

When Cultures Clash Electronically: The Impact of Email and Social Norms on Negotiation Behavior and Outcomes

Journal of Cross-Cultural Psychology
43(4) 628–643
© The Author(s) 2012
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0022022111407190
jccp.sagepub.com


Ashleigh Shelby Rosette¹, Jeanne M. Brett²,
Zoe Barsness³, and Anne L. Lytle⁴

Abstract

This research examines the extent to which the email medium exacerbates the aggressiveness of opening offers made by negotiators from two distinct cultures. Hypotheses derived from negotiation, communication, and culture research predict that Hong Kong Chinese negotiators using email would exhibit a reactance effect and consequently engage in more aggressive opening offers and claim higher distributive outcomes than similar negotiators in the United States. Study 1 examines intercultural email negotiations and results indicate that Hong Kong Chinese negotiators made more aggressive opening offers and attained higher distributive outcomes than their U.S. counterparts. Study 2 results replicate Study 1 findings in an intracultural negotiation setting and also show favorable outcomes for Hong Kong email negotiators when compared to both Hong Kong and U.S. face-to-face negotiators. Overall, the findings suggest that Hong Kong Chinese and U.S. negotiators vary substantially in how they negotiate via email and face to face, which results in differences in distributive outcomes.

Keywords

culture, email, negotiations, aggressive offers, distributive outcomes, opening offers

The study of email communication is a relatively recent domain of negotiation research. However, within a short period of time, research has identified numerous differences between email and face-to-face negotiation behavior (Friedman & Currall, 2003; McGinn & Croson, 2004; Thompson & Nadler, 2002). Some of these differences have been shown to be advantageous to email negotiators, such as more equitable outcomes (Croson, 1999), while others have proven to be unfavorable, such as reduced rapport building (Moore, Kurtzberg, Thompson, & Morris,

¹Duke University, Durham, North Carolina, USA

²Northwestern University, Evanston, Illinois, USA

³University of Washington, Tacoma, Washington, USA

⁴Melbourne Business School, Carlton, Australia

Corresponding Author:

Ashleigh Shelby Rosette, The Fuqua School of Business, Duke University, Box 90120, Durham, NC 27708-0120
Email: arosette@duke.edu

1999; Morris, Nadler, Kurtzberg, & Thompson, 2002), decreased satisfaction with the negotiation (Naquin & Paulson, 2003), heightened tensions (Giordano, Stoner, Brouer, & George, 2009), lower levels of trust (Wilson, Straus, & McEvily, 2006), and increased exclusion from coalition agreements (Swaab, Kern, Diermeier, & Medvec, 2009). Whether the findings are favorable or unfavorable, research comparing the effects of email negotiations to negotiations that occur face-to-face has principally been conducted in Western cultures (e.g., Croson, 1999; Morris et al., 2002; Naquin & Paulson, 2003; Purdy, Nye, & Balakrishnan, 2000; Swaab et al., 2009). Given that research on culture and negotiation has documented extensive cultural differences in negotiation behavior (Brett, 2007; Gelfand & Brett, 2004; Leung & Tjosvold, 1998; Morrison, Conway, & Borden, 1994), it is likely that cultural norms may influence the way negotiators communicate via email (Barsness & Bhappu, 2004).

This research integrates the literature on communication and negotiation behavior with the literature on culture and negotiation behavior to generate hypotheses about how cultural differences may influence negotiation tactics and outcomes when the communication occurs via email rather than face-to-face and when the context changes from inter- to intracultural negotiations. With the growth of a global economy, this research is particularly important because of both the expense of international travel and the continuous demands placed on workers' time that make face-to-face negotiations a luxury that many companies cannot afford. Negotiators who use email to make deals across national borders instead of face-to-face exchanges save travel time and money. However, they are likely to incur significant communication costs because of the cultural differences in the way people negotiate (Brett, 2007; Gelfand & Brett, 2004; Leung & Tjosvold, 1998; Morrison et al., 1994), and email may exacerbate those differences (Barsness & Bhappu, 2004).

Opening offers are one negotiation tactic that may be particularly important when considering cross-cultural email negotiations. The decision to make the opening offer and the decision to make a particularly aggressive opening offer (e.g., low if the buyer and high if the seller) have been shown to have a positive effect on a negotiators' distributive gains (Galinsky & Mussweiler, 2001; O'Connor, 1997; Rosette & Kopelman, 2010). Given the disinhibited behavior associated with negotiating via email versus face-to-face (Friedman & Currall, 2003; McGinn & Croson, 2004; Thompson & Nadler, 2002), complex interactions between culture and communication media on negotiation processes and outcomes seem likely when opening offers are considered.

The purpose of this research is to test hypotheses concerning the extent to which the email medium may increase the aggressiveness of opening offers made by negotiators from Hong Kong Chinese and U.S. cultures and to test the impact of such opening offers on negotiators' distributive outcomes. Aggressiveness of an opening offer is considered to be the extent to which the opening offer is high for the seller or low for the buyer compared to their reservation or walk-away price, not the literal meaning of aggression, which may confer antagonism, hostility, or even an attack. This research contributes to the growing body of literature documenting the importance of opening offers by identifying some of the contextual effects of culture and communication media that affect opening offers.

Opening Offers

Opening offers drive distributive outcomes because they serve as anchors (Bazerman & Neale, 1992; Galinsky & Mussweiler, 2001). Like anchors in decision making, the power of opening offers in negotiations is that responders generally do not sufficiently adjust their counteroffers (Northcraft & Neale, 1987; Tversky & Kahneman, 1974). Buyers who make low opening offers or sellers who make high opening offers have an advantage over the opposing party, at least if the offer is not so aggressive as to prevent agreement.

There are numerous studies documenting this effect. MBA students who made opening offers in a multi-issue negotiation simulation attained higher economic outcomes than those students who did not make opening offers (Galinsky & Mussweiler, 2001). In a labor and management simulation, when negotiators made more aggressive opening offers, they attained higher distributive outcomes (O'Connor, 1997). In a series of distributive negotiations, when sellers made high opening offers or buyers made low opening offers, their respective individual gains increased (Rosette & Kopelman, 2010). In all of these studies, opening offers served as anchors to which the final negotiated agreement conformed, endowing the negotiator making the opening offer with gains. Accordingly, if opening offers are to lead to favorable outcomes, the opening offer needs to be sufficiently aggressive so that it does not unnecessarily cede any part of the bargaining zone. That is, an aggressive opening offer is sufficiently high enough for the seller or low enough for the buyer that it allows the negotiator to signal a deterministic pursuit of the negotiator's goal, which is to attain the best negotiated outcome. These findings suggest that the negotiator who desires to maximize his or her distributive gain should make an opening offer that claims as much value as possible without being so unrealistic or extreme that it alienates the other party and derails the negotiation process.

Email and Opening Offers

Opening offers in a negotiation may be particularly aggressive when communicating with email as compared to communicating face-to-face because computer-mediated communication, such as email, causes negotiators to be less collaborative (Stuhlmacher & Citera, 2005). For example, impasses tend to be much higher when communicating via email as opposed to face-to-face (Croson, 1999). Social awareness theory helps to explain the decrease in collaboration when negotiating with email as opposed to negotiating face-to-face (McGinn & Croson, 2004). Social awareness refers to the degree of consciousness of and attention to the other in a social interaction (Short, Williams, & Christie, 1976). The characteristics of various communication media provide different opportunities for building social awareness. For example, lack of synchronicity in email communication decreases social awareness because parties are not mutually physically present during the interaction. Research on social motives suggests that social awareness increases prosocial tendencies in negotiation that facilitates cooperation, trust, and reciprocity (DeDreu, Weingart, & Kwon, 2000). Accordingly, as social awareness decreases, so does initial cooperation and trust between the negotiating parties. A recent study, for example, found that computer-mediated groups tended to have higher levels of inflammatory remarks that delayed the establishment of trust in comparison to face-to-face groups (Wilson et al., 2006). A similar study showed that computer-mediated groups were more likely to exclude others from coalition agreements (Swaab et al., 2009). McGinn and Croson (2004) concluded after reviewing the communication media and negotiation literatures that the degree of social awareness in communication media accounted for stable differences between the different media with respect to disclosure, mutual trust, and reciprocity in negotiations.

In addition to reducing collaboration, email may also cause negotiators to become more competitive and risk-seeking. In one study, negotiators who communicated via email were more likely to use a competitive bargaining approach than were negotiators who communicated face-to-face (Purdy et al., 2000). The results of a different study mimicked these findings and showed that email induced competitive behavior when participants did not engage in appropriate disclosure (Paese, Schreiber, & Taylor, 2003). Another study showed that negotiators perceived themselves and their opponents as more competitive when negotiating via email as opposed to negotiating face-to-face (Barsness & Tenbrunsel, 1998). In a decision-making study, groups that met face-to-face were risk averse for gain choices and risk seeking for loss choices; however

when groups communicated via computer, they were risk seeking for both gain and loss choices (McGuire, Kiesler, & Siegel, 1987).

Barry and Fulmer's (2004) theory of adaptive media use helps to explain the increase in competitive and risk-seeking behavior. The theory refers to the difference in communication media as bandwidth that captures the presence and transmission of social information. The low level of bandwidth in computer-mediated communication apparently releases inhibitions, frees expression, and lets individuals display more disinhibited behavior (Kiesler & Sproull, 1992). Thus, these two social theories of communication (social awareness theory and theory of adaptive media) imply that opening offers will be more aggressive when negotiators communicate via email, as opposed to face-to-face, because email may lead to less collaboration and more disinhibited behaviors. Furthermore, it is expected that these effects will be stronger for Hong Kong than U.S. negotiators, as is explained in the next section.

Culture and Opening Offers

It is predicted here that Hong Kong negotiators will make more aggressive opening offers than U.S. negotiators when communicating via email. The reasoning is consistent with social awareness and adaptive media research but also relies on Walther's (1992) social information processing model, which suggests that maintenance of social harmony when communicating via email can be difficult. Typically, people from Hong Kong Chinese culture value social harmony more than their U.S. counterparts (Oyserman, Coon, & Kemmelmeier, 2002) and social harmony is maintained through subtle social enforcement (Hofstede, 1980). Social harmony may be particularly difficult to maintain via email, where social norms may be suppressed and social monitoring may be minimal (Gelfand & Realo, 1999; Yamagishi, 1988). When social awareness is low, social norms may be less available and less accessible.

When social norms are suppressed in cultures that maintain social harmony by subtle enforcement, a reactance effect can occur (Gelfand & Realo, 1999; Yamagishi, 1988). That is, when social norms are not reinforced or do not appear to be salient (Morris & Gelfand, 2004), individuals may display behavior that is inconsistent with their culturally normative views, such as maintaining social harmony. When describing this reactance effect, Triandis, Bontempo, Villareal, Asai, and Lucca (1988) explained that conformity to social norms is more common when those norms are obvious and sanctions are likely to be enforced for deviant behavior. However, when the norms are less clear and when sanctions are less likely to be imposed, a reactance effect becomes probable. When parties communicate via email, social distance between the parties is increased (Barry & Fulmer, 2004; Jessup & Tansik, 1991; Sproull & Kiesler, 1986) and social norms may not be as clear. Largely because negotiators neither see nor hear one another when negotiating via email, their social awareness of each other diminishes (McGinn & Croson, 2004), and thus social harmony norms should decrease.

Several studies support this reasoning. In a public goods experiment, Yamagishi (1988) found that in the absence of social sanctions for defection from cooperation, Japanese participants, whose culture normally provides such sanctions, cooperated less than U.S. participants, whose culture normally is less socially controlled. Yamagishi (1988) explained that strong external systems of sanctioning can reduce the basis for voluntary cooperation and therefore exacerbate the conditions that are claimed to provide their justification and for which they are supposed to be the remedy. He suggested that Japanese society's traditional culture of mutual monitoring and sanctioning results in a decrease of trust in the absence of such control mechanisms relative to U.S. society, where such mutual monitoring and sanctioning systems are less dominant. In further support of a reactance effect, in an intercultural negotiation study, culture moderated the relationship between accountability, which was viewed as a normative

enforcement mechanism, and negotiators' psychological states, behaviors, and outcomes. Accountability produced the behavior (competitive versus cooperative) most normative for the culture (Gelfand & Realo, 1999). By inference, the lack of accountability should produce non-normative behavior. Finally, in yet another study, Hong Kong decision makers were more likely to act cooperatively when informal monitoring systems were high as opposed to when they were low (Chen & Li, 2005).

Based on this research and theorizing, we expect that, in a culture like Hong Kong, where social harmony is normative and maintained via formal and informal monitoring systems, when the monitoring circumstances are reduced or removed and social awareness decreases, people will engage in more disinhibited behavior. In contrast, given that social harmony norms are not as prevalent in U.S. culture, a reactance effect is less likely to occur because of a decrease in social awareness that is inherent in email communication. Moreover, reactance theory contends that the more important a societal norm, the greater the magnitude of the reactance effect (Brehm & Brehm, 1981). Accordingly, even if email does induce reactance for U.S. negotiators, it is likely to be less severe than the reactance of Hong Kong negotiators given that social harmony is not as normative in U.S. culture as it is in Hong Kong culture. Therefore, we propose that, compared to U.S. negotiators, Hong Kong negotiators will make particularly aggressive opening offers when they negotiate via email because the email medium will reduce social monitoring and reduce their sensitivity to social harmony norms.

Overview of Studies

Using a simulated negotiation task, the two studies described in this article examine the opening offers and individual distributive gains of email negotiations in two cultures, Hong Kong and the United States. Study 1 investigates between-culture (intercultural) email negotiations. Study 2 contrasted same-culture (intracultural) U.S. and Hong Kong email negotiations. Given that the cultural norms of the opposing party have been shown to influence behavior (Gudykunst, Gao, Nishida, & Tsukasa, 1992; Triandis & Vassiliou, 1972), we examine the influence of culture on opening offers and individual outcomes in both an intercultural context (Study 1) and an intracultural context (Study 2).

Study 1: Intercultural Email Negotiations

The purpose of Study 1 was to investigate the relationships between culture, the aggressiveness of opening offers, and distributive outcomes in an intercultural Hong Kong versus U.S. email negotiation. If Hong Kong Chinese value social harmony (Oyserman et al., 2002) and maintain social harmony through subtle social enforcement (Hofstede, 1980), and communication via email increases social distance and restricts social monitoring, leading to low levels of social awareness, then Hong Kong Chinese negotiators should react more strongly to communication via email than U.S. negotiators and make more aggressive opening offers as a result:

Hypothesis 1: When negotiating intercultural, Hong Kong email negotiators will make more aggressive opening offers than U.S. email negotiators.

Given the consistency of the research that shows that aggressive opening offers lead to higher distributive outcomes (e.g., Barry & Friedman, 1998; Galinsky & Mussweiler, 2001; Kray, Thompson, & Galinsky, 2001; Rosette & Kopelman, 2010) and given that Hypothesis 1 predicts that Hong Kong email negotiators will make more aggressive opening offers than U.S. email negotiators, it follows that Hong Kong email negotiators will attain higher distributive outcomes

than U.S. email negotiators. In addition, cultural differences in distributive outcomes should be mediated by the aggressiveness of opening offers:

Hypothesis 2: When negotiating interculturally, Hong Kong email negotiators will attain higher distributive outcomes than U.S. email negotiators.

Hypothesis 3: The relationship between culture and distributive outcomes will be mediated by the opening offer amount.

Methods

Simulated negotiation. The transactional negotiation exercise in this study involved the sale of a television show by a major film company to an independent television station. The primary issue was the sales price per episode. The issue was solely distributive in nature; specifically, one party gained at the expense of the other. The buyers were given a bargaining range between \$30,000 and \$60,000, and the sellers were given a range between \$35,000 and \$75,000. The bargaining ranges were merely suggested parameters. There were no constraints placed on the opening offer amount, nor were there constraints placed on the agreed upon sales price.

Opening offer amount was operationalized as the sellers' offer on price per episode. We did this for two reasons. First, existing research has demonstrated that buyers' and sellers' opening offers affect final outcomes differently. Weingart, Thompson, Bazerman, and Carroll (1990) showed that buyers' initial offers were curvilinearly related to final outcomes in the form of an inverted-U, whereas sellers' initial offers were positive linearly related to the sellers' outcome. This suggests that the relationship between opening offers and distributive gains for buyers may be exceptionally complex and not easily interpretable in the context of the anchoring and adjustment heuristic, as is likely the case for the sellers. Second, there was no limit on the amount of money that the seller could request. Accordingly, the seller's potential for aggressive behavior was limitless. However, the buyers could not ask to purchase the episodes for less than \$0. It was for these reasons that we used the seller's opening offer to operationalize aggressive opening offers.

Participants and procedures. Seventy-eight undergraduate business students from Hong Kong and the United States participated in the study as part of a classroom exercise on cross-cultural negotiations. Half (21 men and 18 women) were assigned at random to the role of seller and provide the data for this study. As there were no differences between male and female sellers in any of the analyses, gender differences are not discussed further.

There were two versions of the simulation. In one version, the seller was a U.S. company and the buyer was a Hong Kong company; in the other version, the seller was a Hong Kong company and the buyer was a U.S. company. The sellers, whose data were the focus of this study, represented a company from their own culture and negotiated with a buyer representing a company from the other culture.

The negotiations were in English, the language of the students' undergraduate programs. All students in both classes took part in the negotiation exercise. However, only those students who reported that their dominant culture was ethnic Chinese were included in the Hong Kong sample, and only students who reported their dominant culture as American were included in the U.S. sample. The average age for both the Hong Kong Chinese and U.S. students was 21 years. There were 20 U.S. sellers and 19 Hong Kong sellers.

Data were collected during the first week of the students' negotiations class. The instructors standardized their first-week classes using the same materials, handouts, reading assignments, and teaching notes. All procedures were carefully calibrated between the instructor in Hong Kong and the instructor in the United States with step-by-step directions. All students had email

accounts. Upon the completion of an email communication, the negotiator sent the email to the other party and to a central email mailbox. There were no significant differences between Hong Kong email sellers ($M = 5.35$, $SD = 1.66$) and U.S. email sellers ($M = 6.13$, $SD = 3.28$), $F(1, 30) < 1$, *ns*, in the number of emails exchanged before reaching agreement. Furthermore, there was no correlation ($ps > .10$) between aggressiveness of the opening offer and the number of emails exchanged (proxy for time to reach an agreement) for the Hong Kong email sellers ($r = .29$) or the U.S. email sellers ($r = .10$).

At the completion of the negotiation, emails were printed, identified by role, and placed in order by the time received in the email mailbox. These emails served as negotiation transcripts that were then coded both for whether the seller made the opening offer and for the seller's opening offer amount. All participants turned in a results sheet upon completion of the negotiation. At the end of the exercise, the results were shared with the students and the students were debriefed.

The negotiations took place outside of the classroom, and the negotiators were given 10 days to negotiate. The negotiators were given this length of time to negotiate for three reasons. First, because email is asynchronous and there is an inherent delay when one party is typing (and it takes longer to type than it does to speak), we wanted to make certain that the negotiators had sufficient time to negotiate. Second, we did not want to stimulate artificially high impasse rates in the email conditions, which prior research suggested could be a result if email negotiators were squeezed for time (Barsness & Tenbrunsel, 1998). If there was an agreement to be made, we wanted to give the email negotiators sufficient time to come to an agreement rather than coming to an impasse as a consequence of the negotiating medium. Third, there was a 12-hour time difference between the Hong Kong and the U.S. locations where data were collected.

Opening offer. We trained two coders, who were unfamiliar with the hypotheses of the study, to identify the amount of the sellers' opening offer, which was operationalized as either the seller's first offer or first counteroffer in the negotiation. Coders' agreement was 100%.

Distributive outcome. The distributive outcome was operationalized as the sales price per episode agreed to by the negotiators.

Results

Thirty of the 39 negotiating dyads reached an agreement. Of the 9 impasses, 5 occurred for Hong Kong sellers and 4 occurred for U.S. sellers. Conservatively, we did not include the data from the impasse negotiations. The level of analysis for testing the hypotheses was the individual seller. We used analysis of variance (ANOVA) to test our hypotheses. We used opening offers and sales price as the dependent variables, and negotiators' culture and who made the first offer (buyer or seller) were between-subjects factors. We included who made the first offer as a second factor because that decision has been shown to influence both negotiation outcomes (Graham, 1985; Neu & Graham, 1994) and opening offers (e.g., Galinsky & Mussweiler, 2001; Rosette & Kopelman, 2010). However, the interaction term (culture by who made the first offer) was not significant for either the opening offers, $F(1, 28) = 1.14$, $p = .295$, or the sales price, $F(1, 28) = 1.10$, $p = .303$, and will not be discussed further.

The results support all three of the hypotheses. As shown in Table 1, Hong Kong email sellers made more aggressive opening offers, $F(1, 30) = 8.54$, $p = .007$ (Hypothesis 1), and attained a higher sales price, $F(1, 30) = 14.74$, $p = .001$ (Hypothesis 2), than did U.S. email sellers. To test whether aggressive opening offers mediated the relationship between negotiators' culture and distributive outcomes, we tested the overall significance of the indirect effect (i.e., the path through the mediator) by using bootstrapping to construct a bias-corrected 95% confidence interval (Edwards & Lambert, 2007; Stine, 1989). If zero falls outside the confidence interval, the indirect effect is deemed significant (Shrout & Bolger, 2002), and mediation can be said to

Table 1. Means for Intercultural Email Negotiations (Study 1)

	HK Email		U.S. Email	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Sellers opening offer	\$74,237	\$12,455	\$61,500	\$12,165
Sellers sales price	\$59,833	\$7,434	\$49,323	\$7,976

be present. Zero did indeed fall outside of the interval, providing evidence of mediation (Hypothesis 3).

Discussion

The results of Study 1 show that Hong Kong sellers negotiated higher distributive outcomes than U.S. sellers and made more aggressive opening offers than their U.S. counterparts. Also, opening offers mediated the relationship between the negotiator's culture and distributive outcomes. Hong Kong negotiators' aggressive opening offers were directly related to their enhanced outcomes. However, their behavior, in conjunction with the opposing parties' reaction to their behavior, may have also contributed to the relatively high number of impasses observed in these intercultural negotiations. The nine impasses (23%) provide evidence of what can happen when cultures clash.

These findings suggest that Hong Kong negotiators' behavior was consistent with a cultural reactance effect. However, the findings do not rule out two alternative explanations. First, Hong Kong negotiators may have opened more aggressively than U. S. negotiators because they were negotiating intercultural. Social awareness theory and its accompanying research suggest that the social distance between members of different groups should reduce social awareness and increase self-interested behavior. Furthermore, it has been argued that Asians are more likely than Westerners to draw sharp distinctions with respect to social behavior directed toward members of their own cultural group versus behavior directed toward members of other cultural groups (Triandis & Vassiliou, 1972). Thus, it is possible that the effects in Study 1 were not only due to the social impact of email communication generating reactance on the part of the Hong Kong negotiators. It is possible that the results occurred because the negotiations were intercultural and that negotiating with an opposing party who is from a different cultural group has a social impact. Second, it is possible that making aggressive opening offers in a negotiation is normative in Hong Kong and Hong Kong negotiators make more aggressive opening offers than U.S. negotiators regardless of communication medium. To rule out these two competing explanations for the Study 1 results, we conducted Study 2 with intracultural Hong Kong and U.S. negotiators using both email and face-to-face settings.

Study 2: Intracultural Email and Face-to-Face Negotiations

Context is important in negotiation and culture studies (Gelfand & Cai, 2004). Changing the negotiation context from intercultural to intracultural may cue Hong Kong negotiators to make offers that are less aggressive or just as aggressive as offers made when negotiating intercultural via email. On the one hand, negotiating with a same-culture negotiating partner may cue social harmony norms that may minimize aggressive behavior. On the other hand, because email increases social distance between parties (McGinn & Croson, 2004; Short et al., 1976), Hong Kong negotiators may engage in a reactance effect and act aggressively toward

a same-culture partner. Given Study 1 findings and consistent with the proposed rationale for the previous hypotheses, we predict that communicating via email is enough to reduce social harmony norms for Hong Kong negotiators and cause them to act aggressively when negotiating with a same-culture negotiation partner. In addition, intracultural U.S. email negotiators will likely act less aggressively than their intracultural Hong Kong email counterparts. That is, Study 1 findings showed that U.S. negotiators were not necessarily inclined to make aggressive opening offers when communicating via email. Furthermore, because U.S. negotiators are less likely to be constrained by social harmony norms than their Hong Kong counterparts (Oyserman et al., 2002), negotiating with a same-culture negotiation partner is less likely to influence their behavior.

In addition, if email is indeed a disinhibiting communication medium, not only should Hong Kong negotiators make more aggressive opening offers than their U.S. counterparts when negotiating intraculturally via email, but they should also make more aggressive opening offers when compared to face-to-face negotiators from the United States and Hong Kong who negotiate intraculturally. Hence, we make the following predictions between culture and communication media:

Hypothesis 4: When negotiating intraculturally, Hong Kong email negotiators will make more aggressive opening offers than will U.S. email negotiators, Hong Kong face-to-face negotiators, and U.S. face-to-face negotiators.

Hypothesis 5: When negotiating intraculturally, Hong Kong email negotiators will attain higher distributive outcomes than will U.S. email negotiators, Hong Kong face-to-face negotiators, and U.S. face-to-face negotiators.

In addition, the intracultural email and face-to-face data should mimic Hypothesis 3 findings and provide additional confirmation that aggressive opening offers mediate the relationship between culture, media, and individual distributive gains:

Hypothesis 6: The amount of the opening offer will mediate the effect of communication media on distributive outcomes for Hong Kong negotiators.

Method

We used the same negotiation task and measures in Study 2 as in Study 1 except that we altered the negotiation task to reflect an intracultural negotiation.

Participants. There were 17 Hong Kong email sellers and 23 U.S. email sellers. In addition, there were 19 Hong Kong face-to-face and 31 U.S. face-to-face sellers that served as comparison groups to the email conditions. As in Study 1, we only used data from the sellers in each of the dyads. The average age for both the Hong Kong undergraduate sellers (11 men; 25 women) and the U.S. undergraduate sellers (31 men; 23 women) was 21 years. Participants in Study 2 did not participate in Study 1. Three dyads were excluded due to missing data (1 Hong Kong email, 1 U.S. email, 1 Hong Kong face-to-face). As in Study 1, there were no gender differences in any of the analyses; accordingly, gender will not be considered further.

We collected Hong Kong and U.S. face-to-face data using the same negotiation exercise and negotiators from the same pool of students as the email conditions. Participants were provided cassette tape recorders and cassettes to record the negotiation. At the completion of the negotiation, participants returned the tape recorders and cassettes to the instructor. The cassettes were later transcribed and the transcripts were coded. The email negotiators were given 10 days to negotiate (as in Study 1), and the face-to-face negotiators were given 90 minutes to negotiate. Some studies contrasting email and face-to-face negotiations have given email negotiators

Table 2. Means for Intracultural Email Negotiations (Study 2)

	HK-HK Email		U.S.-U.S. Email		HK-HK Face		U.S.-U.S. Face	
	M	SD	M	SD	M	SD	M	SD
Sellers								
Opening offer price	\$83,250	\$19,590	\$65,571	\$11,804	\$67,055	\$11,562	\$65,300	\$13,584
Final price	\$55,968	\$5707	\$52,285	\$4681	\$51,472	\$6059	\$53,520	\$6784

HK = Hong Kong.

more time to negotiate than face-to-face negotiators (Croson, 1999; Morris et al., 2002), and other studies have given them the same amount of time to negotiate (Barsness & Tenbrunsel, 1998; Naquin & Paulson, 2003; Purdy et al., 2000). In each of these studies, there were no differences in negotiated outcomes between the email and the face-to-face negotiators. Because length of time given to negotiate has not been shown to lead to a difference in negotiated outcomes, we gave the email negotiators a longer time to negotiate. In addition, as in Study 1, we found no correlation between opening offer amount and the number of emails exchanged between Hong Kong email sellers ($r = .29, p = .275$) and U.S. email sellers ($r = .15, p = .530$). We also did not find any correlation between opening offer amount and the number of emails exchanged for the Hong Kong face-to-face sellers ($r = -.20, p = .419$) or for U.S. face-to-face sellers ($r = .08, p = .698$).

Results

All Hong Kong email negotiators reached agreement, as did all but two pairs of U.S. email negotiators. As in Study 1, we did not include the two U.S. email impasses in the analysis.¹ All face-to-face negotiators reached an agreement. We used analysis of variance (ANOVA) to test our hypotheses, using opening offers and sales price as the dependent variables and negotiators' culture (Hong Kong or United States), communication media (email or face to face), and who made the first offer (buyer or seller) as between-subject factors.

Hypothesis 4 predicted that when negotiating intraculturally, Hong Kong email negotiators would make more aggressive opening offers than U.S. email negotiators, Hong Kong face-to-face negotiators, and U.S. face-to-face negotiators. The results support Hypothesis 4. The ANOVA yielded a main effect for culture, $F(1, 72) = 8.98, p = .004$, and a main effect for communication media, $F(1, 72) = 6.78, p = .010$. However, the main effect was qualified by a two-way interaction between culture and communication media, $F(1, 72) = 5.20, p = .026$, and Hong Kong email negotiators made the most aggressive opening offers (see means and standard deviations in Table 2). We found no additional interactions.

Hypothesis 5 predicted that Hong Kong email negotiators would also attain the highest distributive outcomes. The results also support Hypothesis 5. The ANOVA revealed a two-way interaction between culture and communication media, $F(1, 72) = 4.36, p = .040$. As depicted in Table 2, Hong Kong email negotiators attained the highest distributive outcome. We found no additional main effects or interactions.

To assess the mediation effect proposed in Hypothesis 6, we followed the path analysis procedures developed by Edwards and Lambert (2007), which address limitations of previous approaches of combining moderation and mediation. The procedures are implemented by first running regressions on both the mediator and the dependent variable and then using the results of these regressions to generate a reduced form equation. Reduced form equations include only

exogenous variables as predictors and are used to compute simple paths that constitute the direct, indirect, and total effects of the independent variable at different levels of the moderator variable. This approach allows researchers to assess where in the causal chain mediation and moderation occur. When engaging in this type of analysis, Edwards and Lambert (2007) recommend using bootstrapped confidence intervals, which can accommodate the nonnormal distributions that result from the multiplication of regression coefficients in the computation of indirect and total effects.

Hypothesis 6 predicted first stage moderated mediation (Edwards & Lambert, 2007), in which culture would moderate the effect of communication media on opening offer amount, which in turn would mediate the effect on price per episode. We therefore began by regressing communication media (email = 1; face to face = 0), culture (Hong Kong = 1; United States = 0), and the interaction term on the opening offer amount. We then regressed communication media and opening offer amount on sales price. In both equations, we controlled for who made the first offer.

The regression on opening offer amount produced a significant interaction between communication media and culture ($\beta = .37, p = .028$). This interaction indicates that culture moderated the path from communication media to opening offer amount (i.e., the first stage of the indirect path). The regression on sales price revealed a significant effect of opening offer amount ($\beta = .48, p = .000$). Given this initial support for the first stage moderated mediation proposed in Hypothesis 6, we used the results of these regressions in conjunction with the reduced form equation to decompose the effects for both levels of the moderator variable (i.e., for Hong Kong and U.S. participants), and we conducted the bootstrap to produce bias-corrected confidence intervals (Stine, 1989).

For U.S. negotiators, the first stage indirect effect of communication media on opening offer amount was not significant ($b = 1193, p = .505$)². In addition, the indirect effect of communication media on sales, mediated through opening offer amount, was not significant for U.S. negotiators ($b = 223, p = .512$), and the confidence interval included zero, indicating that opening offer amount did not mediate the effect of communication media for U.S. negotiators.

We also examined mediation for Hong Kong negotiations. For Hong Kong negotiators, the first stage indirect effect of communication media on opening offer amount was significant ($b = 15,410, p = .000$), and the indirect effect of communication media on sales price, mediated through opening offer amount, was also significant for Hong Kong negotiators ($b = 2,881, p = .000$), and the confidence interval was not inclusive of zero, indicating that opening offer mediated the effect of communication media for Hong Kong negotiators.

Discussion

This study accomplished several goals. First, we replicated Study 1 findings and show that Hong Kong email negotiators make more aggressive opening offers and attain higher distributive gains than U.S. email negotiators. Second, we rule out two alternative explanations for our Study 1 findings. That is, given Study 1 results, the findings could have been attributed to Hong Kong email negotiators negotiating interculturally or to a social norm of aggressive offers in Hong Kong culture. However, our findings show that Hong Kong email negotiators made more aggressive opening offers when negotiating intraculturally and Hong Kong email negotiators made more aggressive offers than did Hong Kong face-to-face negotiators. Third, our findings provide additional evidence of our proposed causal mechanisms. The moderated mediation analysis shows that the opening offer amount mediated the relationship between communication media and outcomes for the Hong Kong negotiators but not for the U.S. negotiators. These findings provide support for our overarching prediction that Hong Kong negotiators may benefit more from negotiating via email than U.S. negotiators.

General Discussion

Theoretical Implications

Our findings are intriguing and have implications for both negotiation research and for managers. First, our findings support anchoring and adjustment research, which argues that aggressive opening offers lead to higher distributive gains (Barry & Friedman, 1998; Galinsky & Mussweiler, 2001; Kray et al., 2001; Rosette & Kopelman, 2010), but we also show that when communicating via email, the Hong Kong sellers in these two studies may have been more likely to benefit from this negotiation tactic than U.S. sellers. Second, our findings contribute to research on social awareness (McGinn & Croson, 2004; Short et al., 1976) and adaptive media (Barry & Fulmer, 2004), which asserts that email communication can lead to less collaboration and more disinhibited behavior, respectively. However, we show that when considering the behavioral outcomes of communicating with email, existing social norms may be particularly important. Our findings suggest that a reduction in social awareness and bandwidth caused by email may have facilitated a reactance effect for Hong Kong negotiators, but not for U.S. negotiators, because of social harmony norms.

Managerial Implications

Managers use email to negotiate both within and across national borders. Using email to negotiate deals and transactions may save time, reduce costs, and increase convenience (Sproull & Kiesler, 1991), but its effect on performance and ultimately a company's bottom line may depend on the cultural norms of negotiators. For example, Peter Boneparth, CEO of Jones Apparel Group, commented in *The New York Times*:

We're developing an office in Hong Kong, and it's clear that the employees there are trying to please. But one of the American-educated managers took me aside and said the staff was having problems with e-mail from the United States. They [U.S. side] were not picking up on the nuances in e-mail. As a result we decided to have more face-to-face meetings. (Olsen, 2005, p. 10)

Managers need to understand these cultural differences if they are to capitalize and leverage them to their advantage. Without an understanding of cultural differences associated with email negotiation, managers (especially American managers) negotiating with managers from cultures similar to that of Hong Kong Chinese may be handicapped.

Future Research and Limitations

This study examines the influence of culture on aggressive opening offers and distributive outcomes in intercultural and intracultural email negotiations between Hong Kong and U.S. negotiators. Although the findings are mostly consistent with our theorizing, the sample sizes were relatively small and consisted of undergraduate students. These two factors may reduce the generalizability of the findings. Young adults frequently have experiences with managers in organizational settings and their opinions and perceptions often mimic those views of organizational members with full-time employment, but older, more experienced negotiators may know to adjust for certain cultural expectations and differences in opening offers. However, one could argue that an undergraduate sample with their familiarity with electronic forms of communication provided a more stringent test of our hypotheses than an older sample that may be less familiar with communicating electronically. Thus, it may be worthwhile to investigate our

predictions and replicate our findings with larger and more diverse populations, such as working managers or graduate students with work experience, and perhaps even with other forms of communication media, such as text messaging, online chat, and telephone. In addition, future research could include an attempt to try to determine the differences in perceptions of social norms in email versus face-to-face communication for Hong Kong versus U.S. negotiators.

Conclusion

This study documents advantages and disadvantages inherent in using different communication media when negotiating interculturally. Oftentimes, companies and organizations rush to introduce a communication medium because it is faster, more convenient, and cost effective. Our findings reveal that attention should be given to the behavioral effects, as well as cost and technological efficiencies (Sproull & Kiesler, 1991), especially when cultural differences exist. It is not enough to know how to use the technology. It is also important to recognize the influence that culture has on the use of technology.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This study was supported by a grant from The Dispute Resolution Research Center, Northwestern University.

Notes

1. In the face-to-face condition, three U.S. buyers and two U.S. sellers had their first offers accepted. Because these dyads yielded no comparison between the buyers and sellers on opening offers, they were not included in the analysis.
2. Consistent with Edwards and Lambert (2007), we report the unstandardized coefficient estimates.

References

- Barry, B., & Friedman, R. (1998). Bargainer characteristics in distributive and integrative negotiation. *Journal of Personality & Social Psychology, 74*(2), 345-359.
- Barry, B., & Fulmer, I. S. (2004). The medium and the message: The adaptive use of communication media in dyadic influence. *Academy of Management Review, 29*, 272-292.
- Barness, Z., & Bhappu, A. (2004). At the crossroads of technology and culture: How they impact attention, social influence, and information exchange processes during negotiation. In M. Gelfand & J. Brett (Eds.), *The handbook of negotiation: Theoretical advances and cross-cultural perspectives* (pp. 350-373). Palo Alto, CA: Stanford University Press.
- Barness, Z., & Tenbrunsel, A. (1998). *Technologically-mediated communication and negotiation: Do relationships matter?* Paper presented at the Academy of Management, College Park, Maryland.
- Bazerman, M. H., & Neale, M. A. (1992). *Negotiating rationally*. New York: Free Press.
- Brehm, J. W., & Brehm, S. S. (1981). *Psychological reactance: A theory of freedom and control*. San Diego, CA: Academic Press.
- Brett, J. (2007). *Negotiating globally: How to negotiate deals, resolve disputes, and make decisions across cultural boundaries* (2nd ed.). San Francisco: Jossey Bass.

- Chen, X. P., & Li, S. (2005). Cross-national differences in cooperative decision-making in mixed-motive business contexts: The mediating effect of vertical and horizontal individualism. *Journal of International Business Studies*, 36(6), 622-636.
- Croson, R. T. A. (1999). Look at me when you say that: An electronic negotiation simulation. *Simulation & Gaming*, 30(1), 23-37.
- DeDreu, C. K., Weingart, L. R., & Kwon, S. (2000). Influence of social motives on integrative negotiation: A meta-analytical review and test of two theories. *Journal of Personality and Social Psychology*, 78, 889-905.
- Edwards, J. R., & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods*, 12, 1-22.
- Friedman, R. A., & Currall, S. C. (2003). E-mail escalation: Dispute exacerbating elements of electronic communication. *Human Relations*, 56(11), 1325-1347.
- Galinsky, A., & Mussweiler, T. (2001). First offers as anchors: The role of perspective-taking and negotiator focus. *Journal of Personality & Social Psychology*, 83(5), 1131-1140.
- Gelfand, M., & Brett, J. (2004). *The handbook of culture and negotiation*. Stanford, CA: Stanford University Press.
- Gelfand, M. J., & Cai, D. A. (2004). Cultural structuring of the social context in negotiation. In M. J. Gelfand & J. M. Brett (Eds.), *The handbook of negotiation and culture* (pp. 238-257). Palo Alto, CA: Stanford University Press.
- Gelfand, M. J., & Realo, A. (1999). Individualism-collectivism and accountability in intergroup negotiations. *Journal of Applied Psychology*, 84, 721-736.
- Giordano, G., Stoner, J., Brouer, R., & George, J. (2009). The influences of deception and computer-mediation on dyadic negotiations. *Journal of Computer-Mediated Communication*, 12(2), 362-383.
- Graham, J. (1985). The influence of culture on the process of business negotiations: An exploratory study. *Journal of International Business Studies*, 16(1), 81-96.
- Gudykunst, W., Gao, G., Nishida, K., & Tsukasa, S. (1992). The influence of individualism/collectivism, self-monitoring, and predicted-outcome value on communication in ingroup and outgroup relationships. *Journal of Cross-Cultural Psychology*, 23(2), 196-213.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage Publications.
- Jessup, L. M., & Tansik, D. A. (1991). Decision making in an automated environment: The effects of anonymity and proximity with a group decision support system. *Decision Sciences*, 22, 266-279.
- Kiesler, S., & Sproull, L. (1992). Group-decision making and communication technology. *Organizational Behavior*, 52, 96-123.
- Kray, L., Thompson, L., & Galinsky, A. (2001). Battle of the sexes: Gender stereotype confirmation and reactance in negotiations. *Journal of Personality & Social Psychology*, 80(6), 942-958.
- Leung, K., & Tjosvold, D. (1998). *Conflict management in the Asia Pacific: Assumptions and approaches in diverse cultures*. Singapore: John Wiley & Sons.
- McGinn, K. L., & Croson, R. (2004). What do communication media mean for negotiators? A question of social awareness. In M. J. Gelfand & J. M. Brett (Eds.), *The handbook of negotiation: Theoretical advances and cross-cultural perspectives* (pp. 334-349). Palo Alto, CA: Stanford University Press.
- McGuire, T., Kiesler, S., & Siegel, J. (1987). Group and computer-mediated discussion effects in risk decision making. *Journal of Personality and Social Psychology*, 52, 917-930.
- Moore, D., Kurtzberg, T., Thompson, L., & Morris, M. W. (1999). Long and short routes to success in electronically-mediated negotiations: Group affiliations and group vibrations. *Organization Behavior and Human Decision Processes*, 77(1), 22-43.

- Morris, M., & Gelfand, M. (2004). Cultural differences and cognitive dynamics: Expanding the cognitive perspective on negotiation. In M. Gelfand & J. M. Brett (Eds.), *Handbook of negotiation and culture* (pp. 45-70). Palo Alto, CA: Stanford University Press.
- Morris, M., Nadler, J., Kurtzberg, T., & Thompson, L. (2002). Schmooze or lose: Social friction and lubrication in e-mail negotiations. *Group Dynamics*, 6(1), 89-100.
- Morrison, T., Conaway, W. A., & Borden, G. A. (1994). Hong Kong. In (Eds.), *Kiss, bow, or shake hands* (pp. 153-160). Holbrook, MA: Adams Media Corporation.
- Naquin, C. E., & Paulson, G. D. (2003). Online bargaining and interpersonal trust. *Journal of Applied Psychology*, 88, 13-120.
- Neu, J., & Graham, J. (1994). The new methodological approach to the study of interpersonal influence tactics: A "test drive" of behavioral scheme. *Journal of Business Research*, 29, 131-144.
- Northcraft, G. B., & Neale, M. A. (1987). Experts, amateurs, and real estate: An anchoring-and-adjustment perspective on property pricing decisions. *Organizational Behavior and Human Decision Processes*, 39, 84-97.
- O'Connor, K. (1997). Motives and cognitions in negotiation: A theoretical integration and an empirical test. *International Journal of Conflict Management*, 8(2), 114-131.
- Olsen, P. R. (2005, February 6). Office space: The boss; the sport of the deal. *The New York Times*, p. 10.
- Oyserman, D., Coon, H., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: Evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128(1), 3-72.
- Paese, P., Schreiber, A. M., & Taylor, A. (2003). Caught telling the truth: Effects of honesty and communication media in distributive negotiations. *Group Decision and Negotiation*, 12(6), 537-566.
- Purdy, J. M., Nye, P., & Balakrishnan, P. V. (2000). The impact of communication media on negotiation outcomes. *International Journal of Conflict Management*, 11(2), 162-187.
- Rosette, A. S., & Kopelman, S. (2010). *Good grief: Feelings of anxiety sour the economic benefits of first offers*. Unpublished manuscript.
- Short, J., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications*. Chichester, UK: John Wiley and Sons Ltd.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7(4), 422-445.
- Sproull, L., & Kiesler, S. (1986). Reducing social context cues: Electronic mail in organizational communication. *Management Science*, 32(11), 1492-1513.
- Sproull, L., & Kiesler, S. (1991). *Connections: New ways of working in the networked organization*. Cambridge, MA: MIT Press.
- Stine, R. (1989). An introduction to bootstrap methods. *Sociological Methods & Research*, 18, 243-291.
- Stuhlmacher, A. F., & Citera, M. (2005). Hostile behavior and profit in virtual negotiations: A meta-analysis. *Journal of Business and Psychology*, 20, 69-93.
- Swaab, R., Kern, M., Diermeier, D., & Medvec, V. (2009). Who says what to whom? The impact of communication setting and channel on exclusion from multiparty negotiation agreements. *Social Cognition*, 27(3), 385-401.
- Thompson, L., & Nadler, J. (2002). Negotiating via information technology: Theory and application. *Journal of Social Issues*, 58(1), 109-124.
- Triandis, H., Bontempo, R., Villareal, M., Asai, M., & Lucca, N. (1988). Individualism and collectivism: Cross-cultural perspectives on self-ingroup relationships. *Journal of Personality & Social Psychology*, 54(2), 323-338.
- Triandis, H., & Vassiliou, V. (1972). A comparative analysis of subjective culture. In H. Triandis, V. Vassiliou, G., Vassiliou, Y. Trinaka, A. Shanmugan (Eds.), *The analysis of subjective culture* (pp. 299-335). New York: Wiley.
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185, 1124-1131).

- Walther, J. B. (1992). Interpersonal effects in computer-mediated interaction: A relational perspective. *Communication Research, 19*, 52-90.
- Weingart, L. R., Thompson, L. L., Bazerman, M. H., & Carroll, J. S. (1990). Tactical behavior and negotiation outcomes. *International Journal of Conflict Management, 1*, 7-31.
- Wilson, J. M., Straus, S. G., & McEvily, B. (2006). All in due time: The development of trust in computer-mediated and face-to-face teams. *Organizational and Human Decision Processes, 99*, 16-33.
- Yamagishi, T. (1988). Exit from the group as an individualistic solution to the free rider problem in the United States and Japan. *Journal of Experimental Social Psychology, 24*, 530-542.