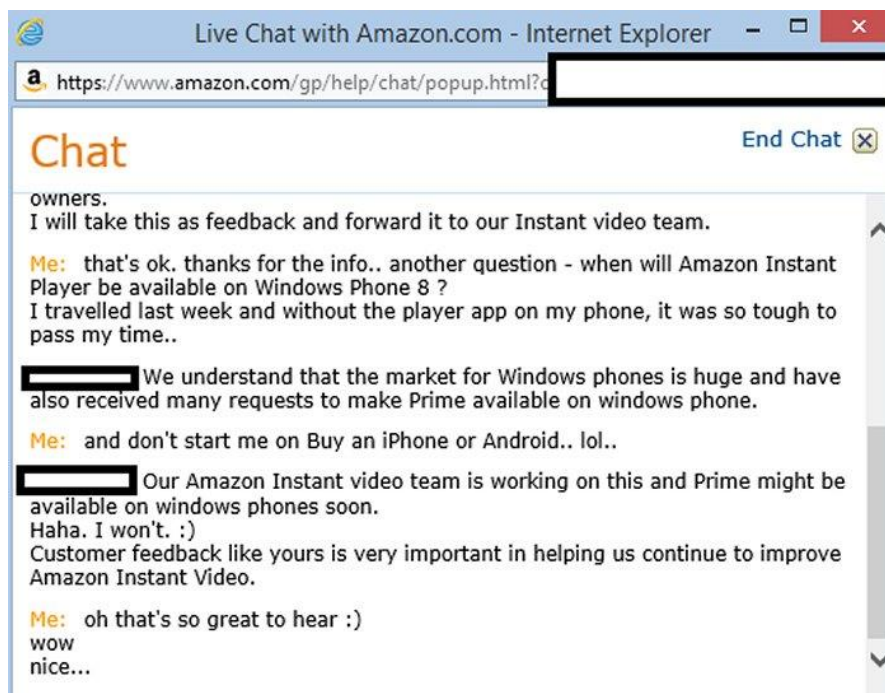
### APPENDIX A

#### Real-Life Examples for the Use of Emoticons in Business Practices

##### 1) Live Chat

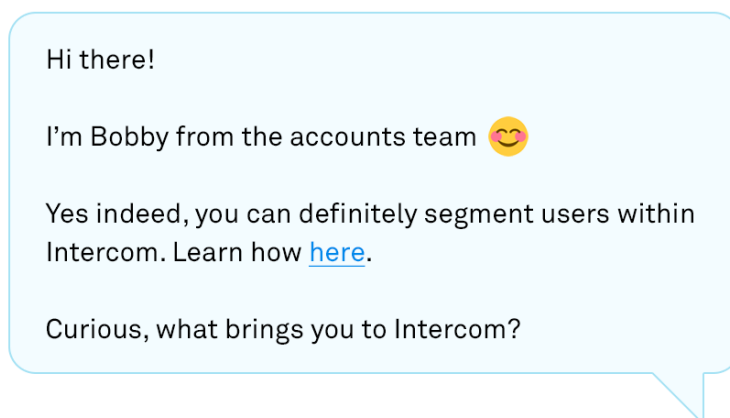
###### Amazon.com

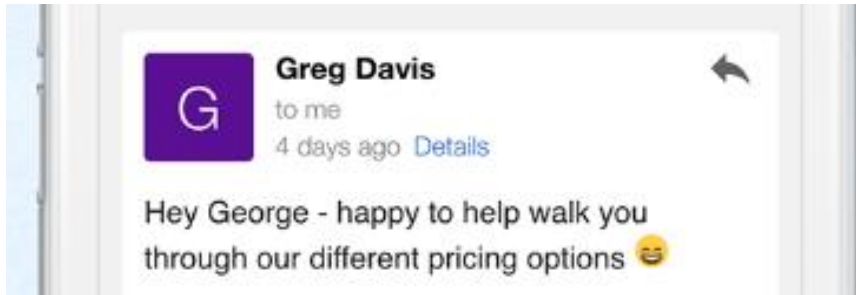
A customer service representative uses an emoticon when live chatting with a customer.



###### Intercom

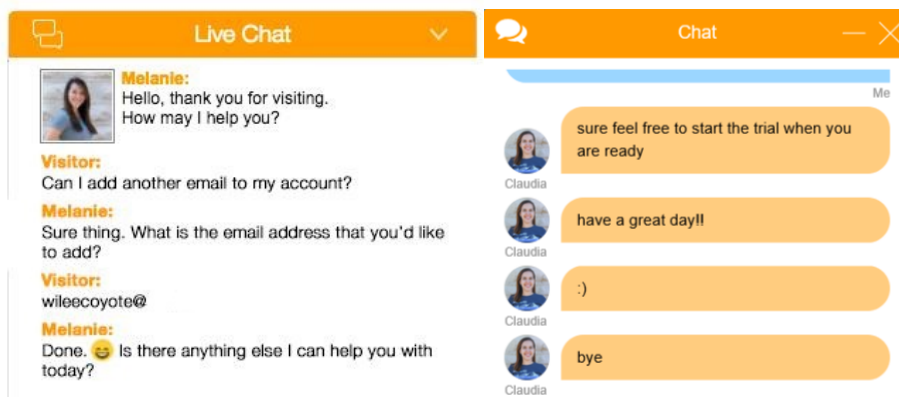
Intercom offers live chat service for business with the emoticon function, and its employees serve their customers with emoticons.





## Snapengage

Snapengage, a live chat service company, suggests that its clients have service agents respond to customers with emoticons, especially a smiley face.



## 2) Emails

### Archival Clothing

Customer representatives use emoticons when emailing customers.

Archival Eggplant Sweatshirt - Shipping Rates

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I did a shipping quote look up for you on the Archival Sweatshirt. Trying to find creative ways to get it to you, for less.

**First Class Mail, International - \$15**, typically takes 3 weeks on average to arrive not the advertised two weeks. If you don't mind waiting, we will even cover your shipping on that.

**FEDEX Economy, International - \$30**, arrives quickly and reliably.

I know the shipping makes it tough to justify ;)

Let us know how we can help.  
We do have some new stockists in Europe - but I don't think they are yet stocking our M-Tall sizes.

Re: Archival Eggplant Sweatshirt - Shipping Rates

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Yes, indeed.  
And I just lowered the flat rate shipping to \$25 in the store.  
Let me know if you don't see that.

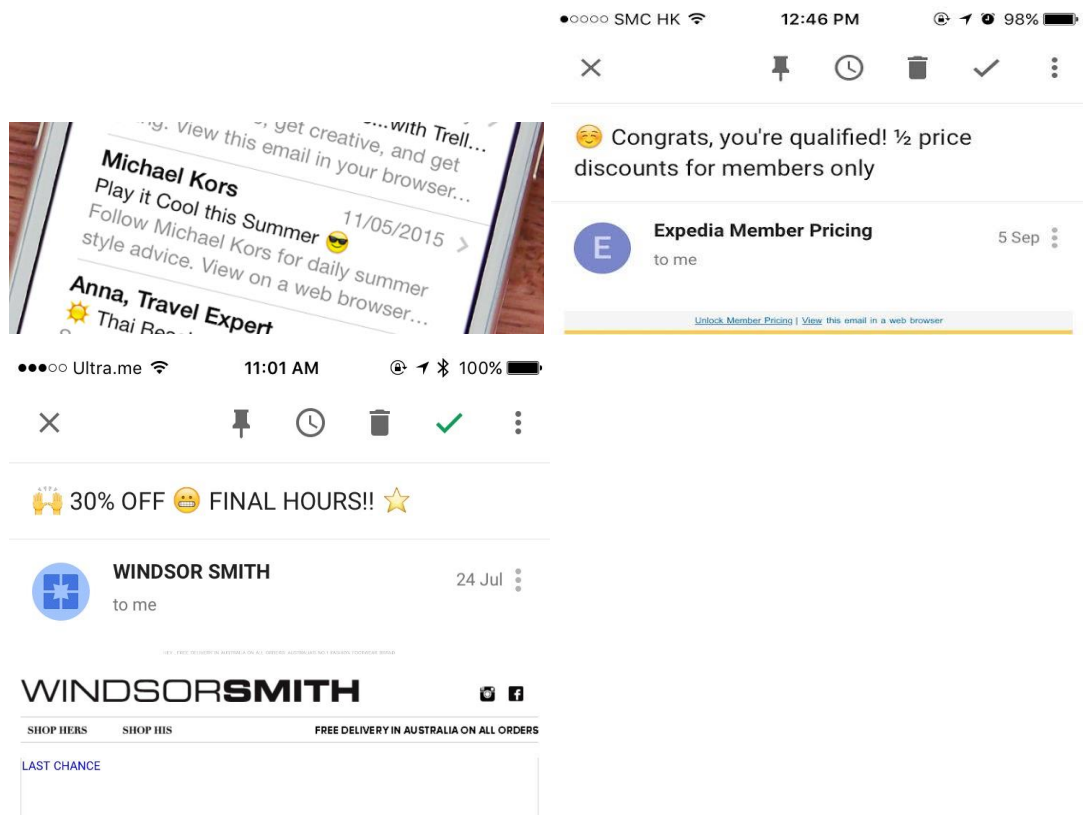
Just trying to understand and assist our potential customers.  
It's all about you - else we wouldn't be doing what we do ;)

Ask you girlfriend, if she wants to test one of our zip pouches.  
I'll add one in to the order. Most useful thing we make outside of our packs. Not kidding ;)



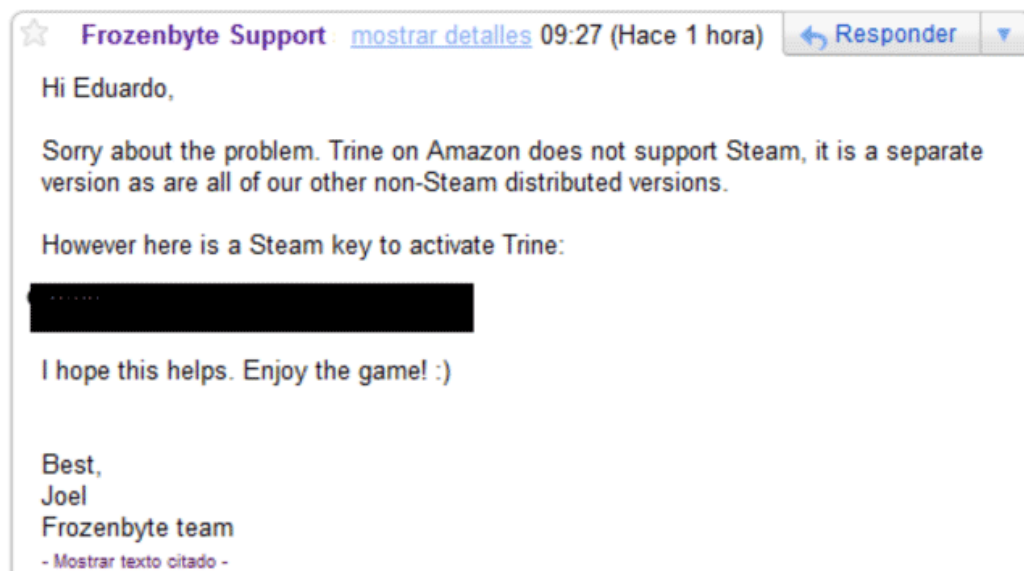
## Expedia and Windsor Smith

Michael Kors, Expedia, and Windsor Smith use emoticons in the header of promotion emails.



## FrozenByte

FrozenByte, a Finnish game-developer, responds to a customer's email with an emoticon.



### 3) Social networks

#### Burger King

Snaps, a platform for advertisers to connect with consumers through branded emoticons, has worked with global brands such as Burger King.



#### Jetblue Airways and Xbox

JetBlue Airways and Xbox incorporate emoticons when interacting with customers on their Facebook homepage.



#### Pepsi

Pepsi has released soda cans and bottles with emoticons, called PepsiMojis, and Tweeted to ask consumers to take a photo of them holding a PepsiMoj.



## Timex

Timex, a watch brand, uses emoticons in conversing with customers on Twitter.



## 4) Other platforms

### McDonald's

McDonald's brings emoticons to life in its video ad.



## Sony

Sony Pictures animation wins a Hollywood bidding war to produce an emoji-themed movie.

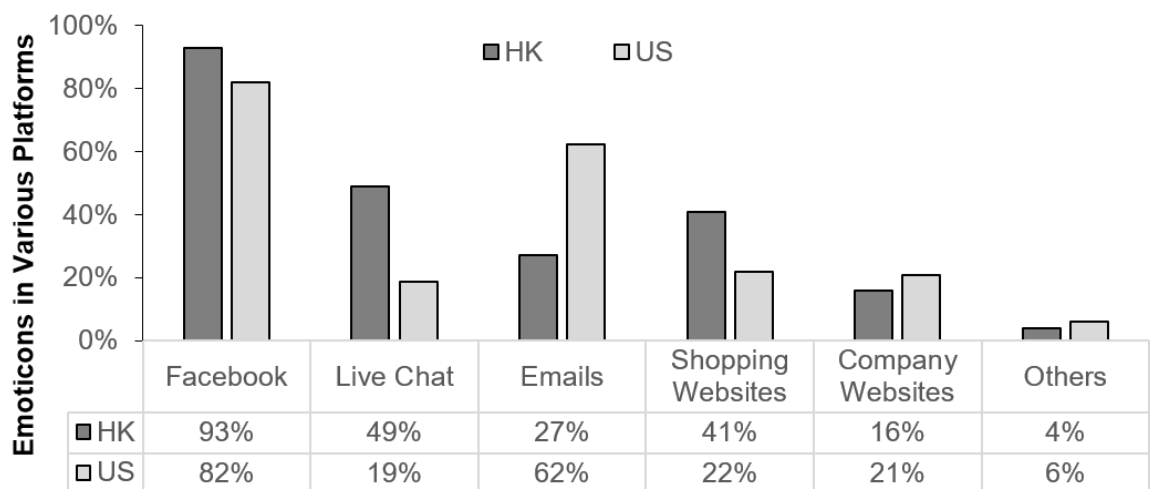


## APPENDIX B

### Pilot Studies: Understanding Emoticon Use in Business Practices

I conducted pilot studies to more systematically understand how customers perceive the use of emoticons in business practices. The pilot studies used the same survey but with different populations, one with Western participants (United States (US), N = 131) and the other with Eastern participants (Hong Kong (HK), N = 97), which are the main populations in my studies.

The pilot studies revealed that 77% of US and 84% of HK participants have seen service employees, brands, or companies using emoticons in business practices such as in advertisements and service encounters. In addition, those who have seen emoticons in business practices indicated various platforms including Facebook, live chats, and emails as the sources of emoticons (see the graph below). For example, among US participants who have seen emoticons in business practices, 82% saw them via Facebook and 62% saw them via emails. Hence, consumers perceive the use of emoticons to be popular among business practices.



I also compared emoticons with internet slang in terms of the extent to which they are perceived to be appropriate in business practices with four items (i.e.,

“the use of emoticons [internet slang] in business practices is”:  
 fine/acceptable/appropriate/offensive [reverse coded], 1 = not at all, 7 = very much;  
 $\alpha > .66$ ). Results indicated that emoticons are perceived to be more proper to use in  
 business practices than internet slang among both US ( $M_{\text{emoticons}} = 3.93$ ,  $SD = 1.51$ ,  
 $M_{\text{slangs}} = 3.22$ ,  $SD = 1.35$ ;  $t(130) = 6.33$ ,  $p < .001$ ) and HK participants ( $M_{\text{emoticons}} =$   
 $4.76$ ,  $SD = 1.17$ ,  $M_{\text{slangs}} = 3.58$ ,  $SD = 1.24$ ;  $t(96) = 8.06$ ,  $p < .001$ ). Furthermore,  
 emoticons were also perceived to be more acceptable than internet slang in various  
 service industries including retail, tourism, fitness, and restaurants (see the table  
 below). Therefore, the pilot studies provide evidence that the use of emoticons is  
 popular and is viewed as more acceptable in business practices than other online  
 casual languages like internet slang.

Perceived Appropriateness of the Use of Emoticons and Internet Slang  
 in Various Service Industries

	<b>Retail</b>	<b>Tourism</b>	<b>Fitness</b>	<b>Restaurant</b>	<b>Hotels</b>
<i>US Sample</i>					
<b>Emoticons</b>	4.82	4.76	4.73	4.72	4.18
<b>Internet Slang</b>	3.98	3.67	3.83	3.86	3.49
<i>t</i> (130)	5.40	6.51	5.99	5.62	4.89
<i>P</i>	.000	.000	.000	.000	.000
<i>HK Sample</i>					
<b>Emoticons</b>	6.00	5.67	5.22	5.66	4.72
<b>Internet Slang</b>	4.79	4.65	4.07	4.28	4.29
<i>t</i> (96)	6.98	5.73	6.53	7.10	2.49
<i>P</i>	.000	.000	.000	.000	.015

## APPENDIX C

### Emoticon Manipulation in Study 1

Dear *[insert name]*,

Thank you for your interest in participating in my study. [😊 / :D / None]

I would like to invite you to participate in the study on [date and time of the study].

Please kindly note that the venue will be at [location of the study]. [😊 / :) / None]

I would really appreciate it if you could forward my invitation email to your friends or colleagues who might be also interested in participating in the study. [😊 / ;) / None]

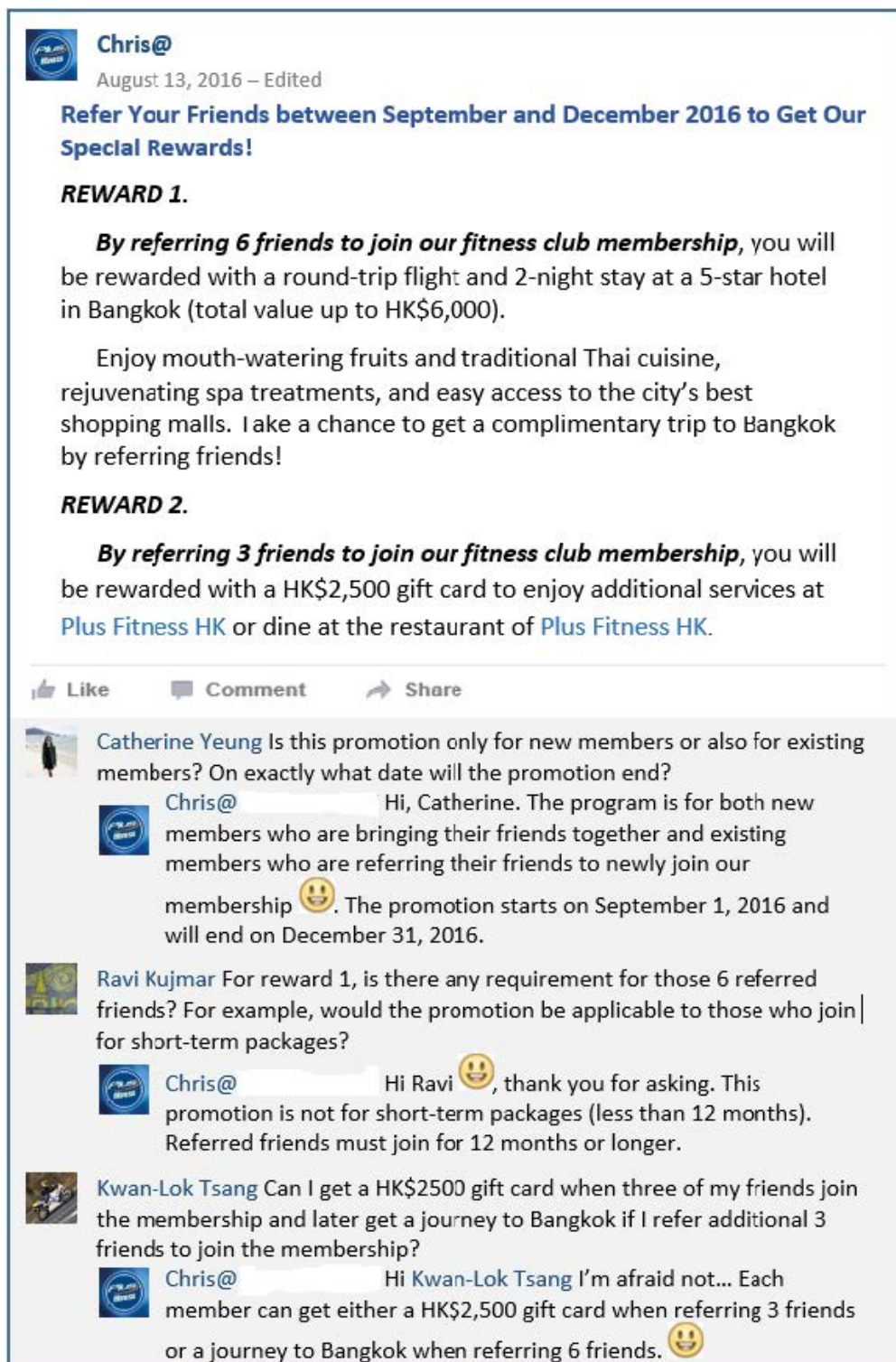
Thank you very much and see you soon.

Best regards,

Study Coordination Team

## APPENDIX D

### Emoticon Manipulation in Study 2



The screenshot shows a Facebook post by Chris@, dated August 13, 2016, and edited. The post title is "Refer Your Friends between September and December 2016 to Get Our Special Rewards!". It lists two rewards: Reward 1 (a round-trip flight and 2-night stay at a 5-star hotel in Bangkok) and Reward 2 (a HK\$2,500 gift card or a complimentary trip to Bangkok). Below the post are three comments from Catherine Yeung, Ravi Kujmar, and Kwan-Lok Tsang, each followed by a reply from Chris@. The replies include a smiley face emoticon (😊) in the first and third replies.

**Chris@**  
August 13, 2016 – Edited

**Refer Your Friends between September and December 2016 to Get Our Special Rewards!**

**REWARD 1.**

*By referring 6 friends to join our fitness club membership*, you will be rewarded with a round-trip flight and 2-night stay at a 5-star hotel in Bangkok (total value up to HK\$6,000).

Enjoy mouth-watering fruits and traditional Thai cuisine, rejuvenating spa treatments, and easy access to the city's best shopping malls. Take a chance to get a complimentary trip to Bangkok by referring friends!

**REWARD 2.**

*By referring 3 friends to join our fitness club membership*, you will be rewarded with a HK\$2,500 gift card to enjoy additional services at [Plus Fitness HK](#) or dine at the restaurant of [Plus Fitness HK](#).

Like Comment Share

**Catherine Yeung** Is this promotion only for new members or also for existing members? On exactly what date will the promotion end?

**Chris@** Hi, Catherine. The program is for both new members who are bringing their friends together and existing members who are referring their friends to newly join our membership 😊. The promotion starts on September 1, 2016 and will end on December 31, 2016.

**Ravi Kujmar** For reward 1, is there any requirement for those 6 referred friends? For example, would the promotion be applicable to those who join for short-term packages?

**Chris@** Hi Ravi 😊, thank you for asking. This promotion is not for short-term packages (less than 12 months). Referred friends must join for 12 months or longer.

**Kwan-Lok Tsang** Can I get a HK\$2500 gift card when three of my friends join the membership and later get a journey to Bangkok if I refer additional 3 friends to join the membership?

**Chris@** Hi Kwan-Lok Tsang I'm afraid not... Each member can get either a HK\$2,500 gift card when referring 3 friends or a journey to Bangkok when referring 6 friends. 😊

NOTE: no emoticons were shown in the no emoticons condition.



## APPENDIX E

### Emoticon and Internet Slang Manipulations in Study 3

Dear Mturker,

Research has shown that Amazon Mechanical Turk is now becoming one of the top data collection platforms in the world! [ 😊 /LOL/None]

In March 2007, there were more than 100,000 Turkers in over 100 countries. This number increased to over 500,000 Turkers from over 190 countries by January 2011, [ 😊 /OMG/None]

However, surprisingly few studies focus on characteristics of Mturk participants. Recently, I heard that some of Mturk participants' characteristics have dramatically changed for the last 5 years.

[ 😊 /LOL/None]

Therefore, in this study, I would like to do a short survey particularly about Mturk participants' shopping behaviors and personality. Please carefully answer all questions.

Thank you very much for your help!

Yours truly,

Researcher C

## APPENDIX F

### Emoticon Manipulation in Study 4

Travel agent: Hello! Welcome! What can I do for you? 😊

Chris: Hello. I want to book a room at Grand Royal Hotel, but I have some questions. First, how's the room? Spacious and well equipped?

Travel agent: Yes, it is very spacious, including a sitting room and a mini-sized kitchen, a 32-inch flat screen TV, a work desk and a wardrobe. Free Wi-Fi is available in all rooms. 😁

Chris: It sounds good. Is the hotel near the Central Train Station?

Travel agent: Yes, very close, just 2.7 km. 🤔

Chris: That is far if I walk. Is there any pick-up service?

Travel agent: Yes, the hotel has mini-buses to pick up guests from Central Station but it is not free. You can check the time and fare on this link: <http://www.nicetravelaroundtheworld.com/hotel-transportation-fee/837012832911>


Chris: The fee looks fair. Thanks for your help. Let me think....

Travel agent: You are welcome! We won't disappoint you if you choose us. 😊

NOTE: no emoticons were shown in the no emoticons condition.

## APPENDIX G

### Emoticon Manipulation in Study 5



**Alex@**  
September 9, 2016 at 3:30 pm

**HKD7,088 - Hawaii Explorer (4 Nights) (Start Honolulu, End Hawaii)**  
Prepare yourself for an amazing journey into a hidden paradise that you have only dreamed about. Hawaii is one of the most magical places on earth. If you want to experience the best of Hawaii, then our package is perfect for you! Throughout your package experience, learn the unique history of Hawaii.

**Available Period:** From 09/09/2016 to 06/06/2017  
**Duration:** 5 days (4 nights)


**THE PACKAGE INCLUDES:**  
4-night hotel accommodation  
Daily breakfast voucher for coffee & pastry  
Local taxes & service charges


**ITINERARY**  
Day 1: Arrive Honolulu  
Day 2: Explore Honolulu and Waikiki  
Day 3: Maui Sightseeing  
Day 4: Historic Hawaii and Hawaii at Leisure  
Day 5: Depart Hawaii


More information: <http://tzoo.co/HaiHK>


---

👍 Like    💬 Comment    ➦ Share

 **Oakley Chan** Does the price include flight tickets, lunches and dinners?  
September 10, 2016 at 10:16 am

 **Alex@** The price includes economy inter-island airfares on Hawaiian Airline from Honolulu to Maui and Maui to Hawaii 😊. Daily breakfast vouchers will be provided, but lunches and dinners are not included 😞.  
September 10, 2016 at 11:32 am

 **Oakley Chan** Will we visit volcanoes in Hawaii?  
September 10, 2016 at 1:05 pm

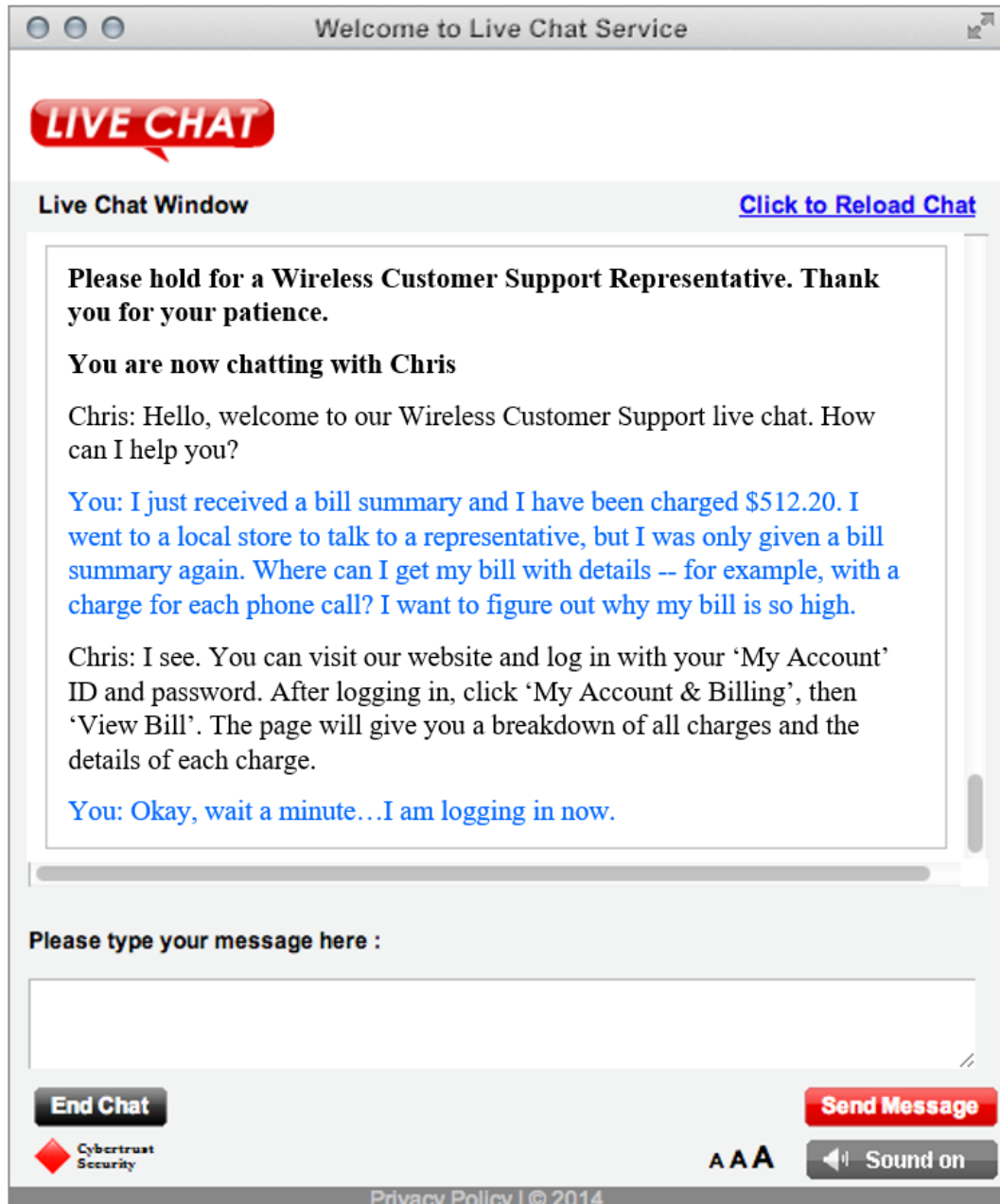
 **Alex@** Sorry, this package does not include visits to Hawaii's volcanoes 😞. You can go to Hawaii Volcanoes National Park anytime on your own during the 4<sup>th</sup> day's leisure time in Hawaii. Here's the park's website <https://www.nps.gov/havo> 😊  
September 10, 2016 at 3:53 pm

NOTE: The two positive emoticons were shown only in the positive emoticons condition; the two negative emoticons were shown only in the negative emoticons condition; and no emoticons were shown in the no emoticons condition.

## APPENDIX H

### Emoticon and Unsatisfactory Service Outcome Manipulations in Study 6

#### Unsatisfactory Service Outcomes and Emoticons Condition



Welcome to Live Chat Service

## LIVE CHAT

Live Chat Window [Click to Reload Chat](#)

You: The itemized bill indicates I need to pay \$445.34 for “Global Roam – South Africa”! I went to South Africa earlier this month for one week. But I used roaming data only ONCE with Google Map for only about 5 MINUTES! THIS IS RIDICULOUS! Please explain why I was charged so much!

Chris: Global data can be expensive 😞. The data transport charge in South Africa is \$0.02/KB. So \$445.34 means that you used about 22 MB data there.

You: I don't understand. It is impossible that I used about 22 MB. I'm pretty sure that 22 MB could let me use Google Map for at least 3 HOURS!

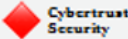

You: But I only used it for about 5 MINUTES!

You: There must be something wrong with your system! I want to see how much data I used each day on which app or website!

Chris: I understand your situation. As the use of roaming data is handled by another department, I can only see how much data in total you used for roaming 😞. I will pass your case to the corresponding staff member and he/she will get back to you within 24 hours 😊.

Please type your message here :

**End Chat** **Send Message**

 AAA 

Privacy Policy | © 2014

No Unsatisfactory Service Outcome and No Emoticons Condition

The screenshot shows a web browser window titled "Welcome to Live Chat Service". At the top left, there is a red speech bubble icon with the text "LIVE CHAT". Below this, the chat window is titled "Live Chat Window" and includes a link "Click to Reload Chat". The chat history shows a system message: "Please hold for a Verizon Wireless Customer Support Representative. Thank you for your patience." This is followed by a message from the agent, Chris: "Hello, welcome to our Wireless Customer Support live chat. How can I help you?". The user then asks: "I just received a bill summary and I have been charged \$51.22. I can only see the total charge on the website. Is there any way to check my bill with details -- for example, with a charge for each phone call, somewhere on the website? I want to know the itemized charges." Chris responds: "I see. You can visit our website and log in with your 'My Account' ID and password. After logging in, click 'My Account & Billing', then 'View Bill'. The page will give you a breakdown of all charges and the details of each charge." The user replies: "Okay, wait a minute...I am logging in now." At the bottom of the chat window, there is a text input field with the placeholder "Please type your message here :". Below the input field are buttons for "End Chat" and "Send Message". In the bottom left corner, there is a "Cybertrust Security" logo. In the bottom right corner, there are "AAA" text and a "Sound on" button with a speaker icon. At the very bottom of the browser window, there is a footer that reads "Privacy Policy | © 2014".

Welcome to Live Chat Service

**LIVE CHAT**

Live Chat Window [Click to Reload Chat](#)

You: The itemized bill indicates that \$44.53 of the bill is coming from “Global Roam – South Africa”. I did go to South Africa earlier this month for one week, and I used Internet there. Can you tell me the rate of the roaming data? And how much data I used?

Chris: Global data can be expensive. The data transport charge in South Africa is \$0.02/KB. So \$44.53 means that you used about 2 MB data there.

You: 2 MB is reasonable. But as I may go abroad very often, can you let me know more details about the roaming data?

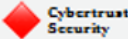

You: Such as how much data I used each day on which app or website?

You: And what are the rates for other countries such as India or China?

Chris: I understand your situation. As the use of roaming data is handled by another department, I can only see how much data in total you used for roaming. I will pass your case to the corresponding staff member and he/she will get back to you within 24 hours.

Please type your message here :

**End Chat** **Send Message**

 AAA 

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## APPENDIX I

### Pretest of Study 6: Competence–Warmth Focus Depending on the Relationship

#### Norm Orientation and Unsatisfactory Service Outcomes

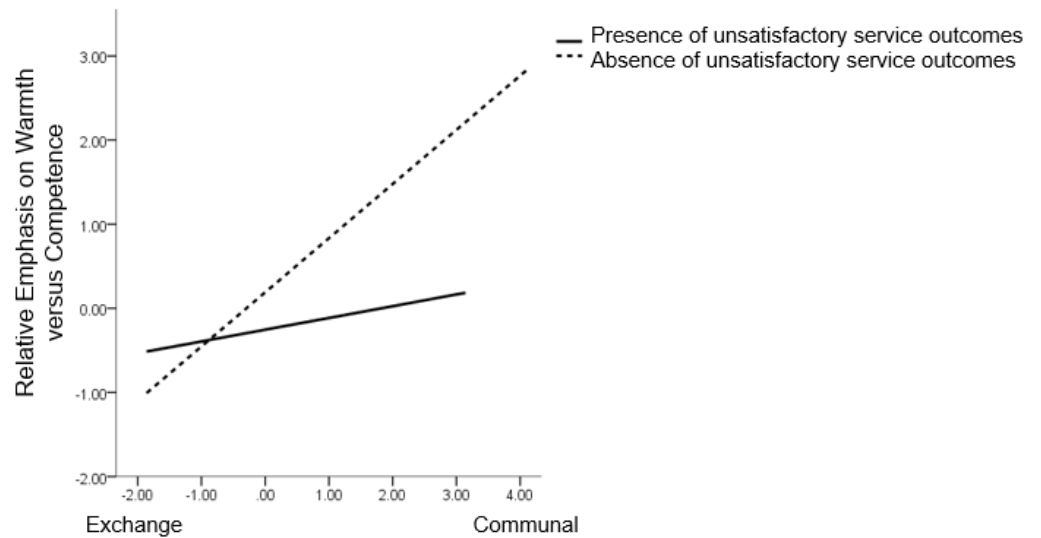
One hundred forty participants were recruited from MTurk (54% female, mean age = 35.91). I first measured their relationship norm orientation using the same items as in the study 4 ( $\alpha = .89$ ). Then, participants read a hypothetical conversation between a customer and an online service employee with the presence or absence of an unsatisfactory service outcome depending on the condition (see appendix H). After reading the conversation, participants indicated the extent to which they would focus relatively more on evaluating the warmth rather than the competence of the service employee if they were the customer in the conversation, using a 7-point semantic differential scale (e.g., competent/warm, capable/friendly, efficient/kind,  $\alpha = .92$ ).

A regression analysis was conducted with the mean-centered relationship norm orientation, an unsatisfactory service outcome, and their interaction as the independent variables and the relative emphasis on warmth versus competence as the dependent variable. The main effect of the unsatisfactory service outcome was significant and negative, indicating that the unsatisfactory service outcome shifted participants' emphasis toward competence ( $\beta = -.18$ ,  $t(136) = 2.41$ ,  $p = .017$ ). More importantly, the interaction was significant ( $\beta = -.26$ ,  $t(136) = 3.50$ ,  $p = .001$ ). Specifically, in the absence of the unsatisfactory service outcome, the more participants were communal (vs. exchange) oriented, the more they emphasized warmth rather than competence ( $\beta = .58$ ,  $t(71) = 6.04$ ,  $p < .001$ ). This result is consistent with my theorization and findings in study 4. However, in the presence of the unsatisfactory service outcome, participants focused more on competence



regardless of their relationship norm orientation ( $\beta = .19$ ,  $t(65) = 1.52$ , NS; see the following figure).

COMPETENCE-WARMTH FOCUS DEPENDING ON THE RELATIONSHIP NORM ORIENTATION AND UNSATISFACTORY SERVICE OUTCOMES



Overall, this pretest showed that customers focus more on evaluating the competence rather than the warmth of a service employee regardless of their relationship norm orientation when they experience unsatisfactory service outcomes, whereas in the absence of unsatisfactory service outcomes, communal-oriented customers emphasize warmth and exchange-oriented customers emphasize competence.

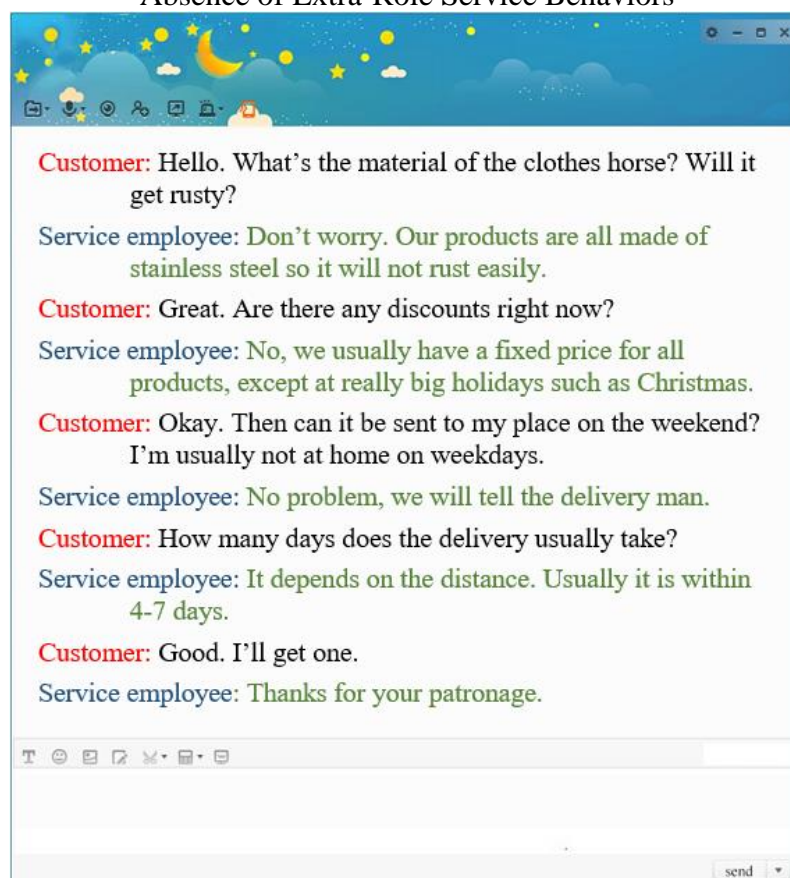
## APPENDIX J

### Pretest of Study 7: Competence–Warmth Focus Depending on the Relationship

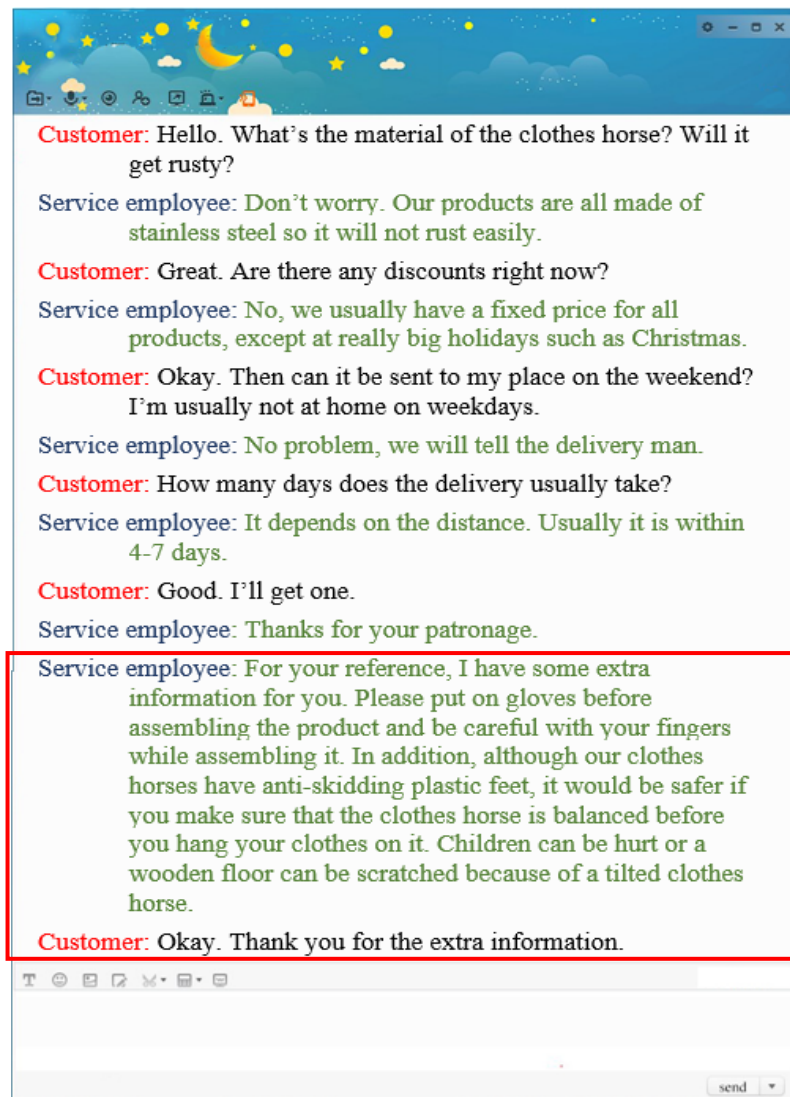
#### Norm Orientations and Extra-Role Service Behaviors

One hundred twelve participants (48% female, mean age = 36.96) were recruited from MTurk. I first measured their relationship norm orientation using the same items as in study 4 ( $\alpha = .86$ ). Next, participants read a hypothetical conversation between a customer and a service employee. The conversation either included or did not include the service employee's extra-role service behaviors (see the following figures).

#### Absence of Extra-Role Service Behaviors



## Presence of Extra-Role Service Behaviors

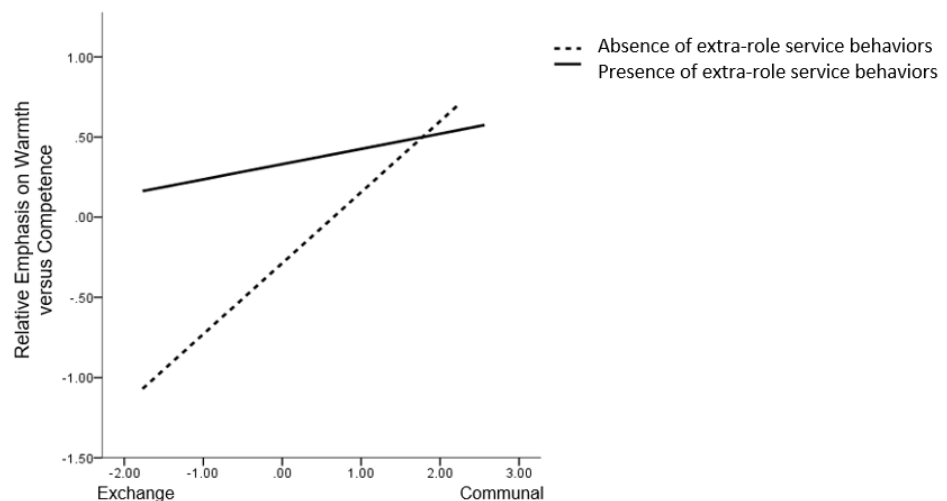


NOTE: The red box indicates the presence of extra-role service behaviors.

After reading the conversation, participants indicated the extent to which they would focus relatively more on the warmth rather than the competence of the service employee if they were the customer in the conversation, using a 7-point semantic differential scale (e.g., competent/warm, capable/friendly, efficient/kind,  $\alpha = .85$ ). I also included three manipulation check items to see whether participants recognized extra-role service behaviors (e.g., “the service provider proactively provided extra information that was not requested by the customer”,  $\alpha = .93$ ).

Manipulation check items indicated that participants recognized extra-role service behaviors, confirming that my manipulation was successful ( $M_{\text{presence}} = 6.13$ ,  $SD = .88$  vs.  $M_{\text{absence}} = 3.23$ ,  $SD = 1.47$ ;  $F(1, 110) = 161.35$ ,  $p < .001$ ,  $d = 2.39$ ). I then conducted a regression analysis with the mean-centered relationship norm orientation, extra-role service behaviors, and their interaction as the independent variables and the relative emphasis on warmth versus competence as the dependent variable. The main effect of extra-role service behaviors was significant and positive, indicating that the presence of extra-role service behaviors shifted participants' emphasis toward warmth ( $\beta = .32$ ,  $t(108) = 3.73$ ,  $p < .001$ ). More importantly, the interaction was significant ( $\beta = -.19$ ,  $t(108) = 2.22$ ,  $p = .028$ ). Specifically, when employees did not perform extra-role service behaviors, participants with a communal relationship orientation were more likely to emphasize warmth rather than competence ( $\beta = .56$ ,  $t(54) = 4.92$ ,  $p < .001$ ). This result pattern is consistent with my theorization and findings in study 4. However, when employees performed extra-role service behaviors, participants focused more on warmth regardless of their relationship norm orientation ( $\beta = .11$ ,  $t < 1$ , NS; see the figure below).

COMPETENCE-WARMTH FOCUS DEPENDING ON THE RELATIONSHIP NORM ORIENTATIONS AND EXTRA-ROLE SERVICE BEHAVIORS



Overall, the pretest showed that the presence of extra-role service behaviors makes customers focus more on warmth than on competence regardless of their relationship norm orientation, whereas in the absence of extra-role service behaviors, communal-oriented customers emphasize warmth and exchange-oriented customers emphasize competence.

## APPENDIX K

### Examples of Extra-Role Service Behaviors in Study 7

- Proactively remind customers of the company's warranty policy; for example:

*"All of my products enjoy a three-year warranty period, and all accessories for the product can be replaced with new ones for free within one year after purchase of the product."*

- Proactively remind customers about potential safety issues with the products; for example:

*"I recommend that you put on gloves before assembling the product, and be careful with your fingers while assembling it."*

- Proactively ask and resolve customers' concerns; for example:

*"Can I ask whether you still have any other concerns regarding product features, warranty, or shipping? I am happy to chat with you about any concerns."*

- Proactively provide information about events and promotions; for example:

*"Dear customer, do not forget to visit my website for discount coupons."*

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