The Effects of Exitability by the Alternative Negotiation on the Electronic Negotiation

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The Effects of Exitability by the Alternative Negotiation on the Electronic Negotiation : Content Analysis of Negotiation Behavior

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We examined the influences of exitability by inducing the alternative negotiation partner in electronic negotiation on the perception of anxiety for continuation, assertive and constructive verbal actions, and negotiation outcome. In a role-play experiment, 40 students negotiated with each other through the e-mail system in one of two experimental conditions. It was found that participants in the exitable condition were motivated to keep the other party in current negotiation and made less asserting and compromising behaviors than those in the unexitable condition. Further, it was indicated that participants in the exitable condition reached agreement more frequently than those in the unexitable condition and the agreement was more integrative in the exitable condition than in the unexitable condition.

Key words: electronic negotiation, exitability, content analysis

Introduction

Recently, remote tele-communication technology, such as e-mail, fax, or phones, has become essential for international business negotiations between companies (Moore, Kurtzberg, Thompson, & Morris, 1999). For example, it is reported that approximately 80% of business organizations use Computer-Mediated-Communication (CMC) as an important way to communicate for daily duties (Overtly, 1999). This is based on the usefulness in negotiation and exchanging information within the members of an organization (Kiesler & Sproul, 1992).

There is research suggesting a negative aspect of CMC that an inhibition against negative emotions and behaviors is reduced by lack of nonverbal cues (Siegel, Dubrovsky, Kiesler, & McGuire, 1986; Carnevale & Probst, 1996). It has generated a skeptical view of electronic negotiation (e.g., Morris, Nadler, Kertzberg, & Thompson, 2002; Purdy, Nye, & Balakrishnan, 2000; Arunachalam & Dilla, 1995). However, some researchers have focused on positive effects of CMC on the processes and consequencies of negotiation. Hatta, Ohbuchi, and Fukuno (2003) found that exitability in CMC prompts participants to offer a low level of demand and therefore to reach agreement in electronic negotiation. This finding suggests that electronic media make negotiations constructive and smooth. Exitability of the other party is a psychological factor that causes one to perceive a negotiation as uncertain and unstable. The purpose of the present study was to examine the effects of exitability on verbal behaviors of participants in electronic negotiations.

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Electronic media is characterized by an asynchrony in communication such that users send or receive messages at different places and times (e.g., Sproull & Kiesler, 1991; Wheeler, 1995). A physical distance (proximity) determines communication between people. Manipulating visual anonymity and proximity between participants in electronic negotiation, Hatta and Ohbuchi (2004) found that physical distance induced participants to exit from the negotiation to change partners because they perceived that the norm of continuation is not salient and the possibility of being retaliated is low. So, in electronic negotiation, the party can easily exit from the negotiation. Hatta et al (2003) also suggested that the existence of alternative partners increased exitability. In the present study, therefore, we attempted to manipulate the perceived exitability by introducing alternative partners to negotiate with. We hypothesized that participant who perceived exitability of the other party by the alternative negotiation would be more strongly motivated to reduce anxiety for the current negotiation than the participant who did not perceive it.

Manipulating the perceived exitability by an instruction, Hatta and Ohbuchi (2003) found that the participants who thought the other party might exit made less assertive actions and more frequently reached agreements than those who did not think so. Inconsistent with the authors' expectations, however, the perceived exitability did not influence compromise. They interpreted that the participants did not want to take one-sided concessions that would hamper self-interests even if they felt low power by the perception of exitability of the opponent. Negotiators may avoid such a strategy if possible. They may be willing to compromise only in exchange for the other party's compromise. Therefore, we hypothesized that participants who perceived exitability would be more strongly motivated to reduce anxiety for the continuation (*Hypothesis 1*), and would assert their demand to a lesser extent (*Hypothesis2*) and would more frequently compromise (*Hypothesis 3*) when they perceived the other party was exitable than when they did not. Assuming that these collaborative behaviors may facilitate integrative agreements, we further hypothesized that the participants who perceived the other party was exitable would more frequently reach integrative agreements than those who did not perceive it (*Hypothesis 4*).

Method

Participants

The participants were 40 Japanese university students (20 males and 20 females) and they were randomly paired to participate in the electronic media negotiation task. Unacquainted pairs were chosen. After the experiment, each participant was given a book coupon of 500 yen as a reward.

Procedures

When two participants arrived at the laboratory, the experimenter told them that they would negotiate with students from another university (actually, both parties were in different booths in the laboratory). In order to motivate the participants to negotiate, the experimenter gave them the following instructions: the goal of each participant was to maximize his or her personal scores; the participant who obtained the highest scores in each condition would be given an additional 3000 yen as a bonus; but, if a pair did not reach agreement within a time limit, the scores of both

participants would be zero. After explaining that this is a negotiation on laboring conditions between employee and employer, the experimenter randomly assigned the participants to one of these roles. Then, the experimenter took the participants to separated booths, and asked them to negotiate with each other via computer, explaining how to use chat software.

The negotiation started with the employee's action. The employee produced a message using a word-processor on his/ her display of the computer, and he/she clicked a button labeled "Deliver" when the message was completed. Then, the message was displayed on the employer's display, being accompanied with a sign "Your turn," prompting him/her to produce a message in response to the employee. When the employer clicked the "Deliver" button, in turn, his/her message was sent to the employee's computer. In this manner, both parties continued to exchange their messages until they reached an agreement or the time expired (45 minutes). When 40 min had passed, the experimenter informed the participants that 5 minutes remained. After the negotiation, the participants were asked to respond to questions to measure anxiety for the continuation.

Negotiation task

The task used in this experiment was a modification of the paradigm used by Fukuno and Ohbuchi (1997). Each participant was presented with a payoff schedule for his/her role, which indicated the issues to be resolved and the gain he/she would get for each of possible alternatives for each issue. The payoff schedule consisted of four issues (e.g., wage per hour, transportation expenses, training period, and working-time per month) and the gain for each of nine possible alternatives for each issue (Table 1). Among the issues, wage per hour was distributive, transportation expenses and training period were integrative, that is, logrolling was possible, and working-time per month was compatible. The distributive issue was a completely fixed-sum (i.e.,

Table 1 Profit schedules for employee and employer

Employee

Issues			
Wage per hour	**Transportation expense**	**Training term**	**Working-time /month**
1050(600)	90%(680)	0days(320)	25days(440)
1000(525)	80%(595)	2days(280)	22days(385)
950(450)	70%(510)	4days(240)	19days(330)
900(375)	60%(425)	6days(200)	16days(275)
850(300)	50%(340)	8days(160)	13days(220)
800(225)	40%(255)	10days(120)	10days(165)
750(150)	30%(170)	12days(80)	7days(110)
700(75)	20%(85)	14days(40)	4days(55)
650(0)	10%(0)	16days(0)	1days(0)

Table 1 (*Continued*)

Employee

Issues			
Wage per hour	**Transportation expense**	**Training term**	**Working-time /month**
1050(0)	90%(0)	0days(0)	25days(440)
1000(75)	80%(40)	2days(85)	22days(385)
950(150)	70%(80)	4days(170)	19days(330)
900(225)	60%(120)	6days(255)	16days(275)
850(300)	50%(160)	8days(340)	13days(220)
800(375)	40%(200)	10days(425)	10days(165)
750(450)	30%(240)	12days(510)	7days (110)
700(525)	20%(280)	14days(595)	4days(55)
650(600)	10%(320)	16days(680)	1days(0)

Each issue consists of 9 alternatives and figures in parentheses are the scores each participant gains.

gains for one resulted in the equal degree of losses for the other party); the logrolling issues were a variable-sum depending on combinations of the alternatives of the two issues (i.e., gains for one party did not result in the equal degree of losses for the other); and, in the compatible issue, the value of each alternative was the same for both negotiators (i.e., a gain for one party resulted in an equal gain for the other). The experimenter stressed that the participants must continue the negotiation until they reached agreement on all of the four issues or the time expired.

Independent variables

The experiment consisted of 2 levels of exitability, which differed in the availability of alternative negotiation partners, and the pairs of participants were randomly assigned into one of the two conditions. In the exitable condition, the experimenter separately told each participant that the other party was allowed to exit the negotiation and to change partner at any time. In the unexitable condition, the experimenter instructed the participants that both parties were not allowed to exit the negotiation until the agreement. In both the exitable and unexitable conditions, the negotiation ended when an agreement was given by a party's acceptance of the offer provided by the other party.

Dependent variables

Ohbuchi, Chiba, and Fukushima (1997) developed the scoring system for the content analysis of verbal responses in conflict situations. Among the 14 response categories measured by this system (rejection, assertion, demand, threat, explanation, supplication, suggestion, persuasion, question, compromise, consideration, acceptance, trade-off, and tap), we focused on two collaborative actions (trade-off and compromise) and three assertive actions (assertion, demand, and threat). Compromise was to make concessions; trade-off was to make concessions on an issue combined with making demands on another issue; assertion was to argue that one's

offer was reasonable; demand was to argue that one's offer was not negotiable; and threat was to suggest a breakdown in negotiation when the other party did not accept one's offer. Three raters independently coded each message according to these categories, and scored frequencies of each of the 14 categories for each participant. The frequency score of each category was converted into a percentage for the total frequency of 14 categories in each participant, and then, it was averaged between the three raters. Reliability coefficients (α) were .88 for compromise, .89 for trade-off, .86 for assertion, .87 for demand, and .00 for threat. Only a rater used the category "threat" for only a message of a participant, but the other raters did not use it at all. Besides these individual scores, the pair scores were also given by aggregating the individual scores of two participants in each pair.

The measure of agreement was the number of pairs in each condition that agreed on all of the four issues within 40 minutes in the negotiation session. The reason was that an agreement reached after 40 minutes was not regarded as voluntary but as pressed by the experimenter's announcement that 5 minutes remained in the allotted period. The measure of integrativeness was the joint gain, that is, the total scores of the paired participants who reached agreement within 45 minutes.

In order to measure the anxiety for the continuation of negotiation, each participant was asked after the experiment to answer the question, "Did you make efforts to hold the other party in the current negotiation?" on a 7-point scale ranging from "*Not at all (1)*" to "*Definitely (7)*".

Results

Individual analysis

Anxiety for the continuation of negotiation. The item scores were tested by *ANOVA* using exitability as independent variable. The effect of exitability was marginally significant, $F(1,39) = 3.95$, $p = .054$. This non-significant effect suggests that the participants in the exitable condition felt stronger anxiety for the continuation of negotiation than those in the unexitable condition ($M = 5.35$ vs. 4.50).

Negotiation behaviors. Table 2 shows the means of the individual scores of the four verbal response categories in each condition. These scores were tested by *MANOVA* using exitability as an independent variable. The effect of exitability on assertion was significant, $F(1,39) = 5.80$, $p < .05$, and that on compromise and demand were marginally significant, $F(1,39) = 3.77$, $p = .06$ and $F(1,39) = 3.65$, $p = .064$. The participants in the exitable condition made less

Table 2 Means and SDs of the individual scores of assertion, demand, compromise, trade-off as a Function of exitability

	Assertion		Demand		Compromise		Trade-off	
Condition	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Exitable	0.002	0.009	0.065	0.129	0.009	0.031	0.237	0.183
Unexitable	0.099	0.179	0.151	0.154	0.067	0.131	0.170	0.164

assertion, compromise, and demanding actions than those in the unexitable condition.

Pair Analysis

Negotiation behaviors. Table 3 shows the means of the pair scores of the four verbal response categories in each condition. These scores were tested by *MANOVA* using exitability as an independent variable. The effect of exitability on assertion was significant, $F(1,19) = 6.14$, $p < .05$, and those on demand and compromise were marginally significant, ; $F(1,19) = 6.74$, $p = .063$; $F(1,19) = 4.37$, $p = .051$. The participants in the exitable condition made less assertion, compromise, and demanding actions than those in the unexitable condition.

Table 3 Means and SDs of the pair scores of assertion, demand, compromise, trade-off as a Function of exitability

	Assertion		Demand		Compromise		Trade-off	
Condition	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Exitable	0.002	0.007	0.065	0.080	0.009	0.014	0.238	0.149
Unexitable	0.103	0.129	0.152	0.113	0.064	0.082	0.164	0.123

Agreement. Figure 1 shows the number of pairs that reached an agreement in each condition. In order to test the differences between the experimental conditions, we conducted a chi square test. It t revealed that the pairs in the exitable condition reached agreement more frequently than those in the unexitable condition, *chi square* (1) = 3.53, $p = .06$.

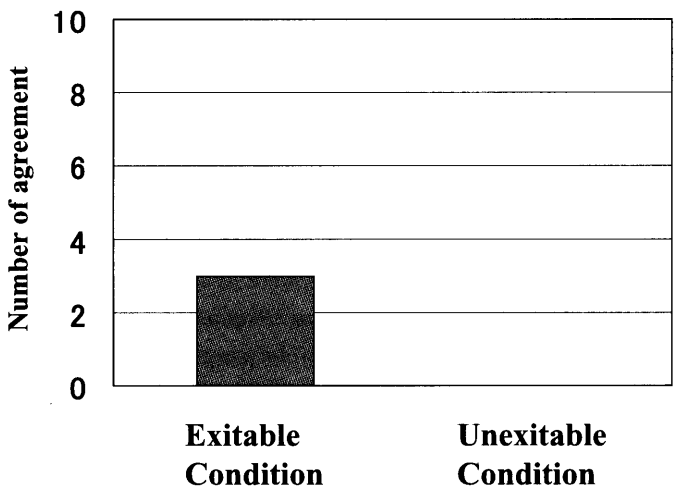

Figure 1. Frequency of agreement

Joint gains. Joint gains were the total scores of the participants in each pair who reached an agreement within 45 minutes. These scores were tested by *ANOVA* using exitability as an independent variable. The effect of exitability was significant, $F(1,13) = 7.97$, $p < .05$. The joint

gain of the pair in the exitable condition was significantly higher than those in the unexitable condition (M = 2683, 2414).

Correlation analysis. In order to examine the relationships between negotiation behaviors, agreements, and joint gains, we computed correlations between the variables. Table 4 indicates that demand significantly correlated positively with assertion, and these significantly correlated negatively with the joint gain.

Table 4 Correlations between the dependent variables

Depend Measures	*Pair*				
	1	*2*	*3*	*4*	*5*
1. Assertion					
2. Demand	.56*				
3. Compromise	.34	.38			
4. Trade-off	-.32	-.39	.15		
5. Agreement	.19	.17	.12	.09	
6. Joint gain	-.74**	-.76**	-.31	.40	-.42

* $p < .05$. ** $p < .01$.

Discussion

In the present study, we focused on exitability, which is a social psychological characteristic of electronic media negotiation. Through a laboratory experiment, we attempted to examine a series of hypotheses regarding the effects of exitability on the processes and outcomes of electronic negotiation.

We hypothesized that the participants who perceived the other party was exitable would decrease assertive behaviors (*Hypothesis 2*) and increase collaborative behaviors (*Hypothesis 3*) because they were motivated to reduce anxiety for the continuation of negotiation (*Hypothesis 1*). To examine the prediction, we observed the behavior of the participants in the exitable condition, in which they were told that the other party could exit from the negotiation, and in the unexitable condition, in which they were told that both parties could not exit. The results were consistent with *Hypothesis 1* and *2*, that is, the participants in the exitable condition were motivated to keep the other party in current negotiation, and made less asserting and demanding behaviors than those in the unexitable condition. This suggests that the participants who perceived the other party potentially had alternative negotiation partners avoided engaging in self-asserting behavior with an expectation to keep the other party in the current negotiation.

It was also found that the participants in the exitable condition made less compromising behavior than those in the unexitable condition, inconsistent with *Hypothesis 3*. It was suggested that the participants did not make mere concessions even when they felt anxiety for continuation of negotiation. Hatta and Ohbuchi (2003) suggested that participants did not prefer such a

one-sided concession even when they were in a low-power status, and the results of the present study supported their suggestion. Exitability did not effect trade-off behavior, though the participants in the exitable condition made this type of behavior non-significantly more often than those in the unexitable condition (M = 0.237 vs. 0.170). Although the results were inconsistent with *Hypothesis 3*, the pattern of means was consistent with our prediction. Some of the participants who perceived that the other party could exit from the negotiation attempted to trade-off instead of self-assertion and mere compromise.

To examine the effects of exitability on negotiation outcomes, we analyzed the rates of agreement. The results were consistent with *Hypothesis 4*, that is, the participants in the exitable condition reached agreement more frequently than those in the unexitable condition and the agreement was more integrative in the exitable condition than in the unexitable condition. In the exitable condition, the participants behaved non-assertively. Such a cooperative orientation seems to have prompted agreements. In addition, the fact that the integrative agreement was made in the exitable condition suggests that the participants attempted to share profits for both parties through negotiations. These results indicate that the perception that the other party has alternative negotiation partners prompted integrative agreements. Pinkley and his colleagues (Pinkley, Neale, & Bennet, 1994; Pinkley, 1995) demonstrated that participants who do not have alternative negotiation partners tend to offer more attractive proposals and are more strongly committed to the current negotiation than those having them, probably with anxiety for continuation of negotiation. Using the electronic negotiation situation, we observed the same positive effects of alternative partners as Pinkley et al's. Therefore, the exitability can be regarded as a positive characteristic of electronic negotiation that provides participants with alternative partners and distance.

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