A Dual-Sequence Framework for B2C Relationship Formation: Moderating Effects of Employee Communication Style in Online Group Chat

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ABSTRACT

Past research on B2C relationships has typically focused on unidimensional constructs of satisfaction, trust, and commitment, ignoring underlying psychological dimensions. Although some studies have examined cognitive and affective dimensions of these relational constructs, dual sequential effects in relationship formation have not been investigated. This study proposes and finds (in the context of online group chat) that parallel cognitive and affective sequences of relationship formation take place, thus expanding scholarly understanding of underlying psychological processes and offering marketing practitioners two different ways to build relationships with consumers. The proposed dual-sequence relational framework further advances theory by shedding light on counterintuitive findings.
in past research. The study also supports the proposed moderating effects of employee communication style, such that sequential effects of cognitive (affective) relational constructs are stronger with a task-oriented (socially oriented) employee, thus offering insights to practitioners in hiring and training employees to match specific organizational goals for building relationships with consumers.

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INTRODUCTION

In recent years, marketers have been trying to build relationships with consumers through mass customization in offline contexts, but although this approach is better than mass marketing, it is not easy to build business-to-consumer (B2C) relationships without interpersonal linkages (Johnson & Grayson, 2005). The same is true for online contexts. Although Bauer, Grether, and Leach (2002) investigated whether Web site characteristics can be used to build relationships with consumers, Gefen and Straub (2003) have attributed the low levels of relationships with online consumers to the lack of social presence on the Web. However, as interpersonal communication on the Internet is growing, there is good potential to form B2C relationships through this medium as well (Komiak & Benbasat, 2006; Preece, 2001; Walther 1992). As relationship building gives firms a definite strategic advantage (Beatty, Mayer, Coleman, Reynolds, & Lee, 1996), the increasing importance of building B2C relationships through personal interactions with contact employees (in offline as well as online contexts) is of critical academic and practitioner interest.

Although meaningful conceptual frameworks of relationship formation have been proposed (e.g., Bauer, Grether, & Leach, 2002; Garbarino & Johnson, 1999; Morgan & Hunt, 1994), these are typically based on unidimensional relational constructs (i.e., satisfaction, trust, and commitment), which fail to consider underlying psychological dimensions. Yet, researchers (e.g., Kanawattanachai & Yoo, 2002; Meyer, Becker, & Vandenberghe, 2004) have indicated that relational constructs have dual dimensions—cognitive and affective—that should have separate effects on behavioral intentions. If so, this would result in two parallel relational processes, with important implications for (1) advancing theory through better understanding the psychological processes in relationship formation, and (2) enhancing marketing practice by allowing marketers to use two different approaches to build relationships with consumers, based on organizational goals.

So far, however, this idea of parallel processes of relationship formation (i.e., independent, sequential effects of cognitive and affective dimensions) has remained underdeveloped in both the online and offline B2C marketing literatures. A few studies (e.g., Johnson & Grayson, 2005; Komiak & Benbasat, 2004) have examined a subset of cognitive vs. affective relational constructs (e.g., cognitive and affective trust) in B2C exchanges and have found separate effects. However, researchers have not yet examined a full set of dual relational constructs (i.e., cognitive and affective dimensions of satisfaction, trust, and commitment) to determine if indeed dual sequences of relational constructs are formed, leading independently to consumers’ behavioral intentions. As both online and offline marketers are struggling to develop relationships with consumers (e.g., Harris & Goode, 2004; Johnson & Grayson, 2005), understanding
the underlying processes in building such relationships is critical. The primary purpose of this paper, therefore, is to develop a relational framework that examines these issues to advance scholarly understanding of relationship formation and to offer actionable implications for marketers.

In addition, some past research on business-to-business (B2B) relationship formation has used a mix of unidimensional and dual relational constructs, which has led to some counterintuitive findings. For example, Geyskens and Steenkamp (2000) found that greater social satisfaction (experienced by customers) reduces their loyalty. Also, research that viewed calculative commitment in negative terms to denote high dependence (e.g., Geyskens, Steenkamp, Scheer, & Kumar, 1996; Verhoef, Franses, & Hoekstra, 2002; Wetzels, de Ruyter, & van Birgelen, 1998) has suggested that calculative commitment must be minimized in favor of affective commitment. Instead, by viewing calculative commitment as the economic or instrumental worth of a provider (cf., Allen & Mayer, 1990), it could be an additional way to enhance relationships with consumers. Therefore, a related objective of this study is to investigate these issues to shed light on counterintuitive or contradictory findings in past research.

Researchers have stressed that the role of the contact employee (e.g., Beatty et al., 1996; Crosby, Evans, & Cowles, 1990), and in particular, employee communication style in personal interactions with consumers (e.g., Miles, Arnold, & Nash, 1990; Sparks, Bradley, & Callan, 1997) is crucial in building B2C relationships. Understanding how the communication style of contact employees can lead to different responses from customers presents a major opportunity for differentiation in building B2C relationships. Moreover, employee communication style is relevant not only for offline, interpersonal contact; even in online settings, which are “text-only” and contextually less rich, the employee’s written communication is critical in demonstrating how the company relates to consumers (e.g., Andrews & Haworth, 2002; Preece, 2001). Hence, another objective of this paper is to examine the role of employee communication style in enhancing relationship formation with consumers.

Related to this issue, the organizational and marketing literatures view task vs. social orientation at opposite ends of the communication continuum (e.g., Bales, 1958; Jacobs, Evans, Kleine, & Landry, 2001). Moreover, researchers in marketing have found that task vs. social communication styles are associated with differences in cognitive, affective, and behavioral responses from recipients (e.g., Dion & Notarantonio, 1992; Sparks, Bradley, & Callan, 1997; Williams & Spiro, 1985). However, there is little other research on employee communication style in offline B2C contexts, and some contradictory perspectives in online contexts. For example, some authors conclude that online communication is inherently task oriented (Kiesler, Siegel, & McGuire, 1984) or that consumers prefer it to be so (Froehle, 2006). In contrast, other researchers have suggested that online communication can be socially oriented, creates empathy, and encourages participation in virtual groups (Preece, 1999; Walther, 1992), or that both styles generate similar responses (Kahai & Cooper, 1999). This variability in perspectives as well as the lack of theoretical development (in both offline and online B2C contexts) warrants a closer examination of task vs. social employee communication styles in forming relationships with consumers.

Whereas the literature underscores the need to better understand the effects of employee communication style, previous research has focused on direct, rather than moderating, effects (e.g., Dion & Notarantonio, 1992; Sparks, Bradley, &
Callan, 1997; Williams & Spiro, 1985); for an exception, see another study by the authors (Dolen, Dabholkar, & de Ruyter, 2007). Yet, researchers emphasize the importance of investigating moderating effects (Baron & Kenny, 1986; James & Brett, 1984), particularly in contact-employee contexts (Michaels & Dixon, 1994; Stock & Hoyer, 2005; Yilmaz & Hunt, 2001), given that moderating effects of external factors tend to be more meaningful both for theory and practice (Dabholkar & Bagozzi, 2002). Thus, another objective of this study is to investigate the moderating effects of employee communication style on the proposed relationship formation framework.

CONCEPTUAL FRAMEWORK

Proposed Dual-Sequence Model of Relationship Formation

Although relationship models vary widely, there is substantial empirical support for the positive effects of satisfaction on trust (e.g., Garbarino & Johnson, 1999; Selnes, 1998), trust on commitment (e.g., Morgan & Hunt, 1994; Sargeant & Lee, 2004), and satisfaction on commitment (e.g., Anderson & Srinivasan, 2003; Bettencourt, 1997), and even support for all three links in one study (e.g., Bauer, Grether, & Leach, 2002). Therefore, these three linkages are used as the basis for the proposed framework, but unlike these studies that use unidimensional measures of relational constructs, this framework distinguishes between cognitive and affective dimensions, based on the rationale that cognitive and affective evaluations are uniquely different. In addition, the proposed framework goes further than past studies (e.g., Gruen, Summers, & Acito, 2000; Johnson & Grayson, 2005) that have examined selected subsets of cognitive and affective relational constructs. First, all three relational constructs (satisfaction, trust, and commitment) are included in their dual form (cognitive and affective) in order to ascertain that the separate links found in past research on subsets of these constructs will hold when all six constructs are included in one study. Second, two parallel relationship formation processes (i.e., cognitive and affective) are proposed, which, if supported, will allow practitioners to pursue different approaches to attain desired outcomes from customers. This conceptualization is based on emerging evidence that customer evaluations of perceived economic performance determine cognition-based relational consequences (e.g., Doney & Cannon, 1997; Kanawattanachai & Yoo, 2002), whereas customer evaluations of social performance determine affect-based relational consequences (e.g., Beatty et al. 1996; Crosby, Evans, & Cowle, 1990). Before presenting the proposed framework of dual relational sequences, the six key relational constructs are defined.

**Economic and Social Satisfaction.** A distinction between economic and social satisfaction has been made in B2B contexts (e.g., Geyskens & Steenkamp, 2000; Hernández-Espallardo, 2006), which can be applied to the B2C context as well. Specifically, economic satisfaction encompasses customer evaluations of economic or instrumental outcomes, task accomplishment, and goal attainment, whereas social satisfaction captures customer evaluations of social presence, interpersonal interactions, and enjoyment from a social exchange.

**Cognitive and Affective Trust.** Unlike satisfaction, trust has been frequently conceptualized as a dual construct across a wide variety of research
domains. One such distinction is between credibility/reliability and benevolence as two dimensions of trust (e.g., Garbarino & Lee, 2003; Komiak & Benbasat, 2004). Moreover, several authors (e.g., Johnson & Grayson, 2005; Komiak & Benbasat, 2006; McAllister, 1995; Stewart & Gosain, 2006) have labeled reliability (or credibility) as cognitive trust and benevolence as affective trust. Cognitive trust reflects the customer’s confidence that the contact employee (or service provider) is honest, accurate, and dependable, and keeps promises, whereas affective trust is the conviction that the employee (or provider) has genuine concern for the customer’s welfare, and is caring and supportive.

Calculative and Affective Commitment. Researchers have defined commitment as closer to an attitude than a behavior (Gundlach, Achrol, & Mentzer, 1995) and have found that its effects are independent of the duration of the relationship (Bettencourt, 1997). Moreover, Jacobs et al. (2001) concluded that initial buyer-seller interactions not only determine immediate outcomes, but also are good predictors of long-term outcomes and relationships. Based on this background, the framework focuses on the commitment of customers in the initial phase of relationship formation.

The marketing and organizational literatures have suggested that “commitment” is multidimensional (e.g., Meyer, Becker, & Vandenberghe, 2004; Verhoef, Franses, & Hoekstra, 2002). As normative commitment arises from a sense of moral obligation (cf., Allen & Meyer, 1990), it is not as relevant as calculative and affective commitment, especially at the stage of relationship formation (Gruen, Summers, & Acito, 2000). Calculative commitment refers to an evaluation of the instrumental worth of the organization for the customer, whereas affective commitment refers to the emotional attachment that the customer feels toward the organization (Gruen, Summers, & Acito, 2000).

Cognitive Sequence of Relational Constructs. Cognitive trust is built on the competence of others (Luhman, 1979) and therefore can be strengthened by customers’ perceptions of task accomplishment and goal attainment, which are reflected in economic satisfaction. Similarly, researchers (Doney & Cannon, 1997; Kanawattanachai & Yoo, 2002; McAllister, 1995) have proposed that the assessment of rational characteristics builds cognitive trust. In addition, Johnson and Grayson (2005) have verified empirically that customers’ evaluations of instrumental aspects lead to cognitive trust. Thus, a positive influence of economic satisfaction on cognitive trust is anticipated (see H1a).

Although some researchers (e.g., Geyskens et al., 1996; Wetzels, de Ruyter, & van Birgelen, 1998) have reported a negative influence of trust on calculative commitment in B2B contexts, other researchers have found significant positive effects of trust on self-reported measures of relationship continuity (e.g., Morgan & Hunt, 1994), which is in keeping with the original terminology of “continuance commitment” (cf., Allen & Meyer, 1990). Komiak and Benbasat (2004) have suggested that cognitive trust will increase a consumer’s dependence on the firm, thus implying an increase in calculative commitment. Colwell and Hogarth-Scott (2004) found empirical evidence that cognitive trust reduced switching behavior in a study on banking services. Therefore, it is proposed that cognitive trust will have a positive impact on calculative commitment (see H1b).

Finally, as calculative commitment represents an evaluation of the costs and benefits of interactions, it is likely to be directly influenced by economic satisfaction. For example, Wetzels, de Ruyter, and van Birgelen (1998) found a positive effect
of unidimensional satisfaction (but measured in rational terms) on the calculative commitment of office equipment buyers. Beatty et al. (1996) have suggested that customers who believe that the service they get from a salesperson is convenient, useful, and time efficient (i.e., aspects of economic satisfaction) are less likely to switch providers. Thus, economic satisfaction is expected to contribute positively to calculative commitment (see H1c). Hence, it is hypothesized that:

**H1a:** Economic satisfaction will have a positive effect on cognitive trust.

**H1b:** Cognitive trust will have a positive effect on calculative commitment.

**H1c:** Economic satisfaction will have a positive effect on calculative commitment.

**Affective Sequence of Relational Constructs.** Although the literature provides no specific evidence for the link between social satisfaction and affective trust, research shows that behavior demonstrating interpersonal care and concern is critical for the development of affective trust (McAllister, 1995; Rempel, Holmes, & Zanna, 1985). As evaluations of interpersonal interactions are an integral aspect of social satisfaction, it is proposed that social satisfaction will have a positive influence on affective trust (see H2a).

It is logical that affective trust (based on recognition of care and concern) will lead to affective commitment (emotional association). Beatty et al. (1996) have argued that social dependence (an aspect of affective trust) binds customers to the service provider, which indicates affective commitment. There is empirical support for this link as well. McAllister (1995) found that affective trust increases a desire to assist others in meeting their objectives (e.g., customers want the firm to do well), which suggests a form of affective commitment. Li, Browne, and Chau (2006) found a positive effect of trust (the measure of which included affective items) on affective commitment. Therefore, a positive effect of affective trust on affective commitment is anticipated (see H2b).

Finally, as affective commitment represents an emotional tie to the provider, it is likely to be directly influenced by social satisfaction, which is based on an evaluation of the interpersonal aspects of the exchange. Beatty et al. (1996) have suggested that social and enjoyable aspects of interactions with salespeople have a positive effect on consumers’ sense of belonging, and this helps create relationships where emotional value is inherent in the exchange, indicating affective commitment. Thus, social satisfaction is expected to have a positive effect on affective commitment (see H2c). Therefore, it is hypothesized that:

**H2a:** Social satisfaction will have a positive effect on affective trust.

**H2b:** Affective trust will have a positive effect on affective commitment.

**H2c:** Social satisfaction will have a positive effect on affective commitment.

**Ties between Cognitive and Affective Sequences.** Attitudinal literature (cf., Fishbein & Ajzen, 1975) as well as research on consumer evaluation processes (e.g., Dabholkar, 1994) have demonstrated that cognitive processes lead to affective processes, especially in new encounters or in early stages of evaluation. Also,
research on relationships has highlighted the development of interpersonal affect upon a cognitive base (e.g., Jacobs et al., 2001; Rempel, Holmes, & Zanna, 1985), which is even more pronounced in early stages of the relationship. Therefore, in addition to the dual cognitive and affective sequences of relational constructs, cognitive dimensions are expected to positively influence their affective counterparts.

When consumers interact with contact employees, some level of economic satisfaction may be necessary for social satisfaction to develop. McAllister (1995) writes that consumers want their baseline expectations to be met before they invest in social and relational exchanges. Johnson and Grayson (2005) posit that as economic benefits of relational exchange become apparent, affective evaluations develop. Therefore, it is proposed that economic satisfaction will enhance social satisfaction (see H3a).

With respect to the interplay between the trust components, the primacy effect of cognition has been found in a variety of contexts. Organizational literature (e.g., Lewis & Weigert, 1985; McAllister, 1995) shows that cognitive trust both precedes and influences affective trust, especially in the early stages of relationship formation. In recent studies on offline financial service delivery, Colwell and Hogarth-Scott (2004) and Johnson and Grayson (2005) provide empirical evidence of a positive impact of cognitive trust on affective trust. In online or computer contexts, Kanawattanachai and Yoo (2002) found that virtual teams formed cognitive trust before developing affective trust; Komiak and Benbasat (2006) found that cognitive trust is an antecedent to affective trust in the adoption of online recommendation agents; and Stewart and Gosain (2006) found the same link for software development teams. Therefore, cognitive trust is expected to have a positive effect on affective trust (see H3b).

Finally, it is accepted that affective commitment typically forms more slowly than calculative commitment and tends to be influenced by the latter (e.g., Allen & Meyer, 1990; Meyer, Becker, & Vandenberghe, 2004). Similarly, Harris and Goode (2004) found support for the cognitive-affective sequence of loyalty phases as proposed by Oliver (1997). Therefore, it is hypothesized that calculative commitment will have a positive influence on affective commitment (see H3c).

**H3a:** Economic satisfaction will have a positive effect on social satisfaction.

**H3b:** Cognitive trust will have a positive effect on affective trust.

**H3c:** Calculative commitment will have a positive effect on affective commitment.

**Consequences of the Relational Constructs.** Research suggests that commitment has a direct effect on customers’ behavioral intentions (e.g., Bettencourt, 1997; Gruen, Summers, & Acito, 2000; Morgan & Hunt, 1994). The proposed framework examines two critical types of behavioral intentions: buying intentions (also called purchase or patronage intentions) and participation intentions (i.e., intentions to engage in voluntary participation behaviors such as providing feedback).

Researchers (e.g., Dick & Basu, 1994) have suggested that switching costs (an aspect of calculative commitment) are drivers of behavioral loyalty (which encompasses both buying and participation intentions). There is empirical support for this idea as well. Li, Browne, and Chau (2006) found calculative commitment to increase patronage intentions in a study of Web site vendors, whereas Gruen et al. (2002)
found that calculative commitment increased participatory behaviors of insurance salespeople with their local chapters. These findings suggest that customers who decide to stay with a provider for economic benefits will not only buy from the firm, but also make constructive suggestions to help the firm. Hence, a positive effect of calculative commitment is expected on buying intentions as well as participation intentions (see H4a and H4b).

Research shows that affective commitment has a positive influence on both buying behavior and voluntary behavior (Verhoef, Franses, & Hoekstra, 2002). This is logical because emotional attachment to an organization will encourage customers to buy from the organization as well as to perform helpful behaviors. Likewise, Sargeant and Lee (2004) found that relationship commitment (measured with affective items) had a positive effect on the “giving” behavior of donors; moreover, in a charity context, “giving” can encompass both patronage and participation. In addition, Li, Browne, and Chau (2006) found a positive link from affective commitment to patronage intentions, while Gruen et al. (2002) found a positive effect of affective commitment on participation. Therefore, positive effects of affective commitment are anticipated on buying intentions as well as participation intentions (see H4c and H4d).

**H4a:** Calculative commitment will have a positive effect on buying intentions.

**H4b:** Calculative commitment will have a positive effect on participation intentions.

**H4c:** Affective commitment will have a positive effect on buying intentions.

**H4d:** Affective commitment will have a positive effect on participation intentions.

The proposed dual-sequence framework for B2C relationship formation (i.e., H1a–H4d) is shown in Figure 1.

![Figure 1. Dual-sequence Framework for B2C Relationship Formation with Moderating Effects of Employee/Advisor Communication Style (Task vs. Social).](image-url)
Moderating Effects of Employee Communication Style

Organization literature categorizes (employee or leader) communication style into two basic types: task oriented and socially oriented (cf., Bales, 1958). A *task-oriented style* focuses on goals, exchanging knowledge, and fulfilling recipient needs in terms of information. Others have referred to this style as precision (Dion & Notarantonio, 1992) or “impersonal” (Sparks, Bradley, & Callan, 1997), but they all capture the essence of task-oriented communication. In contrast, a *socially oriented style* focuses on interpersonal relationships, satisfying emotional needs of recipients, and facilitating interactions. Behaviors related to this style are also referred to as “interactive behaviors” (Williams & Spiro, 1985), “relational selling behaviors” (Crosby, Evans, & Cowles, 1990), or “accommodative behaviors” (Sparks, Bradley, & Callan, 1997), but they all incorporate socially oriented communication.

Although these studies have examined direct effects of task vs. social communication, they have not investigated moderating effects of employee communication style; for an exception, see another study by the authors (Dolen, Dabholkar, & de Ruyter, 2007). Other researchers (e.g., Michaels & Dixon, 1994; Stock & Hoyer, 2005; Yilmaz & Hunt, 2001) have studied moderating effects of salesperson characteristics on salesperson attitude, job satisfaction, or performance, and have identified the moderating role of contact-employee characteristics as critical. However, moderating effects of *any* employee characteristics (including communication style) on the dynamic process of relationship formation have not yet been examined in either the organizational or the marketing literatures.

To address these gaps, the literature on social exchanges and social contagion is examined. Blau (1964) identifies social exchanges as “voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others (p. 91).” It is proposed that *relational exchanges* (e.g., between contact employees and customers) are *those social exchanges that are specifically motivated by the expectation of building a relationship between the parties involved in the exchange.* Economists and sociologists have offered the important insight that influence in social exchanges may be driven by social contagion, i.e., an individual’s attitudes and behavior may be strongly influenced through exposure to other individuals’ attitudes and behavior as a result of social interactions (e.g., Brett & Stroh, 2003).

Various theoretical reasons have been proposed for social contagion, each describing a different causal mechanism of social influence. One rationale is the reciprocity principle of social influence, whereby people tend to return to others whatever they receive from them (Gouldner, 1960). Another rationale is that driven by the need for social presentation and cognitive consistency (e.g., Festinger, 1954), individuals use socially induced cognitive and affective strategies to match the behaviors of those with whom they interact. Alternatively, the influence of another person may occur without conscious motivation. For instance, it has been demonstrated that individuals automatically imitate the emotional reactions of others through emotional contagion (Barsade, 2002), or they learn from others without deliberation through vicarious modeling (Bandura, 1986). Despite these many different theoretical explanations, the practical phenomena described are the same, and thus social contagion theory provides clear direction for suggesting moderating effects of employee communication style on B2C relationship formation.

Applying the logic of social contagion to employee–consumer interactions, it is expected that consumers will respond in a similar fashion to the communication style the employee uses. Thus, a task-oriented employee, who tends to be rational,
goal oriented, and focused on productive outcomes, will trigger cognition-based evaluations by customers (e.g., Jacobs et al., 2001), suggesting moderating effects of communication style. For example, it has been demonstrated that task-oriented leaders encourage rational, goal-setting, cognitive processes among members (Faraj & Sproull, 2000; Sagie, 1996). Similarly, Cannon-Bowers and Salas (2001) suggest that focusing on cognitive processes encourages group members to pay greater attention to cognitive evaluations. By emphasizing positive perceptions about the instrumental aspects of the exchange, a task-oriented contact employee will stimulate the importance of cognition-based satisfaction, trust, and commitment as antecedents in consumer evaluations, thereby strengthening the links connecting the cognition-based constructs with each other and with the behavioral outcomes. Thus, the following moderating effects are hypothesized:

**H5:** An employee who uses a task-oriented communication style (rather than a socially oriented style) will strengthen the following effects in consumer evaluations:

(a) The positive effect of economic satisfaction on cognitive trust
(b) The positive effect of cognitive trust on calculative commitment
(c) The positive effect of economic satisfaction on calculative commitment
(d) The positive effect of calculative commitment on buying intentions
(e) The positive effect of calculative commitment on participation intentions

In a parallel fashion, a socially oriented employee will generate a tendency of affective-based processing among customers (e.g., Stock & Hoyer, 2005; Pugh, 2001), suggesting moderating effects of communication style. Roberts and Aruguete (1999) found that social aspects of information exchange promoted the influence of affective performance aspects in evaluations by individuals due to reciprocity. Similarly, in the sales context, customers were found to adapt their affective processing to match the affective mindset of the salesperson (e.g., Stock & Hoyer, 2005; Pugh, 2001). A communication style that stresses affective processes, such as personal bonding among members, encourages individuals to pay greater attention to affective antecedents in their evaluations (Bartel & Saaverda, 2000). By emphasizing positive perceptions about relational aspects of the exchange, a socially oriented contact employee will stimulate the importance of affect-based satisfaction, trust, and commitment as antecedents in consumer evaluations, thereby strengthening the links connecting the affective-based constructs with each other and with the behavioral outcomes. Thus, the following moderating effects are hypothesized:

**H6:** An employee who uses a socially oriented communication style (rather than a task-oriented style) will strengthen the following effects in consumer evaluations:

(a) The positive effect of social satisfaction on affective trust
(b) The positive effect of affective trust on affective commitment
(c) The positive effect of social satisfaction on affective commitment
(d) The positive effect of affective commitment on buying intentions
(e) The positive effect of affective commitment on participation intentions

The moderating effects of employee communication style (i.e., H5a–H6e) are also shown in Figure 1, presented earlier.
METHODOLOGY

Research Context

In deciding on an offline vs. an online context, it was noted that although marketers today are well aware of the vital importance of an online presence (e.g., Reichfeld & Schefter, 2000), business analysts reveal that online conversion rates and consumer repurchase intentions remain consistently low (CRM Today, 2004). To restore the personal touch that is lost in the typical online self-service options, companies increasingly include live communication on their Web sites, where consumers can interact with employees or with other consumers (e.g., Gefen & Straub, 2003). Anecdotal evidence shows that giving this extra attention to consumers via interactive online encounters helps to build relationships and increase online sales (Bauerlein, 2006; Tedeschi, 2006), but no scholarly research has studied this trend or its impact on building B2C relationships.

Within the online context, it has been noted that online chat has the potential to persuade and satisfy consumers (Bickart & Schindler, 2001; Dolen & Dabholkar, 2005). Moreover, researchers (e.g., Yen & Gwinner, 2003) have stressed the need to understand relational aspects of online encounters such as chat. Specifically, company-initiated group chat was selected, where consumers sign up to exchange information with each other and with a product or service advisor, e.g., SunTrust Bank’s group chats on mortgages (http://www.suntrustmortgage.com/chat/chatlist.asp). This is clearly a new trend where companies can offer expert information in an online, social setting to win over chat participants as long-term customers (Informationweek, 2001). Given the firm’s active role in inviting consumers to chat and providing advice on products and services, online group chat has many possibilities for building B2C relationships. Furthermore, as individuals chat online in order to get information and for social interaction (Zinkhan, Kwak, Morrison, & Peters, 2003), the context of online group chat is ideal for studying the moderating effects of task vs. social communication styles of the contact employee, or advisor in this case.

In particular, the study examines online group chat for a travel context. This topic was chosen for a number of reasons. Online travel sales (representing a lion’s share of all online sales), have been increasing at 28% a year since 2002, to reach $79 billion in 2006, and are still growing, although at a lower rate of about 17%; the tighter market is making online travel marketers look for new ways to attract “Internet-savvy consumers” (Grau, 2007). Orbitz, a leading travel marketer, already offers dyadic chat on its Web site to consumers who experience problems, and online group chat is not far behind for the industry considering the trends in multi-way online communications. Also, online consumer groups who share experiences and solve problems have a long history in the travel context, suggesting that consumers like to listen to other consumers’ views on travel topics (Dellaert, 2000). Finally, the travel setting is a context in which concepts such as satisfaction, trust, commitment, willingness to buy, and participation are relevant and important (e.g., Shankar, Smith, & Rangaswamy, 2003).

Sample

Business students from a large European university were chosen to participate in the study. College students are a highly relevant population for this study given
that they represent a critical consumer segment for online travel (Direct, 2000) and tend to be comfortable with emerging Internet formats such as online chatting (Williamson, 2006). Thus, the sample represents a population of direct interest to online marketers. In other words, the results could help marketers target college students with a view to building lifetime relationships.

In total, 211 business students participated in the study. The sample was almost equally divided by gender (52% males), with an average age of 23 years. The level of interest in travel was 6.4, and experience with online chatting was 5.03 (on scales of 1 to 7).

**Research Design and Procedure**

An experiment was conducted to carefully manipulate the task vs. social communication style of the online advisor, which would be difficult to execute in a field study. Online group chat sessions were arranged to discuss planning a trip to London, something that would be relevant and interesting to the respondents. Forty-two chat groups were formed, whereby 21 groups (105 respondents) received the task treatment and 21 groups (106 respondents) received the social treatment. Each group (approximately 5 participants) was invited to visit an online chat room specifically set up for this study. Respondents were allowed to sign up for a chat session on a day and time that suited them best. They could sign on from the university or from any other location as long as they were chatting individually. Thus, respondents met only online and not in person during the experiment. Each group was randomly assigned to one of the two treatments (i.e., task vs. social advisor communication style).

A scenario was sent online to the respondents before the actual chatting took place. It was stated that the respondent had made an appointment with a travel agency to book a trip for a small group of friends with a budget of 500 euros per person and that the respondent was especially interested in a four-day trip to London. The scenario explained that the travel agency had introduced a new service, which could replace face-to-face appointments, i.e., an online chat session for consumers with the same interest (e.g., the four-day city trip), and that the respondent had agreed to participate in such a session.

The online chat session was started after the respondents read the scenario, and lasted up to 45 minutes. Participants filled in an online survey after the chat session and were debriefed about the objectives of the research only after the complete data collection.

**Experimental Treatments**

The experimental treatments, i.e., task vs. social communication styles of the online advisor, were based on Williams and Spiro (1985) as follows. Because task-oriented communication style is goal oriented, purposeful, and structured, the task advisor’s role was to be concerned about efficiency, provide information, and direct the session. As socially oriented communication is personal and supportive, the social advisor was to reward participants verbally, showing empathy and understanding by using “emoticons” (symbols used to denote emotions, e.g., “☺”). The treatment development also drew on observations made by Preece (2001, p. 351) that in online group chats, “narrow, deep threads” characterize “factual discussions” (e.g., those guided by a task-oriented style) and “broad, shallow
threads” characterize “empathic discussions” (e.g., those guided by a socially oriented style).

Separate advisor scripts were developed for the task and social treatments, but they were standardized in format to control for extraneous influences (see Appendix A). Depending on the communication style, the advisor used standard sentences for different situations that arose from participants’ interactions. In addition, three planned interactions took place, with a researcher posing as a chat participant to help the advisor emphasize his scripted style, and these were spread out over the chat session so as not to be noticeable.

The advisor was a graduate student from England, who had studied and lived in London for four years and knew all the interesting places to visit. He was trained to use task- as well as socially oriented communication. One expert was used for both styles instead of two, in order to control for personality differences. Training was organized over several weeks during which the researchers practiced “chatting” with the advisor until his use of the different task- and socially oriented communications was appropriate, he applied the scripts and standard sentences correctly, and the three planned interactions ran as intended.

Pretesting

Several scenarios describing the city trip were developed and thoroughly pretested. Business students (not the same as those in the final studies) read each scenario and gave feedback. Based on their input, the scenarios were modified repeatedly for improvement. Using realism checks (see Dabholkar, 1994), the final scenario used in the study was considered highly realistic (rating 6.09 on a scale of 1 to 7). In addition, seven test chat sessions (with 34 new respondents) were organized to test the scripts and advisor communication styles. After each test session, respondents filled out manipulation checks (see Appendix B). T-tests on these indicated that the treatments for advisor communication style had worked well. Specifically, the means for the task manipulation check were 3.65 for a social advisor and 5.66 for a task advisor ($t = 9.27$, $p < 0.001$). Similarly, the means for the social manipulation check were 5.63 for a social advisor and 3.53 for a task advisor ($t = 9.54$, $p < 0.001$). Finally, informal interviews after the chat sessions showed that respondents saw the interactions as natural and realistic. Thus, the extensive pretesting resulted in a realistic scenario and believable scripts, and the advisor was able to create separate treatment effects of communication style.

Questionnaire Development

Although dual relational constructs have been discussed in the literature, in order to capture these constructs in an online context, scale development and adaptation were required. In addition, given that the study was not focused on relationship formation over time, but on the initial stages of relationship formation, it was important to ensure that the operationalizations were appropriate. For example, predictive commitment was measured so that it would be meaningful for participants even within the context of a single chat session.

The scales were either modified from existing scales in offline contexts or developed for the study if no appropriate scales were available. The entire questionnaire was critically reviewed by fellow academics in the field of marketing.
After incorporating a number of suggested changes, the scales were tested with 27 business students who were not part of the final study or the pretesting. Using conventional psychometric procedures (cf., Churchill, 1979), the scales were purified and prepared for data collection. The items for the constructs and their sources from the literature, where relevant, are reported in Appendix C.

RESULTS

Manipulation Checks

T-tests were conducted on the means of manipulation checks for a task vs. social advisor (see items in Appendix B). Just as in the pretest, the treatments for advisor communication style worked well in the actual experiment. The means for the task manipulation check were 3.95 for a social advisor and 5.63 for a task advisor (t = 9.91, p < 0.001). The means for the social manipulation check were 5.82 for a social advisor and 3.99 for a task advisor (t = 10.69, p < 0.001). Thus, the manipulations were significantly different in the correct direction for both communication styles.

Validating Constructs

Confirmatory factor analysis (CFA) (cf., Jöreskog & Sörbom, 1993) was conducted on all the items (for all constructs) in the proposed dual-sequence model of relationship formation (see Figure 1). The fit for this model was good (χ² = 878.50, df = 467, RMSR = 0.05, RMSEA = 0.06, NNFI = 0.91, and CFI = 0.92). However, three items were seen to have high modification indices, and as these items also appeared to be a little different in terms of content validity, they were dropped from further analysis (see Appendix C). This step improved the fit of the measurement model considerably (χ² = 635.57, df = 377, RMSR = 0.05, RMSEA = 0.06, NNFI = 0.93, and CFI = 0.94), thus providing strong support for convergent validity of the constructs. Factor loadings, standard errors, and t-values for all the items are also reported in Appendix C, and further indicate evidence of construct validity. Reliabilities of the constructs ranged from 0.83 to 0.94 and provide even more support for the strength of the measures (see Appendix C).

Correlations among the constructs ranged from 0.25 to 0.78, with only two correlations exceeding 0.75, thus providing support for discriminant validity for the majority of the constructs (see Table 1). Chi-squared difference tests were conducted for all constructs, a pair at a time, and in all cases the differences were significant (p < 0.001), thus establishing discriminant validity (cf., Anderson & Gerbing, 1988). In addition, CFAs were run on these variables (pairwise) as separate constructs vs. as a single construct. In every case, the CFAs with separate constructs had excellent fits, but the CFAs for combining two variables as a single construct had unacceptable fits, thus providing further evidence for the discriminant validity of the constructs.

Partial Disaggregation

Having tested the measures and established convergent and discriminant validity, it was decided to test partial disaggregation models (cf., Bagozzi & Heatherton,
Table 1. Correlations among Dual Relational Constructs.

<table>
<thead>
<tr>
<th></th>
<th>Economic Satisfaction</th>
<th>Social Satisfaction</th>
<th>Cognitive Trust</th>
<th>Affective Trust</th>
<th>Calculative Commitment</th>
<th>Affective Commitment</th>
<th>Buying Intentions</th>
<th>Participation Intentions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic satisfaction</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social satisfaction</td>
<td>0.66</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive trust</td>
<td>0.55</td>
<td>0.42</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective trust</td>
<td>0.46</td>
<td>0.68</td>
<td>0.57</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculative commitment</td>
<td>0.78</td>
<td>0.62</td>
<td>0.50</td>
<td>0.52</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective commitment</td>
<td>0.65</td>
<td>0.70</td>
<td>0.45</td>
<td>0.59</td>
<td>0.76</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buying intentions</td>
<td>0.45</td>
<td>0.40</td>
<td>0.26</td>
<td>0.25</td>
<td>0.59</td>
<td>0.49</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Participation intentions</td>
<td>0.41</td>
<td>0.50</td>
<td>0.34</td>
<td>0.37</td>
<td>0.42</td>
<td>0.45</td>
<td>0.40</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note: All correlations are significant at \( p < 0.01 \) (two-tailed).*
Partial disaggregation reduces measurement error compared to total disaggregation (Bagozzi & Edwards, 1998) but at the same time accounts for measurement error compared to models that aggregate all items for a given construct or models that are not based on structural equations (Dabholkar, Thorpe, & Rentz, 1996). It is an appropriate technique when convergent and discriminant validity are established for all the items so that aggregation of selected items will not lead to inappropriate indicators (Bagozzi & Edwards, 1998). Anderson and Gerbing (1988) write that at least two indicators should be used for each construct and that each indicator should only pertain to one construct. The partial disaggregation models meet all of these criteria. First, the measurement model was run with two aggregated indicators for each construct and yielded an excellent fit ($\chi^2 = 123.88$, df = 76, RMSR = 0.05, RMSEA = 0.04, NNFI = 0.96, and CFI = 0.97). Next, the same aggregated indicators were used to test the structural model as follows.

Testing the Proposed Dual-Sequence Model of Relationship Formation

Structural equations modeling (SEM) (Jöreskog & Sörbom, 1993) was used to test the dual-sequence framework (overall model) shown in Figure 1. The proposed model had an excellent fit for the whole sample ($\chi^2 = 157.53$, df = 91, RMSR = 0.06, RMSEA = 0.05, NNFI = 0.95, and CFI = 0.96). In addition, all of the hypotheses (H1a–H4d) were supported as indicated through standardized beta (or gamma) coefficients and $R^2$ values (for the full sample) as shown in Table 2. In addition to substantial effect sizes (see Kline, 1998), $R^2$ values for all endogenous variables were high enough to be of sound practical significance (see Table 2), thus further supporting the strength of the proposed links in the dual-sequence model of relationship formation.

Although the proposed model as a whole and all the individual links in it were very well supported, three competing models were tested for further validation (cf., Anderson & Gerbing, 1988). First, a model was tested without the links from the three cognitive constructs to their affective counterparts, but the model fit was not as good ($\chi^2 = 221.67$, df = 93, RMSR = 0.08, RMSEA = 0.07, NNFI = 0.91, and CFI = 0.93). Next, a model was tested with direct paths from the satisfaction and trust constructs to the two behavioral intentions; however, not only was the fit worse ($\chi^2 = 201.43$, df = 85, RMSR = 0.08, RMSEA = 0.06, NNFI = 0.91, and CFI = 0.94), but none of the new direct paths were supported. Finally, a model was tested where the order of trust and satisfaction was reversed on both the cognitive and affective sides. The fit for this model was only somewhat worse ($\chi^2 = 175.35$, df = 91, RMSR = 0.07, RMSEA = 0.06, NNFI = 0.94, and CFI = 0.95) than that for the proposed model, but in addition, not all the hypotheses in this alternate model were supported. One of the reverse links tested (from affective trust to social satisfaction) was not significant, and the link from affective commitment to participation intentions also became nonsignificant, thus failing to explain the full role of all the relational constructs. Therefore, the proposed model is both theoretically and empirically superior to alternate models with changed sequences, added direct links, or dropped effects.

Testing the Moderating Effects

The moderating effects model was tested through multigroup SEM analysis (cf., Dabholkar & Bagozzi, 2002; Jöreskog & Sörbom, 1993) with partial disaggregation
DUAL-SEQUENCE RELATIONSHIP FORMATION

Psychology & Marketing DOI: 10.1002/mar

Table 2. Testing the Dual-Sequence Relational Model Using Structural Equations.

<table>
<thead>
<tr>
<th>Model Hypotheses (H1a–H4d)</th>
<th>Standardized Beta/Gamma Coefficients Full Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a: Economic satisfaction → Cognitive trust</td>
<td>0.68***</td>
</tr>
<tr>
<td>H1b: Cognitive trust → Calculative commitment</td>
<td>0.24*</td>
</tr>
<tr>
<td>H1c: Economic satisfaction → Calculative commitment</td>
<td>0.74***</td>
</tr>
<tr>
<td>H2a: Social satisfaction → Affective trust</td>
<td>0.34**</td>
</tr>
<tr>
<td>H2b: Affective trust → Affective commitment</td>
<td>0.21*</td>
</tr>
<tr>
<td>H2c: Social satisfaction → Affective commitment</td>
<td>0.20*</td>
</tr>
<tr>
<td>H3a: Economic satisfaction → Social satisfaction</td>
<td>0.62**</td>
</tr>
<tr>
<td>H3b: Cognitive trust → Affective trust</td>
<td>0.50***</td>
</tr>
<tr>
<td>H3c: Calculative commitment → Affective commitment</td>
<td>0.51***</td>
</tr>
<tr>
<td>H4a: Calculative commitment → Buying intentions</td>
<td>0.56***</td>
</tr>
<tr>
<td>H4b: Calculative commitment → Participation intentions</td>
<td>0.25*</td>
</tr>
<tr>
<td>H4c: Affective commitment → Buying intentions</td>
<td>0.30**</td>
</tr>
<tr>
<td>H4d: Affective commitment → Participation intentions</td>
<td>0.23*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>R² Values Full Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social satisfaction</td>
<td>0.38</td>
</tr>
<tr>
<td>Cognitive trust</td>
<td>0.46</td>
</tr>
<tr>
<td>Affective trust</td>
<td>0.51</td>
</tr>
<tr>
<td>Calculative commitment</td>
<td>0.84</td>
</tr>
<tr>
<td>Affective commitment</td>
<td>0.62</td>
</tr>
<tr>
<td>Buying intentions</td>
<td>0.64</td>
</tr>
<tr>
<td>Participation intentions</td>
<td>0.20</td>
</tr>
</tbody>
</table>

Notes: All hypotheses (H1a–H4d) in the proposed dual-sequence relational model are supported. Significance of beta/gamma values: *p < 0.05; **p < 0.01; ***p < 0.001.

(cf., Bagozzi & Heatherton, 1994; Dabholkar, Thorpe, & Rentz, 1996) using the same aggregate indicators as in the measurement and structural models. An acceptable model fit was found ($\chi^2 = 344.81$, df = 191, RMR = 0.08, RMSEA = 0.08, NNFI = 0.90, and CFI = 0.92) despite the large number of constructs and paths, and chi-squared tests showed that differences across the two groups (task vs. social communication style) were caused by factor loadings rather than error variances (cf., Dabholkar & Bagozzi, 2002). Having supported the presence of moderating effects, their direction was determined next by examining beta (or gamma) coefficients for the two groups.

Nine out of the 10 proposed moderating hypotheses H5a–H6e were supported, as seen by comparing standardized beta (or gamma) coefficients across the two advisor styles in Table 3. For example, the effect of economic satisfaction on cognitive trust is stronger for the task communication style ($\beta = 0.90, p < 0.001$) compared to the social communication style ($\beta = 0.48, p < 0.001$) as predicted, thus supporting H5a. Also, most of the differences in effects sizes for H5a–H6e (i.e., differences in standardized beta or gamma values across advisor communication styles) were sizeable (see Table 3). Only one hypothesis (H5d) was not supported.
Table 3. Testing the Moderating Hypotheses Using Structural Equations.

<table>
<thead>
<tr>
<th>Moderating Hypotheses (H5a–H6e)</th>
<th>Task Style</th>
<th>Social Style</th>
</tr>
</thead>
<tbody>
<tr>
<td>EconSat → CogTru (H5a: Stronger for Task)</td>
<td>0.90***</td>
<td>0.45***</td>
</tr>
<tr>
<td>CogTru → CalcCom (H5b: Stronger for Task)</td>
<td>0.70***</td>
<td>0.37**</td>
</tr>
<tr>
<td>EconSat → CalcCom (H5c: Stronger for Task)</td>
<td>1.03***</td>
<td>0.48***</td>
</tr>
<tr>
<td>SocSat → AffTru (H6a: Stronger for Social)</td>
<td>0.07*</td>
<td>0.23*</td>
</tr>
<tr>
<td>AffTru → AffCom (H6b: Stronger for Social)</td>
<td>0.19*</td>
<td>0.36**</td>
</tr>
<tr>
<td>SocSat → AffCom (H6c: Stronger for Social)</td>
<td>0.17*</td>
<td>0.34**</td>
</tr>
<tr>
<td>CalcCom → BI (H5d: Stronger for Task)</td>
<td>0.64***</td>
<td>0.73***</td>
</tr>
<tr>
<td>CalcCom → PI (H5e: Stronger for Task)</td>
<td>0.18*</td>
<td>0.08*</td>
</tr>
<tr>
<td>AffCom → BI (H6d: Stronger for Social)</td>
<td>0.20*</td>
<td>0.34**</td>
</tr>
<tr>
<td>AffCom → PI (H6e: Stronger for Social)</td>
<td>0.16*</td>
<td>0.29*</td>
</tr>
</tbody>
</table>

Notes: All moderating hypotheses (H5a–H6e) are supported, except one (H5d is not supported). Bolder values indicate stronger effect for corresponding employee/advisor communication style. Significance of beta/gamma values: *p < 0.05; **p < 0.01; ***p < 0.001.

Key:
- Task = Task communication style of employee/advisor
- Social = Social communication style of employee/advisor
- EconSat = Economic satisfaction
- SocSat = Social satisfaction
- CogTru = Cognitive trust
- AffTru = Affective trust
- CalcCom = Calculative commitment
- AffCom = Affective commitment
- BI = Buying intentions
- PI = Participation

DISCUSSION

Theoretical Contributions

This study makes several contributions to the literature through the proposed and tested conceptual framework for B2C relationship formation. First, by examining the dual aspects (cognitive and affective) of all three relational constructs (satisfaction, trust, and commitment) within a single framework, the study (a) conceptually extends previous models with unidimensional relational constructs and (b) confirms empirical support, within one comprehensive model, for the separate links between dual relational constructs found in past research. Second, in testing alternate models with reverse effects, additional direct effects, or omitted links, the proposed model was found to have the best fit, thus ruling out alternate ways to conceptualize the dual-sequence framework of relationship formation. Third, having proposed and empirically supported dual sequences of relational constructs leading to customers’ behavioral intentions, the study establishes that relationship formation occurs through two parallel processes (cognitive and affective) and thus advances scholarly understanding of the underlying processes in B2C relationship formation.

In addition, support for the dual-sequence framework of relationship formation offers insights on counterintuitive findings in past research, which used a mix of unidimensional and dual relational constructs. For instance, Geyskens and Steenkamp (2000) found a positive effect of economic satisfaction but an unexpected negative influence of social satisfaction on loyalty, which suggests
that marketers should minimize customers’ social satisfaction to increase loyalty. An explanation for their results may lie in the fact that they measured loyalty as a unidimensional construct (with rational items), causing economic and social satisfaction to have opposing effects. In contrast, by including dual satisfaction and dual commitment constructs in this study, positive effects were found for both types of satisfaction on the matching form of commitment, suggesting that marketers should increase both types of satisfaction to increase customer commitment.

Also, researchers (Geyskens et al. 1996; Wetzels, de Ruyter, & van Birgelen, 1998) have found a negative influence of trust on calculative commitment. One explanation for these results is that trust was operationalized as a unidimensional combination of honesty and benevolence, but commitment was measured separately as calculative and affective. Another explanation is that calculative commitment was viewed in negative terms to denote high dependence. Instead, by viewing calculative commitment in terms of economic value as in this study (which removes its negative connotation), and by distinguishing between cognitive and affective trust, a positive relationship was found between cognitive trust and calculative commitment, as both have economic bases. Thus, the proposed framework and the results of this study make a strong case for measuring all relational constructs (satisfaction, trust, and commitment) in their dual forms (cognitive and affective) to avoid the type of counterintuitive results found in past research.

Support for the proposed framework also sheds new light on the link between calculative commitment and voluntary behavior. For example, in a study of insurance customers, Verhoef, Franses, and Hoekstra (2002) proposed (but failed to find) a positive link from calculative commitment to purchase behavior, but found a negative link to voluntary behavior (such as referrals or participation). In contrast, the results of this study show that calculative commitment can create positive voluntary behavior such as enthusiastic and active participation in B2C interactions. The rationale is that consumers who see the economic value of the relationship would want to participate actively in interactions with company representatives because they recognize that this will help them make better decisions. Thus, this study addresses the dilemma raised in past research about whether companies should attempt to increase calculative commitment or not, as it was expected to reduce positive voluntary behaviors by customers, such as referrals or participation. The results of this study show that both calculative and affective commitment increase buying and participation intentions, and therefore act in tandem rather than as opposing forces.

In addition to the contributions of the overall conceptual framework, the study investigated and supported moderating effects of employee communication style on links in the framework. As proposed, cognitive evaluation processes were stronger with a task-oriented employee, whereas affective evaluation processes were stronger with a socially oriented employee. In other words, depending on the communication style used, the employee can evoke and strengthen either cognitive- or affective-based sequences of relational evaluations by customers. This is a new insight for the literatures on relationship marketing, communication, and organizational behavior—that employee (or leader) communication style can be used to plan desired sequences of relational evaluations and behavioral consequences from recipients of the communication.
Limitations and Future Research

The experimental design is subject to an inherent limitation, i.e., possible lack of realism. However, the high ratings on realism checks mitigate this problem to some extent. Furthermore, although employees may display a combination of both communication styles in practice (Dion & Notarantonio, 1992; Jacobs et al., 2001), in building theory an experimental design is necessary to create distinct treatments (in this case, advisor communication styles) in order to determine the effects of each treatment accurately (cf., Kerlinger & Lee, 2000). Distinguishing between task and social orientations made it possible to carefully manipulate and control the communication style of the advisor and allowed the determination of distinct implications for each style, which would not be possible in a field study, where instances of multiple communication styles may be present in the same encounter. Future research could build on our work through a field study to examine the effects of a mixed communication style.

Although a sample of business students does not offer much demographic variation, the sample is highly relevant in terms of actionable marketing implications. The reason is that college students are frequent users of online services, especially travel-related services (Direct, 2000), and are also very familiar with online group chat (Williamson, 2006). Future tests of our framework, especially in offline contexts, could use a broader demographic sample.

Restricting evaluative judgments about relationships to a single service episode may seem counterintuitive, especially for a construct such as commitment. However, as explained earlier, the commitment constructs in this study reflect the commitment of new users in the initial phase of relationship formation, where satisfaction and trust are critical, and are good predictors of long-term outcomes and relationships (Beatty et al., 1996; Bettencourt, 1997; Gundlach, Achrol, & Mentzer, 1995; Jacobs et al., 2001). Future studies could use longitudinal designs to investigate how these judgments develop over time. Also, research done over time would allow a study of actual customer behavior, which the experimental nature of this study precluded.

The only unexpected finding was that the effect of calculative commitment on buying intentions was not greater for the task-oriented advisor as proposed (in H5d). As the difference in betas was below 0.10, it is likely that there was no difference based on style. Furthermore, as the difference in betas for H5e was also right at 0.10, the two results together may imply that once calculative commitment is developed, behavioral intentions form without being differentially influenced by employee communication style. The reason may be that a conviction of the economic value of a relationship is enough to drive behavior, whereas with affective commitment, social communication in interactions can further strengthen already formed behavioral intentions. Future studies could test whether this is indeed the case.

The base conceptual framework could be tested in a variety of offline contexts, for instance in face-to-face service, sales, or purchase settings where interpersonal interaction is important. Future research could also test the base framework for different types of interactive online encounters. It is possible that dyadic chat may stimulate more cognitive processes, whereas group chat may stimulate more affective processes, and future studies could explore such differences. Research on dyadic chat could also include communication style of the customer as a moderator. Studies in offline contexts could test all the moderating
hypotheses in this framework, as well as moderating effects of relevant customer characteristics or situational factors.

**Implications for Marketing Practitioners**

First, the context of this study reveals that company-initiated online group chat can meaningfully restore the personal touch in online interactions with consumers and help in B2C relationship formation. The findings support anecdotal results (e.g., Bauerlein, 2006; Tedeschi, 2006) that through interactive online encounters, such as group chat, marketers can achieve higher conversion rates and start building relationships with online shoppers. Second, even though this study was conducted in the online setting, the findings may have meaningful implications for both online and offline contexts given that the theoretical framework is not context dependent.

As cognitive and affective processes appear to play parallel roles in shaping behavioral outcomes, marketers must correctly assess the drivers of the relational process during interactions with consumers so that they can enhance marketing strategies and tactics aimed at building B2C relationships. Some interactions and relationships might be characterized by an economic rather than an affective base, for example, when switching costs are high. Other interactions might be based on affective motivations (e.g., Preece, 1999). Based on knowledge of consumer motivation for interactions in particular contexts, firms should focus on strengthening those dimensions (cognitive, affective, or both) that will best promote relationship formation.

The finding, that a particular communication style (displayed by contact employees in interactions with consumers) can enhance cognitive or affective processes in consumer evaluations, has further implications for marketers. Specifically, it implies that employee communication style can be used to achieve company objectives in terms of building different types of B2C relationships. To develop calculative commitment by consumers, firms should emphasize a task-oriented communication style. This means hiring contact employees who are goal oriented and efficient, and training them to provide critical and timely information to consumers for better decision making. Such a strategy will trigger a sequence of cognitive evaluations and processes—making consumers focus on economic satisfaction, which in turn will increase their cognitive trust in the provider and lead to greater calculative commitment.

In contrast, marketing strategies aimed at developing affective commitment should focus on social and personalized interactions with a high level of care and concern for consumers. This means hiring contact employees who exhibit natural empathy and social skills, and training them to emphasize interpersonal elements, respond to the emotional needs of consumers, and provide supportive feedback. Online employees can also be trained to use “emoticons” to convey a sense of social connection. Such an approach will spark a sequence of affective evaluations and processes—making consumers focus on social satisfaction, which in turn will increase their affective trust in the provider and lead to greater affective commitment.

Although it is ideal that task-oriented or socially oriented individuals be recruited to best fit the company’s approach, employees should have some degree of flexibility in communication style to respond to varying customer orientations (e.g., Jacobs et al., 2001; McFarland, Challagalla, & Sherwani, 2006) as
well as changes in organizational goals and strategies. Moreover, training programs should include the use of adaptive behavior (e.g., Miles, Arnold, & Nash, 1990; Spiro & Weitz, 1990) to prepare contact employees for changes in communication style as needed.

Finally, for those companies whose long-term goals are economic as well as relational, contact employees should strive for an optimal mix of task and social orientation (rather than focusing on one style) in order to balance cognitive and affective processes for consumers. In these cases, it is in the firm’s interest to pursue a dual marketing strategy to create affective as well as calculative commitment by consumers, as this study shows that both types of commitment influence buying and participation intentions positively. Whereas past research recommends that marketers should focus primarily on creating affective commitment from customers, this study suggests that striving for calculative commitment in addition to affective commitment would further enhance the positive effects on buying and participation behavior.

REFERENCES


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APPENDIX A

Experimental Treatments (Employee/Advisor Communication Styles)

Task Communication Style:
In the Introduction, the advisor focuses on structuring the session. He sets goals, explains that his role is to advise the customers about travel, stresses the importance of staying goal oriented, states that he will give sound advice, clarifies that there is a time limit of 45 minutes, and sets an agenda for the session.

During the session, three planned interactions take place. For example, the respondent (one of the researchers) says, “This is fun, this chatting. Isn’t it possible to do this more often? . . . We could start an online community so we can swap tips about London.” The advisor answers, “That’s an interesting idea, but not particularly relevant to the goal of this session. Let’s not lose track of what we’re discussing today . . . we’re talking about the details of your trip to London.” Standard sentences the advisor uses are, for example, “I will summarize what you said.” “Keep our objective in mind.” “Let me clarify this point.” “We have 10 minutes left.”

The advisor closes the session by explaining what the travel agency can offer the participants, expressing that he tried to give as much information as possible, that he feels he can provide them with an interesting offer, and that he will send all of the participants a follow-up e-mail.

Social Communication Style:

In the Introduction, the advisor is personable and social. He introduces himself (including personal information), he shows his appreciation for the customers’ participation, explains that his role is to help them, and expresses his hope that they will enjoy the chat, and that this session will be the start of a long-standing relationship with the travel agency.

During the session, three planned interactions take place. For example, the respondent (one of the researchers) says, “This is fun, this chatting. Isn’t it possible to do this more often? . . . We could start an online community so we can swap tips about London.” The advisor answers, “I think that is a great idea! Perhaps we could exchange e-mail addresses at the end of this session . . . What do you think?” Standard sentences the advisor uses are, for example, “I think we are doing a good job.” “I like your idea!” “I understand what you mean.” “That’s a good remark!”

The advisor closes the session by praising the input of the customers, expressing his own enjoyment of the session and his hope that it was enjoyable and useful for them, providing an opportunity for extra questions via e-mail, and focusing on meeting again in the near future.
APPENDIX B

Manipulation Checks

Items for the Task Communication Style of the Employee/Advisor:

The advisor worked hard to provide information.
The advisor was clearly goal oriented.
The advisor wanted the sessions to be highly informative.
The advisor's primary concern was to focus on the details of the trip.
The advisor's main objective was to provide travel information.
The advisor wanted to make sure we made a decision about the trip.

Items for the Social Communication Style of the Employee/Advisor:

The advisor was easy to talk with.
The advisor was interested in socializing with customers.
The advisor genuinely liked to help customers.
The advisor was cooperative and friendly.
The advisor tried to establish a personal relationship.
The advisor seemed interested in us not only as customers, but also as persons.
The advisor liked to talk and put people at ease.

Note: All items used 7-point Likert scales and were based on Williams and Spiro (1985).
### APPENDIX C

**Confirmatory Factor Analysis on Measures.**

<table>
<thead>
<tr>
<th></th>
<th>Factor Loadings</th>
<th>Std. Error</th>
<th>t-values</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economic Satisfaction (Developed for this study)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\alpha = 0.94$</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am satisfied with this new interactive service because of all the relevant travel information they gave me.</td>
<td>1.35</td>
<td>0.09</td>
<td>15.12</td>
</tr>
<tr>
<td>I am pleased that this online travel service will save me time</td>
<td>1.57</td>
<td>0.09</td>
<td>16.67</td>
</tr>
<tr>
<td>I am satisfied that this advisory service will help me book my trips more efficiently</td>
<td>1.60</td>
<td>0.09</td>
<td>17.01</td>
</tr>
</tbody>
</table>

| **Social Satisfaction (Developed for this study)** |                 |            |          |
| $\alpha = 0.87$                   |                 |            |          |
| Chatting online through this new service was an enjoyable experience for me | 1.01           | 0.07       | 13.60    |
| The social aspect of the online interactions was very pleasant for me. | 0.99           | 0.07       | 13.59    |
| This new online travel service is a pleasant way to exchange information. | 1.27           | 0.11       | 11.96    |

| **Cognitive Trust (adapted from Crosby et al., 1990 “trust” items; Johnson & Grayson, 2005)** |                 |            |          |
| $\alpha = 0.86$                   |                 |            |          |
| Even when the advice seems questionable, I am confident that the advisor is telling the truth. | 0.88           | 0.08       | 11.39    |
| I think the information provided by this advisory service will be proven to be inaccurate.** | 0.68           | 0.08       | 8.08     |
| I think this online travel service would keep the promises made to me. | 0.71           | 0.06       | 11.07    |
| I know that the information given to me is based on the advisor’s best judgment. | 0.73           | 0.07       | 10.54    |
| I trust this advisory service because they seem to be very dependable. | 0.85           | 0.07       | 12.03    |
| I can count on the advisor to be sincere | 0.92           | 0.07       | 13.38    |

| **Affective Trust (adapted from Crosby et al., 1990 “trust” items; Johnson & Grayson, 2005)** |                 |            |          |
| $\alpha_1 = 0.88; \alpha_2 = 0.84$ |                 |            |          |
| In all circumstances, the advisor is ready to offer me assistance and support. | 0.77           | 0.07       | 10.60    |
| When giving advice, the advisor is concerned about my welfare | 0.89           | 0.08       | 11.42    |
| In the future, I can count on the online travel service to consider how the company’s decisions and actions will affect me | 1.01           | 0.08       | 12.81    |
| I trust this advisory service because they seem to care about their customers | 1.05           | 0.07       | 14.71    |
| When it comes to things that are important to me, I can depend on the support provided by this advisory service.* | 1.10           | 0.08       | 14.65    |

(Continued)
APPENDIX C (Continued)

Confirmatory Factor Analysis on Measures.

<table>
<thead>
<tr>
<th>Factor Loadings</th>
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</tr>
</thead>
</table>

**Calculative Commitment** (adapted from Gruen et al., 2000; Verhoef et al., 2002)

\( \alpha_1 = 0.92; \alpha_2 = 0.90 \)

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loadings</th>
<th>Std. Error</th>
<th>t-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>It would save me time if I stay with this online travel service for future travel.</td>
<td>1.31</td>
<td>0.10</td>
<td>13.06</td>
</tr>
<tr>
<td>It would be useful to me to be associated with this advisory service</td>
<td>1.32</td>
<td>0.08</td>
<td>15.89</td>
</tr>
<tr>
<td>This advisory service helps me make good decisions, so I want them to do well.</td>
<td>1.27</td>
<td>0.08</td>
<td>15.01</td>
</tr>
<tr>
<td>There are no comparable online chat options, so I will continue the relationship I have formed with this new online travel service.*</td>
<td>1.16</td>
<td>0.08</td>
<td>13.85</td>
</tr>
</tbody>
</table>

**Affective Commitment** (adapted from Gruen et al., 2000; Verhoef et al., 2002)

\( \alpha_1 = 0.94; \alpha_2 = 0.94 \)

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loadings</th>
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<th>t-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>It would make me feel good to be associated with this online travel service</td>
<td>1.17</td>
<td>0.08</td>
<td>14.10</td>
</tr>
<tr>
<td>I feel a strong sense of belonging to this online travel service.*</td>
<td>1.13</td>
<td>0.09</td>
<td>12.12</td>
</tr>
<tr>
<td>I like interacting with this advisory service, so I want them to succeed.</td>
<td>1.31</td>
<td>0.08</td>
<td>16.57</td>
</tr>
<tr>
<td>I feel comfortable using this advisory service, so I want them to do well.</td>
<td>1.27</td>
<td>0.08</td>
<td>16.73</td>
</tr>
<tr>
<td>I think I will enjoy the relationship I have formed with this new advisory service.</td>
<td>1.23</td>
<td>0.08</td>
<td>15.11</td>
</tr>
<tr>
<td>Even if there are other online chat options, I will continue this relationship.</td>
<td>1.10</td>
<td>0.09</td>
<td>12.98</td>
</tr>
</tbody>
</table>

**Buying Intentions** (Developed for this study)

\( \alpha = 0.83 \)

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loadings</th>
<th>Std. Error</th>
<th>t-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am willing to book my trip via this online travel service.</td>
<td>1.57</td>
<td>0.10</td>
<td>15.65</td>
</tr>
<tr>
<td>I will make travel arrangements through this advisory service in the next 6 months.</td>
<td>1.06</td>
<td>0.09</td>
<td>11.25</td>
</tr>
<tr>
<td>I probably will not book any travel via this online travel service.**</td>
<td>1.17</td>
<td>0.11</td>
<td>10.63</td>
</tr>
</tbody>
</table>

**Participation Intentions** (Developed for this study)

\( \alpha = 0.86 \)

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loadings</th>
<th>Std. Error</th>
<th>t-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am willing to contribute enthusiastically in future chat sessions.</td>
<td>1.15</td>
<td>0.09</td>
<td>12.91</td>
</tr>
<tr>
<td>Next time, I will actively participate during the chat session.</td>
<td>1.11</td>
<td>0.08</td>
<td>14.46</td>
</tr>
<tr>
<td>I will make constructive suggestions in future chat sessions.</td>
<td>0.80</td>
<td>0.09</td>
<td>8.90</td>
</tr>
</tbody>
</table>

Notes: All items based on 7-point Likert scales.

* Items dropped due to high modification indices.

** Reverse coded items.

Reliability: \( \alpha \) (when no items dropped); \( \alpha_1 \) (before dropping items); \( \alpha_2 \) (after dropping items).

All t-values were significant at \( p < 0.001 \).