

Foreign language effect in negotiations: negotiation language and framing effect on contract terms and subjective outcomes

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Abstract

Purpose – This study aims to test negotiation outcomes when bilinguals negotiate in a foreign rather than their native language. Decision research on the foreign language effect indicates that bilingual individuals may be less susceptible to framing bias when using a foreign language because they make less emotional and biased choices. With increasing international business activity, there is a pressing need to examine the effect of language on bilingual negotiators.

Design/methodology/approach – The authors tested the hypotheses using a two (task frame: gain vs loss) $\times$ 2 (language: foreign vs native) factorial design recruiting 246 Korean–English bilinguals. A negotiation simulation with three issues was used, and participants exchanged offers with a preprogrammed computer they believed to be a real counterpart.

Findings – There was no significant interaction effect between framing and language on the offers made, but the framing effect was mitigated and nonsignificant for negotiators who used their foreign language. The interaction between framing and language conditions significantly affected negotiators' positive emotions and satisfaction with the negotiation.

Originality/value – The uniqueness of this paper is related to its effort to investigate the effect of negotiation language on a negotiator's decision-making. Considering globalization and the increasing prevalence of international negotiations, this paper has implications for researchers and practitioners.

Keywords Foreign language effect, Framing bias, Negotiation, Bilingual, Negotiation outcomes

Paper type Research paper

Introduction

The globalization of commerce and trade raises the prevalence and importance of cross-cultural negotiations (Bontempo *et al.*, 1997; Brett, 2007; Weiss, 1994). Growing multinational competition and cooperation means that the structure of the negotiation process includes more people using foreign languages when working with each other. From an intraorganization perspective, leaders must understand the potential effect of language diversity on global organizations (Neeley and Kaplan, 2014). With more employees and companies using multiple languages, incorporating divergent people and organizations requires negotiations in nonnative languages. However, we still know little about how using different languages in negotiations affects a bilingual's judgment and decision-making process.

A framework that can help researchers and practitioners understand the effect of language in negotiations is research on the so-called “foreign language effect” (FLE).

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Keysar *et al.* (2012) coined this term to describe how people's decision-making processes are affected by processing information using their native vs nonnative language (Keysar *et al.*, 2012). The psychology and language literature has accumulated results showing that using a foreign vs native language affects decisions leading researchers to call for additional study of interactive contexts, such as interpersonal conflict and negotiation (Costa *et al.*, 2014). Negotiation entails the exchange of information and often interpersonal interaction, so communication in the negotiation process is important (Short, 1974). Investigating the tendencies and capabilities of nonnative speakers in organizations represents an important issue in the global economy (Huang *et al.*, 2013; Neeley *et al.*, 2012; Neeley and Dumas, 2016) but has been missing in negotiation studies.

This work can inform the literature on judgment bias, which has also been a major focus in the negotiation literature (Neale and Northcraft, 1991). A number of common biases can skew judgment of the probability of risks and rewards, sometimes leading to suboptimal choices (Gilovich *et al.*, 2002; Kahneman, 2003). Active systematic theory building and research on “the study of error” (Lippmann, 1922) actually began with attempts to understand and remedy a profound and tragic negotiation failure in international relations (Bottom *et al.*, 2011). More recent research has begun to pinpoint how common biases shape and sometimes derail the negotiation process (Bottom *et al.*, 2011). We examine the FLE as a potential mitigating factor. Studying it in the negotiation context may further illuminate aspects of the exchange process, yielding implications for organization dynamics.

Drawing upon two strands of research into negotiator biases when using a foreign language, we aim to make three contributions. First, this research aims to investigate how language use affects bilinguals' negotiating outcomes. Many negotiation studies have explored the influence of specific cultural backgrounds (Adair and Brett, 2005; Imai and Gelfand, 2010; Liu *et al.*, 2012). We extend this work by demonstrating that the act of speaking a foreign language influences negotiators, even holding cultural attributes constant. With this separation of language and cultural effects, we seek to understand the negotiation process in a foreign language setting. Second, this research can contribute to the wider negotiator judgment bias literature. The framing effect is a widely studied persistent form of negotiator bias (Caputo, 2013). The FLE could be a mitigating factor. Previous studies have explored other moderators that mitigate this bias (Carnevale, 2008; Diederich *et al.*, 2018). Along these lines, we will propose that bilinguals' use of nonnative language functions as a moderator. Third, highlighting the potential benefit of using bilingual negotiators, this research can yield implications for how companies select, train and deploy negotiators with different competencies.

Literature review and hypothesis development

The negotiation process involves information processing, information exchange and decision-making. Previous research recognizes that negotiators use intuition in a way that makes them prone to systematic biases, which, in turn, influence the negotiation process and outcome (Bazerman *et al.*, 2000; Brett and Thompson, 2016; Kesting and Nielsen, 2020; Kramer *et al.*, 1993; Neale and Bazerman, 1985). We begin this section by focusing on framing bias in particular. We continue by reviewing studies about the FLE, explaining how the use of a foreign vs native language influences bilingual negotiators' outcomes.

Framing bias in negotiations

Recognizing that bias can skew negotiator judgment contributing to inefficient decisions and ineffective outcomes, researchers identified particular biases and some methods for debiasing (Bazerman *et al.*, 2000). Considerable attention focuses on framing, anchoring and

overconfidence (Caputo, 2013; Bhatia and Gunia, 2018; Neale and Bazerman, 1985; Ritov, 1996; Small *et al.*, 2007). Reliance on intuition and heuristic information processing leaves negotiators vulnerable to these effects.

In this paper, we focus on the framing effect, which is a prediction derived from the prospect theory of risky choice (Kahneman and Tversky, 1979). How issues and outcomes are presented and processed by bargainers influences their willingness to take risks, shaping tactical choices and subsequent outcomes. Neale and Bazerman (1985) found that participants issued greater concessions and earned better and more integrative outcomes when they negotiated within a frame focused on gains they could accrue (Neale and Bazerman, 1985). Those framed to focus on possible losses to be incurred acted more competitively, conceded less and perceived the negotiation to be more unfair. In a particular form of open market simulation, Neale *et al.* (1987) further observed that those bargaining for gains completed more transactions yielding greater total value than those seeking to eliminate losses (Neale *et al.*, 1987). Reflecting the fundamental tension between actions that claim and those that create value, negatively framed negotiators secure more concessions from and claim more value than a positively framed counterpart (Bottom and Studt, 1993). Research persistently finds evidence of a link between negotiation framing, tactics and outcomes.

Evidence of moderating factors for the framing bias suggests that it is a replicable but somewhat malleable phenomenon. Manipulating the social motive of participants influenced the effect of framing; participants in the cooperative motive condition were more cooperative in the loss frame, while those in the individualistic motive condition cooperated more in the gain frame (De Dreu and McCusker, 1997). Carnevale (2008) found that positive mood interacts with the framing effect. Individuals in a positive affect condition showed a reversed pattern. They conceded more in the loss than in the gain condition. Time constraint is another factor that influences the strength of the framing effect (Diederich *et al.*, 2018). Tighter time constraints make the framing effect more salient. These studies further substantiate the framing effect but highlight the need to understand moderators of it.

Framing bias and foreign language effect

We consider the framing effects found in the negotiation context (Caputo, 2013) in light of recent studies demonstrating that native vs foreign language use influences framing bias. We use the term *foreign language effect* below to refer to the evident impact of using a foreign language during decision-making (Keysar *et al.*, 2012).

Individuals appear to be less influenced by framing when making decisions in a second rather than in their native language. Keysar and colleagues used a protocol called the Asian Disease Problem (Tversky and Kahneman, 1981), which is about choosing between safe and risky options to treat an epidemic that will kill 600 people if not addressed. In the gain frame, participants were to choose between a treatment option of saving 200 people or another option with a 1/3 probability of 600 people saved while no one will be saved in 2/3 probability. On the other hand, loss frame participants were given two treatment options that were the same but stated differently. The loss frame version was a treatment option in which 400 would die or another option with a 1/3 probability that no one would die and a 2/3 probability that 600 people would die. In this study, those who use Korean as their native language and English as their foreign language, and who use English as their native language and Japanese and Spanish as their foreign language were recruited. They evinced diminished framing effects when participating in the foreign language condition regardless of the particular native and foreign language. The FLE was also found for loss aversion (Keysar *et al.*, 2012), risk aversion (Hayakawa *et al.*, 2017) and self-serving bias (van Hugten

and van Witteloostuijn, 2018). It has been replicated with participants speaking Thai, Dutch, Hungarian and German (van Hugten and van Witteloostuijn, 2018; Nadarevic *et al.*, 2018; Winskel *et al.*, 2016).

With extensive research showing the existence of FLE, its mechanism has also been investigated. One study suggested that using a foreign language can increase systematic decision-making by reducing emotionality (Hayakawa *et al.*, 2017). Testing whether foreign language usage is responsible for more deliberation vs less emotional processing, Hayakawa and colleagues found support for the reduced emotionality account. Those using a foreign language make decisions using a style that is less rapid and intuitive System 1 thinking vs slow and effortful System 2 based (Kahneman, 1992; Tversky and Kahneman, 1974). In their study, bilinguals facing a moral dilemma made choices with less consideration of deontological rules in their foreign languages. However, they did not make more utilitarian decisions. By testing competing accounts, the authors concluded that using a foreign language affected moral choices, resulting from blunted emotional reactions rather than increased analytic thinking.

Related to this FLE, bilinguals reported a stronger emotional response to swearing or taboo words in their native language (Dewaele, 2004). This suggests that even when individuals process the same words, the emotion evoked depends on whether the word is in their first or second language. Such findings about foreign languages influencing emotionality are consistent with research in neuroscience, notably showing that the emotional system could explain the framing bias using a brain imaging study (De Martino *et al.*, 2006). To the extent that framing bias is related to the emotional system, reductions in a second language condition would be consistent with a reduced emotionality mechanism for FLE.

Foreign language effect mitigates framing effect in negotiations

Building on previous studies on negotiator framing and potential moderators, we propose that a FLE will reduce the impact of the negotiator frame. Given that negotiation is an interactive process with gain and loss, it is full of pitfalls that lead to bias and hamper the ability to evaluate the situation accurately. Using a foreign language is less automatic and emotional, which can result in more reasoned choices. FLE can mitigate bias, regulating negotiator behavior so they are less prone to bias. We next propose a specific case of framing bias in which the FLE may have this impact.

Within behavioral economics, the framing effect is one of the most studied biases, indicating that individuals make inconsistent decisions based on the same information if that information is presented in subtly different ways. Tversky and Kahneman (1981) proposed that individual preferences can reverse due to framing; when a choice is stated in terms of gains, people show risk aversion while they show risk-seeking behavior under loss frames (Kahneman and Tversky, 1979; Tversky and Kahneman, 1981). Keysar *et al.* (2012) found this risk preference reversal weakened when decision-makers relied on a foreign language. They found that the framing effect – whereby people are risk-averse for gains while risk-seeking for losses – reduced when choices were presented in a foreign language (Keysar *et al.*, 2012). People showed diminished loss aversion in foreign language conditions than in native language conditions. This effect was analogous in English–Japanese, Korean–English, English–French and English–Spanish bilinguals (languages listed as native–foreign).

In the current study, we extend these findings into a negotiation context. Whether the negotiators are striving to increase positive gains (profits) or diminish negative losses (expenses) can influence their behavior (Carnevale, 2008; Carnevale and Pruitt, 1992; Neale and Bazerman, 1985). In a loss frame, negotiators perceive giving concessions as increases in

losses, while those in a gain frame perceive the same concessions as decreasing gains. Increasing loss is more painful than decreasing gains, so negotiators in the loss frame are less likely to give concessions when making offers. We hypothesize that this results in differences between offers made in the gain and loss conditions. FLE studies have shown that individuals speaking a foreign language make decisions that are less influenced by framing effects. The research reviewed above suggests that prior effects may generalize across economic decision-making in different settings, including negotiations, in which case offers in foreign conditions should be similar across gain and loss frames. Thus, we predict:

- H1.* Offers made by negotiators will be lower in the loss frame than in the gain frame, though language conditions will interact with the frame. The difference in offers between gain and loss frames will be larger in the native language condition than in the foreign language condition.

This study examines not only objective concession behavior but also how framing and language context can affect subjective outcomes such as emotional reactions and satisfaction with negotiation. Negotiation studies showed the importance of subjective outcomes such as satisfaction with the offer and emotional experience (Curhan *et al.*, 2006, 2009; Overbeck *et al.*, 2010). Curhan *et al.* (2006) defined subjective value (SV) as “social, perceptual, and emotional consequences of a negotiation (p. 494)” and found that participants’ subjective outcomes have predictive validity over objective outcomes in terms of future behavior. An affect heuristic (De Martino *et al.*, 2006) drives framing effects; individuals use emotional information to make decisions that contribute to this bias. In addition, diminished levels of emotionality appear to increase FLE (Hayakawa *et al.*, 2017). Thus, we propose that FLE involves negotiators’ emotional experience.

Studies suggest that the structure of gain vs loss framing evokes different emotional responses. One meta-analysis in the communications literature found that the gain frame induces positive emotions while the loss frame increases negative emotions (Nabi *et al.*, 2020). Cognitive appraisal theory suggests people experience emotional reactions following their cognitive evaluations of the environment (Lazarus, 1991). We suggest that individuals in foreign language settings will experience smaller changes to their emotional states between gain and loss frames than will individuals in their native language settings.

The gain vs loss frame should result in different emotional responses in the current study. The loss frame starts at zero as a reference point, and a person’s best deal is zero. On the other hand, people in a gain frame earn positive gains through negotiation. In their seminal paper, Tversky and Kahneman suggested that “pain is more urgent than pleasure. The asymmetry of pain and pleasure is the ultimate justification of loss aversion in choice” (Tversky and Kahneman, 1991, p. 1,057). Furthermore, negative information is processed more thoroughly, and negative impressions are both faster to form and harder to change (Baumeister *et al.*, 2001). Similarly, the effect of the loss frame is stronger and lasts longer than the gain frame (Ledgerwood and Boydstun, 2014). We note previous studies have shown the importance of positive emotions in negotiations (Carnevale, 2008; Carnevale and Isen, 1986), and focus particularly on positive states. Constantly processing information about the loss will reduce positive emotions, while negotiating about gain will not. Thus, we posit that the loss frame will negatively affect positive emotion.

A similar effect should reduce SV. We note that SV (Curhan *et al.*, 2006) has four factors – namely, instrumental, self, process and relationship. Instrumental SV is satisfaction with the economic outcome, Self SV includes the extent to which an individual loses face, Process SV

addresses satisfaction with fairness and voice and Relationship SV focuses on aspects such as trust and personal impressions. We focus on the three interpersonal factors of SV as our study is about interactive negotiation. We excluded the self-subjective satisfaction value, which is about the negotiator's evaluation of one's performance and experiencing shame. This study design highlights how individuals process different negotiation contexts, so interpersonal aspects of the subjective value index (SVI) have been used. Although the frame can affect the negotiator's positive emotions and feelings about the negotiation, using a foreign rather than the native language will mitigate this relationship. Research on the FLE suggests that individuals in foreign language conditions show lower emotional reactions (Dewaele, 2004; Hayakawa *et al.*, 2017). Thus, we suggest that negotiating in a foreign vs native language can moderate the effect of the gain vs loss frame on SV. Figure 1 denotes a graphical representation of our research model:

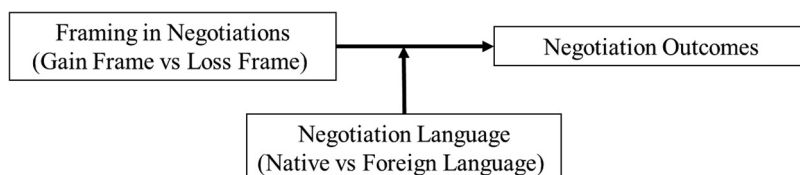
- H2. Negotiators' positive emotion and subjective value (feelings about the instrumental outcome, the process and the relationship) will be lower in the loss frame than in the gain frame, and using a foreign vs native language will interact with this framing effect such that the difference in negotiators' positive emotion and subjective value between gain and loss conditions will be larger in the native language condition than in foreign language condition.

Methods

A computer-simulated experiment tested the hypotheses above. Participants were assigned at random into either a native or foreign language condition and a gain or loss condition in a 2 (native language vs foreign language) $\times$ 2 (negotiating gains vs negotiating losses) factorial design. Eligible participants were native speakers of Korean and also fluent in English, and they were selected by the same criteria as previous research on FLEs (Costa *et al.*, 2014; Hayakawa *et al.*, 2017; Keysar *et al.*, 2012). That is, participants were invited to the studies only if they were native speakers of the target native language, fluent foreign speakers of the target foreign language and not exposed to the target foreign language at home before the age of eight. Past studies have sampled from Korean–English bilingual speakers (Keysar *et al.*, 2012), and typically effects generalize across different languages that are not overly similar to each other linguistically (c.f., Dylman and Champoux-Larsson, 2020). This study is preregistered at the Center for Open Science (https://osf.io/8943q/?view_only=066aa01990b64d439bfc92034ce6709).

Participants and recruitment

All participants were recruited in South Korea. To ensure sufficient competence, we recruited those with a specific level of proficiency according to a standardized English test. The level is high enough for them to graduate from prominent South Korean universities (i.e.



Source: Authors' own work

Figure 1.
Conceptual model

a TOEIC test score of 800 or equivalent). We posted recruitment advertisements on the internal bulletin boards of online communities in several South Korean universities in multiple locations. These bulletin boards require university affiliation to access. Participants were told they would engage in a negotiation experiment to study individual differences and negotiations.

To determine the number of participants, we conducted a power analysis. Using the effect size of 0.21 from [Keysar et al. \(2012\)](#)'s framing study with a power of 0.8, an *a priori* power analysis revealed a need for 252 participants. So, we recruited that many. Eight were excluded from the analysis since they indicated that they learned English before the age of four ([Costa et al., 2014](#)). Previous FLE studies suggested that the language should be foreign and taught presumably in school ([Dylman and Champoux-Larsson, 2020](#)). Learning English before the age of four means that individuals were exposed to English as a foreign language before they attended school, so it would be questionably foreign for the purposes of this study. As a suspicion check, we asked for any guesses or thoughts regarding hypotheses, simulation or study after the experiment to ensure that all were blind to the purpose. Four were excluded because they questioned the design and purpose of the study. Three were excluded because they noted that they did not understand the instructions. One was suspicious about whether they were really negotiating against a real person rather than a computer. In total, analyses included 246 participants. There were 60 participants in the native-loss condition, 61 in the foreign-loss condition, 61 in the native-gain condition and 64 in the foreign-gain condition.

Study design

We randomly assigned participants to one of four conditions. The native (Korean) vs foreign (English) language condition crossed with the gain (Positive) vs loss frame (Negative) condition. We adopted [Carnevale \(2008\)](#)'s experimental design that tested the moderating effect of positive affect on the framing effect ([Table 1](#)). [Table 1](#) shows different payoff charts by frame. We used this chart as written for the foreign language condition and as translated for the native condition.

Upon arrival, participants were guided to a computer workstation, consistent with the cover story, and they waited to be connected to a human counterpart online. To increase motivation, participants were told they would receive a bonus of up to KRW 2,000 (US\$1.70) on top of their standard payment of KRW 6,000 (US\$5.00). All participants were told that they were assigned at random to the seller role. They received programmed offers from the to be actual buyers. They exchanged offers in the form of three issue combinations. Participants received the same programmed offers that [Carnevale \(2008\)](#) used (i.e. ABA, BBB, ACC, BCD, CCE and BDF), reflecting common practices for a tough bargaining partner. [Figure 2](#) shows the negotiation simulation in native and foreign conditions.

Participants were informed there would be seven rounds of negotiation. However, six rounds were the actual maximum to eliminate any effect from knowing that one was in a final round without further opportunity in case of an impasse. After reaching a deal or completing the sixth round, participants reported their emotions, offer satisfaction and demographic information. During the negotiation, while rounds of offers and counteroffers were still ongoing, the negotiation would be interrupted when the participants gave an offer that was more favorable than the system was about to give next. This prevented participants from receiving a counteroffer that would elicit confusion and suspicion that the counterparts may be a computer vs human. After participants finished the survey, we debriefed them, informing them that the negotiation consisted of preprogrammed offers. We then paid out the maximum amount they could have earned from the negotiation simulation, including the bonus.

Table 1.
Negotiator issue
chart for computer-
simulated
experiments in
foreign language
condition

Delivery time		Discount terms		Financing terms	
<i>(a) Issue chart for gain frame conditions (positive frame)</i>					
A	0	A	0	A	0
B	200	B	300	B	500
C	400	C	600	C	1,000
D	600	D	900	D	1,500
E	800	E	1,200	E	2,000
F	1,000	F	1,500	F	2,500
G	1,200	G	1,800	G	3,000
H	1,400	H	2,100	H	3,500
I	1,600	I	2,400	I	4,000
<i>(b) Issue chart for loss frame conditions (negative frame; values subtracted from the gross of \$8,000)</i>					
A	-1,600	A	-2,400	A	-4,000
B	-1,400	B	-2,100	B	-3,500
C	-1,200	C	-1,800	C	-3,000
D	-1,000	D	-1,500	D	-2,500
E	-800	E	-1,200	E	-2,000
F	-600	F	-900	F	-1,500
G	-400	G	-600	G	-1,000
H	-200	H	-300	H	-500
I	0	I	0	I	0

Source: Carnevale (2008)

The buyer offered you
Delivery Time: A
Discount Terms: B
Financing Terms: A

What is your offer to the buyer?

Your Score Chart:

Delivery Time (Points)		Discount Terms (Points)		Financing Terms (Points)	
0	A	0	A	0	A
200	B	300	B	500	B
400	C	600	C	1000	C
600	D	900	D	1500	D
800	E	1200	E	2000	E
1000	F	1500	F	2500	F
1200	G	1800	G	3000	G
1400	H	2100	H	3500	H
1600	I	2400	I	4000	I

	A	B	C	D	E	F	G	H	I
Delivery Time	☐	☐	☐	☐	☐	☐	☐	☐	☐
Discount Terms	☐	☐	☐	☐	☐	☐	☐	☐	☐
Financing Terms	☐	☐	☐	☐	☐	☐	☐	☐	☐

구매자님이 제안을 보냈습니다
배송 시간: A
할인 조건: B
결제 조건: A

구매자에게 어떤 제안을 보내시겠습니까?

참가자님의 점수 표:

배송 시간 (점수)		할인 조건 (점수)		결제 조건 (점수)	
0	A	0	A	0	A
200	B	300	B	500	B
400	C	600	C	1000	C
600	D	900	D	1500	D
800	E	1200	E	2000	E
1000	F	1500	F	2500	F
1200	G	1800	G	3000	G
1400	H	2100	H	3500	H
1600	I	2400	I	4000	I

	A	B	C	D	E	F	G	H	I
배송 시간	☐	☐	☐	☐	☐	☐	☐	☐	☐
할인 조건	☐	☐	☐	☐	☐	☐	☐	☐	☐
결제 조건	☐	☐	☐	☐	☐	☐	☐	☐	☐

Notes: During the experiment, participants received offers from their counterparts and then formulated and sent their counteroffers. Gain and foreign language condition (Left) and gain and native language condition (Right)

Source: Derived from authors' design of this study (Qualtrics)

Figure 2.
Example of
computer-simulated
negotiation

Measurements

We calculated scores for concession behavior with each round of offers. For our contract outcome analysis, we use the first offer and an average score of all the offers made. Subjective outcomes consisted of two parts; positive emotion and satisfaction with negotiation. We asked about positive emotion on a five-point scale (i.e. “At this moment right now, how much positive emotion do you have?” with the item “I have positive feelings”). To measure satisfaction from negotiation, we used three aspects of SV from the SVI (Curhan *et al.*, 2006); feelings about the instrumental outcome (i.e. “How satisfied are you with your buyer’s most recent offer?”), feelings about the process (i.e. “Would you characterize the negotiation process as fair?”) and feelings about the relationship (i.e. “How satisfied are you with your relationship with your counterpart as a result of this negotiation?”) using a seven-point scale. The analyses below examine the average satisfaction ($\alpha = 0.76$).

Analysis

Contract and subjective outcomes were measured on different scales and analyzed separately. First, participants’ actual offers were measured for each round. Analysis of variance (ANOVA) tested for differences across conditions in the first offer. Linear mixed-effect modeling accounted for the within-individual nested structure of offers made. This model included a random effect for individuals with fixed effects for language and framing conditions. In a supplementary analysis, we compared four conditions. Second, we used ANOVA to examine subjective outcomes of positive emotion and SV, which were measured one time at the end of the negotiation.

Results

Table 2 provides descriptive statistics and correlations among study variables. As expected, the three dimensions of SV are correlated, supporting aggregation into a single measure of negotiator subjective experience. Positive emotions correlated with SV as expected, since both pertain to feelings about the negotiation. The positive correlation between framing and offers made and positive emotion replicates the framing effect. Negotiators in different language conditions obtained different outcomes. However, there was no interaction effect between language and framing on contract outcomes. Next, examining subjective outcomes, we found a significant difference in positive emotions and satisfaction with the offer. In our

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1. Language effect ^a	0.51	0.50								
2. Framing effect ^b	0.51	0.50	0.01							
3. Average offer	4,562.76	2,381.32	−0.08	−0.22**						
4. Positive affect	2.85	1.04	−0.06	0.18**	−0.14*					
5. Negative affect	2.64	1.11	−0.05	−0.29**	0.09	−0.38**				
6. Average subjective value ^c	3.51	1.08	0.07	0.08	−0.03	0.61**	−0.33**			
7. Offer satisfaction	3.26	1.44	0.04	0.04	0.02	0.56**	−0.38**	0.83**		
8. Process satisfaction	3.80	1.24	0.05	0.04	0.00	0.32**	−0.12	0.78**	0.43**	
9. Relationship satisfaction	3.48	1.28	0.10	0.12	−0.10	0.63**	−0.29**	0.85**	0.57**	0.54**

Notes: *M* and *SD* are used to represent mean and standard deviation, respectively. ^aLanguage manipulation (0 = Native language condition; 1 = Foreign language condition). ^bFraming manipulation (0 = Negative [loss] frame; 1 = Positive [gain] frame). ^cAverage subjective value is the average of three dimensions of subjective value – offer satisfaction; process satisfaction and relationship satisfaction. * indicates $p < 0.05$. ** indicates $p < 0.01$
Source: Derived from the statistical analysis of this study (R version 4.2.2)

Table 2.
Descriptive statistics
for and correlations

supplementary analysis, we report no score difference between the gain and loss frame in foreign language conditions.

Contract outcomes

We hypothesized that the language condition would moderate the effect of the task frame. The interaction between language and frame for the first counteroffer the participant made was nonsignificant [$F(1,242) = 0.16, p = 0.69$]. Likewise, with linear mixed-effect modeling, the interaction between framing and foreign language for all offers made was nonsignificant [$F(1,242) = 1.26, p = 0.26$]. So, there was no support for an interaction effect between framing and language on contract outcomes, as predicted in *H1*.

Subjective outcomes

There was a significant interaction effect between framing and language conditions for positive emotions [$F(1,242) = 5.03, p = 0.03$] and SV [$F(1,242) = 6.84, p = 0.02$] as illustrated in [Figures 3](#) and [4](#). In the foreign language condition, there was no difference in positive emotions by frame. By contrast, negotiators in their native language condition experienced more positive emotion when negotiating in a positive (gain) frame vs negative (loss) frame ([Figure 3](#)). The SV showed the same result ([Figure 4](#)). Both findings support *H2*.

Supplementary analysis

Following recommendations for ordinal interaction patterns ([Strube and Bobko, 1989](#)), we conducted a series of post hoc comparisons using the Tukey HSD test for offers participants made. We hypothesized that the framing effect would be present in the native vs foreign language condition. That is, we proposed that differences in offers would be present in the native language condition but diminished in the foreign language condition. Supporting this prediction, mean scores for the negative frame with the native language ($M = 5,452.50, SD = 2,037.61$) were significantly different than the positive frame with the native language condition ($M = 4,027.51, SD = 2,380.18$) [$t(119) = 3.38, p < 0.001$]. However, comparisons for the negative frame in the foreign language condition ($M = 4,737.43, SD = 2,233.83$) and the positive frame with the foreign language condition ($M = 4,011.46, SD = 2,590.18$) were not significantly different [$t(123) = 1.67, p = 0.10$].

Although our study design has a variable score chart that allows participants to reach a positive agreement, which led us to focus on positive emotion in analyses, we also checked whether the interaction effect exists for negative affect. Although negative affect correlated negatively with other study variables, the interaction effect present for positive emotion was not significant for negative emotion. Negative emotion is less relevant to the type of deal-making examined in this experimental simulation which provides for an expansively positive zone of a potential agreement creating many combinations of mutual gains, offers and agreements.

Discussion

Many studies have demonstrated that framing effects can influence the course of negotiation ([Bazerman et al., 1985](#); [Bottom and Studt, 1993](#); [Caputo, 2013](#); [Neale et al., 1987](#); [Neale and Bazerman, 1985](#); [Thompson, 1990](#)). Extrapolating evidence from individual decision-making experiments, we hypothesized that negotiating in a foreign language could mitigate framing effects. Our evidence partially supports this hypothesis. In particular, the negotiation frame changed the offers made, although this frame effect

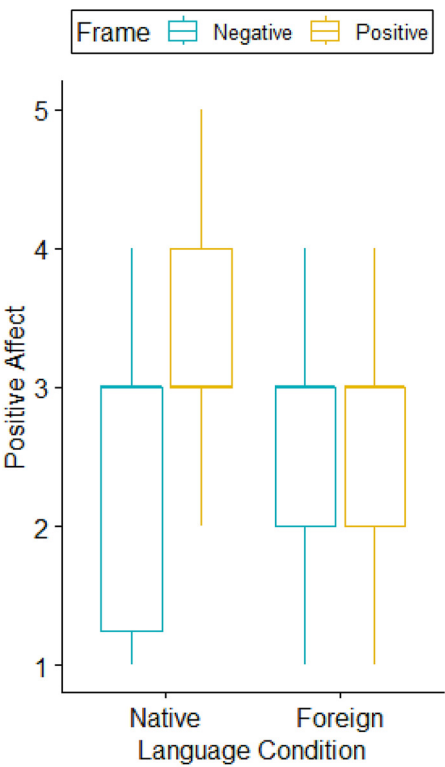
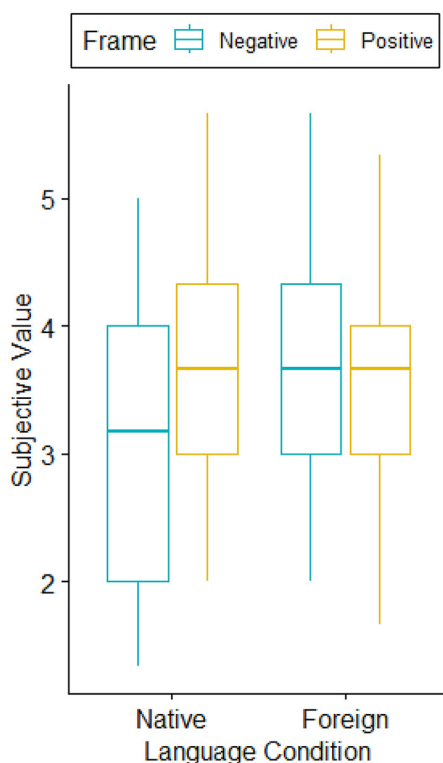


Figure 3.
Framing effect and
foreign language
effect on negotiator's
positive emotions

Notes: $N = 246$. Native language as Korean and foreign language as English
Source: Derived from the statistical analysis of this study (R version 4.2.2)

existed only when negotiators used their native language. There was no significant difference between frames in the foreign language condition. Language and frame did not interact in determining contract terms.

We suggest two explanations for this nonsignificant interaction effect. First, the experimental design, in which participants only negotiated by sending and receiving offers, did not emphasize communication and language use. Although the instructions, score chart and negotiation interface all appeared in different languages, computer-based simulated negotiation does not give a fully immersed interpersonal experience. Further, in each round, participants conducted a relatively rapid calculation to evaluate the counterpart's offer and to formulate their own counteroffer. Research on the FLE proposes that obtaining and processing information in a native or foreign language influences biases in decision-making. We suggest the effect is attenuated to the extent that participants were running calculations rather than focusing on communication in their assigned language. For example, Winskel *et al.* (2016) suggested that their null effect of foreign language on a financial decision-making task was because the task they used was rather simple and did not involve significant language skills (Winskel *et al.*,



Notes: $N = 246$. Native language as Korean and foreign language as English

Source: Derived from the statistical analysis of this study (R version 4.2.2)

Figure 4.
Framing effect and
foreign language
effect on negotiator's
subjective value
(instrumental,
process and
relationship
subjective value)

2016). Along with the relatively attenuated use of language while conducting the task, we speculate statistically that the effect may have been suppressed by an ordinal interaction (Strube and Bobko, 1989).

For subjective outcomes such as positive emotion and negotiator satisfaction, the significant interaction effect between framing and language suggests less intense affective reactions when working in a foreign language (Dylman and Champoux-Larsson, 2020; Hayakawa *et al.*, 2017). Although there was no significant interaction effect in the actual offers made, participants reported different subjective outcomes such that participants in a foreign language condition had emotions and satisfaction that were less impacted by framing. This significant effect for SV is important in that Curhan and colleagues showed that SV could matter more in the long run than economic outcomes when examining criterion variables such as job satisfaction (Curhan *et al.*, 2009). In real-world negotiations, individuals must rely on their subjective evaluation because they cannot objectively evaluate their negotiation outcomes in the same way they can in negotiation simulations containing a payoff chart. As such, this finding suggests the importance of language for bilingual negotiators.

Theoretical and practical implications

This study set out to test language influences on negotiators. Based on our findings, we propose theoretical and practical implications of this study. First, this study gives an insight into the effect of using a foreign language in cross-cultural negotiations, which has thus far coincided with cultural differences in empirical research. When individuals from different cultural backgrounds negotiate, at least one party engages in the negotiation using one's nonnative language. However, previous research has focused primarily on the effect of the home culture, the counterpart culture or the interactions between different cultures (Adair and Brett, 2005; Kopelman and Olekalns, 1999; Liu *et al.*, 2012). We add the observation that when negotiations are processed in a foreign language, this language effect can affect the negotiator's judgment processes. In this way, cross-cultural negotiations include an effect of language as well as an effect of cultural differences.

Second, as the moderator for the framing bias, making use of a foreign language suggested another possible way to eliminate the damaging impact of biases on decision-making. Previous studies provided effective interventions such as perspective-taking or reminding oneself of one's target point (Galinsky and Mussweiler, 2001). The FLE furthers our understanding of heuristics' emotional and automatic mechanisms. Testing the effect and mechanism, this study explores not only a possible way to reduce bias but also a basis for developing interventions to remedy those biases. An example of a potential intervention could be instructing bilinguals to process the negotiation in their foreign language when they need to distance themselves from the situation.

Third, by introducing the FLE in negotiation settings, this study tries to expand the range of contexts in which the effect has been studied and demonstrate its generalizability to economic and business issues. The FLE is not frequently studied, perhaps due to the practical difficulties of securing a large enough sample from this very specific population. However, given that an increasing number of foreign-language speakers participate in negotiations, the effect is worth examining. The act of using a foreign language reduces the chance that negotiators will experience strong feelings, such as disproportionately elated or unhappy, which otherwise is common in this potentially emotional setting. Negotiators might use the tactic of switching languages by letting their counterparts speak their own native language, knowing that it makes them potentially more vulnerable.

A final practical implication is for organizations with foreign partners or international employees. In addition to considering that they are from different cultural backgrounds, organizations need to understand that many of their employees are communicating in a language different from the one they learned or used at home, which influences their affective processes. Such differences might cause conflict within teams, but if understood correctly, team members who are using their foreign language could be an asset through their lower susceptibility to framing effects.

Future research

While this study's findings contribute to research on the FLE in negotiations, many questions remain. First, we call for future research to expand study designs to include direct interpersonal communication in foreign language conditions. It was beyond the scope of this study to investigate the FLE in face-to-face negotiations. As a first step, we focused on the negotiator's comprehension and decision-making. However, actual negotiations require the use of the foreign language in interaction with the counterpart. This also raises the issue not only of language comprehension but also language production. Factors such as language proficiency and anxiety could influence the effect of communicating in a foreign language, given that the level of perceived language competence relates to language production

anxiety (Cheng, 2002). Thus, measuring the FLE masked by the pressures of an interaction context due to the language production issue would be fruitful.

Second, future research can also determine the potential effects of foreign vs native language use on a negotiator's counterpart. In one study about friendship, children preferred speakers with native accents, even favoring them over those with nonnative accents even when sharing a racial identity (Kinzler *et al.*, 2009). As such, a foreign accent can reduce information exchange and building trust.

Finally, future research could consider the potential impact of negotiation language as part of a potential home-field advantage. When negotiating the terms of negotiation, each party compromises on issues such as the official language for the negotiations. In some sense, if one negotiates in a nonnative language, this means that they are already complying with norms or yielding to the counterpart's power. Thus, considerations regarding the power issues can help establish greater accuracy in understanding this phenomenon.

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