

Full Length Research Paper

The effects of spatial distance spreading on social presence, negotiation continuation norm and exit behavior in the electronic negotiation

Taketoshi Hatta^{1*} and Ken-ichi Ohbuchi²

¹Department of Medical Technology, Gifu University of Medical Science, 795-1 Nagamine, Ichihiraga Seki City, Gifu Prefecture Japan 501-3892.

²Department of Psychology, Tohoku University, 27-1 Kawauchi, Aobaku, Sendai City, Miyagi Prefecture, Japan 980-8576.

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The purpose of the present study is to reexamine the effects of spatial distance on the psychological processes and behavior of negotiators found by Hatta and Ohbuchi, using a different measure of social presence. Participants were 20 undergraduate students, and negotiations were conducted via computer. They were assigned to either a close or remote condition. The results indicated that participants in the remote condition felt less social presence of the other, and exited from the negotiation task sooner than those in the close condition. It also was found that the less salient social presence was, the weaker was the effect of the negotiation continuation norm. The results of this study are in conformity with a previous study, showing that an increased physical distance weakens the sense of social presence and the effect of the normative expectation to continue negotiations, facilitating an early exit from negotiations.

Key words: Electronic negotiation, social presence, continuation norm, spatial distance, exit behavior.

INTRODUCTION

Computer-Mediated-Communication (CMC), such as E-mail, has become a popular communication mode for people given the spread of mobile phones during the last decade. This means many people have gained the opportunity to “negotiate” with CMC. Negotiation here is defined as a discussion between parties to resolve discord (Pruitt and Carnevale, 1993), and it also is a useful strategy for conflict resolution.

Several researchers have indicated that an electronic negotiation (such as CMC) leads to a decrease in trust between parties (Morris et al., 2002), makes the negotiators more competitive (Purdy et al., 2000), and increases the likelihood of an impasse due to the lack of nonverbal cues (Moore et al., 1999). Also, Hatta et al.

(2007) found that parties in electronic negotiation offer moderate demands and may more quickly reach an agreement due to an estimation of the “exitability” of the other party. Exitability is a psychological factor that causes a party to perceive unstable negotiation continuity.

With CMC, users can communicate while being in spatially different locations (Sproull and Kiesler, 1991; Wheeler, 1995). One of the causal factors of exitability is the spatial distance between negotiators. Hatta and Ohbuchi (2008) found that participants in remote location, lacking visual information, were less inclined to follow the negotiation continuation norm, and exited negotiations sooner than those in the close location. A social norm is a rule that people implicitly follow in a group or in society,

*Corresponding author. E-mail: hatta@u-gifu-ms.ac.jp. Tel: +81-575-22-9401. Fax: +81-575-23-0884.

which guides thinking and behavior (Bettenhausen and Murnighan, 1991; O'Sullivan et al., 1994). The negotiation continuation norm is a social norm indicating that once parties start negotiating, they should make their best efforts to reach an agreement without exiting from it unreasonably. Therefore, if a party perceives an unstable or weak negotiation, they may anticipate the exit of the other party and more easily quit the negotiation, since they perceive a weakened negotiation continuation norm.

With CMC, the spread of spatial distance tends to weaken the effect of the negotiation continuation norm since it decreases the sense of social presence. Social presence here is defined as the sense of social existence of the other during interactions (Short et al., 1976; Lee and Nass, 2002). Lee and Nass (2002) indicated spatial distance decreases one's awareness of the presence of the other. Social norms work by sharing a rule with the other party. Therefore, parties in separate locations are less affected by a social norm, as they only weakly perceive the existence of the other party who would share the rule.

Hatta and Ohbuchi (2008) found that participants in a remote location felt less salience of social presence, and perceived a weaker negotiation continuation norm than those in a close location. However, it is questionable whether the item that was used in the experiment, "Did you feel that the other negotiator was as dry as a machine?" was appropriate for the measurement of social presence; this item might measure an *impression* of the other, but not directly measure the sense of social existence of the other. Therefore we used "Did you feel the other party was close at hand?" as the item to more directly measure social presence in this experiment.

The purpose of this study was to reexamine the influence of the effect of physical distance on (a) the perception of social presence, as measured by the revised item described above, and (b) on the continuation norm of negotiation, and to examine the relationships among these psychological factors and exit behavior. It was hypothesized that the parties in the remote distance condition would more easily exit from the negotiation, since they would feel less social presence and therefore perceive a weaker continuation norm effect than those in the close condition.

METHOD

Participants

The participants were 20 Japanese undergraduate students (10 males and 10 females), who negotiated via computer. After the negotiation, they each were given 500 yen as a reward for their participation.

Procedure

In the laboratory, the participants were assigned the role of a buyer, and were instructed to negotiate with the "other party" regarding the

purchase of a car. But the other party was a computer program that always asked for the most expensive price. The experimenter instructed the participants to aim to buy at the lowest price; a participant who could buy the car at the lowest price in each condition could earn 3,000 yen as a bonus. After the verbal instruction, they were seated in separated booths. After the participants were instructed again on the computer screen, they negotiated via computer for 10 min and then responded to a questionnaire.

Negotiation task

The task used in this negotiation was a distribution issue whereby one party's gain of a profit resulted in an equal degree of loss for the other party. The subject was the price of a used car. In the negotiation, the participants offered an amount from seven possible alternatives during a turn.

Independent variable

The experiment was designed with an independent variable consisting of two conditions of spatial distance: remote and close. Participants who were told they would negotiate with the party in the next booth were in the close condition, and those who were told they would negotiate with a party in a building elsewhere in the city were in the remote condition. Participants were randomly assigned to either condition.

Dependent variable

The time it took (in seconds) until the participants quit the negotiation was the index of willingness to exit from negotiation. In order to measure their perceptions, the experimenter asked the participants to answer several items immediately after the negotiation ended. Those items were, for social presence, "Did you feel the other party was close at hand?" and, with respect to the negotiation continuation norm, "Did you think that it was a violation of social norm to exit from negotiation," and "Did you think that once the party started negotiating, they should make their best efforts to reach an agreement without exiting from it unreasonably?" Responses were recorded on a 7-point scale ranging from "Not at all (1)" to "Definitely (7)".

RESULTS

Social presence

The item scores of social presence were tested by analysis of variance (ANOVA) using spatial distance as the independent variable. The effect of spatial distance was significant ($F(1,18) = 6.40, p < .05$). The participants in the remote condition had less of a sense of the existence of other party than those in the close condition ($M = 1.3$ vs. 2.1).

Negotiation continuation norm

The mean scores regarding the negotiation continuation norm were tested by ANOVA using spatial distance as the independent variable. The participants in the remote

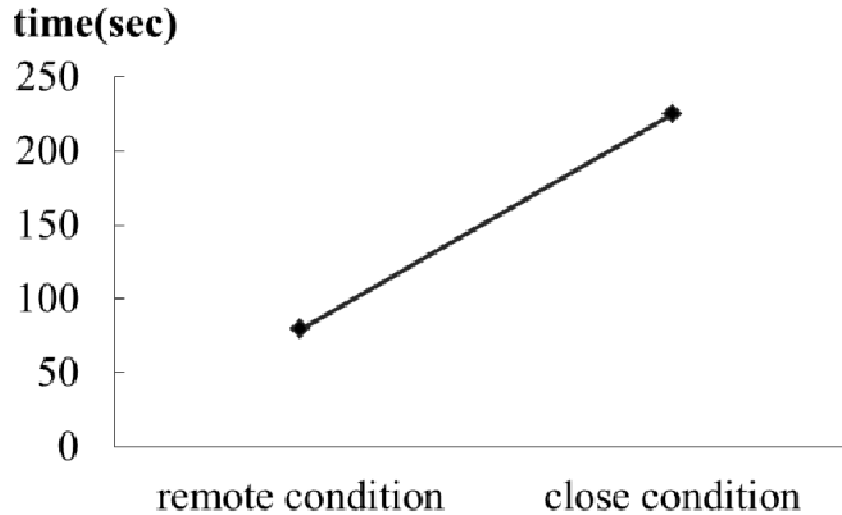


Figure 1. The main effect of spatial distance on exit time.

Table 1. Correlations among social presence, continuation norm and time until exit.

| | 1 | 2 | 3 |
|---------------------|-------|--------|---|
| 1 Social presence | | | |
| 2 Continuation norm | .428+ | | |
| 3 Time until exit | .311 | .586** | |

** $p < .01$, + $p < .10$.

condition were somewhat less likely to perceive the exit action as a deviation from the norm than those in the close condition ($M = 2.0$ vs. 2.3), but the effect of spatial distance was not significant.

Exit from negotiation

Elapsed time until the participants exited from the negotiation was tested by ANOVA using spatial distance as the independent variable, and was found to be significant ($F(1,18) = 6.05, p < .05$). As shown in Figure 1, participants in the remote condition exited the negotiation sooner than those in the close condition.

Correlation analysis

In order to examine the relationships among social presence, the negotiation continuation norm, and time until exit from negotiation, we conducted a correlation analysis. Table 1 shows that scores regarding the negotiation continuation norm correlated positively with those for social presence and elapsed time until exit from negotiation.

DISCUSSION

The results of this study, which used a new item to measure social presence, confirmed the findings of the study by Hatta and Ohbuchi (2008), which indicated that an increased physical distance between negotiators weakens the sense of social presence and the effect of the norm of negotiation continuation, facilitating exit from the negotiation.

The results indicated that the party in negotiations with another in a relatively remote location felt less presence of the other party, and exited from the existent negotiation sooner than those who negotiated with a party in a close location. This means that with greater spatial distance between negotiators, they feel less social presence and can more easily abandon negotiations. The effect of spatial distance was not found to change the perception of the negotiation continuation norm. However, the results of a correlation analysis showed that the less salient the social presence was, the weaker was the effect of the negotiation continuation norm, and the sooner was the exit from negotiations.

It may be concluded that the negotiators who feel less social presence can exit from the negotiation table because they perceive a weaker negotiation continuation norm. These results support the hypothesis of the present study.

Some studies have argued that electronic negotiation is likely to break down because the formation of trust between negotiators is difficult to establish (Morris et al., 2002; Moore et al., 1999). As with other interpersonal norms, with the negotiation continuation norm, the formation of trust relies on the existence of another person. Therefore, it is reasonable that the formation of trust with another negotiator is difficult with electronic negotiations, as the negotiators feel less social presence.

But, less social presence does not necessarily mean the complete breakdown of negotiations. Because the perception of less social presence prompts an exit from negotiations, it is thought a negotiator will estimate a high risk of the other's "exitability." Hatta et al. (2007) found that negotiators who strongly perceived the exitability of the other demanded less and were more likely to reach an agreement than negotiators who did not perceive the exitability of the other.

The results of this study are useful in understanding the mental processes of negotiators not only in electronic negotiation situations, but also in face-to-face (FTF) negotiations. Essentially, the negotiator regards the BATNA (Best Alternative to Negotiation Agreement) as the reservation price when the value of BATNA is obvious. However, Pinkley et al. (1994) pointed out that some pairs often reached an agreement although the final value was less than the BATNA. It is thought that these negotiators came to agreement regardless of the lower value because they were motivated to follow the negotiation continuation norm. It may be that a negotiator finally decides not only on the basis of rationality but also due to emotional factors such as duty. Further research is needed to examine the influence of the negotiation continuation norm on the mental processes and outcomes with FTF negotiations.

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