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Negotiation and Conflict Management Research

Negotiation Strategy: A Cross-Cultural Meta-Analytic Evaluation of Theory and Measurement

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Abstract

Negotiation theorists conceptualize negotiation strategy from a behavioral or a motivational perspective and negotiation researchers code transcripts or collect negotiators' self-reports to operationalize it. This meta-analysis evaluates the functional similarities and differences between these different theoretical perspectives and approaches to measuring negotiation strategy as it predicts joint gains. We analyzed 3,899 unique negotiations from 76 independent samples and 46 different papers. Our results reveal that motivational and behavioral theories and self-report and behavioral coding measurements yield similar predictions and are functionally equivalent, significant predictors of joint gains. On the other hand, our analysis testing culture (Western versus East Asian, South Asian and Middle Eastern samples) as moderator reveals that the current theories and methods of measuring negotiation strategy are only significant predictors of joint gains in Western culture samples.

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Negotiation is a social process by which two or more interdependent parties make decisions, allocate resources, or resolve disputes (Brett, 2014). Negotiation strategy represents the *way* that people negotiate—the goal-directed behaviors they use to reach agreement (Weingart et al., 1990). "Strategies embody middle-range goals that organize a negotiator's approach, such as 'identify opportunities for mutual gain'" (Weingart et al., 1999, p. 367). In contrast, tactics are the specific behaviors that negotiators use to implement their strategies. Strategies are middle-range goals that organize a negotiator's approach, such as identifying opportunities for mutual gain (Weingart et al., 1990, p. 4). Strategy is an important construct in negotiation because researchers use strategy as a mechanism to explain contextual effects and individual differences on negotiation outcomes. Joint gains, the total value created in a negotiation (Raiffa, 1982), is a particularly important outcome (Pruitt & Rubin, 1986), because negotiators receive more of their high priority interests, which implies that they should be satisfied with their individual outcomes and more likely to implement their agreements (Raiffa, 1982).

Although negotiation scholars agree that strategy is important for negotiation outcomes, how to conceptualize negotiation strategy divides scholars. Behavioral theorists (e.g., Walton & McKersie, 1965) focus on what negotiators do - how they use strategy to share information about interests and priorities to find tradeoffs to generate joint gains (i.e., integrative strategies), or to provide information about power, alternatives, and comparisons to try to influence concessions (i.e., distributive strategies). Motivational theorists (e.g., Deutsch, 1949a; 1973; Blake & Mouton, 1964; Pruitt & Rubin, 1986) focus on negotiators' goals – what they are trying to do, e.g., cooperate versus compete, contend versus problem solve. Deutsch (1949a) reviewed the conceptual literature on cooperation and competition concluding that the differences between the two concepts "lies in the difference in the nature of the two goal regions in the two social situations" (Deutsch, 1949a, p. 131). He went on to say that in the cooperative situation, an individual can enter into his/her goal region only if all other individuals "under consideration" can also enter into their respective goal regions. In contrast, in the competitive situation, an individual who enters into his/her goal region does so at some expense to the others in the social situation (Deutsch, 1949a, pp. 131-132). These conceptual differences between behavioral and motivational theories lead to our first research question: What are the theories' functional differences in predicting joint gains?

How to measure negotiation strategy also divides negotiation scholars and sets up our second research question. Researchers use three different methods: behavioral coding of negotiation transcripts (e.g., Weingart et al., 1990); self-reports collected after the negotiation (e.g., DeDreu et al., 2001); and electronic coding of transcripts (e.g., Friedman et al., 2004). Thus, our second research question concerned the functional differences among methods of measuring negotiation strategy.

Our third research question is whether culture matters to the strategy-joint gains relationship. Do the theories and methods developed and validated in Western cultures generalize to non-Western cultures? Negotiators in different cultures do use strategy differently (Brett et al., 2017) raising the question of whether the strategy-joint gains model may be Western culture bound. We assess these three research questions using meta-analysis.

Comparison of Behavioral and Motivational Negotiation Theory

Van de Vliert (1997) pointed out that conflict management strategy is about what people intend to do as well as what they actually do. This distinction captures the difference between behavioral and motivational theories of negotiation strategy. Both theoretical perspectives have important conceptual similarities. Both view strategy as goal-related behavior and ultimately

conceptualize two different types of strategy, but the theories differ in their emphasis on what negotiators intend to do – their motivation and what negotiators actually do – their behavior. Our research question is whether these conceptual differences matter for studying the negotiation strategy-joint gains relationship.

Behavioral theory conceptualizes two types of strategy in terms of what negotiators do during the negotiation. Most behavioral researchers rely on the theorizing of Walton and McKersie that conceptualizes distributive strategy as the tactics negotiators use to understand and modify their counterparts' utilities for outcomes, e.g.; threats, emotional tactics (putdowns, demands), appeals to logic, and persuasive arguments, and integrative strategy as the tactics negotiators use to define the problem and search for solutions that benefit both parties, or at least do not represent "equal sacrifices" (Walton & McKersie, 1965, p. 9). Negotiators using integrative strategy seek information about a counterpart's interests and priorities, e.g., by asking and answering questions, and then integrate those interests with the negotiator's own (Weingart et al., 1990).

Some behavioral researchers rely on the theorizing and research by Pennebaker (Pennebaker & Graybeal, 2001) (LIWC the Linguistic Inquiry Word Count) concerning categories of words that people use in social interaction, particularly categories of cognitive processes and mechanisms, such as causation, discrepancy, insight and categories of affect such as positive and negative emotion. (See also Elfenbein et al., 2010.)

Motivational theories, both competitive-cooperative theory (Deutsch, 1949a; 1973; Johnson & Johnson, 2005; 2011) and dual concern theory (Pruitt & Rubin, 1986; Rahim, 1983; Ruble & Thomas, 1976) conceptualize strategy in terms of negotiators' motives - what negotiators are trying to do, that is, cooperate or problem solve to try to reach a jointly beneficial agreement or compete or contend to reach an individually beneficial agreement. Dual concern theory identifies four distinct strategies, but empirical studies using this theoretical perspective frequently focus on just two: problem solving and contending, also labeled forcing (e.g., Beersma & De Dreu, 2005). Contending focuses on imposing one's will on others. It involves threats, bluffs, persuasive arguments, and positional commitments (DeDreu et al., 2001). Problem solving in contrast, is oriented toward "an agreement that satisfies own and others' aspirations as much as possible" (DeDreu et al., 2001, p 646).

To avoid confusion in referring to the two different types of strategy proposed by behavioral and motivational theories, we use the Lax and Sebenius' (1986) terms *value creation* to refer to integrative, cooperative or problem solving strategy, and *value claiming* to refer to distributive, competitive and contending strategy. Empirically, the relationship between strategy and outcome has not been tested in a meta analysis. Past work has focused on the relationship between trust and strategy (Kong et al., 2014) or on the relationship between strategy and individual outcomes (Hüffmeier et al., 2018). We propose that strategy has direct effects on joint gains in negotiation. Therefore:

> ***H1.*** Value creation strategy will have a positive relationship with joint gains and value claiming strategy will have a negative relationship with joint gains.

The underlying structure of joint gains may cause behavioral theory to be a stronger predictor of joint gains than motivational theory. To negotiate joint gains, negotiators need to develop relative insight (Pruitt, 1981; Thompson & Hastie, 1990); that is, they need to learn what issues are of higher priority to their counterparts than to themselves so that they can propose trade-offs (Pruitt, 1981). Sharing and reciprocating information about interests and priorities is a key strategy for gaining insight (Gunia et al., 2011; Kimmel et al., 1980). Behavioral theorists conceptualize (Walton & McKersie, 1965) and operationalize (Weingart et al., 1990) integrative strategy as the exchange of information

about interests and priorities. In contrast, motivational theorists conceptualize (Deutsch, 1949b; 1973; Pruitt & Rubin, 1986) and operationalize (De Dreu et al., 2001) problem solving strategy as the nature of the process of searching for an agreement that meets self and other's interests. That process may reveal issue priorities, but negotiators, in considering alternative solutions, may land on one that is satisfactory to both without understanding why. It is also possible that the motivational perspective is more vulnerable to satisficing (Raiffa, 1982) than the behavioral perspective, because the implication of a satisfactory outcome is that it meets a minimum threshold, not that it maximizes trade-offs. The empirical research documents positive and significant correlations between integrative strategy and joint gains (e.g. Kong et al., 2014) and between problem solving and joint gains (e.g., Beersma & DeDreu, 1999). Still, we hypothesize that value creation as conceptualized by behavioral theory will have a stronger relationship with joint gains than value creation as conceptualized by motivational theory.

> ***H2.*** Value creation as conceptualized by behavioral theory will have a stronger relationship with joint gains than value creation as conceptualized by motivational theory.

Measurement Methods of Strategy

Researchers primarily use two different methods to measure negotiation strategy. One is behavioral coding of transcripts of the negotiations either by trained coders (e.g., Weingart et al., 1990) or by computer programs (e.g., Kern et al., 2012). The other is self-reports collected immediately after the negotiation (e.g., DeDreu et al., 2001). Many books and articles discuss the strengths and weaknesses of different methods of measurement (e.g., Manusov, 2005). However, the negotiation measurement articles do not compare strengths, weaknesses, or expected outcomes across different types of measurement. Thus, our research question is whether self-report versus behavioral coding of strategy makes a difference in predicting joint gains.

Behavioral and Computer Coding

Researchers can measure strategy by coding negotiators' email, chat, audio or video exchanges. Typically, highly trained third parties who are not privy to the study's hypotheses, or the outcome of the negotiations they are coding, code transcriptions of these files (Weingart et al., 2005). Occasionally, coders categorize small slices of strategy (Curhan & Pentland, 2007) directly from audio or video recordings. There are several published behavioral coding schemes for negotiation strategy (e.g., Brett et al., 2018; Weingart et al., 2007; Weingart et al., 1990).

An alternative to having people do the coding is to have a computer program count words in predetermined categories. Some negotiation researchers (e.g., Elfenbein et al., 2010) use the categories of content (e.g., positive and negative emotions, cognitive mechanisms, such as cause, insight, discrepancy, negations, etc.) in the Linguistic Inquiry and Word Count (LIWC) (Pennebaker & Graybeal, 2001). Others use LIWC to develop content categories based on theory (e.g., Gelfand et al., 2015).

Because behavioral coding does not capture negotiators' perceptions, the social meaning of their behaviors, it may not predict interaction outcomes as well as self-report (Bakeman & Gottman, 1997). Still, behavioral coding, if done reliably, is relatively objective, allows for very rich data, can take into account timing and sequences (e.g., Weingart et al., 1999) and changes in behavior over time (Bakeman & Gottman, 1997).

Self-Report

Early examples of research using self-report to measure strategy are in Rahim (1983) and Pruitt & Carnevale (1993). Building on prior work by Van de Vliert (1997), De Dreu and colleagues (2001) developed the DUTCH questionnaire. A strength of self-reports is that they capture the social meaning underlying negotiators' behaviors. Self-reports measure what negotiators think of their own and the other party's behaviors during social interaction. Self-report data also is less expensive to collect and prepare for analysis than behaviorally coded data.

The primary critique of self-report measurement is that self-serving biases and inaccuracies in describing one's own behavior or the social interaction will affect reliability and validity (White & Sargent, 2005). Because of the post-negotiation timing of measurement, negotiators are likely to know their own outcomes prior to completing their individual questionnaires and they may craft their answers to justify their outcomes.

Measurement Comparison

Because behavioral coding and self-report vary with respect to the underlying nature of measurement, the two methods may have different predictive validity with respect to joint gains. Behavioral coding may not be as robust a predictor of joint gains as self-report if the motivational orientation of the negotiator is a stronger predictor of joint gains than the actual tactics that negotiators engage in. Self-report should be a more valid measure of the motivational orientation of the negotiator than behavioral coding. Behavioral coding, especially when done by computer, can count use of positive and negative affect words, but it cannot pick up the motivational meaning underlying the use of those words which self-report can. Behavioral coding also may not be as reliable a method of measuring strategy as self-report despite care in developing and maintaining intercoder reliability. Self-report measures typically use multiple items to measure each construct. These items are grounded in theory, but their measurement is developed using standard psychometric techniques that produce reliable and valid scales. See for example the development of the DUTCH measure of the dual concern model (DeDreu et al., 2001). In contrast, training people to code behavior reliably is a challenge, especially when code categories are narrow and coding is fine grained at the thought unit level within each speaking turn. See for example Weingart and colleagues' study (2007) in which a single person coded approximately 32,000 thought units contained within approximately 19,000 speaking turns. For reliability, which was .80 across all 33 categories, a second person coded a subset of approximately 500 units across different negotiations. The 33 codes were then reduced to six using correspondence analysis. In addition, self-reporting negotiators may tailor self-reports of their motivations to be consistent with their own outcomes. For reasons of capturing sematic meaning and motivational intention, reliability, and self-consistency, we predict that self-report measurement of negotiation strategy will outperform behavioral coding in predicting joint gains.

> ***H3.*** Self-report measurement of negotiation strategy will have a stronger relationship with joint gains than behavioral coding.

Culture: A Theoretical Moderator

Our third research question is whether culture matters to the strategy-joint gains relationship. Do the theories and methods developed and validated in Western cultures generalize to non-Western cultures? There is both theoretical and empirical evidence that negotiators in different cultures use

strategy differently (Brett et al., 2017) raising the question of whether the strategy-joint gains relationship may be limited to Western culture. In Western culture, use of value creation strategy is widespread and generally effective in generating joint gains (Kong et al., 2014). In East Asia, the Middle East and South Asia, value claiming appears to be more normative than value creating (Brett et al., 2017). Joint gains tend to be lower in non-Western than Western cultures, but not always significantly so (Aslani et al., 2016). Kong et al.'s (2014) meta-analysis reported a significant negative relationship between value claiming strategy and joint gains.

Culture and communication theory describes Western cultures as low context, because norms in those cultures emphasize direct communication. In contrast, East Asian cultures are labeled high context, because norms emphasize indirect communication (Gibson, 1998; Hall, 1976). Low-context communication is more explicit, with meaning clearly contained in the words or on the surface of a message. High-context communication is more implicit, with subtle meaning embedded behind and around the spoken or written words. Pruitt (1981) theorized that sharing information about interests and priorities in a give and take of questions and answers between negotiators (value creating strategy) is a direct means of gaining the knowledge about differences that negotiators need to understand to propose trade-offs. He also theorized that there is indirect information embedded in negotiators' influence attempts (that is, their use of value claiming strategy) that negotiators could use to acquire that same information. He pointed out that negotiators do not try to influence each other to make concessions on issues that are unimportant to them, although he conceded that drawing inferences about interests and priorities from influence attempts is indirect and may require second order processing. Adair and Brett (2005) contrasted the use of negotiation strategy by negotiators from high and low context cultures, concluding that high context culture negotiators were using influence and offers to negotiate joint gains indirectly whereas low context culture negotiators were exchanging information via questions and answers to negotiate joint gains directly.

Thus, there is both theory and empirical evidence suggesting that negotiators from Western and East Asian, or low and high context cultures may use value creating and value claiming strategy differently to negotiate joint gains. However, the patten of East-West differences may not extend to Middle Eastern (Aslani et al., 2016; Gelfand et al., 2015) and South Asian negotiators (Gunia et al., 2011). Studies from these cultures report that use of value claiming strategy is strongly and negatively related to joint gains, in contrast to studies from East Asia. In fact, Gelfand and colleagues (2015: 967) concluded, "the same language that predicts integrative agreements [joint gains] in the United States, namely, that which is rational and logical (cognitive mechanisms, LIWC), actually backfires and hinders agreements in Egypt."

H4a. The relationship between value creating strategy and joint gains will be more positive in Western than in non-Western cultures.

H4b. The relationship between value claiming strategy and joint gains will be more negative in Western than in non-Western cultures.

Method

Literature Search

To develop a database of studies, we searched PsychInfo, Google Scholar, ProQuest, and SCOPUS for keywords: negotiation, integrative strategy, integrative tactics, distributive strategy, distributive tactics, and DUTCH (DeDreu et al., 2001). We forward and backward searched the

references in several key papers (Hüffmeier et al., 2014; Kong et al., 2014; Weingart et al., 1990). A separate literature search using the same target keywords across ProQuest and Web of Science seeking dissertations identified 18 dissertations. Overall this search yielded 110 papers. We sought additional papers by trying to contact the 189 authors of the 110 papers. We could get no email addresses for 31; one was deceased; and we received no reply from 86 authors. We received 52 additional papers from authors who responded to our email.

Inclusion Criteria and Selection of Studies

Working together, two authors developed and applied the following inclusion criteria: 1) At least two parties from an undergraduate, MBA, executive, or mixed educational-level population completed a simulated multi-issue negotiation either in person or virtually. 2) Researchers measured value claiming and/or value creating strategy using behavioral coding, self-report, or computer coding. Pre-negotiation surveys indicating participants' intent to use strategies did not meet inclusion criteria. 3) Data were available to compute a correlation between value claiming and/or value creating strategy and joint gains. We sought correlational data from authors whose published papers did not report the correlations we required, but whose methods sections suggested that appropriate data existed. We received data from 14 authors. 4) The negotiation context was deal making, not dispute resolution. 5) The manuscript was in English.

Figure 1 and Table 1 in the supplemental materials summarize our search process and the results of our decisions on inclusion (46 papers) and exclusion (134 papers). Citations of the 134 excluded papers categorized by the reason for their exclusion are available from the authors.

Coding

Two authors, working separately, read each paper to categorize it by theory and measurement. We classified two theoretical perspectives as behavioral: those that followed the theoretical model in Walton and McKersie (1965) and those that followed the theoretical model in Pennebaker and Graybeal (2001). We classified three approaches to measurement as self-report, behavioral coding, computer coding. There were no disagreements between coders regarding the classification by theory or measurement.

To code the dependent variable, joint gains, two authors working separately identified the dependent variable used in the study. Joint gains and Pareto optimality are very highly correlated (Tripp & Sondak, 1992). The meta-analysis includes studies reporting one or the other outcome.

To code the independent variables, value creating and value claiming, we used the strategic classifications provided by the author of the paper. If a motivational theory paper measured multiple indicators, for example, multiple dimensions of the DUTCH measure, we followed the lead of DeDreu and colleagues (2001) coding problem solving as value creating and forcing as value claiming. If a behavioral theory paper measured multiple tactics and classified them into strategies, we used the paper's classification assigning tactics identified by the author as integrative to value creating and those identified by the author as distributive to value claiming. When a behavioral theory paper measured multiple tactics and did not classify the tactics into strategies (four papers), two coders working together followed the lead of two key behavioral papers (Weingart et al., 1990; Weingart et al., 2007) to assign tactics to strategies. For behavioral theory papers based on word count categories (Pennebaker & Graybill, 2001), we followed the lead of Elfenbein et al., (2010), because this paper used multiple measures of tactics - behavioral and computer coding, and self-report and assigned them to

strategies. Table 1 summarizes the decision rules for coding independent variables and notes the papers on which the decision rules were based.

Table 1
Variable Coding

Value Creating strategies	Value Claiming strategies
Information sharing and seeking, questions and answers about information and priorities (Weingart et al., 1990)	Emotional tactics, appeals to logic, influence tactics (putdowns, demands, threats) (Weingart et al., 1990)
Problem solving (DeDreu et al., 2001)	Punishment; contending, avoiding, forcing, contentious behavior, and concession making (DeDreu et al., 2001; Pruitt, 1981)
Collaborating and cooperating (Deutsch, 1973)	Competing and contending acts (Deutsch, 1973)
Discrepancy (Elfenbein et al., 2010)	Optimism (Elfenbein et al., 2010)

We recorded the reliability of each indicator of strategy. When a paper reported multiple tactics assigned to the same strategy, we averaged their correlations with joint gains – a procedure recommended by Hunter and Schmidt (2004) for multiple indicators. We also averaged the reliabilities of the tactics that were averaged.

Additional coding included recording of the national origin of each sample to operationalize culture as a moderator. We used World Bank's regions of economic activity (World Bank Annual Report, 2016) (e.g., Brett et al., 2017) to assign nations to regions: East Asia, Middle East and South Asia, and the West.

We recorded methodological moderators including publication status: published vs. unpublished; setting: field vs. laboratory; subject population: undergraduate, MBA, executive or mixed; negotiation method: one-on-one, team-on-team, or multi-party; percent of male participants; and average age of participants. We recorded four control variables: paper number ("paper"), the number of independent studies included in each paper (two papers had two studies each), number of negotiations in the study (sample size of dyadic, team-on-team or multiparty groups in the study), and number of methods used to measure strategy.

Meta-Analytic Procedures

We conducted all meta- and moderator analyses using the Metafor package (Viechtbauer, 2010) in R (R Core Team, 2016) with mixed effects models. Mixed effects models allowed us to meet the assumption of effect size statistical independence (Hunter & Schmidt, 2004), and to account for variability between effect sizes attributable to sampling error. To control for the dependence of observations when studies used multiple measurement methods or theories, we modeled paper effects, sample effects, study effects, and pair (an indicator of whether both value creating and value claiming coefficients were measured within the same negotiation) as random effects, and strategy, theory, measurement method, and additional moderators of interest as fixed effects. This approach partitioned variance explained by identifiable factors (controls and moderators) and by random, unidentifiable sources (Lipsey & Wilson, 2001).

We conducted the meta-analysis using Pearson's *r* as the effect size measure. Because *r* is not normally distributed, we transformed each *r* into Fisher's *z*, after correcting for measurement error. A Fisher's z transformation also controls for sample size. We used transformed Fisher's z values in all analyses. We computed confidence intervals around transformed Fisher's z using the Metaphor package. All tables report Pearson's *r* correlations that were un-transformed from the Fisher's z after the analysis. The full meta-analysis plan, explanations of correction techniques, power analysis, and publication bias are in the supplemental materials.

Results

The purpose of this meta-analysis was to evaluate hypotheses concerning the functional similarity and differences in predicting joint gains between theories for conceptualizing and methods for measuring negotiation strategy across Western and non–Western cultures. We analyzed 46 papers that produced 62 independent samples and 76 total observations.

Value Creating and Value Claiming Negotiation Strategy on Joint Gains

H1 tested the strategy only model against an intercept only model. The meta-analytic results reported in Table 2 show that value-creating strategy had a significant, positive relationship with joint gains; value-claiming strategy had a significant negative relationship with joint gains. A deviation test comparing the log likelihoods from the strategy model to the intercept only model shows that the strategy model fit the data better than the intercept only model (Model fit = ($\Delta G^2(1) = 44.07$, $p < .001$, $\Delta I^2 = 8.13\%$).

Table 2

Effects of Negotiation Strategy on Joint Gains

Joint Gains	**Full Model** (k = 133; 6,801 negotiations; 3,899 unique)					**Outliers Removed** (k = 125; 6,377 negotiations; 3,687 unique)				
	n	$\bar{r}$	*z*	*95% CI*	I^2	*n*	ρ	*z*	*95% CI*	I^2
Creating	70	.29	7.30***	[.22; .38]	78.55%	66	.25	7.06***	[.18; .32]	72.72%
Claiming	63	-.14	-3.20**	[-.22; -.05]		59	-.10	-2.70**	[-.18, -.03]	
Model Fit: $\Delta G^2(1) = 44.07$, $p < .001$, $\Delta I^2 = 8.13\%$ $QE(131) = 610.76$, $p < .001$ $QM(2) = 63.51$, $p < .001$						**Model Fit:** $\Delta G^2(1) = 38.11$, $p < .001$, $\Delta I^2 = 9.88\%$ $QE(123) = 450.85$, $p < .001$ $QM(2) = 57.23$, $p < .001$				

Note. *z* computed on corrected, and Fisher's *z* transformed correlations. $\bar{r}$ and ρ are reverted transformations from Fisher's *z*-values (and can be interpreted as correlations). Confidence intervals computed around transformed Fisher's z. Unique counts for observations that report both creating and claiming coefficients. Model fit statistics compared against intercept-only models. Heterogeneity analyses (I^2) were conducted on corrected effect sizes.

$p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

A Guide to Reading Results Tables

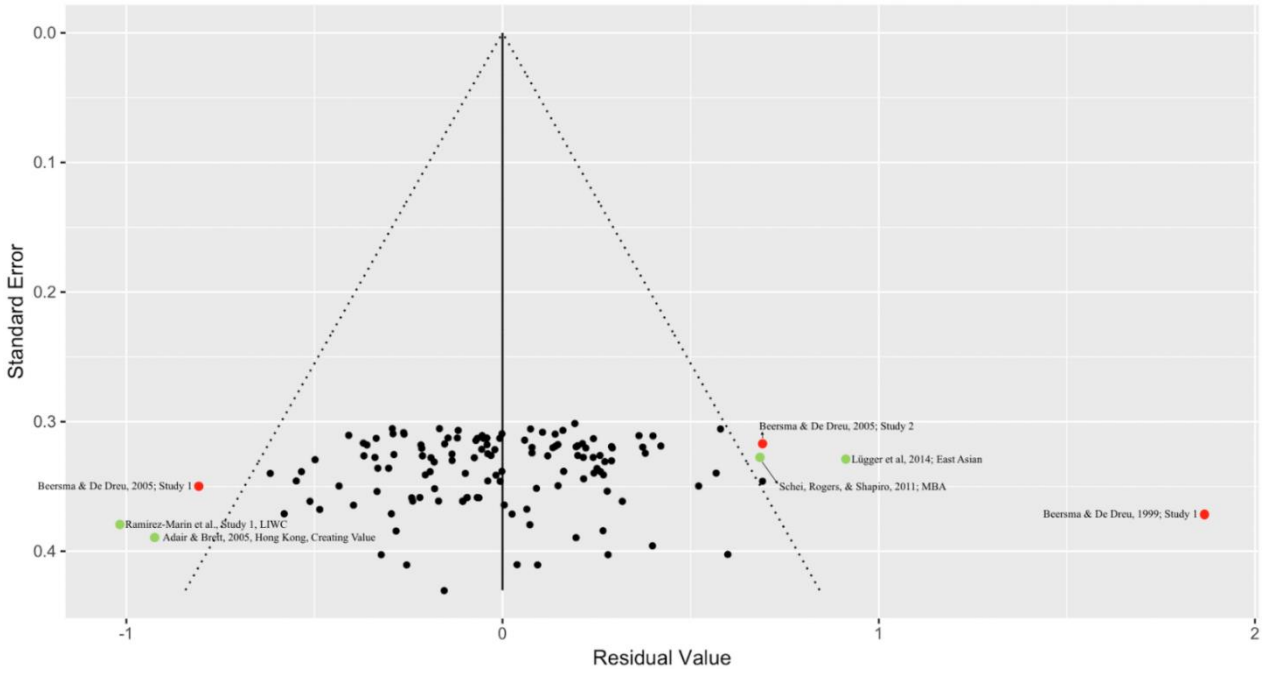
Observation is our meta-analysis unit of analysis. Within each observation, there were multiple negotiations. Most observations measured both value creating and value claiming strategies and reported the correlation between each strategy and joint gains. The meta-analysis treats each correlation between value creating and joint gains and value claiming and joint gains as a separate negotiation. Our tables report both this total number of negotiations on which an analysis was run, as well as, the number of those negotiations that were unique, that is value claiming and value creating were measured on the same negotiation. All analyses include a random effect of observation pair to control for the dependency due to measuring both value creating and value claiming strategy in the same negotiation. The column labeled *n* shows how many effect sizes were included in each analysis. We computed the *z* test-statistics on the Fisher's z transformed correlations used in the analysis; $\bar{r}$ and ρ values are correlation estimates untransformed from the Fisher's z used in the analysis for ease of interpretation. In Table 2 the $\bar{r}$, the estimated Pearson's r correlation between creating value and joint gains in the full model is .29, and ρ in the model excluding outliers is .25. The estimated Pearson's r correlation between creating value and satisfaction in the full model is .33, and in the model excluding outliers is .30. We computed the confidence interval around the transformed Fisher's z used in the meta-analysis. For this reason, confidence intervals may not appear symmetric around $\bar{r}$ and ρ, especially for estimates at extreme values of these coefficients, which is where the Fisher's z transformation makes the greatest difference. The reader who is interested in verifying whether the confidence interval is symmetric, can retransform the estimated correlation coefficient $\bar{r}$ or ρ into Fisher's z using the formula: .5(log((1+r)/(1-r))), the confidence interval will be symmetric around that transformed value. The model fit statistic (ΔG^2(df)) includes the observed change in fit given the differences in degrees of freedom. The *p*-value is computed from the deviation test of this value against the chi-square distribution. The change in I^2 in the strategy model is the percentage point difference between the I^2 of the intercept-only model and the strategy only model. In tables reporting results for theory and measurement models, the change in I^2 is the percentage difference between the I^2 of the strategy only model, and the model for which the results are being reported.

Testing for Outliers

Next, we tested for outliers using a funnel plot to examine each observation's studentized residuals in relation to its standard error. Our criterion was an absolute studentized residual higher than 1.96 (Viechtbauer & Cheung, 2010). The funnel plot in Figure 1 shows seven outliers. Three of the outliers (two from the same study) had a common profile: they were three-person negotiations, the theory was dual concern (motivational), but the measurement was not self-report of own use of strategy, but the average of the average of two negotiators' reports on the use of strategy by the third negotiator. Thus, there were substantive and theoretical reasons why these observations might be outliers. In subsequent analyses, we excluded these three empirical outliers, plus a fourth paper that used the same method: Beersma and DeDreu (1999); Beersma and DeDreu (2005, Study 1 and Study 2) and Beersma and DeDreu (2002). Results including outliers are available from the authors.

Figure 1

Funnel Plot for the Effect of Negotiation Strategy on Joint Gains with Outliers Labeled



Note. BC = Behavioral Coding; SR = Self-Report; LIWC = Linguistic Inquiry and Word Count is computer coded. z computed on corrected and Fisher's z transformed correlations. $\bar{r}$ and ρ are reverted transformations from Fisher's z-values (and can be interpreted as correlations). Confidence intervals computed around transformed Fisher's z. Unique negotiations account for studies that report both creating and claiming coefficients. Model fit statistics compared against strategy-only models. Heterogeneity analyses (I2) were conducted on corrected effect sizes.
$p < .10$, *$p < .05$, **$p < .01$, ***$p < .001$

After removing outliers, the value creating-joint gains estimate was significant, positive, and above average in magnitude (estimate = .25); the value claiming-joint gains estimate was significant, negative, and below average in magnitude (estimate = -.10). These results support H1. We used Paterson and colleagues' (2016) average effect size of .278 based on 690 corrected effect sizes in micro-managerial meta-analytic research to interpret magnitude. The strategy model with outliers removed fit better than the intercept only model (Model fit = ($\Delta G^2(1) = 38.11$, $p < .001$, $\Delta I^2 = 9.88\%$). All subsequent analyses remove these four outliers.

Including Theory as a Predictor of Joint Gains

H2 predicted that value creation as conceptualized by behavioral theory would have a stronger relationship with joint gains than value creation as conceptualized by motivational theory. The results of testing H2 are reported in Table 3. These results indicate that for both creating and claiming value, behavioral ($\bar{r}$ = .26; $\bar{r}$ = -.08) and dual-concern ($\bar{r}$ = .31; $\bar{r}$ = -.26) theories replicated the result of the strategy only model prediction of joint gains. The estimate for competitive-cooperative theory was not significant for creating value ($\bar{r}$ = .17), but it was significant for claiming value ($\bar{r}$ = -.35).

The effect size estimates based on the LIWC conceptualization of behavioral theory were not significant.

To further test H2 we performed simple contrasts on the estimated coefficients using the pooled standard error calculated off the diagonal of the estimated variance-covariance matrix produced by the meta-analysis. Thus, all contrasts control for non-independence. There were no significant differences between the estimated effect sizes for value creating (motivational, dual concern (MDC)) = .31 vs. behavioral (B) = .26), $t(117) = .52$, $p = .60$ or for value claiming, (DC = -.26 vs. B = -.08), $t(117) = 1.33$, $p = .19$. However, note the low magnitude of the behavioral theory, value claiming effect sizes (behavioral = -.08; behavioral (LIWC) = -.02) relative to the higher magnitude of the motivational theories of dual concern (MDC = -.26) and competitive-cooperative (MCC = -.35) value claiming effect sizes.

The model fit statistic in Table 3 shows that the theory model fit the data as well, but no better than the strategy-only model (Model Fit: $\Delta G^2(6) = 5.86$, $p = .439$, $\Delta I^2 = .60\%$). Overall, these results suggest that despite theoretical differences, behavioral and motivational theories are not fully distinguishable when using strategy to predict joint gains. These results indicate that in contrast to the H2 prediction, motivational and behavioral theories converge on similar estimates of the relationships between value creating and value claiming strategy and joint gains. The results also suggest that more studies are needed to assess whether the behavioral theory use of LIWC conceptualization of value creating and value claiming is a valid indicator of negotiation strategy as it relates to joint gains.

Table 3

Effects of Strategy and Theory on Joint Gains

Joint Gains	**Outliers Removed** (k = 125; 6,377 negotiations; 3,687 unique)				
Creating	*n*	$\bar{r}$	*z*	*95% CI*	I^2
Behavioral	53	.26	6.74***	[.19; .34]	72.12%
Dual Concern	5	.31	2.85**	[.10; .55]	
Comp-coop	2	.17	.98	[-.17; .52]	
LIWC	6	.11	.83	[-.15; .36]	
Claiming					
Behavioral	49	-.08	-1.97*	[-.16; -.00]	
Dual Concern	4	-.26	-2.00***	[-.51; -.01]	
Comp-coop	2	-.35	-2.02*	[-.70; -.01]	
LIWC	4	-.02	-.11	[-.33; .29]	

Model Fit: $\Delta G^2(6) = 5.86$, $p < .439$, $\Delta I^2 = .60\%$

$QE(117) = 419.68$, $p < .001$

$QM(8) = 67.16$, $p < .001$

Note. Dual concern and comp-coop are motivational theories. LIWC = Linguistic Inquiry and Word Count is a behavioral theory. z computed on corrected and Fisher's z transformed correlations. $\bar{r}$ and ρ are reverted transformations from Fisher's z-values (and can be interpreted as correlations). Confidence intervals computed around transformed Fisher's z. Unique negotiations account for studies that report both creating and claiming coefficients. Model fit statistics compared against strategy-only models. Heterogeneity analyses (I^2) were conducted on corrected effect sizes. $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Including Measurement Method as a Predictor of Joint Gains

Table 4 reports the results of testing H3 that predicted that the self-report method of measuring negotiation strategy would have a stronger relationship with joint gains than behavioral coding. For value creating and value claiming, both behavioral coding ($\bar{r}$ = .25; $\bar{r}$ = -.09) and self-report measurement methods ($\bar{r}$ = .31; $\bar{r}$ = -.13) produced significant estimates of the strategy – joint gains relationship. The computer coding method, perhaps due to large heterogeneity across a very limited number of observations (*n*'s <= 8), produced no significant estimates of the relationship between value creating or value claiming strategy and joint gains.

The measurement-method model fit the data no better than the strategy only model (Model Fit: $\Delta G^2(4)= 5.12$, p =.28, ΔI^2 = .19%), indicating that different measurement methods were converging on similar estimates of relationships between negotiation strategy and joint gains. Simple contrasts, testing H3, were consistent with this interpretation. The self-report (SR) effect size estimate was not significantly greater than behavioral coding (BC) effect size estimate either for value creation (SR $\bar{r}$ = .31; BC $\bar{r}$ = .25) or for value claiming (SR $\bar{r}$ = -.13; BC $\bar{r}$ = -.09) (all *p*'s > .33). Both behavioral coding and self-report measurement methods converged on largely the same estimated effect size between strategy and joint gains.

Table 4

Effects of Strategy and Measurement Type on Joint Gains

Joint Gains	**Outliers Removed** (k = 125; 6,377 negotiations; 3,687 unique)				
	n	$\bar{r}$	*z*	*95% CI*	I^2
Creating					72.53%
BC	38	.25	5.28***	[.16; .34]	
SR	20	.31	5.37***	[.20; .44]	
LIWC	8	.04	.36	[-.18; .27]	
Claiming					
BC	38	-.09	-2.01*	[-.18; -.00]	
SR	17	-.13	-2.03*	[-.26; -.00]	
LIWC	4	-.02	-.11	[-.33; .30]	

Model Fit: $\Delta G^2(4)= 5.12$, p =.275, ΔI^2 = .19%
$QE(119) = 433.23$, $p < .001$
$QM(6) = 64.94$, $p < .001$

Theory, Measurement Method, and Strategy as Predictors of Joint Gains

The theory plus measurement model (results fully reported in supplemental materials) fit the data equally as well as the theory model (Model Fit_{Theory}: $\Delta G^2(2) = 4.12$, $p = .13$, $\Delta I^2 = .06\%$) and equally well as the measurement model (Model $Fit_{Measure}$: $\Delta G^2(4) = 4.86$, $p = .302$, $\Delta I^2 = .47\%$). There were no significant differences between estimates of the relationships between value creating and joint gains when conceptualized as motivational and measured via self-report: (MDC $\bar{r} = .31$) versus conceptualized as behavioral theory and measured via self-report (B $\bar{r} = .34$), t(115) =.16, $p = .88$. There also were no significant differences in the estimates of the relationship between value claiming and joint gains (MDC $\bar{r} = -.26$ vs. B $\bar{r} = -.03$), $t(115) = -1.49$, $p = .14$. The behavioral theory self-report estimated effect size ($\bar{r} = -.03$) was not significant and its magnitude was very small in contrast to the magnitude of both the motivational theories' self-reports estimated effect sizes for the relationship between value claiming and joint gains (MDC $\bar{r} = -.26$) and (MCC $\bar{r} = -.35$). Estimates for computer coding of value creating and value claiming were not significant.

Results of the analysis of the interaction between theory and method (reported in a bar chart in the supplemental materials) showed no significant differences for value creating between estimates of behavioral theory, behavioral coding ($\bar{r} = .25$) and behavioral theory, self-report ($\bar{r} = .34$) effect sizes ($t[115] = -1.12$, $p = .26$). There also were no significant differences for value claiming between estimates of behavioral theory, behavioral coding ($\bar{r} = -.09$) and the behavioral theory, self-report ($\bar{r} = -.03$) effect sizes ($t[115] = -.65$, $p = .52$). Overall, these results support the interpretation that all measurement types and theoretical perspectives provide functionally equivalent estimates of the relationship between negotiation strategy and joint gains.

Culture as a Theoretical Moderator

Culture was a significant moderator of the strategy-joint gains model. Supporting Hypotheses 4a and 4b, which predicted Western culture hegemony, results in Table 5 show that the effects of value creating and value claiming negotiation strategy on joint gains were only significant in Western culture samples: value creating effect size ($\bar{r} = .31$) and value claiming effect size ($\bar{r} = -.15$).[1] The simple contrast results reported in Table 6 show a significant difference between cultures for value creating ($t[117] = 3.17$, $p = .002$) and a marginal difference for value claiming ($t[117] = -1.98$, $p = .058$). There were no significant differences between East Asian, or Middle Eastern and South Asian cultures for value creating ($t[117] = -.29$, $p = .77$) or value claiming ($t[117] = .47$, $p = .64$). Designating the region of the observation in the model had a significant effect on model fit compared to the strategy only model (Model Fit**:** $\Delta G^2(4) = 13.52$, $p = .009$, $\Delta I^2 = 3.35\%$). These results suggest that the validity of using current theory and measurement of value creating and value claiming strategies to predict joint gains may be limited to Western cultures.

[1] Given that all analyses resulted in non-significant differences in model fit for all models of joint gains beyond the strategy-only model, for the sake of parsimony and ease of interpretation, we ran moderator analyses by adding the moderator to the strategy only model.

Table 5

Effects of Culture on the Relationship between Negotiation Strategy and Joint Gains

Joint Gains	Outliers Removed (k = 123; 6,305 negotiations; 3,651 unique)				
	n	$\bar{r}$	*z*	*95% CI*	I^2
Creating					69.69%
Western	45	.31	8.08***	[.24; .40]	
East Asian	11	.06	.74	[-.11; .24]	
Middle East & South Asian	9	.10	1.09	[-.08; .29]	
Claiming					
Western	40	-.15	-3.57***	[-.23; -.07]	
East Asian	10	.04	.39	[-.14; .21]	
Middle East & South Asian	8	-.03	-.28	[-.22; .16]	

Model Fit: $\Delta G^2(4) = 13.52$, $p = .009$, $\Delta I^2 = 3.35\%$
$QE(117) = 386.04$, $p < .001$
$QM(6) = 79.94$, $p < .001$

Note. z computed on corrected and Fisher's z transformed correlations. $\bar{r}$ and ρ are reverted transformations from Fisher's z-values (and can be interpreted as correlations). Confidence intervals computed around transformed Fisher's z. Unique negotiations account for studies that report both creating and claiming coefficients. Model fit statistics compared against strategy-only models. Heterogeneity analyses (I^2) were conducted on corrected effect sizes.

$p < .1$, * $p < .05$, ** $p < .01$, *** $p < .001$

Coefficient Comparisons Outliers Excluded:

Creating: Western vs. Non-Western: $t(117) = 3.17$, $p = .002$; East Asian vs. Middle East & South Asian: $t(117) = -.29$, $p = .77$
Claiming: Western vs. Non-Western: $t(117) = -1.98$, $p = .048$; East Asian vs. Middle East & South Asian: $t(117) = .47$, $p = .64$

Methodological Moderators[1]

The Supplemental Materials present detailed results of testing the effects of the methodological moderators. Here we summarize those results.

Publication

There were no significant differences in the effect sizes for published ($\rho = .28$) versus unpublished ($\rho = .16$) observations for the relationship between value creating and joint gains $t(121) = 1.33$, $p = .18$ or published ($\rho = -.09$) versus unpublished ($\rho = -.17$) observations for the relationship between value claiming and joint gains $t(121) = -.88$, $p = .38$. The model including publication status as a moderator did not fit the data significantly better than the strategy only model ($\Delta G^2[2] = 2.52$, $p = .28$).

The estimates for value creating in unpublished data were smaller in magnitude than the estimates for value claiming in unpublished data, but these differences were not significant. The funnel plot showed substantial symmetry with only a small gap in lower left where two published observations were outliers.

Setting

The setting of the observation, as an experiment or a non-experimental study, was a significant moderator of the relationship between strategy and joint gains. The model including setting fit the data significantly better than the model including strategy only ($\Delta G^2(2) = 12.81$, $p = .002$). Experiments consistently produced higher estimates of the relationship between strategy and joint gains. The difference was significant for value creating strategies (experiment (E) $\rho = .37$, non-experiment (NE) $\rho = .16$ ($t[121] = 3.28$, $p = .001$), but not for value claiming strategies (E $\rho = -.16$; NE $\rho = -.05$) ($t[121] = -1.66$, $p = .097$). The relationship between value claiming and joint gains was not significant in a non-experimental setting.

Negotiation Type

The moderator, negotiation type (one-on-one, team-on-team, multiparty), did not improve model fit over the strategy-only model ($\Delta G^2[4] = 2.36$, $p = .67$).

Population Type

Population type (undergraduate, MBA, executive, or mixed) was a not a significant moderator as demonstrated by the only marginally better fit over the model including strategy-only ($\Delta G^2(6) = 11.23$, $p = .08$). Although not significantly different from mixed population types ($\rho = .21$), the executive population ($\rho = .03$) produced significantly lower estimates of the relationship between value creating and joint gains than both MBA ($\rho = .24$), ($t[117] = -2.03$, $p = .04$) and undergraduate populations ($\rho = .33$) ($t[117] = -3.29$, $p < .001$).

Discussion

This meta-analysis addresses the functionality of different theoretical conceptualizations and methods of measuring negotiation strategy to predict joint gains with startling findings. First, given current data, negotiation strategy theory, whether behavioral or motivational, and negotiation strategy measurement, whether behavioral coding or self-report, are essentially functionally equivalent when predicting joint gains, with the caveat that LIWC computer behavioral coding, at least as it has been used to date, is not. Second, negotiation strategy theory is culturally bound to Western culture samples. The positive relationship between value creation and joint gains characteristic of Western cultures samples is not significant in non-Western culture samples. The negative relationship between value claiming and joint gains characteristic of Western culture samples is not significant in non-Western culture samples. As meta-analytic results reveal how to make negotiation strategy research easier to do – use self-reports, they also reveal that current theory is insufficient to address how to study the strategy-joint gains relationship in non-Western cultures.

Theoretical Implications

Three theoretical implications of this research reveal opportunities for future research: 1) the theory of negotiation strategy is Western-culture bound; 2) the differences between behavioral and

motivational perspectives, although conceptually distinct, are functionally equivalent, empirically; 3) what observers can describe of negotiators' behaviors and what negotiators self-report are functionally equivalent, empirically,

The theory of negotiation strategy predicting joint gains appears to be culture bound. But, because the meta-analysis does not reveal why, this research identifies an opportunity for future research to understand how non-Western culture negotiators are using negotiation strategy to negotiate joint gains. There is a hint in the meta-analytic results showing that value claiming is less negatively related to joint gains in non-Western than Western cultures that some non-Western culture negotiators may be using the information embedded in value claiming strategy to infer information needed to generate trade-offs and joint gains.

The fundamental difference between the motivational and behavioral perspectives on negotiation strategy is that motivational theories capture what the negotiators intended to do whereas behavioral approaches capture what negotiators actually did. Researchers from both theoretical traditions aim to predict negotiation outcomes from strategy and use strategy as an explanatory mechanism to account for the effects of independent variables on outcomes. Our meta-analysis shows that the behavioral and motivational theories generate functionally equivalent estimates predicting the relationship between strategy and joint gains. Still, the conceptualizations of these two theories are different. Motivational theory focuses on the importance of self-and-other's interests and information sharing, which we define broadly as interests and priorities for value creating and influence for value claiming. Behavioral theory, in contrast, focuses squarely on information sharing. However, our results indicate that in the context of understanding the relationship between negotiation strategy and joint gains, the two foci are highly interrelated. That the theory of cooperation and competition did not generate significant estimates for value creating strategy, suggests that the information-sharing element, which is part of both motivational and behavioral theory, may be a key component of negotiation strategy. However, we caution that we had few motivational theory, competition-cooperation observations. The implication for future researchers is that they should select their theoretical perspective based on the nature of their research questions.

Two of the three operationalizations of strategy in our meta-analysis (behavioral coding and self-report) provided functionally equivalent estimates of the relationship between negotiation strategy and joint gains. The implication for future researchers is that so long as they are studying value claiming and value creating strategy, self-report is as valid a method of measurement as behavioral coding and much more efficient. Thus, despite the strong differences in the methods of behavioral coding versus self-report, the meta-analysis results suggest that negotiators can report how they are using strategy in negotiation with validity that is similar to the validity of observers coding the use of negotiation strategy. These self-report measures captured the negotiator's own view of the use of strategy in the negotiation. The studies in which negotiators reported on their counterparts' behaviors were outliers in the meta-analysis. In future research using self-reports to measure use of strategy, researchers may wish to consider the differences between self-reports of own use of strategy versus of counterpart's use of strategy.

Computer coding using LIWC categories of social interaction words did not provide significant estimates for the strategy-joint gains relationship. We had few LIWC data sets and their estimates of the strategy-joint gains relationships were extremely heterogeneous. However, it is possible that the categories of social interaction that the LIWC system counts are too conceptually distant from the behaviors and motives of the value creating and value claiming strategies that are central to negotiation theory. This may indicate that we do not yet have appropriate categories for using computer coding to measure negotiation strategy. Alternatively, the results may indicate that counting

words in categories does not generate as much insight into latent semantic meaning as coding behavior in context or asking negotiators about their motives and behaviors. Future research using computer coding that is based on theoretically developed categories, such as reported by Gelfand and colleagues (2015) may generate more valid indicators.

Limitations and Opportunities for Future Research

As with all research, this meta-analysis has certain limitations. First, although we acquired some unpublished data sets and our publication bias analysis implied no publication bias, effects in data sets that we did access might be more robust than effects in the data sets we did not access. It is possible that our estimates are upwardly biased, because of our meta-analytic database. Second, we carefully followed authors own operationalizations of their measures into strategies of value creating and value claiming. Authors using behavioral coding operationalized strategy as the relative frequency of the content of the interaction; however, we note that some behavioral studies expand beyond the frequency of process and study reciprocity and or complementarity of content (Weingart et al., 2007). Future research may wish to take a comparative process approach to study the relationship between negotiation strategy and joint gains. Third, four studies required that we categorize multiple negotiation behaviors into value claiming and value creating strategy. We did so based on theory and papers that provided an empirical categorization for example using correspondence analysis (Weingart et al., 2007). However, we recognize that our categorization of behaviors into strategies may have introduced heterogeneity into the strategy effects.

Finally, we offer two cautions to readers who may be new to meta-analysis. First, one should not interpret non-significant or smaller effect sizes as less correct than larger or significant effect sizes. Our meta-analysis provided an accurate assessment of the true effect size for each measurement method and theory given the data available. Even though our meta-analysis revealed consistently significant effects of value creating and value claiming on joint gains, the relative size of the effect is not indicative of a "truer" estimate of the effect of negotiation strategy on joint gains. In other words, confidence in an estimate of an effect size should be based on the size of the standard error (where smaller is more confident) rather than the size of the effect. Second, the estimates reported in the meta-analysis are accurate to the data available to date. As scholars continue to study negotiation strategy, particularly across cultures, it is likely that a deeper understanding will emerge explaining why, given data available, theory and methods are functionally equivalent, but the strategy-joint gains relationship in Western culture does not generalize to non-Western culture.

Conclusion

Results of our meta-analysis showed that different theoretical perspectives and measurement methods were functionally equivalent in accounting for the relationship between creating and claiming value and joint gains. The effect of value creating on joint gains was positive and the effect of value claiming on joint gains was negative. However, these results only held in Western culture samples. We conclude that the theory of value creating and value claiming negotiation strategy as it relates to joint gains is Western culture bound.

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Appendix
Supplemental Materials

Figure 1
Search Flow Diagram

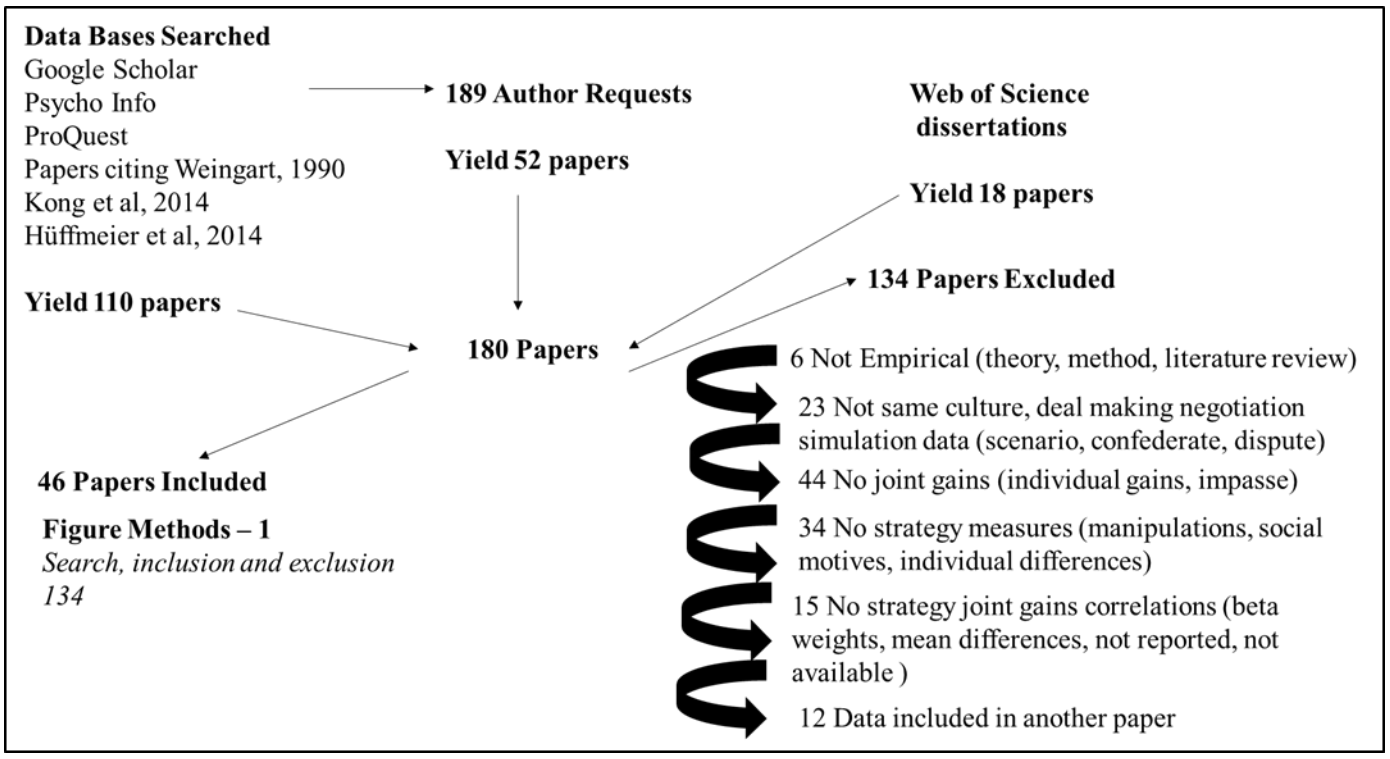


Table 1

Papers in the Meta-Analysis

No	Citation	P/U	#S	Method	Theory	Method x Theory	# Methods	IV	Culture	Region	# N	Parties	Age	% male	Pop Type	Exp vs Field
1	Ramirez-Marin et al., 2014.	U	2	BC & LIWC	B	BC-B; LIWC	2	Pair	M	W; SA&ME	37; 29	ONE	20; 21	32; 50	U	F
8	Beersma & De Dreu, 1999.	P	1	SR	DC	SR-DC	1	Pair	S	W	22	MULTI			U	E
9	Beersma & De Dreu, 2002.	P	1	SR	DC	SR -DC	1	Pair	S	W	91	MULTI			U	E
11	Beersma & De Dreu, 2005.	P	2	SR	DC	SR-DC	1	Pair	S	W	30;69	MULTI		41;31	U	E
22	De Dreu, et al., 2006.	P	1	SR	DC	SR-DC	1	Pair	S	W	50	ONE	20		U	E
27	Elfenbein, et al., 2010	U	1	BC; LIWC	B	BC-B; LIWC	2	Pair	S	W	26	ONE	30	70	MBA	F
39	Gunia, et al., 2011.	P	4	BC; SR	B	BC-B; SR-B	2	Pair	M	W; SA&ME	25;25;28;39	ONE	38;46; 41;38	77;92; 98;78	EXEC	F
40	Han, et al., 2012.	P	1	SR	B	SR-B	1	Pair	S	EA	53	ONE	20	64	U	E
46	Hyder, et al., 2000.	P	1	BC	B	BC-B	1	Pair	S	W	61	ONE		69	U	F
67	Lügger, et al., 2014.	P	2	BC	B	BC-B	1	Pair	M	EA; W	46;48	ONE		50;52	U	F
73	Moore, et al., 1999.	P	1	BC	B	BC-B	1	Pair	S	W	97	ONE			MBA	E
76	Morris, et al., 2002.	P	1	BC	B	BC-B	1	V Claim	S	W	39	ONE			MBA	E

84	Olekalns & Smith, 2013.	P	1	BC	B	BC-B	1	Pair	S	W	62	ONE	19	23	U	E
85	Olekalns, et al., 2014.	P	1	BC	B	BC-B	1	V Claim	S	W	60	ONE			MIXED	E
86	Olekalns & Smith, 2000.	P	1	BC	B	BC-B	1	Pair	S	W	64	ONE	22	50	U	F
103	Rockmann & Northcraft, 2010.	P	1	BC	B	BC-B	1	V Claim	S	W	32	MULTI			U	F
106	Schei & Rognes, 2003.	P	1	SR	B	SR-B	1	Pair	S	W	81	ONE	25	57	MBA	E
107	Schei et al., 2008.	P	1	SR	B	SR-B	1	Pair	S	W	76	MULTI	21	65	U	E
108	Schei et al., 2011.	P	1	BC	B	BC-B	1	Pair	S	W	48	ONE	25	63	MBA	E
109	Schei et al., 2006.	P	1	BC	B	BC-B	1	V Create	S	W	17	ONE	25	58	MBA	F
110	Schei, 2013.	P	1	SR	B; DC	SR-B; SR-DC	2	V Create	S	W	116	ONE	25	55	MBA	F
116	Sinaceur, 2010.	P	1	SR	B	SR-B	1	V Create	S	W	32	ONE			U	E
129	Ten Velden et al., 2007.	P	1	SR	DC	SR-DC	1	Pair	S	W	97	MULTI	21	26	U	E
130	Ten Velden et al., 2010.	P	1	BC	B	BC-B	1	V Create	S	W	83	ONE	21	56	U	E
133	Tinsley et al., 2002.	P	1	BC	B	BC-B	1	Pair	S	W	60	ONE	29	65	MBA	E
136	Volkema et al, 2010.	P	1	BC	B	BC-B	1	V Claim	S	W	33	ONE	26	61	MBA	F
137	Weingart et al., 1996.	P	1	BC	B	BC-B	1	Pair	S	W	90	ONE		63	U	E
138	Weingart et al., 2007.	P	1	BC	B	BC-B	1	Pair	S	W	36	MULTI		75	MBA	E
142	Weingart et al., 1990.	P	1	BC	B	BC-B	1	Pair	S	W	22	ONE			MBA	F

144	Wilken et al., 2013.	P	1	BC	B	BC	1	Pair	S	W	58	TEAM		46	MBA	E
150	Liu, 2011.	P	2	BC	B	BC-B	1	Pair	M	W; EA	32;35	ONE	20;26	50;48	MIXED	F
155	Butt, 2005.	P	1	SR	DC	SR-C&C	1	Pair	S	SA&ME	104	ONE	30	74	MIXED	E
156	Choi, 2003.	U	1	BC; SR	B; C&C	BC-B; SR-C&C	2	Pair	S	W	125	ONE	20	49	U	E
164	Gelfand, 1996.	U	1	SR	C&C	SR-C&C	1	Pair	S	W	82	TEAM		52	U	E
171	Zerres et al., 2013.	P	1	BC	B	BC-B	1	V Create	S	W	180	ONE	24	61	U	E
172	Geiger, 2014.	P	1	BC	B	BC-B	1	Pair	S	W	52	TEAM	25	63	MBA	E
176	Harinck & De Dreu, 2011.	P	1	SR	DC	SR-DC;	1	Pair	S	W	51	ONE	22	33	U	E
178	Yao et al., 2017.	P	1	BC; SR	B	BC-B; SR-B	2	Pair	S	EA	50	ONE	41	80	EXEC	F
179	Aaldering & Ten Velden, 2016.	P	1	BC; SR	B; DC	BC-B; SR-DC	2	Pair	S	W	82	ONE	23	28	U	E
180	Aslani et al., 2016.	P	3	SR	B	SR-B	1	Pair	M	EA; ME&SA; W	48;68; 63	ONE	19;21; 20	47;50; 32	U	F
181	Olekalns et al., 2014.	P	1	BC	B	BC-B	1	V Claim	S	W	35	ONE	19	34	U	E
182	Nandkeolyar & Brett, 2012.	U	1	LIWC; BC	B	LIWC BC-B	2	Pair	S	SA&ME	66	ONE	24	59	MBA	F
186	Ramirez-Marin & Brett, 2012.	U	2	SR; LIWC	B	SR-B; LIWC	2	Pair	M	W; W	44;37; 20;20	ONE	22;21	37; 28	U	F
187	Kern et al., 2012.	P	2	BC; LIWC	B	BC-B; LIWC	2	V Create	M	EA; W	15;16	ONE	24;20	38;34	Mixed	F
189	De Dreu et al., 1998.	P	1	BC	B	BC-B	1	Pair	S	W	45	ONE			U	E
5149	Adair & Brett, 2005.	P	8	BC	B	BC-B	1	Pair	M	W; EA; ME&SA	201	ONE	32	75	Mixed	F

Table 1 Notes: These abbreviations are used in the heading row of the table: PU – Published/Unpublished. #S - the number of the study in the paper. Method – B=Behavioral coding, SR= Self Report, LIWC = Linguistic Word Inquiry Count. Theory B = Behavioral, DC=Dual Concern, C&C = Cooperative & Competitive; Method xTheory – indicates which method was used to measure which theoretical perspective. #Methods – indicates the number of methods reported in the same sample. IV- refers to whether value claiming, value creating or both (indicated by term pair) variables were measured in the same sample. Culture indicates whether the sample was Single or Multi-cultural. Region – W=West; EA=East Asia, ME&SA=Middle East and South Asia. #N indicates the number of negotiations in the sample; multiple numbers here refer to separate intra-cultural samples in this study. Parties – ONE – one on one negotiation, MULTI – multiparty negotiation, TEAM – team on team negotiation; Age – average age reported. % male – percent of the sample reported as male. Pop type: type of sample: MBA, U-undergrad, EXEC – executive education, MIXED – a mixture of populations. Exp vs Field – an experimental study or a non-experimental study.

Correction Techniques

We followed Hunter and Schmidt's (2004) approach to correct correlations between joint gains and value creating and value claiming for measurement error by dividing all effect sizes by the square root of the reliability estimates of the correlated variables. In the absence of a reliability coefficient, we used the average reliability of that variable (value creating, value claiming) in the data set. We replaced 5/70 missing reliability coefficients for value creating (α = .76). We replaced 10/63 missing reliability coefficients for value claiming (α = .77). We assigned joint gains a reliability coefficient of 1.00. (See De Wit, Greer, & Jehn, 2012; Greer, de Jong, Schouten, & Dannals, 2018, for precedent.)

Power Analysis

Given that the meta-analyses reported in this paper are mixed-effect multivariate meta-analyses and that the studies used for the meta-analysis represent, to the best of our knowledge, the entire body of work to date, a priori power analyses were inappropriate (McShane & Böckenholt, 2016). Instead, we computed post-hoc, power-calibrated effect size estimates for each correlation estimate in all of our models. We provide the sample size required for 80% power should a researcher be interested in detecting the effect in a future single-sample study. (See table providing Power Analysis Details below.)

Table 2

Details of the Power Analysis

Outliers Removed	Value Creating		Value Claiming	
	$\bar{r}$ (v^2)	N_{v^2}	$\bar{r}$(v^2)	N_{v^2}
Overall	.25 (.001)	133	-.10 (.001)	1,057
Measurement Type				
Behavioral Coding	.25 (.002)	144	-.09 (.002)	1,614
Self-Report	.31 (.004)	87	-.13 (.004)	800
Computer Coding	.04 (.013)	-	-.02 (.025)	-
Theory				
Behavioral Theory	.26 (.002)	124	-.08 (.002)	2,311

Dual Concern	.31 (.013)	103	-.26 (.017)	214
Cooperation-Competition	.17 (.031)	6.827	-.35 (.031)	112
Computer Coding	.11 (.017)	-	-.02 (.025)	-
Theory x Measurement				
Behavioral Theory BC	.25 (.002)	142	-.09 (.002)	1,578
Behavioral Theory SR	.34 (.006)	77	-.03 (.007)	-
Dual Concern SR	.31 (.013)	102	-.26 (.016)	211
Cooperation-Competition SR	.17 (.030)	5,580	-.35 (.030)	110
Computer Coding	.04 (.013)	-	-.02 (.024)	-
Moderators – Outliers Removed	**Value Creating**		**Value Claiming**	
	$\bar{r}$ (v^2)	N_{v^2}	$\bar{r}$(v^2)	N_{v^2}
Culture				
Western	.31 (.002)	65	-.15 (.002)	324
East Asian	.06 (.008)	-	.04 (.008)	-
Middle Eastern	.10 (.009)	5,394	-.03 (.009)	-
Publication				
Published	.28 (.001)	87	-.09 (.002)	1,416
Unpublished	.16 (.006)	360	-.17 (.007)	378
Setting				
Experiment	.37 (.003)	47	-.16 (.003)	276
Field	.16 (.002)	283	-.05 (.002)	36,602
Type				
Team-on-Team	.13 (.024)	-	-.22 (.024)	414
One-on-One	.27 (.001)	95	-.09 (.002)	1,323
Multi-Party	.15 (.024)	8,797	-.19 (.019)	523
Population				
Undergraduates	.33 (.002)	58	-.10 (.003)	1,088
MBA	.24 (.005)	126	-.14 (.005)	614
Executive	.03 (.007)	-	-.10 (.007)	4,355
Mixes	.21 (.013)	286	-.02 (.014)	-

Table 2 Notes:

1. Prospective power-calibrated sample requirements given meta-analytic estimates of effect size, and heterogeneity within- and across- estimates (one-sided a = .05, power = .80).

2. The sample size values represent the number of participants required to detect a particular effect if the correlation and variance uncovered in the meta-analysis were the true effect size and variance in the population. For each correlation, we provide a sample size estimate (N_{v^2}) that represents the sample size required to detect an effect (at power = .80 and one-sided alpha = .05) after correcting for the variance in the effect size estimate for the particular correlation. We computed the power-calibrated effect sizes using procedures described in McShane and Böckenholt (2016). We used the diagonal of the variance-covariance matrix from the meta-analysis as the value for v^2. Although we used custom code on unrounded values, our results can be replicated approximately using the online calculator available at https://blakemcshane.shinyapps.io/pces/. Researchers should select Type of Test = "Test of a Correlation Coefficient," power = .80, alpha = .05 (one-sided), $\rho = \bar{r}$ from the tables, $v^2 = v^2$ from the tables.

Meta-Analysis Plan

We first calculated the mean effect sizes for the association between creating and claiming value with joint gains across theory and across measurement method. We used deviance tests based on log likelihoods to compare the fit of these strategy only models to intercept-only models. To check for outliers, we used a funnel plot to examine each observation's studentized residuals in relation to its standard errors. Kepes, Bushman and Anderson (2017) suggest a set of analyses to evaluate publication bias, all of which we used. We calculated the mean effect sizes for the association between creating and claiming value strategy with joint gains by the theory and measurement method interaction. We compared the fit of this model to the strategy only and measurement method only models. All models controlled for whether an observation used multiple methods of measurement, and whether the same observation reported both value creating and value claiming.

We calculated I^2 to compare heterogeneity accounted for in each model. I^2 describes the variation across observations attributable to heterogeneity between observations rather than chance. We were not interested in the absolute values of I^2, because we presumed there would be a high degree of heterogeneity between observations in the data set. Instead, we compared the difference in I^2 between models to evaluate whether theory or measurement method or their interaction explained a significantly greater portion of heterogeneity in results (Higgins & Thompson, 2002).

Moderator analyses used multivariate meta-regression to evaluate the implication of study characteristics and theoretical moderators on effect sizes (c.f., Greer et al., 2018).

Publication Bias

The publication bias analyses suggested that publication bias may have led to an underestimate of the magnitude of the effects of value creating, and perhaps value claiming, on joint gains. The Trim & Fill results (Duval & Tweedie, 2000) showed the effect size for value creation as positive and significant and perhaps an underestimate with the number of missing studies estimated by the Egger's test as 13 on the right (positive estimates missing). The effect size for value claiming was negative and significant with no missing studies. The cumulative value CMA of the top five most precise estimates (Kepes, Banks, McDaniel, & Whetzel, 2012) results were stronger than both our meta analytic results and the Trim & Fill results for value creation (meta =.25; T&F = .34; CMA = .44) and value claiming (meta -.10; T&F = -.10; CMA -.26). The Selection analysis (Vevea & Hedges, 1995) which weighs the observation by its contribution to the estimate (a probability of observing its p-value in the data set) estimates the value creation effect (.31) and the value claiming effect (-.08). The Fail-Safe N results (Rosenberg, 2005) estimating the number of additional null effect file drawer studies that would need to exist to nullify our estimates are 6861 for value creation and 1050 for value claiming. These results provide no evidence that publication bias led to an overestimate of effect sizes; if anything, the value-creation effect size may be an underestimate.

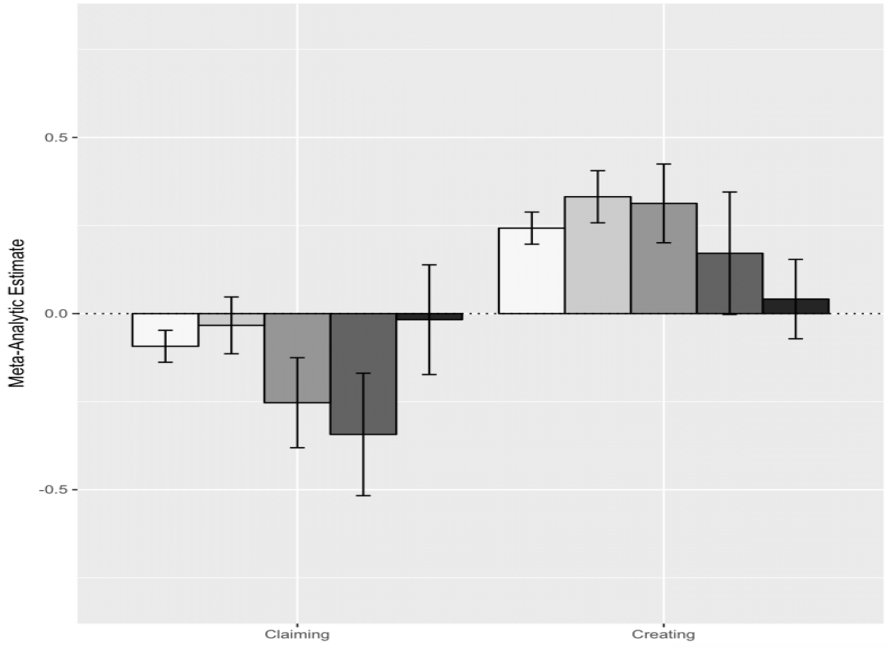
Outlier Analysis

To test for outliers, we used a funnel plot to examine each observation's studentized residuals in relation to its standard error. Our criterion was an absolute studentized residual higher than 1.96 (Viechtbauer & Cheung, 2010). The funnel plot (in Figure 2 in the paper) identified seven outliers. Three of the outliers (two from the same study) had a common profile: they were three-person negotiations, the theory was dual concern, but the measurement was not self-report of own use of strategy, but

the average of two negotiators' reports on the use of strategy by the third negotiator. Thus, there are substantive and theoretical reasons why these observations might be outliers. In subsequent analyses, we excluded these three empirically identified outliers, plus a fourth paper that used the same methods: Beersma & DeDreu (1999); Beersma & DeDreu (2005, Study 1 and Study 2) and Beersma & DeDreu (2002). Results including outliers are available from the authors.

Figure 2

Meta-analytic Coefficients Regressing Joint Gains on Theory and Measurement Type by Strategy



Dual Concern SR = Behavioral SR:
Claiming: $t(115) = -1.49$, $p = .136$
Creating: $t(115) = .16$, $p = .875$
Behavioral BC = Behavioral SR:
Claiming: $t(115) = -.65$, $p = .519$
Creating: $t(115) = -1.12$, $p = .264$

Table 3

Effects of Strategy, Theory and Measurement Type on Joint Gains

Joint Gains	Outliers Removed (k = 125; 6,377 negotiations; 3,687 unique)				
	n	$\bar{r}$	*z*	*95% CI*	I^2
Creating Behavioral BC	38	.25	5.43***	[.14; .34]	72.06%
Behavioral SR	13	.34	4.66***	[.20; .49]	
Dual Concern SR	5	.31	2.90***	[.11; .54]	
Comp-coop SR	2	.17	1.00	[-.17; .51]	
LIWC CC	8	.04	.37	[-.18; .26]	
Claiming					
Behavioral BC	38	-.09	-2.05*	[-.18; -.00]	
Behavioral SR	11	-.03	-.42	[-.19; .13]	
Dual concern SR	4	-.26	-2.02*	[-.51; -.01]	
Comp-coop SR	2	-.35	-2.06*.	[-.70;-.02]	
LIWC CC	4	-.02	-.11	[-.32; .29]	
Model Fit$_{Measure}$: $\Delta G^2(4) = 4.86$, $p = .302$, $\Delta I^2 = .47\%$					
Model Fit$_{Theory}$: $\Delta G^2(2) = 4.12$, $p = .127$, $\Delta I^2 = .06\%$					

Note. BC = Behavioral Coding; SR = Self-Report; CC = Computer Coding. z computed on corrected and Fisher's z transformed correlations. $\bar{r}$ and ρ are reverted transformations from Fisher's z-values (and can be interpreted as correlations). Confidence intervals computed around transformed Fisher's z. Unique negotiations account for studies that report both creating and claiming coefficients. Model fit statistics compared against strategy-only models. Heterogeneity analyses (I^2) were conducted on corrected effect sizes.

$p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4

Effects of Moderators on the Relationship between Strategy and Joint Gains

Outliers Removed	Creating				Claiming						
	n	*ρ*	*Z*	*95% CI*	*n*	*ρ*	*z*	*95% CI*	I^2	*Fit*	*Bonferroni*
Publication											
Published	51	.28	6.93***	[.20; .36]	48	-.09	-2.06*	[-.17; -.01]	72.61%	$\Delta G^2(2)$ = 2.52 p = .283	p = 1.00
Not Published	15	.16	2.19*	[.02; .31]	11	-.17	-2.00*	[-.33; -.00]			
Setting											
Experiment	23	.37	7.34***	[.28; .49]	23	-.16	-3.15**	[-.27; -.06]	69.92%	$\Delta G^2(2)$ = 12.81 p = .002	p = .016
Field	43	.16	3.65***	[.08; .25]	36	-.05	-1.03	[-.14; .04]			
Type											
Team-on-Team	3	.13	.83	[-.18; .43]	3	-.22	-1.41	[-.52; .09]	72.80%	$\Delta G^2(4)$ = 2.36 p = .669	p = 1.00
One-on-One	60	.27	7.13***	[.19; .34]	52	-.09	-2.17*	[-.16; -.01]			
Multi-Party	3	.15	.96	[-.16; .45]	4	-.19	1.41	[-.46; .08]			
Population											
Undergraduate	30	.33	7.09***	[.25; .44]	25	-.10	-1.93.	[-.20; .00]	71.05%	$\Delta G^2(6)$ = 11.23 p = .082	p = .656
MBA	16	.24	3.61***	[.11; .38]	15	-.14	-1.92.	[-.27; .00]			
Executive	13	.03	.31	[-.14; .19]	13	-.10	-1.16	[-.26; .07]			
Mixed	7	.21	1.77.	[-.02; .44]	6	-.02	-.18	[-.25; .21]			

Note. z computed on corrected and Fisher's z transformed correlations. Model fit statistics compared against strategy-only models. Heterogeneity analyses (I^2) were conducted on corrected effect sizes. Bonferroni corrections run to account for the 8 additional post-hoc analyses on the data. p < .1, * p < .05, ** p < .01, *** p < .001

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negotiation and conflict management research

Negotiation and Conflict Management Research

Servant Leadership, Third-Party Behavior, and Emotional Exhaustion of Followers

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Abstract

Conflicts are ubiquitous in all life's domain where people live and perform interdependent tasks, including convents. Managing conflicts among followers is an essential responsibility of leaders. The way leaders behave while managing such conflicts have received little academic attention; available studies have focused on business contexts. This study aimed to examine the relationship between servant leadership, and emotional exhaustion through team conflicts, and further investigates the mediating role of leaders' third-party conflict behaviors such as avoiding, forcing, and problem-solving. Data were gathered from 453 religious sisters (followers), in 166 convents, in a Catholic Women Religious Institute mostly based in Nigeria. Structural equation modeling confirmed that servant leadership was associated with reduced team conflicts through leaders' third-party behaviors. Further findings showed that perceived servant leadership was negatively related to emotional exhaustion through a nonforcing expression. We discussed theoretical and practical implications.

Introduction

Conflicts are a reality in all domains of life such as religious communities, work, organizations, and family settings. Conflicts occur between two or more individuals when at least one party feels irritated, obstructed or frustrated by the other(s) due to incompatibility of interests or needs, values or goals (Elgoibar, Euwema, & Munduate, 2017). In teams, conflicts arise when there are perceived differences among team members, which can have detrimental impacts (De Wit, Greer, & Jehn, 2012) on team well-being. In organizational settings, also in local religious communities, or convents, conflicts occur at two levels: hierarchical, between a leader and (one or more of) the religious sisters, and among religious sisters. Specifically, given the interdependent and interactive nature of community life, conflicts in the local religious communities may happen due to incompatibility of interests, viewpoints, and diverse personalities, limited resources, and defending individuals' position. Similarly, Rahim (2002) highlighted that conflicts occur among individuals due to limited resources, different beliefs, and opinions.

We consider four conflict types in this study—relationship, task, process, and status conflicts (Bendersky & Hays, 2012; Jehn, 1995; Jehn & Mannix, 2001), which will be aggregated into a single variable of team conflicts. Meta-analytic findings by De Wit et al. (2012) showed that task conflict during the brainstorming or idea generation phase is beneficial; however, the benefit diminishes if dispute management is not constructive. Unresolved conflicts typically have detrimental effects on individuals' well-being as evidenced by stress, psychosomatic complaints, anxiety, anger and tension, sadness, and guilt (Bendersky & Hays, 2012;

Bollen & Euwema, 2015; De Dreu & Weingart, 2003; Dijkstra, Van Dierendonck, Evers, & De Dreu, 2005; Rispens & Demerouti, 2016; Römer, Rispens, Giebels, & Euwema, 2012). Conflicts are associated with reduced performance (Bendersky & Hays, 2012) and increased emotional exhaustion (Giebels & Janssen, 2005). They can be harmful to team outcomes (Costa, Passos, & Bakker, 2015) if not properly managed. Therefore, leaders' ability to effectively manage followers' conflicts is crucial for followers' well-being.

Research has associated specific leadership behaviors to conflictmanagement, indicating the effectiveness of ethical and transformational leadership (Babalola, Stouten, Euwema, & Ovadje, 2018; Kessler, Bruursema, Rodopman, & Spector, 2013; Saeed, Almas, Anis-ul-Haq, & Niazi, 2014). We expand these works by investigating the role of servant leadership (leading by serving others) in managing followers' conflicts. Servant leaders help to improve followers' psychological health and reduce burnout (Babakus, Yavas, & Ashill, 2010; Rivkin, Diestel, & Schmidt, 2014). Yet, the mediating role of team conflict, and leaders' third-party conflict behaviors—avoiding, forcing, and problem-solving in this relationship, is relatively lacking. Our sample of interest is religious sisters, who live and work 24/7 together in local religious communities. This unique environment is susceptible to conflicts, which can have negative impacts on religious sisters' social and psychological well-being if not adequately managed. According to Giebels and Janssen (2005), conflict management behaviors impact individuals, groups, teams, and organizations.

We further examine emotional exhaustion, as it depicts a core dimension of burnout (Maslach, Schaufeli, & Leiter, 2001), a chronic stress-related syndrome. Burnout comprises emotional exhaustion, cynicism, and inefficacy. Yet, emotional exhaustion is the most widely reported and the most thoroughly investigated, as the core dimension of burnout syndrome (Maslach & Leiter, 2016), which has emerged as a critical social and health issue (Dubale et al., 2019) in diverse organizations (Cooper, Knight, Frazier, & Law, 2019). Emotional exhaustion is relevant for this study as it enables the understanding of the chronic stress and energy depletion that religious sisters experience due to conflicts that are not constructively managed. Given the need to improve followers' well-being, research has indicated the crucial role of leaders, especially in (followers') conflict situations (Römer et al., 2012; Zhao, Thatcher, & Jehn, 2019).

The aims of the current study are threefold: (a) examine the relationship between religious sisters' perception of servant leadership and frequency of team conflict, and the degree of emotional exhaustion; (b) investigate the extent these relationships are mediated by leaders' third-party conflict behavior—avoiding, forcing, and problem-solving; (c) and explore whether team conflict mediates the relationship between the perceived servant leadership and the level of emotional exhaustion experienced by followers.

This study contributes to the growing body of literature on servant leadership (Eva, Robin, Sendjaya, Van Dierendonck, & Liden, 2019), conflict management, and leaders' third-party conflict behaviors (Römer et al., 2012; Gross, Neuman, Adair, & Wallace, 2019), and well-being (emotional exhaustion) in two ways. First, while extant studies establish a negative relationship between servant leadership and burnout (Babakus et al., 2010; Rivkin, Diestel, & Schmidt, 2014), this study sheds light on the leaders' third-party conflict behaviors as the underlying psychological mechanisms explaining the relationships between servant leadership and team conflict, as well as servant leadership, and emotional exhaustion. Finally, most studies on (servant) leadership, conflict management, third-party interventions, and well-being (Jit, Sharma, & Kawatra, 2016; Poitras et al., 2015; Römer et al., 2012) were conducted in the Western business contexts. We extend research by investigating local religious communities of women in a Nigerian-based Religious Institute, a context that has been underrepresented in the literature.

Setting the Scene: Religious Community (Convent) in the Nigerian Context

Convent in this context refers to a local religious community within Catholic Women Religious Institutes (CWRI) where women who professed to be religious live community life (Eze, Lingegger, & Rakoczy, 2016; Obi & Bollen, 2017). A local religious community comprises 2–20 or more sisters living together, each with an officially designated leader. Leadership structure in CWRI is top-down hierarchical, including the general level, the regional level, the provincial level, and the local level. Daily community activities in convents

include prayers, meals, recreation, and engaging in daily regular tasks that are assigned and supervised by the community leader. Examples include cooking, cleaning, and laundry, taking care of the sick and aged members, taking care of the orphans, bursary, and accounting duties. We focus on the local community level. Religious sisters also typically work beyond the convents and have professional jobs, including medical (physicians, nurses), education (school teachers and leaders), and social and pastoral works. Life in the local religious community characterizes regular communication, interaction, and interdependenceand these situations are susceptible to conflicts. We applied the following terms interchangeably: Local religious communities refer to convents; religious sisters or sisters or community members refer to followers, and local community leaders are the local superiors. (Religious community refers to the broader Institute.) Religious sisters live and work in local religious communities situated in a national context.

The cross-cultural definition of Nigeria as a collectivist society (Hofstede, 2001; House, Hanges, Javidan, Dorfman, & Gupta, 2004) depicts outstanding communal characteristics. These features include integrating to one's family and community, caring, mutual trust, listening, and mutual respect, forgiveness, building peace, integrity, and common good, oneness, fairness, and interdependence. In line with this assertion, African theorist, Metz (2018), describes the African community based on two core features: first, considering oneself as part of the whole community through sharing, and finally, achieving the common good of all through serving the community. Specifically, Nigerian culture is evident in the African leadership philosophy of *Ubuntu*—a concept that denotes humanity, especially humanity toward others (a person is a person through the other person). The idea of *Ubuntu* additionally depicts a notion of social sensitivity and personal responsibility for collective well-being, which summarizes the ideal leadership in African countries/context. The *Ubuntu* African common terminology has different related expressions in diverse African nations such as *Ujamaa* in Tanzania, *African Humanism* in Zambia, *Conscientism* in Ghana, and *Community* in Nigeria (see Heussen-Montgomery, & Jordans, 2020). Similarly, a new paradigm shift in leadership is gradually emerging in Nigerian nation, where the commonly used authoritarian and distrustful ledaership behavior is giving way to a person-oriented style (Nwankwo, Heussen-Montgomery, & Jordans, 2020). It follows that a leader in the Nigerian or African cultural background ideally renders service to community well-being, including managing (followers') conflicts constructively as soon as these emerge.

When conflicts occur among religious sisters, local community leaders have the onus to intervene and manage the conflict constructively . These leaders may apply the community principle of mutual respect and demonstrate effective and efficient third-party behaviors to help resolve these conflicts. If the conflicts among the religious sisters remain unresolved, it could escalate, thereby lead to sisters' experience of emotional exhaustion, and negatively impact the religious community living environment. Besides, given the religious and spiritual values they uphold, religious sisters may be most receptive to the servant leaders as the third-party in mediating their team conflicts. We discuss in the following sections the relationships between emotional exhaustion due to unresolved conflicts, servant leadership, team conflict, and the mediating roles of third-party conflict behavior.

Emotional Exhaustion, Servant Leadership, and Team Conflict

Emotional Exhaustion

Emotional exhaustion is the extent to which an individual is depleted or lacked physical and psychological resources to handle interpersonal stressors (Maslach et al., 2001). Individuals experiencing emotional exhaustion feel overstretched, as this drains their physical and mental capacities. At the individual level, the experience of emotional exhaustion appears in such unhealthy tendencies as anxiety, depression, and other illnesses (Bianchi, Schonfeld, & Laurent, 2015; Weigl et al., 2016), which confirms its reliable prediction of stress-related health outcomes (Maslach et al., 2001). At the organizational level, the essential characteristics of emotional exhaustion include the desire to quit employment or job, absenteeism, and low morale (Maslach & Jackson, 1981). Emotional exhaustion for religious sisters may imply the level of feeling drained

of energy. This emotional drain manifests itself in disinterestedness and low morale in engaging in activities associated with the religious community life, which can heighten one's desire to abandon the spiritual or religious life. Altruistic leadership, such as servant leadership, through its prioritizing followers' well-being and psychological needs, can ameliorate followers' level of emotional exhaustion.

Servant Leadership

The concept of servant leadership has been in existence, evident in the over 2000-year-old, Biblical teachings of Jesus Christ to his followers that anyone who wants to be first (or to lead) must be a servant to others (Mark 10: 42–45). In the 1970s, Greenleaf introduced servant leadership to organizations, as leading through serving followers , characterized by prioritizing followers' needs and well-being, while developing followers to attain thier optimal potential, and achieve the highest possible outcome (Greenleaf, 1977). Building on Greenleaf, Eva et al. (2019) defined servant leadership as "an (a) other-oriented approach to leadership (b) manifested through one-on-one prioritizing of follower's individual needs and interests, (c) and outward reorienting of their concern for self towards concern for others within the organization and the larger community" (p. 114). Servant leaders are primarily servants to each of their unique followers. In this regard, servant leadership is beneficial to followers' physical health and psychological well-being.

Besides, Liden et al. (2015) identified seven key characteristics of servant leadership: first, *emotional healing* characterized by the care of followers' concern, personal problems, and well-being; second, *creating values for the community*, for example, leaders' involvement in helping followers to become active community members, while enhancing other communities beyond the immediate community; third, *conceptual skills* refer to a servant leader's show of proficiency in solving work-related problems with a sufficient level of understanding of the organization; fourth, *empowering* followers is the extent that the leader entrusts followers with responsibility, allows them autonomy to function, and promotes decision-making influences; fifth, *helping followers grow and succeed* captures the degree to which the leader encourages followers to achieve their maximum potential and excel in their vocation; six, *putting followers first*, which is prioritizing followers' needs ; and seven, *behaving ethically*, bydemonstrating honesty, trustworthy behaviors, and serving as a model of integrity.

One of the critical potentials of servant leadership is emotional healing. According to Liden and colleagues (2015), servant leaders who espouse this quality show respect for and care about followers' challenges, concerns, and well-being. Emotional healing shown by the leader motivates followers to vent their concernsthis stimulates emotional maturity (Eva et al., 2019) and followers' ability to handle frustrations and stress in a positive way. Servant leaders can offer emotional healing to their followers by engaging in empathetic listening, holding a kind attitude, and providing support to their followers—social, emotional, and financial (Jit, Sharma, & Kawatra, 2017). Serving behaviors such as conceptual skills, helping followers grow and succeed, and empowering followers (Liden et al., 2015) attenuate followers' emotional exhaustion, which is typically triggered when demands of interpersonal communications exceed individuals' capacities or resources to handle the conflicts (Maslach et al., 2001). Subsequently, research has shown that servant leadership improved psychological well-being and relates negatively to various emotional strain (Rivkin et al., 2014). Considering the theory on servant leadership, and its potential benefits, we propose the following hypothesis:

Hypothesis 1a. The perceived use of servant leadership will be negatively related to followers' level of emotional exhaustion experience.

Servant Leadership and Team Conflict

An essential characteristic of convents is a high level of interdependence, regular interaction, and shared goals, effective communication, task allocation, and community living as a core value. These qualities align with the description of a team. Similar to groups in organizational settings, conflicts, the extent to

which team members experience real or imaginary incompatibility in goals, values, needs, and interests (Van de Vliert, 1997), often challenge religious community collaboration. Teams perform well with low levels of conflict (Jehn & Mannix, 2001), but team conflicts often inhibit successful team functioning (De Dreu & Weingart, 2003; De Wit et al., 2012), leading to the increased level of stress (Römer, 2017) and anxiety. Similar situations are probable in convents. Research has differentiated various types of conflict in teams . The commonest examples researched include relationship, task, process, and status conflicts. Relationship conflicts refer to disagreement about nonwork issues or personal issues, such as, dislike that occurs among team members, personality differences ,interpersonalincompatibilities, and a feeling of tension and frustration. Task conflicts are awareness of disagreements in ideas and viewpoints regarding specific tasks. Process conflicts are disagreement about responsibilities and the logistics required to solve work problems (Jehn & Mannix, 2001). Status conflicts refer to disputes over individuals' relative status (i.e., respect, prestige) position within the groups' social hierarchy (Bendersky & Hays, 2012). Conflicts are commonplace in convents, due largely to its nature of community life and different personalities.

Meta-analytic evidence (De Wit et al., 2012) found relationship, task, and process conflicts to be detrimental to individuals' psychological well-being and team functioning, and similar results emerged for status conflict (Bendersky & Hays, 2012). Greer and Dannals (2017) have strongly argued that team conflicts (relationship, task, process and status conflicts) are often difficult to differentiate, given their strong intercorrelations. Greer, Saygi, Aaldering, and De Dreu (2012) hold the same view. This view might be particularly true in convents. Given the nature of the community living, group tasks, and task allocations and other processes, it may seem difficult to distinguish conflict types. In this study, we integrate the four conflict types into a single measurement of team conflict in local religious communities, representing the amount of friction that each follower perceives. Leaders play an essential role in managing (followers) conflicts (Zhao et al., 2019).

Servant leaders prioritize followers' well-being and needs (Greenleaf, 1977; Liden et al., 2015). In convents, leaders' roles include helping community members connect to other community members, and resolving relationship, task and logistic issues, while encouraging community members to become active in the life and work of their local religious communities. Servant leaders encourage followers to actively participate in the community (Liden et al., 2015), which may inspire collaboration, cooperation, and cohesion in convents. Religious sisters who perceive their community leaders as exhibiting, as well as encouraging servant leadership qualities such as open and effective communication, are likely to experience fewer team conflicts. Research indicates that servant leaders encourage team members to discuss their disagreements directly (Wong, Liu, Wang, & Tjosvold, 2018). Therefore, we propose the following hypothesis:

Hypothesis 1b. The perceived use of servant leadership will be negatively related to the amount of team conflict experienced by followers.

Servant Leadership and Emotional Exhaustion: The Mediating Role of Team Conflict

This study argues that servant leadership negatively relates to emotional exhaustion and to team conflict. Consequently, we propose that decreased team conflicts should mediate the relationship between servant leadership and emotional exhaustion. Servant leaders foster followers' open discussion of their differences, frustrations, and disagreements (Wong et al., 2018) through exhibiting ethical and moral standards such as honesty, integrity, and trust (Liden et al., 2015). In this regard, followers become willing and capable of collaborating in their life and work relationships, including readiness to discuss thier hurts, and feelings of obstructions. These readiness to collaborate will likely de-escalate team conflict (Gelfand et al., 2012), and subsequently, curb followers' feelings of emotional exhaustion. As servant leaders inspire team consensus (Wong et al., 2018) rather than team conflict, and we argue that the negative relationship between servant leadership and emotional exhaustion will occur indirectly through reduced team conflict, we propose the following hypothesis:

Hypothesis 1c. The amount of team conflict that followers experience will mediate the relationship between perceived use of servant leadership and the level of emotional exhaustion of followers.

Servant Leadership and Leaders' Third-Party Conflict Behavior

Important leadership skill is to handle conflicts between followers constructively, which will impact the extent of followers' conflicts and well-being. A leader's third-party behavior refers to the leader's response to followers' conflicts, which the leader was aware of or was informed about (Römer et al., 2012). Here, our study interest is explicitly focused on leaders' behavior when they act as third parties in the conflict between their followers. The most typical conflict behaviors of leaders include avoiding, forcing, and problem-solving (Gelfand et al., 2012; Römer, 2017). For example, leaders may decide not to get involved in followers' conflict (avoiding), or they may opt to impose a solution on conflicting parties (forcing) to end the disputes. Moreover, leaders may further seek to understand both parties' underlying issues of concerns, in other to work together with them toward an acceptable solution (problem-solving). Although Jit, Sharma, and Kawatra (2016) found strategies through which servant leaders like to handle conflicts, research is yet to examine servant leadership and leader's third-party behaviors in followers' conflicts.

Servant Leadership and Leaders' Third-Party Avoiding, Forcing, and Problem-Solving in Followers' Conflicts

Conflict avoiding behavior has become an essential subject of interest in conflict management studies (Wang, Fink, & Cai, 2012). Avoiding occurs when a leader opts not to get involved in the conflict (Römer et al., 2012). Leaders may avoid followers' conflicts due to several reasons: (a) They do not focus on the interpersonal relations and are hardly aware of the tensions and conflicts, (b) the issues at hand do not seem to matter to them or are seen as trivial, (c) leaders might consider managing conflicts the responsibility of the conflicting parties, (d) they might be afraid to get too much involved and become partial, (e) they feel incapable of handling the conflicts due to lack of proper skills (Römer, 2017; Van de Vliert, 1997), (f) or they believe intervening is not their role, and avoiding is a proper approach. Leaders' avoiding strategy leaves followers in conflicts unattended, which frustrates conflicting parties, as they feel that their leaders do not take their issues seriously (Römer, 2017). Individuals in conflict usually view their leaders' avoiding approach as a lack of support (Römer et al., 2012). This perception by the followers may be due to leaders' inability to facilitate open, fair, and honest dialogue in conflict situations (Gelfand et al., 2012), thereby fueling conflict escalation and unfavorable health outcomes for followers. In other words, conflict communication research has highlighted that (leaders') lack of communication or opting not to communicate (in followers' conflicts) is synonymous with communication (Wang et al., 2012). These studies have focused on Western contexts and may be subject to cultural biases.

Although avoiding conflicts in collectivist contexts is often seen as appropriate compared with Western individualistic cultures, research findings on avoiding behavior in collectivist settings have been inconsistent. Ohbuchi and Atsumi (2010) suggested that avoiding conflict promotes group harmony and interdependent group identity, but impedes personal interests and justice. Yang and Li (2017) found that leaders' avoiding behavior in the Chinese context improves followers' perception of fairness, trust, and emotional well-being, while Chen, Liu, and Tjosvold (2005) demonstrated that avoiding conflict has a significant negative relation with productive or constructive conflict in the Chinese context.

This study contends that followers' perception of servant leadership will negatively relate to leaders' avoiding behavior in followers' conflicts. Servant leaders prioritize each individual's needs and well-being (Van Dierendonck, 2011), and leaders' avoiding behavior in conflict situations does not serve such a goal. Servant leadership is altruistic, considering followers' needs before the leader's needs (Liden et al., 2015) while empowering followers' autonomy to air their views, especially in conflict moments.

Motivation to serve followers inspires servant leaders to intervene in followers' conflicts instead of avoiding them. In line with this reasoning, we propose the following hypothesis :

Hypothesis 2a. The perceived use of servant leadership will be negatively related to leaders' avoiding behavior as a third party in followers' conflicts.

Forcing behavior occurs when a leader imposes a preferred solution to disputants in other to end their conflicts (Römer et al., 2012). A forcing leader provokes adverse outcomes in followers such as anxiety, strain, depression, stress and bullying (Baillien, Bollen, Euwema, & De Witte, 2014; Way, Jimmieson, & Bordia, 2016). Römer (2017) found that a forcing leader may be a new party in the conflict, and followers may further turn against a forcing leader. A leader's forcing behavior may not benefit followers in disputes. Servant leaders opt for credible conviction of followers via empowering rather than coercive (force) compliance. Followers will thus likely perceive their servant leaders not to engage in forcing behavior or in the detrimental use of power, as these contradict the core characteristic of serving others by empowering them. Consistent with this line of thought, we hypothesize as follows:

Hypothesis 2b. The perceived use of servant leadershipwill be negatively related to leaders' forcing behavior as a third party in the followers' conflicts.

Problem solving is defined as leaders' search for underlying concerns of the parties in conflict while seeking for a favorable solution that addresses all parties' concerns (Römer et al., 2012) with the help of these parties. Some leaders engage in problem-solving of followers' conflicts by addressing the underlying issues towards an amicable resolution (Jit et al., 2016; Römer et al., 2012). Achieving problem-solving behavior involves engaging in open and sincere dialogue and nonjudgmental listening (Tjsovold, Wong, & Chen, 2019). The conceptual skills of servant leaders enable them to exhibit competence in solving work-related issues (Liden et al., 2015). Problem-solving aligns with the ethical behaviors of servant leaders (Liden et al., 2015), which highlights building consensus with the group instead of relying on one's status (Spears & Lawrence, 2016). Servant leaders, while prioritizing followers, motivate them to repair their dysfunctional relationships, and address their conflicts effectively and efficiently (Jit et al., 2017). Servant leaders build community (Liden et al., 2015), by enhancing interpersonal relationships, through addressing followers' concerns by using effective communication strategy. Subsequently, we propose that servant leadership motivates followers to discuss their conflicts constructively by listening to others' opinions. We thus propose the following hypothesis:

Hypothesis 2c. The perceived use of servant leadership will be positively related to leaders' problem-solving behavior as a third party in the followers' conflicts.

Servant Leadership and Team Conflict: The Mediating Role of Leaders' Third-Party Conflict Behavior

The way servant leaders handle followers' conflicts may indirectly affect how each follower experiences team conflict. As argued above, we expect servant leadership to foster problem-solving, and to relate negatively to avoiding and forcing behaviors in playing a third-party role in followers' conflicts. In other words, we expect servant leaders who neither avoid conflicts nor impose solutions in their followers' conflicts to reduce the amount of team conflict experience of their followers. Avoiding or forcing behaviors may risk fueling further conflicts as parties' underlying concerns are not taken into account. Servant leaders who engage in problem-solving strategy will likely reduce team conflict experience for two reasons: first, the leader listens to parties' needs and values while seeking an amicable solution; this serves as a prerequisite toward problem-solving. Finally, servant leaders are role models toward constructive conflict management behaviors (Jit et al., 2016). They empower parties to develop (learn) conflict

management skills (Van Dierendonck, 2011) thereby reducing the intensity of their conflict experience. When parties in conflict perceive that their leaders utilize problem-solving behavior, by exhibiting honesty, and fairness, while facilitating effective dialogue, they will likely collaborate toward effectively resolving their disputes. We thus hypothesize:

Hypothesis 3. The perceived leaders' nonuse of third-party avoiding (H3a), forcing (H3b), and the use of problem-solving (H3c) will mediate the negative relationship between the perceived use of servant leadership and amount of team conflict.

Servant Leadership and Emotional Exhaustion: The Mediating Role of Leaders' Third-Party Conflict Behavior

We argue that leaders' third-party conflict behaviors will mediate the relationship between servant leadership and followers' level of emotional exhaustion. Research has shown that avoiding and forcing responses are associated with decreased well-being, evidenced by sleep disturbance and anxiety (Way et al., 2016), and stress (Römer, 2017). Servant leaders who intervene in followers' conflicts, reduce followers' emotional exhaustion. Similarly, research indicates leaders' third-party avoiding and forcing behaviors to heighten the conflict–stress relationship, while those who engage in problem-solving attenuate the conflict–stress link (Römer et al., 2012). While prolonged stress triggers emotional exhaustion (Cooper et al., 2019; Maslach & Leiter, 2016), leaders, who exhibit behaviors such as listening with empathy, and nonforcing behaviors (i.e., not forcing a resolution), could mitigate followers' emotional exhaustion. We therefore hypothesize:

Hypothesis 4. The perceived servant leaders' third-party, nonavoiding (H4a), and nonforcing (H4b), and the use of problem-solving (H4c) behaviors will mediate the negative relationship between the perceived use of servant leadership and emotional exhaustion.

Method

Sample and Procedure

This study consisted of a survey among religious sisters in local religious communities of a Catholic Women Religious Institute based in Nigeria in sub-Saharan Africa. Data collection was between 2016 and 2017, from religious sisters who did not occupy a leadership position. Initially, 777 sisters received a survey, either online or via paper and pencil. Finally, 453 respondents completed the questionnaire (response rate 58.3%), of which 56 were online, and 397 were via paper and pencil. Respondents were Nigerians and came from 166 of 221 local religious communities of the Institute spread in Africa (n = 407), Europe, and North America (n = 46). The number of years in the religious profession in the institute ranged between one and 51 years (M = 18.92, SD = 10.14), with an average tenure in a convent of 4.77 years (SD = 3.06). Age ranged between 20 and 70 (age as such was not measured). Respondents had varying educational backgrounds, and the majority held a bachelor's degree (30.9%) and master's degree (26.5%). Others had secondary vocational education (17.2%), a senior secondary certificate in education (12.4%), a higher national diploma (9.5%), and a doctoral degree (3.5%). Most of the sisters (88%) are working, while 11.9 % are studying. Their dominant fields of work were education (60.3%), medical care (17.4%), and accounting (7.7%). The local religious communities had an average size of 7 community members (SD = 6.16), including the local community leader.

Measurement

All constructs were assessed via a questionnaire using a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Some of these constructs were slightly adapted to suit the religious community context.

Servant Leadership

Followers assessed the extent to which the community leader engages in servant leadership using the 7-dimension (7 items) servant leadership scale ("SL–7": Liden et al., 2015). The item, "My leader puts my best interest ahead of his/her own" was adapted to "My superior puts my best interest before her own" (Cronbach's alpha = .66).

Team Conflict

A 13-item team conflict scale was adapted from Jehn and Mannix's (2001) to fit the context of religious communities. Specifically, four types of conflict were measured: task, relationship, process conflict, and status conflict: relationship conflict (3 items), for example, "sisters in my community often experienced relationship conflict" (α = .63); task conflict (3 items), for example, "sisters in my community experienced conflict of ideas" (α = .77); process conflict (3 items), for example, "sisters in my community often disagree about resource allocation" (α = .85); and status conflict (4 items) (Bendersky & Hays, 2012), for example, "sisters in my community competed for influence" (α = .79). Cronbach's alpha for all team conflict items together is .91, providing good reason to use them as one concept.

To determine whether it is feasible to use a general team conflict scale or the different types of conflict scales separately, before the primary analysis, we compared two measurement models. The results are described below in the result section. We used team conflict as an individual variable, representing the level to which each religious sister independently perceives the amount of team conflict in the local religious community.

Leader's Third-party Conflict Behaviors

We used Römer et al. (2012) scale (an adapted version of the Dutch test for conflict handling: DUTCH, Van de Vliert, 1997) to assess leaders' third-party behavior in followers' conflict, measuring avoiding (4 items), forcing (3 items), and problem-solving (3 items). The wordings were slightly changed to fit the religious community. A sample item for avoiding is "My local superior tries not to get involved" (Cronbach's alpha = .79) and for forcing is "My local superior enforces a decision to the conflicting sisters" (Cronbach's alpha = .73). A sample item for problem-solving is "My local superior examine issues until a solution is found that really satisfies each sister that is involved in the conflict" (Cronbach's alpha = .77).

Emotional Exhaustion

Emotional exhaustion was measured with a 5-item version of the Maslach Burnout Inventory-Students' Survey (MBI-SS) (Schaufeli et al., 2002), for example "I feel emotionally drained from my work" (Cronbach's alpha = .85).

Strategy for Statistical Analysis

We used structural equation modeling (SEM) to estimate the hypothesized model and test all hypotheses simultaneously. We conducted the analyses using SEM in R, version 3.3.3 with the lavaan package (Rosseel, 2012) version 0.6-1.1132 and lavaan.survey package (Oberski, 2014), controlling for dependence in the data by looking at teams as clusters because some of the participants belonged to the same local communities and thus rated the same leader. The use of this package in R allows us to estimate our concepts

over the clusters, with no explicit modeling of the effect of the clusters or teams themselves, as the main interest of this study is the individual and not the team. As the proposed model is rather large, we reduced the number of parameters by using parcels for servant leadership and team conflict and come as close as possible to the recommendation of three indicators for each construct (Little, Rhemtulla, Gibson, & Schoemann, 2013). This approach is preferable over using more indicators as it reduces type I errors and minimizes the prospect of a-priori model misspecification (Little, Cunningham, Shahar, & Widaman, 2002). Other latent constructs (each of the leaders' third-party behaviors and emotional exhaustion) consisted of five or fewer items and were operationalized based on their items rather than parcels.

Results

Preliminary Analysis

Before testing our hypotheses, we tested different measurement models with a confirmatory factor analysis (CFA) to assess the dimensionality of the variables under study. Model 1 was constructed based on the six latent variables discussed in the literature section: servant leadership, leaders' third-party avoiding, forcing and problem-solving, team conflict, and emotional exhaustion. This was compared to a measurement model (Model 2) where the four types of conflicts do not load on a latent team conflict construct but are four separate constructs found in the literature (i.e., relationship, task, process, and status conflicts) and a single-factor model (Model 0), which indicates that there is no distinction between the variables based on common method bias.

The single-factor model (Model 0) could not be accepted due to its low goodness-of-fit indices (χ^2 = 1,725.985 (209); CFI = .52; TLI = .47; RMSEA = .13; SRMR = .13). Both multifactor models yielded acceptable goodness-of-fit indices (Hu & Bentler, 1999): Model 1; χ^2 = 315.921 (194); CFI = .96; TLI = .96; RMSEA = .04; SRMR = .04; Model 2; χ^2 = 682.795 (398); CFI = .94; TLI = .93; RMSEA = .04; SRMR = .04. A Satorra–Bentler scaled chi-square difference test revealed a significant better fit for the first model where the four conflict types are collapsed on one latent construct (ΔSBS-χ^2 (204) = 366.89; ($p < .001$)); hence, we proceeded analyses with this model. Table 1 reports the means, standard deviations, Pearson's correlation coefficients, and scale reliabilities among studied variables.

Table 1
Descriptive Statistics, Reliabilities, and Correlations of Studied Variables

Measure	*M*	*SD*	1	2	3	4	5	6	7	8
1. Tenure (in the convents)	4.77	3.06	–							
2. Educational level	3.53	1.44	.52***	–						
3. Servant leadership	4.80	0.87	−.00	−.02	*(.66)*					
4. Third-party avoiding	3.43	1.40	.06	.13**	−.28***	*(.79)*				
5. Third-party forcing	3.61	1.20	−.07	−.04	−.21***	.50***	*(.73)*			
6. Third-party problem-solving	4.43	1.49	−.02	−.13**	.50***	−.43***	−.17***	*(.77)*		
7. Team conflict	3.84	1.27	.10*	.20***	−.19***	.54***	.35***	−.34***	*(.91)*	
8. Emotional exhaustion	2.35	1.15	−.03	−.03	−.12**	.18***	.28***	−.10*	.15**	*(.85)*

Notes. *$p < .05$.
**$p < .01$.
***$p < .001$; Cronbach's alpha coefficients are written in parenthesis on the diagonal.

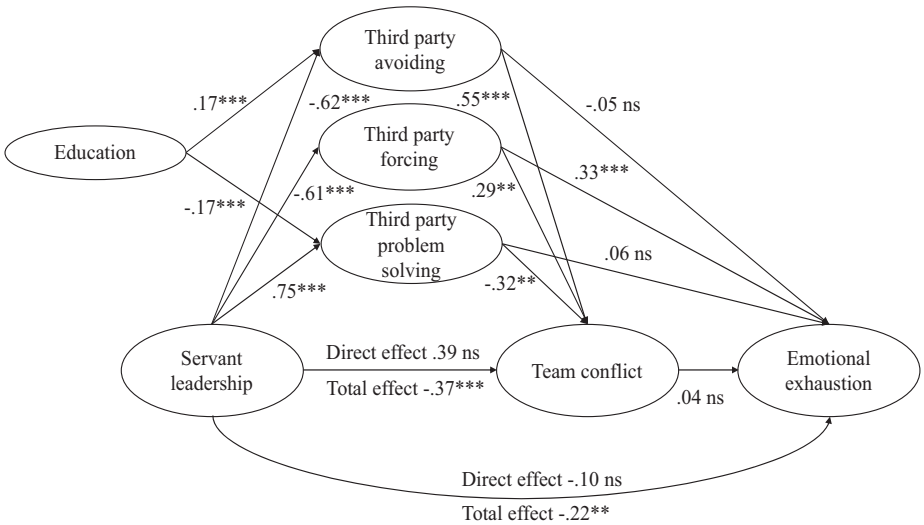

Figure 1. Structural model with SEM standardized parameter estimates. $N = 453$ follower ratings, $^{**}p < .01$, $^{***}p < .001$.

Hypotheses Testing

To test our proposed hypotheses, all predicted relationships were designed into a structural model (Figure 1). This allows for clear interpreting of all the hypotheses by examining the direct and total effects. To interpret Hypothesis 1a and 1b, besides the direct effect (i.e., the pathway from the predictor to the outcome while controlling for the mediating variables), the total effect (i.e., the sum of the direct effect and all the indirect effects of the mediating variables) was calculated. The control variable education was significantly related to avoiding and problem-solving and was thus retained in the final structural model. The model yielded excellent goodness-of-fit indices with $\chi^2 = 451.352$ (217); CFI = .93; TLI = .92; RMSEA = .05; SRMR = .06. All indicators loaded significantly on their respective latent variables. Mediation analysis was performed based on the recommendations of Hayes (2009), and Zhao, Lynch, and Chen (2010) to establish whether or not there is indirect effect.

Concerning Hypothesis 1a, the total effect (combination of direct and indirect effects, including all the mediational paths to each of the three third-party behaviors and team conflict) between servant leadership and emotional exhaustion was significant (standardized estimate = −.22, $p < .01$). However, when looking only at the direct effect, there was no significant relationship between servant leadership and emotional exhaustion ($\beta = -.10$ ns). A similar effect was found for Hypothesis 1b on the relationship between servant leadership, and team conflict. The total effect was significant (standardized estimate = −.37, $p < .001$), but no significant direct effect was found ($\beta = .39$ ns). Hypothesis 1a and 1b is supported, but given the difference between the direct and total effects it is clear that there are underlying mechanisms for this relationship, which are reported below for Hypotheses 3 and 4. Regarding Hypothesis 1c, there was no indirect effect (mediation) of servant leadership on emotional exhaustion through team conflict (standardized estimate = .02; ns). Thus, this hypothesis was not confirmed.

Supporting Hypothesis 2, which proposes a direct relationship between servant leadership and leaders' third-party behavior: Servant leadership (H2a) relates negatively to leaders' third-party avoiding ($\beta = -.62$, $p < .001$), and (H2b) forcing ($\beta = -.61$, $p < .001$), as well as (H2c) positively related to leaders' third-party problem-solving behavior ($\beta = .75$, $p < .001$). In turn, leaders' third-party conflict behaviors significantly relate to team conflict (avoiding, $\beta = .55$, $p < .001$; forcing, $\beta = .29$, $p < .01$; problem-solving, $\beta = -.32$, $p < .01$).

Table 2
Results of Structural Equation Modeling of Standardized Indirect Effects with Insignificant Effects

Indirect effects	Hypothesis	Standardized estimate
SL → TP avoiding → Team conflict	3a	−.34***
SL → TP forcing → Team conflict	3b	−.18***
SL → TP Problem-solving → Team conflict	3c	−.24**
SL → TP forcing → Emotional exhaustion	4b	−.20**
SL → TP avoiding → Emotional exhaustion	4a	.03 ns
SL → TP problem-solving → Emotional exhaustion	4c	.04 ns

Notes. ns = nonsignificant; SL = servant leadership; TP = third-party.
**$p < .01$.
***$p < .001$.

To test the mediation Hypotheses H3 and H4, we performed Sobel tests (Sobel, 1982). For H3, all three predictions were confirmed, as leaders' third-party (H3a) avoiding (standardized estimate = −.34, $p < .001$), (H3b) forcing (standardized estimate = −.18; $p < .01$), and (H3c) problem-solving (standardized estimate = −.24, $p < .01$) behaviors mediate the relationship between servant leadership and team conflict . Hypothesis 4a, 4b, and 4c proposed the leaders' third-party conflict behavior to mediate the relationship between servant leadership and emotional exhaustion. Following the same Sobel tests for establishing mediation, our data supported only Hypothesis 4b; leaders' third-party forcing behavior mediates the relation between servant leadership and emotional exhaustion (standardized estimate = −0.20, $p < .01$). The Sobel tests for the leaders' third-party avoiding and problem-solving behaviors were not significant (Table 2).

Discussion

The current study examined the relationship between servant leadership, team conflict, and emotional exhaustion of followers (religious sisters). Interestingly, findings provide strong support for the mediating role of leaders' third-party conflict behaviors—avoiding, forcing, and problem-solving in the proposed relationships. Specifically, we found that servant leadership utilizes neither avoiding nor forcing behaviors but applies problem-solving when managing followers' conflicts as a third-party, and as a result, reduces followers' team conflict. Further findings showed that servant leadership's nonforcing behavior mediated the relationship between servant leadership and emotional exhaustion. However, a mediation model proposing team conflict to explain the relationship between servant leadership and emotional exhaustion in this study was not supported. These findings advance extant research on servant leadership, team conflict, and well-being (emotional exhaustion).

Theoretical Implications

The present study sheds light on the relevance of studying servant leadership in relation to resolving team conflicts and attenuating emotional exhaustion, via the leaders' third-party conflict behaviors, in an underrepresented context in the literature—convents.

Analyses revealed three key findings: First, we established direct relationships between servant leadership and each of the leader's third-party avoiding (negative), forcing (negative), and problem-solving (positive). These results indicate that the more sisters perceive their local community leaders as servants, the less they see avoiding and forcing behaviors, and the more they understand the leader's problem-solving strategy: seeking for parties' underlying concerns when the leader intervenes as a third-party in their conflicts. These findings corroborate previous qualitative study by Jit, Sharma and Kawatra (2016)

that servant leaders opt for kind, participative, and persuasive strategies in conflicts, such that in followers' conflicts, they impartially seek for the parties' main concerns (initial diagnosis).

Second, we found that leaders' third-party conflict behaviors mediate the negative relationship between servant leadership and team conflict. Leaders who avoid conflicts or impose a solution in their followers' conflicts potentially fuel followers' team conflict experience, while leaders who apply problem-solving reduce team conflict. These results suggest that as long as religious sisters have servant leaders in convents, they experience reduced team conflicts due to the leaders' display of serving behaviors through problem-solving rather than avoiding or imposing a solution. These results aligned with the previous findings indicating that leaders' third-party avoiding and forcing responses strengthen interpersonal conflicts, while their problem-solving reduces conflict (Römer, 2017).

Third, further analysis showed the relationship between servant leadership and emotional exhaustion to be mediated only by the leaders' forcing behavior in a third-party role. This finding suggests that sisters' perception of servant leadership is associated with relief in their level of emotional exhaustion experience, as the leaders display no forcing behavior. This result supports prior research suggesting that leaders' third-party forcing behavior harms followers' well-being by intensifying individuals' stress levels (Römer, 2017), anxiety, and depression (Way et al., 2016). Our results show that conflicts among religious sisters in convents are a reality, yet are not necessarily destructive with servant leaders as third parties.

Overall, these are crucial findings given that they enable us to determine how and to what extent servant leadership improves collaborating, integrating, or problem-solving local religious communities by reducing team conflict and followers' emotional exhaustion experience. Notably, this study extends research on (servant) leadership and leaders' third-party conflict behavior (Jit et al., 2016; Römer et al., 2012), and on servant leadership and team conflict (Wong et al., 2018). It further strengthens research on servant leadership and followers' health and well-being (Rivkin et al., 2014; Wu, Qiu, Dooley, & Ma, 2020).

The present findings add to confirm the theorizing that servant leadership prioritizes serving followers' needs and well-being (Greenleaf, 1977; Obi & Bollen, 2017; Van Dierendonck, 2011), which here include reducing team conflict through problem-solving and by using a nonforcing strategy to curb sisters' emotional exhaustion experience. Overall, these results extend the emerging literature on the vital role of leadership as a third-party in followers' conflicts (Poitras et al., 2015; Römer, 2017), with particular reference to servant leadership and problem-solving. Our results suggest that conflict management literature needs to integrate servant leadership competencies (e.g., emotional healing, empowering, listening, ethical behavior, empathy) in constructing problem-solving conflict-handling skills.

Contrary to our expectations, neither the servant leaders' nonavoiding behavior nor their use of problem-solving in followers' conflicts could explain the relationship between servant leadership and emotional exhaustion. One possible explanation for these nonsignificant findings could be due to cultural contexts and contingency factors. Given the collectivist context of our sample, one may argue that the nonavoiding behavior of a servant leader as a third-party may impact emotional exhaustion less. Research showed that organizational and societal factors impact leaders' behavior as third parties in followers' conflicts (Römer, 2017), such that individuals from diverse cultures will tend to prioritize various sets of values and practices. Hence, cultures may clash in the face of conflicts (De Dreu, Kluwer, Euwema, & Van der Vegt, 2017). To be specific, avoiding conflict in some collectivist contexts was found to boost followers' attitudes and behaviors (Yang & Li, 2017). Thus, the national (Nigeria) and organizational (CWRI) contexts of this research might have influenced this finding.

Another possible explanation could be that results on leaders' forcing behavior have been consistent across cultures and studies. These results have led to a general conclusion that leaders' forcing behavior in followers' conflicts (relationship, task, and process) harms followers' well-being such as high increase in stress (Römer et al., 2012), anxiety,depression, and bullying (Way et al., 2016). Hence, the nonforcing approach of a servant leader in this study curbs the level of emotional exhaustion such that avoiding and problem-solving behaviors could offer no other explanation as to the reason for the relationships.

One further feasible explanation for the lack of mediation of leaders' avoiding and problem-solving strategies in the servant leadership–emotional exhaustion relationships may likely be that effects differ depending on conflict types. For example, avoiding could be more effective in managing relationship conflicts, while in managing task conflicts, problem-solving appears more effective (De Dreu & Van Vianen, 2001; Guerra, Martínez, Munduate, & Medina, 2005). More importantly, our data fit better with a one-factor model for the different conflict types, rendering credence to our findings on a general level. Future research may consider a contingency approach, illuminating whether different leadership behaviors are more or less helpful depending on the type of conflict that followers experience. Leaders and conflict managers should, like servant leaders, refrain from forcing response in conflicts. Such behavior possesses the highest risk of triggering emotional exhaustion.

Another finding contrary to our expectation was that team conflict could not mediate the relationship between servant leadership and emotional exhaustion. Presumably, it was not just the experience of conflict but how leaders manage conflicts in convents that impact followers' well-being. Researching servant leadership in leaders' third-party behavior in convents is timely. Our study aligns with several findings emphasizing the relevance of leaders as third parties in conflicts between followers. These studies highlighted that direct leaders (Römer, 2017), and institutional third-party mediators (Bollen, Euwema, & Munduate, 2016), intervene in conflicts. Additionally, peers as peacemakers (Zhang, Bollen, Pei, & Euwema, 2018), women in the third-party peer role (Benharda, Brett, & Lempereur, 2013), and women religious leaders, specifically, local community leaders in convents, are capable of handling conflicts in beneficial ways. Moreover, productive conflict management occurs in family firms (Alvarado-Alvarez, Armadans, & Parada, 2020) as well. While some research has adopted the integration of cooperative and competitive strategies in conflict management (Euwema, García, Munduate, Elgoibar, & Pender, 2015), we underline the value of servant leadership and problem-solving behaviors to religious sisters' conflicts, establishing that local community leaders in convents demonstrate serving behaviors and problem-solving in conflict situations. Indeed, this study confirms recent theorizing that servant leadership is appropriate for female religious institutes in Nigeria (Obi & Bollen, 2017), including for advancing problem solving third-party conflict behavior for individuals' wellbeing.

Regarding female leadership and culture, the present findings strengthen prior research that women of all cultures prefer person-oriented third-party intervention (Giebels & Yang, 2009) in conflict situations. Our study results suggest that women in religious community life (in Nigeria) prefer relational oriented leadership behavior, such as servant leadership, and problem-solving third-party strategy in (followers') conflicts rather than forcing and/or avoiding. This research builds a robust theoretical bridge between servant leadership, team conflicts, and emotional exhaustion via leaders' third-party conflict behaviors. The study further builds a connecting bridge between servant leadership and the indigenous African understanding of administration (Metz, 2018). We also respond to a call that researchers explore further on the mediating processes through which servant leadership relate to relevant outcomes (Eva et al., 2019). This study builds a generalizing (inclusive) bridge by studying a different sample—religious sisters within a CWRI, in Nigeria, a sub-Saharan African context.

Potential Limitations of Study and Suggestions for Future Research

This study has some potential limitations, and hence, suggestions for further research. First, our unique sample showed that constructs from business organizations could generalize to a different type of organization, suggesting that human behaviors are inherently the same. However, future research might explore more diverse organizations and develop constructs based on religious communities, as well as replicate our findings.

Second, given the cross-sectional design of this study, no causal claim can be made regarding the direction of the relationship between the studied variables. Also, all variables were measured on the

individual follower level, suggesting a potential common method bias. However, using standardized and rigorously developed instruments reduces common method variance (Spector, 1987), as we did in this study. Spector (2019) noted some strategies for optimizing the use of cross-sectional designs, including the control variables to rule out extraneous variables, which we also did. Following Podsakoff, MacKenzie, Lee, and Podsakoff (2003), assuring anonymity to participants reduces common method bias. We guaranteed anonymity to our respondents and used different wordings for different variables.

The theoretically grounded direction of our hypotheses and the empirically convincing findings lend credence to the predicted paths of the relationships in our model. We examined team conflict and emotional exhaustion experience of religious sisters. It seems logical that we evaluate sisters' perceptions of leaders' behavior. This evaluation is more important for our research question than the way leaders perceived their behavior. For example, if a leader in this study understands herself as a servant, but a follower does not recognize so, this might neither be viewed as supportive nor curb sisters' level of emotional exhaustion. The way followers perceive their leaders is vital in defining leaders' (third-party) behaviors, and not only leaders' perceptions are crucial (Bollen & Euwema, 2015; Römer, 2017). Yet, future research could integrate leader and followers' perceptions.

Third, this research examines leaders' third-party behaviors: avoiding, forcing, and problem-solving. A future study could explore other conflict-handling styles: accommodating and compromising in religious communities, and also investigate these in conflicts between leaders and followers. Notably, our choice of avoiding, forcing, and problem-solving leader behaviors depicts what leaders usually do in followers' conflicts, that is, conflicts of which leaders are not a part (Römer, 2017). Accommodating and compromising are typical behaviors by the conflicting parties themselves. Finally, servant leaders' nonavoiding and problem-solving behaviors did not mediate the servant leadership–emotional exhaustion relationship in this study. Future research could explore to gain more insight into the reason behind this result. Also, team conflict did not explain the servant leadership–emotional exhaustion relationship in this study. Future research could focus on specific conflict types.

Practical Implications

The results of this study offer concrete contributions to conflict management research and practice, to organizations, and leaders of religious institutes, HR managers, and nongovernmental organizations. To maintain problem-solving as well as physically and psychologically healthy individuals, the results of this study imply that CWRI could benefit from practicing servant leadership and problem-solving behaviors in followers' conflicts in convents. This study highlights that at any moment, leaders should resist avoiding or forcing behaviors in handling followers' conflicts and instead display problem-solving. To develop and enhance servant leadership practices and problem-solving, reduced team conflict, and decreased emotional exhaustion, we suggest establishing training programs and interventions on servant leadership and conflict management skills for leaders at all levels of the institute. The leadership training program should be ongoing, and should encompass community members as they are potential leaders, as well as those candidates in formation.

Leadership training programs should emphasize serving behaviors and problem-solving competencies that enable leaders to serve followers , and resolve challenges associated with religious community life and responsibilities. The application should help develop practical and open communication skills. These skills will enhance information sharing and discussing conflicts with respect, mutual trust, fairness, and honest behaviors toward promoting psychologically healthy individuals in convents. Leaders should inspire followers to manage conflicts constructively by themselves by creating conducive environments. In selecting leaders , essential considerations should go to those sisters that demonstrate serving behaviors, strong ethical and altruistic tendencies, spiritual, and relational characters, with the ability to demonstrate problem-solving skills in conflict situations for collaborative and problem-solving religious communities.

Conclusion

Managing followers' conflicts as a third party is a crucial responsibility of leaders, specifically local community leaders. Our empirical findings show that local community leaders in convents whom their followers perceived as exhibiting servant leadership behaviors manage their followers' conflicts constructively through problem-solving rather than through avoiding or forcing behaviors when performing their third-party role. These leaders promote followers' well-being by reducing followers' level of emotional exhaustion experience through nonforcing behavior. Overall, the present study advances our understanding of literature by adding to the growing evidence on how servant leaders manage followers' conflict as third parties in convents—an underrepresented research domain. In other to reduce team conflicts, this study particularly highlights the need for organizations to recognize the benefits of practicing servant leadership and problem-solving behaviors, and to refrain from both avoiding conflicts and forcing a solution while playing a third-party role. Indeed, practising leading others by serving them, reducing conflicts in teams, and curbing emotional exhaustion through the leaders' third-party behaviors are not limited to individuals in business contexts but are similarly alive in convents. The current study highlights the critical role of local community leaders in convents—serving behaviors, problem-solving, promoting the well-being of religious sisters, and improving healthy and quality religious communities.

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Negotiation and Conflict Management Research

Stepping Back from the Brink: A Comparative Analysis of Ripeness Theory and Readiness Theory in the U.S.-North Korea Crisis of 2017–2018

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Abstract

This study assesses the usefulness of two theories, ripeness theory and readiness theory, in explaining de-escalation in intense crisis, when adversaries move toward formal negotiations. The U.S.-DPRK crisis in 2017–2018 serves as a case study for examining how each theory can contribute to our understanding of the fundamentals that facilitate a crisis de-escalation process. The study finds both theories instructive for understanding the U.S.-DPRK episode, but points to readiness theory as more insightful. Considering the multiple sources at play in the non-linear pre-negotiation phase, and specifically the central role played by a third party in moving the process forward, readiness theory provides a more profound and detailed understanding of the forces, their interplay and the gradual changes that led the parties to change their policy. This unique contribution of readiness theory can offer conflict parties and practitioners insights applicable to similar events in the future.

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The intense U.S.-North Korea crisis in 2017 marked "a change in saliency" (Zartman, 2005, p. 167) in a conflict that had simmered in the Korean Peninsula for seven decades. The escalation in the parties' relations came against the backdrop of nuclear achievements by North Korea, officially known as the Democratic People's Republic of Korea (DPRK), and U.S. efforts to convince the DPRK to renounce its nuclear militarization. In this crisis, both parties took steps of increasing severity, in several dimensions, to retaliate and pressure the other party to change its behavior (Faure & Zartman, 2005; Zartman & Faure, 2005). This dynamic brought the parties to the brink of nuclear war. However, the escalation began to reverse in early 2018, leading to a U.S.-North Korea summit meeting in June 2018 in Singapore, where the leaders of both sides declared their intentions to explore ways to peacefully resolve the conflict. This study applies two theories – ripeness theory and readiness theory – to analyze the de-escalation of the U.S.-North Korea crisis in 2018, examining how each theory can contribute to our understanding of the fundamentals that led toward direct, formal negotiations. We ask which of the two theories best describes the sources of change in the adversaries' approach – from unilateral, coercive strategies and tactics to the bilateral option of diplomatic negotiation.

The two conceptual frameworks of ripeness theory and readiness theory outline variables and causal effects that brake escalation and move conflict parties "out of escalation into negotiation" (Faure & Zartman, 2005). For over three decades, *ripeness theory* (Zartman, 2000; Zartman & de-Soto, 2010) has dominated the academic and practical discourse on the right timing for negotiation. The theory identifies mutual perceptions of hurting impasse as the impetus for the parties to begin de-escalation and embark on negotiation, and highlights two necessary (and insufficient) conditions of mutually hurting stalemate and a way out for the productive inauguration of negotiation (Zartman, 2000; Zartman & Faure, 2005). Implicitly applying the logic of the theory elaboration approach (Fisher & Aguinis, 2017) to the ripeness theory construct, Pruitt (2005, 2007) formulated *readiness theory* as a theoretical advancement that improves ripeness theory by elucidating multiple causal factors that influence the process of ripening (Pruitt, 2005). According to Pruitt, readiness to settle a conflict is affected by two psychological variables – motivation to end a conflict and optimism – that determine the degree of the leaders' readiness to attempt to resolve their conflict through negotiation. Motivation and optimism are influenced by several antecedents.

Two methodological comments should be noted. The first concerns the selection of this case study for exploring both theories' value in discerning the forces underlining de-escalation processes. Recognizing that the intense disruption of relations that brought the U.S. and North Korea to "a nuclear collision course" (Jackson, 2019) in 2017 could happen again in this intractable conflict, and in similar ones, there is utmost importance in identifying the contextual and intervening variables that facilitated the transition from escalation to de-escalation and enabled the parties to avoid catastrophe, even though ensuing negotiations failed to produce any agreement in this case. The second comment concerns the need to acknowledge the fragility of the data available on the North Korean side for developing the analysis presented in this paper. Both theories applied in this study, ripeness and readiness, address perceptions and behaviors. Yet, it is a challenging task to discern North Korea's intentions because most of the data available on North Korea's perceptions is actually based on American conjectures about those perceptions.[1] While bearing this in mind, this study draws conclusions about North Korea's perceptions and intentions by analyzing its leadership's public speeches and official statements, and by observing the state's actual behavior.

The paper comprises four main sections. A discussion of ripeness theory and readiness theory is presented in the first section, which also includes the research questions guiding the analysis of the case. The second section includes an overview of the U.S.-North Korea crisis. The third section examines – first

[1] I would like to thank an anonymous reviewer for this comment.

through the lens of ripeness theory and then from the perspective of readiness theory – the underlying causes of the changes in the conflict dynamics that led the U.S. and North Korea to shift from escalation to diplomatic dialogue and negotiation. Finally, the fourth section presents insights from the application of both theories and explain why readiness theory more accurately explains the empirical observations from the case studied. A table summarizing the analysis according to the two theories is presented in the appendix.

Two Theories about the Antecedents of Negotiation in a Crisis: Ripeness Theory and Readiness Theory

The analysis in this paper is based on assessing the usefulness of the arguments outlined by two competing theories (George & Bennett, 2005), ripeness theory and readiness theory. Each theory attempts to explain the elements involved in the process of convincing leaders of conflict parties in crisis episodes to abandon their unilateral approach and negotiate to resolve their conflict peacefully.

Ripeness Theory

Ripeness theory discusses the initiation of negotiation at a ripe moment that is "favorable for timing de-escalation strategies" (Aggestam, 2005, p. 271). The theory suggests that conflict parties seek to negotiate a way out of the conflict when they "find themselves in an uncomfortable and costly predicament" (Zartman, 2000, p. 225) and perceive their unilateral strategies as no longer effective (Zartman, 2000). Ripeness theory outlines two necessary but insufficient conditions underlying a party's decision to climb down the escalation ladder and initiate negotiation: mutually hurting stalemate (MHS) and way out (WO). These two conditions are the building blocks of ripe moments, without which the search for an agreed outcome in negotiation, whether bilateral or mediated, cannot begin (Zartman, 2000).

The perception of mutually hurting stalemate, a deadlock condition, from which the parties see no exit, can result from various causes, including cognitive, relational, contextual, structural, or processual ones (Faure & Zartman, 2005, p. 297). In the ripeness discourse, a deadlock indicates that "a system has reached a state of equilibrium" (Faure, 2005, p. 26), which serves as "a point of reversal in an escalation process" (Faure, 2005). Indeed, studies exploring the transition from escalation to negotiation reinforce the centrality of stalemate as a precondition for the initiation of negotiation (Faure & Zartman, 2005; Zartman, 2000; Zartman & de-Soto, 2010). According to ripeness theory, this condition is optimally associated with an impending, past or recently avoided catastrophe (Zartman, 2000).

The sense of a potential way out is the second condition stipulated by ripeness theory. The theory postulates that the perception of MHS triggers the search for alternatives to the unilateral track, or a "way out" (Zartman & de-Soto, 2010). This element refers to the perception of both parties "that they and the other party are willing to look for a joint solution" (Zartman & de-Soto, 2010, p. 23). A way out can be assessed mainly by subjective indicators. That is, it "depends on each party's perception of the other party's intentions" (Zartman & de-Soto, 2010, p. 23). In particular, the actions of the other party must be perceived as "an encouragement to talk" (Zartman & de-Soto, 2010, p. 23). However, WO can also be assessed by objective indicators as an "an action or statement by one party" (Zartman & de-Soto, 2010, p. 23).

A third party is not an integral part of ripeness theory. However, since a "ripe moment needs to be turned from a passive situation into an active process for de-escalation and negotiation to occur" (Aggestam, 2005, p. 273), Zartman (2000) stresses that moments must be perceived as such and seized by the parties themselves or by a third party.

Table 1

Ripeness and Readiness Perspectives on the U.S.-North Korea De-Escalation Process

Ripeness Theory Analysis		**Readiness Theory Analysis**	
MHS and Perception of Looming Catastrophe		**Sources of Increase in Motivation**	
U.S.	**North Korea**	**U.S.**	**North Korea**
1. Sanctions were ineffective 2. U.S. frustration with China's conduct 3. Unfeasibility of U.S. preventive attack 4. Risk of unintentional catastrophic war	1. Cost of sanctions 2. Risk of sliding into a devastating nuclear confrontation	The unfeasibility of current tactics: 1. Sanctions were ineffective 2. Growing U.S. frustration with China's approach 3. Unfeasibility of U.S. preventive attack 4. Increased likelihood of an unintentional catastrophic war	1. Cost of sanctions 2. Growing risk of war 3. Pressure from China
WO		**Sources of Increase in Optimism**	
U.S.	**North Korea**	**U.S.**	**North Korea**
By June 2018, the U.S. had learned about North Korea's intentions and expectations in messages exchanged via South Korea and China and in bilateral discussions	By June 2018, North Korea had learned about U.S. intentions and expectations in messages exchanged via South Korea and in bilateral discussions	Growing perceptions of working trust and light at the end of the tunnel effected by: 1. Third-party mobilization: South Korea's engagement since January 2018 and China's engagement since March 2018 2. Information gathering 3. Testing the waters 4. Wishful thinking	1.North Korea's confidence in countering the U.S. and blocking its military options 2. Growing perceptions of working trust and light at the end of the tunnel effected by: 2.1 Third-party mobilization: South Korea's engagement since January 2018 2.2. Information gathering 2.3 Testing the waters

Readiness Theory

The second theory used to process and analyze the dynamics of the current case study is readiness theory (Cantekin, 2016; Pruitt, 2005, 2007, 2015; Schiff, 2014, 2019a, 2019b; Stimec et. al., 2011), which is a modification and elaboration of ripeness theory (Pruitt, 2005). Aiming to make it more useful, Pruitt changed the structure of the core ripeness theory to create a new theory that looks at "the motives and perceptions that make up ripeness on each side separately rather than focusing attention on joint states of mind such as a mutually hurting stalemate" (Pruitt, 2005, p.6). Readiness theory treats the psychological states of the leaders (reflected in their perception of MHS and a WO according to ripeness theory) and their antecedents as variables (Pruitt, 2005). Thus, readiness theory is viewed as "a strong move towards a psychological view of ripeness" (Stimec et al., 2011, p. 147).

Readiness theory applies the concept of readiness as a characteristic of a party to a conflict that reflects its leadership's thinking about the conflict (Pruitt, 2007). Readiness is affected by two necessary psychological variables: motivation to escape the conflict and optimism. Both must be present to some degree for any conciliatory behavior to be initiated, yet they may vary in intensity. Thus, readiness fosters a wide range of conciliatory behaviors, each dependent on the level of readiness. A low level of readiness generates moderate conciliatory gestures. As the readiness level rises, the party's behavior becomes more conciliatory and may take the form of a ceasefire or an agreement to enter negotiations. The greater the readiness on both sides, the more likely they are to negotiate (Pruitt, 2005, 2007, 2015). Thus, conflicts that result in negotiation usually exhibit a growing level of readiness on both sides.

An important feature of readiness theory is that it postulates a number of antecedents and mechanisms that give rise to motivation and optimism. Motivation can derive from any or all of the following: a sense that the conflict is unwinnable (that is, a perception of losing creates greater motivation), a sense that the conflict is generating unacceptable costs or risks, and pressure from a powerful third party. While the first two antecedents of motivation roughly parallel ripeness theory's perceptions of hurting stalemate and impending catastrophe, the third source of motivation – third party pressure – is not part of ripeness theory (Pruitt, 2005).

The second necessary antecedent of readiness is optimism. It refers to the possibility of concluding negotiations with an agreement that is acceptable to both sides. It requires a certain degree of faith that the final agreement will satisfy each side's goals and aspirations without exorbitant costs (Pruitt, 2007); that the negotiator on the other side is, in fact, authorized to make a commitment; and that the other side will indeed adhere to the agreement (Schiff, 2019a, 2019b). This source of readiness is parallel to the perception of a way out, as described by ripeness theory. However, readiness theory also outlines the sources of optimism about a way out, postulating that optimism derives from three states of mind (Pruitt, 2005, 2007): lower aspirations, working trust (a belief that the other side is also motivated to settle the dispute, will work hard and make concessions) and a sense of a "light at the end of the tunnel" (the perception that an acceptable agreement is taking shape and that the other side is prepared to make the necessary concessions). The third state of mind leads to a higher level of optimism (Pruitt, 2007).

In the initial stage, when considering the option of negotiation, optimism reflects a conviction that the other side is serious about ending the conflict and is willing to make the necessary concessions at the negotiating table. Preserving this optimism requires a belief that a formula can be achieved that bridges the parties' opposing positions and is acceptable to both; the greater the perceived distance between the parties, the lower the level of optimism (Pruitt, 2005).

Readiness theory further observes that motivation and optimism are mutually related in a number of ways (Pruitt, 2005, 2007). Most relevant to our discussion is the assertion that motivation to end a conflict can trigger a number of mechanisms that foster optimism about the success of negotiations, engender new thinking about the rival and generate a confidence-building cycle and conciliatory spiral that leads to negotiations (Pruitt, 2005, 2007). These mechanisms include third-party mobilization, moderation of the

parties' demands, accumulation of information that challenges pre-existing states of mind, and testing the waters – that is, sending conciliatory signals or seeking clandestine contact with the other party. Information gathering and testing the waters mechanisms, if taken seriously and reciprocated by both parties, can lead to a conciliatory spiral and the flourishing of optimism (Pruitt, 2007).

Third-party mobilization occurs when a third party discerns motivation in the disputing parties to end a conflict. This boosts the third party's optimism about resolving the conflict and thus encourages it to bring the adversaries to the negotiating table. Such third-party efforts can generate optimism on both sides and eventually lead to full negotiations. Another mechanism postulated by the theory is wishful thinking, which is triggered by motivation to end a conflict and is a catalyst for optimism (Pruitt, 2005). This mechanism allows for the discovery of selective evidence of the other side's logic or motivation to end the conflict (Pruitt, 2005). According to readiness theory, optimism and motivation are further related because each variable can compensate for a shortage of the other (Pruitt, 2007, 2015).

The research design in this paper employs two clusters to assess the value of ripeness theory and readiness theory in explaining the de-escalation dynamics of the North Korea-U.S. crisis episode. The first cluster addresses ripeness for negotiation as the dependent variable and asks whether mutual hurting stalemate and way out can explain the transition from escalation to negotiation in this crisis. In the second cluster, readiness for negotiation is viewed as the dependent variable. This includes an assessment of the impact of the motivation and optimism variables on the parties' readiness to embark on the de-escalatory sequence that enabled negotiations to begin.

The Crisis in the Korean Peninsula (2017–2018)

The tension between North Korea and the U.S. is a major dimension of the intractable conflict in the Korean Peninsula, a conflict that has simmered since the division of the Korean Peninsula in the 1950s, centering on issues the North Korea and the Republic of Korea (ROK) (South Korea) perceive as incommensurable (Wertz, 2018). For the last seven decades, North Korea-U.S. relations have featured a Cold War mentality and zero-sum game perceptions, including a strong sense of victimization on the North Korean side (Faure, 2019). The North Korean regime has viewed the U.S. and its military alliance with South Korea as an existential threat. From North Korea's perspective, the U.S. is liable to invade at any time (as it did in June 1950) and is an obstacle to the unification of the peninsula under its hegemony (Jackson, 2019; McGuire, 2018). This sense of insecurity has fueled North Korea's drive since the 1950s to develop a credible nuclear deterrence to guarantee the survival of its regime (Jackson, 2019; McGuire, 2018; Wertz, 2018). North Korea also views its nuclear program as an important source of pride and prestige, which accords it status and agency in international affairs (McGuire, 2018).

North Korea's nuclear proliferation efforts over the decades have spawned an ongoing debate in the international community on how to mitigate the threat of nuclear war in the Korean Peninsula (Jackson, 2019). The two major attempts at diplomacy by the U.S. and the international community – the Agreement Framework (1994) and the Six-Party Talks (2003–2009) – culminated in North Korea's declaration in 2009 that it was no longer bound by earlier agreements and that it would not return to the negotiating table (Davenport, 2020). Since North Korea's first nuclear test in 2006, the UN Security Council has imposed increasingly tough sanctions on North Korea to pressure it to denuclearize (Tweed, 2019). These efforts have failed to contain North Korea's proliferation.

Under Chairman Kim Jong-un, who rose to power in 2011, North Korea has even accelerated its ballistic missile program and bolstered its arms arsenal (ICG, 2018b). Kim's announcement of his intention to test an intercontinental ballistic missile in early 2017 (Wertz, 2018), followed by a series of long-range missile tests demonstrating North Korea's nuclear capacity, provoked a spiral of heightened tensions between North Korea and the Trump administration, with rounds of actions and counteractions (Davenport,

2020). By the end of 2017, North Korea had launched at least 20 missiles. The situation was further aggravated by reciprocal inflammatory rhetoric from Kim and President Trump, with both leaders demonizing each other (Faure, 2019). North Korea announced in September 2017 that it had successfully tested a nuclear hydrogen bomb and declared in November that its enhanced ICBM capability was capable of hitting the U.S. mainland (Landler, Sang-Hun, & Cooper, 2017; Spetalnick & Brunnstrom, 2017). Viewing North Korea's behavior as unacceptable, the U.S. responded with a coercive strategy of "maximum pressure", indicating that its top priority vis-à-vis North Korea was to convince it to comprehensively denuclearize and manage the crisis through diplomacy (Jackson, 2019; Pennington, 2017). The strategy "relied on escalating the pain the Kim regime felt until it changed its views about its own nuclear weapons" (Jackson, 2019, p. 104). This included an economic downturn that would force the regime to recalculate the costs and benefits of simultaneously pursuing nuclear proliferation and economic development (Albert, 2019b; Belfer Center, 2018). The U.S. stepped up its campaign against North Korea, in the second half of 2017, pushing for harsher economic and financial sanctions and for UN Security Council condemnation of North Korea's nuclear activities (ICG, 2018b).

The U.S. and its allies, including Japan, South Korea and the EU, imposed sanctions in 2017 that went beyond the UN measures in restricting economic activity with North Korea and targeting a longer list of North Korean individuals and businesses (Albert, 2019b; Tweed, 2019). At the same time, this strategy included "coercive signaling" of Washington's readiness to resort to military force "rather than just give up on denuclearization" (Jackson, 2019, p. 104) by preparing for a preventive military attack against North Korea. As North Korea further accelerated its tests in the fall of 2017, the Trump administration declared that it would not allow North Korea to achieve a nuclear strike capability against the United States (ICG, 2018a; Wertz, 2018) and stepped up its military preparations for a preventive strike against North Korea aimed at delaying its nuclear program (Jackson, 2019). Pyongyang responded by warning that in the event of a U.S. attack against its strategic nuclear capabilities, it would not hesitate to retaliate (Bishop, 2018).

As things heated up in 2017, the U.S. administration officially ruled out negotiating with North Korea until it ratcheted down its provocations and agreed to denuclearize. At the same time, however, the State Department stressed that "diplomatic channels are open for Kim Jung Un for now" communication (Watkins, 2017). These efforts did not bear fruit (Sanger, 2017). In backchannel discussions conducted between North Korean officials and various American figures in the last two months of 2017, North Korean officials rejected a U.S. offer to engage in direct talks. As a precondition for negotiation, North Korea demanded a halt to hostile U.S. policy, including joint military exercises with its allies in the region, which North Korea viewed as a threat to its existence (Davenport, 2020). Furthermore, Pyongyang reportedly questioned the value of such talks since "only Trump can speak for Trump" (ICG, 2018b).

The first sign of some change in North Korea's approach in this crisis came with Kim's New Year's address on January 1, 2018. After more than two years without any high-level contacts between the two Koreas, Kim proposed collaboration between the two countries to alleviate tensions and bring peace and stability to the peninsula; he also raised the possibility of North Korea participating in the Winter Olympics (Belfer Center, 2018; Kim, 2018).

South Korea

South Korea aimed to resolve the conflict in the peninsula peacefully in the broader context of building economic cooperation and reconciliation, with the hope of eventually reunifying the two Koreas. It saw the initiation of direct dialogue between the U.S. and North Korea as a key first step for achieving the formal end of the Korean War (Campbell, 2018; M. Lee, 2018). Thus, while South Korea supported tougher sanctions against North Korea throughout 2017 and promoted the U.S. deployment of a defensive system,

it maintained that sanctions and pressure alone would not stop North Korea's nuclearization and that it could only be halted through direct dialogue between the U.S. and North Korea (M. Lee, 2018).

Noting the Olympic détente message in Kim's speech, South Korea facilitated communication between North Korea and the U.S., and South Korea-U.S. military exercises were put on hold until March 2018 (Johnson, 2018). Both sides, the U.S. and North Korea, expressed their willingness, in principle, to engage in dialogue. Yet, in January and February of 2018, the parties were not ready to consider the other's preconditions for negotiations. From the American perspective, North Korea would need to take steps towards denuclearization before any talks could commence. The U.S. insisted that the ultimate result of dialogue with North Korea must be its denuclearization and that this issue must be discussed in talks with Pyongyang (Johnson, 2018; Oliphant, 2018). North Korea, on the other hand, rejected any preconditions for negotiation and asserted that its nuclear program, which it pursued as a deterrent to invasion, was non-negotiable (Johnson, 2018).

In early March, a South Korean envoy visited North Korea and brought back an invitation from Kim to Trump to meet and discuss the permanent denuclearization of the Korean Peninsula (Davenport, 2020). Trump accepted Kim's invitation and preparations for the leaders' summit began (Helsel & Kim 2018). Following a diplomatic crisis in May that led Trump to cancel the planned summit, direct talks between the U.S. and North Korean officials resumed at the end of May in New York and, in parallel, in South Korea and Singapore (M. Lee, 2018). On June 2, Trump announced that the summit would take place as planned (He-suk, 2018).

At the Singapore Summit on June 12, 2018, Trump and Kim agreed to start negotiations on the complete denuclearization of the Korean Peninsula, normalization of relations and a formal end to the Korean War. At the end of the meeting, which concluded the pre-negotiation phase, the two leaders signed a document outlining broad objectives for the ensuing negotiation process, including a commitment to work together on establishing peace and prosperity on the Korean Peninsula, along with its complete denuclearization (Berlinger & Yeung, 2018).

China

China's collaboration in the strict enforcement of the international sanctions regime was viewed by the U.S. as crucial in the effort to isolate North Korea and force it to denuclearize (Delaney, 2017; Perlez, 2017; Vitkovskaya, 2018). China was North Korea's sole political ally and economic lifeline, accounting for 90% of its trade (Jeong-Ho, 2018). In 2017, China officially implemented and backed the U.S. strategy of economic coercion (Huifeng, 2018; Sun, 2018). Beijing viewed Kim's accelerated nuclear pursuit as adventurous and as endangering China's geostrategic and economic interests, and stressed the economic cost of what it viewed as North Korea's ongoing provocations (ICG, 2018a; Myers & Perlez, 2018). China had no desire to have a nuclear state on its borders that would foment instability on the Korean Peninsula, and it sought to improve its relations with the U.S. and de-escalate the trade war between the two countries. Trump promised China a better trade deal if it cooperated on North Korea and threatened punishments if it failed to comply with the Security Council's sanctions against North Korea (Sun, 2018). Nonetheless, China continued to informally trade items along its border with North Korea (Albert, 2019a) and the overall ties between China and North Korea only grew stronger in 2017 (though trade declined due to the sanctions) (Albert, 2019a; Cohen, 2019; Lu, 2017; Perlez, 2017; Silberstein, 2019). In December 2017, China joined Russia in opposing U.S. efforts to tighten sanctions further and advocated for the easing of sanctions (Snyder & Byun, 2018).

In 2017, the U.S. made intensive efforts to convince China to pressure North Korea to change its behavior (Jackson, 2019). Until the beginning of 2018, however, China remained preoccupied with its internal struggles over political power and reforms, and was reluctant to exert diplomatic pressure on North Korea to stop its nuclear testing and return to the negotiating table (Sang- Hun, 2017). This changed in early 2018

with China's increasing need to secure its interests in the discussions on possible direct negotiation between the U.S. and North Korea, mediated by South Korea. China resumed warm relations with North Korea after six years of tense relations. The rapprochement began with two meetings between the Chinese president and the North Korean leader. The first was convened by Xi Jinping on March 26, 2018, within ten days of Trump's agreement to meet with Kim; the second was held in April 2018 prior to a meeting between Kim and Moon in Panmunjom, (ICG, 2018a; Myers & Perlez, 2018). In these meetings, China encouraged North Korea to pursue negotiation with the U.S.

Analysis

Ripeness Theory and the De-Escalation of the U.S.-North Korea Crisis

The "escalations to call" (Faure & Zartman, 2005, p. 178) spiral in U.S.-North Korea relations in 2017 engendered perceptions of mutual stalemate on both sides. Both parties applied coercive strategies and destructive dialogue between the leaders in an effort to "match the level of power actions of the opponent" (Faure & Zartman, 2005, p. 302) and pressure the other to abandon its unilateral strategies. Yet, by the end of 2017, the parties realized that their bargaining strategies had put them in a situation in which they had matched each other and could "go no further" (Zartman, 2005, p. 168) – that is, they could not escalate their way out of the conflict. The U.S. realized that sanctions were not achieving the anticipated results and that it had failed to convince China to strictly comply with the international sanctions and pressure North Korea to stop its nuclear pursuit. North Korea was suffering under the burden of the sanctions, and its nuclear expenditure further strained its economy. Both parties' perceptions of potential catastrophe substantially increased the costs of pursuing the current track and risks of sliding unintentionally into nuclear war. The recognition of mutually hurting stalemate and both parties' fear of a devastating war that no one really wanted sparked both parties' intensive search for a way out of the impasse during the first six months of 2018.

Perceptions of MHS and Looming Catastrophe

The United States

In late 2017, the U.S. came to realize that unilateral tactics had failed to yield the expected results and had in fact increased the likelihood of an unintentional catastrophic war. Three elements contributed to the U.S. predicament: the failure of sanctions to achieve the anticipated results, U.S. frustration with China's approach and the impracticality of a U.S. preventive attack.

The Sanctions were not Achieving the Anticipated Results. By the fall of 2017, the U.S. realized that the international sanctions aimed at blocking North Korea's economic development had not achieved the anticipated results (ICG, 2018b). North Korea's response to the tightening of sanctions was to continue testing and expanding its arsenal. As noted, North Korea claimed that the U.S. mainland was now within its missile range and announced the successful testing of a nuclear hydrogen bomb (Landler et al., 2017; Spetalnick & Brunnstrom, 2017).

Frustration with China's Conduct. The difficulty of convincing China (Jackson, 2019), North Korea's biggest trading partner and sole ally, to strictly comply with the international sanctions and cooperate in influencing North Korea to pursue the diplomatic track, led to growing frustration in Washington. China's

trade with North Korea expanded in mid-2017, with exports of grain up 400 percent from January to April 2017 relative to the previous year (Jackson, 2019, p. 123). By the end of 2017, China's reluctance to fully enforce the stringent sanctions demanded by the Security Council generated diplomatic tensions between the U.S. and China. Trump admitted that the U.S. had tried to apply all its leverage with China (Associated Press, 2017; Cohen, 2019; Delaney, 2017; Korte, 2017).

The Unfeasibility of a U.S. Preventive Attack. After bringing the U.S. mainland within its missile range, the situation had become what Zartman describes as "a moment when the upper side slips and the lower hand rises, both parties moving towards equality" (Zartman, 2000, p. 228). By late 2017, the U.S. had become increasingly fearful that military options would incur very high costs. In response to the debate in the U.S. on military options, Pyongyang had warned that in the event of a U.S. attack, it would not hesitate to retaliate (Bishop, 2018). The absence of communication between U.S. and North Korea following Trump's speech at the UN in September, which North Korea viewed as a declaration of war, led to growing concern in the U.S. about sliding into military confrontation, intentionally or unintentionally (Davenport, 2020). A military confrontation was seen as likely to result in a huge number of deaths, mass displacement, and reconstruction that would take a generation to complete (Jackson, 2019; Mullany, 2017; Nakamura & Jaffe, 2018).

North Korea

The change in North Korea's approach in January 2018 was influenced by three main inter-related elements: the cumulative cost of sanctions, the perception of the "lower hand" rising (Zartman, 2000) and the risk of sliding into a nuclear war. These contributed to North Korea's perception of stalemate and fear of impending catastrophe.

The Burden of the Sanctions. The North Korean economy was showing signs of distress, shrinking by 3.5% by the end of 2017 (Kim, 2018; Kim & Herskovitz, 2019; Schoff, 2019). This trend stood in stark contrast to the signs of economic progress North Korea had shown since the start of Kim's rule, despite being under international sanctions (Jeong-Ho, 2018). North Korea's major acceleration of its costly nuclear program in 2017, along with international sanctions of unprecedented severity, which aimed to cut off the country's energy supplies and access to hard currency, had a devastating impact on the North Korean economy (Kim, 2018). In September 2017, in an attempt to improve its relations with the United States, China banned textile and seafood imports from North Korea, in addition to its exports of certain petroleum products, iron, and coal – moves that were increasingly affecting the North Korean economy. Thus, in January 2018, as North Korea was entering its third year of Kim's five-year strategy for national economic development, the lifting of the sanctions became critical for economic recovery (Kim, 2018). Kim realized that this recovery would be impossible as long as the country remained in economic isolation (Jeong-Ho, 2018).

The Risk of Sliding into a Devastating Nuclear Confrontation. In view of the rising military tensions between two nuclear powers, Kim called in his New Year's speech for a renewal of inter-Korean dialogue (after two years with no high-level contacts) to look for a diplomatic way out of the predicament and to avert a "holocaust of a nuclear war forced by outside forces" (Kim, 2018).

The U.S. and North Korean Perceptions of a Way Out

As noted, the U.S. and North Korea began to intensively search for a way out of the impasse during the first six months of 2018. This followed their recognition of mutually hurting stalemate and fears of a

potentially devastating war. In this timeframe, North Korea and the U.S. clarified their intentions and expectations in messages exchanged via South Korean envoys. Major milestones in the creation of way-out perceptions occurred in early March 2018 and in the wake of the diplomatic crisis in late May that year. In March, Kim invited Trump to meet and discuss the permanent denuclearization of the Korean Peninsula (Davenport, 2020). He expressed his openness to negotiate the future of his nuclear arsenal, conditional upon guaranteeing North Korea's security in line with a five-point agreement drawn up between Kim and South Korean officials (Davenport, 2020). The messages exchanged via South Korean intermediaries in early March included a commitment by Kim to refrain from conducting nuclear or ICBM tests during the talks with the U.S., and North Korea's call for a gradual elimination of nuclear weapons in return for a commensurate lifting of sanctions (Davenport, 2020). Following the diplomatic crisis in May that prompted Trump to cancel the planned summit, Kim sent messages via South Korean envoys reaffirming his commitment to complete denuclearization. The American perception of North Korea's intentions in pursing negotiation was further supported by similar communications from Kim, delivered by China, following Xi and Kim's meetings (Haas, 2018; Kyodo, 2017; Mullany, 2017; Sang-Hun, 2017).

The direct discussions in preparation for the U.S.-North Korea summit, now back on schedule, contributed to Washington's perception of a way out. Though conspicuous gaps emerged in the parties' positions on the dismantling of North Korea's nuclear weapons program and the security guarantees it would receive in return (U.S. Department of State (DOS), 2018), by the end of the direct discussions the Americans believed that if North Korea received the right assurances it would agree to terminate the program (Sang-Hun, 2018). By convincing North Korea of the bright future that awaited it after denuclearizing, and by granting Kim the international legitimacy he had long sought, the U.S. hoped to entice Pyongyang "to invest in change" (Jackson, 2019, p. 185). Thus, the perception of a way out was taking shape. At the end of the summit preparation meetings on May 31, Secretary of State Pompeo stated that real progress had been achieved in the discussions and expressed confidence that the parties were moving in the right direction (DOS, 2018).

In the days leading up to the summit, North Korea described the Singapore Summit as an event marking the end of hostile relations with the U.S., which would help foster "a radical switchover in the most hostile [North Korea]-U.S. relations" (McCurry, 2018). A key element in North Korea's perception of a way out was China's approval and support for Kim's direct dialogue with the U.S. on step-by-step denuclearization in return for economic rewards and the gradual lifting of sanctions (Albert, 2019a; ICG, 2018a; Myers & Perlez, 2018).

The in-depth exchange of opinions during the Singapore Summit on issues pertaining to the new North Korea-U.S. relationship (Rosenfeld, 2018) reinforced the perception of a way out, as expressed in Kim's assent to Trump's request to return the remains of American MIAs from the Korean War and in Trump's consent to suspend U.S.-South Korea military exercises, which North Korea viewed as a belligerent threat (Berlinger & Yeung, 2018).

In closing, the case reveals how ripe moments, originating in mutually hurting stalemate and combined with the specter of looming catastrophe, led both parties to search for a way out, change their unilateral approach and negotiate an end to their conflict. Further to Faure and Zartman's seminal study (Faure & Zartman, 2005), this research illustrates how the escalation dynamics in the North Korea-U.S. crisis exhausted the parties' ability to further escalate the conflict without a serious risk of sliding into all-out war. The increasing costs of escalation and the fear of brinkmanship dynamics produced a turning point in the crisis, convincing both sides to actively explore the negotiation option. This, in turn, fostered perceptions of a way out.

Readiness for Negotiation in the Context of Crisis

In the previous section, we discussed how perceptions of mutually hurting stalemate and a way out, as described by ripeness theory, contributed to the de-escalation process in the U.S.-North Korea crisis. Here, we trace the same events through the lens of readiness theory, focusing on the sources of the parties' readiness to negotiate an agreement – specifically, their motivation to end the conflict and optimism.

The U.S. and North Korea demonstrated increasing readiness to pursue the bilateral path of negotiation in the months leading up to the Singapore Summit. The motivation to settle the crisis via diplomacy grew steadily on both sides since the end of 2017 as they recognized the unfeasibility of their current tactics. The increasing severity of the crisis created perceptions of unacceptable risks and costs in both Washington and Pyongyang. Both sides came to realize that the conflict was unwinnable with the coercive strategies they had pursued. In the case of North Korea, these elements were reinforced by the leverage wielded by China, its ally. Since the beginning of 2018, the strong motivation of both parties encouraged a modest increase in optimism that the final agreement would meet their goals without incurring exorbitant costs (Pruitt, 2007). This slight change in the level of optimism was generated through several mechanisms, including third-party mobilization, bilateral testing of the waters, information gathering, and wishful thinking. It is noteworthy that the increase in optimism that paved the way toward formal negotiations was not a linear process. In mid-May 2018, as the diplomatic crisis was evolving, the level of optimism receded for a while. Optimism then began to rise again, thanks to the intensive engagement of a third party (South Korea) and a series of actions initiated by both parties. These elements induced the slight change in their assessment of whether it was possible to achieve their goals through diplomacy.

Sources of Motivation

The United States

As the U.S. came to realize that the sanctions imposed on North Korea were ineffective and that a preventive military attack was unfeasible, it became more motivated to intensively pursue diplomacy as an option for dealing with North Korea's military provocations (Sanger, 2017). Washington's growing frustration with China's approach was also a contributing factor behind this growing motivation. Furthermore, the "on the brink" escalation dynamics that emerged by the fall of 2017 led to growing U.S. awareness of the likelihood of an unintentional catastrophic war. Thus, by the end of 2017, it was increasingly clear to the U.S. that a change in tactics was needed.

Ineffectiveness of Sanctions and Unfeasibility of Preventive Attack. Though indicators showed that international isolation and the tough sanctions on North Korea in 2017 caused economic harm (ICG, 2018b), its nuclear program continued unabated; it was clear that international pressure was not producing the expected results (Spetalnick & Brunnstrom, 2017). At the same time, the U.S. had become convinced by the end of 2017 that the military option of a preventive attack against North Korea, aimed to stymie its nuclear program and force it to the negotiating table, was no longer feasible (Delaney, 2017; Perlez, 2017). In light of Pyongyang's warnings that it would not hesitate to retaliate, and given the lack of communication channels between the U.S. and North Korea following Trump's speech at the UN in September (which North Korea viewed as a declaration of war), there was growing concern in the U.S. that a miscalculation could drag the parties into a devastating war (Bishop, 2018; Jackson, 2019).

Growing Frustration with China's Approach. As the crisis escalated in 2017, the U.S. became frustrated by its inability to compel China to pressure North Korea and strictly enforce the international sanctions against North Korea, or to coax China into using its special ties with North Korea to encourage restraint and convince Pyongyang to abandon its missile program and turn to negotiation (Delaney, 2017;

Jackson, 2019; Korte, 2017). In April 2017, China told the Trump administration not to expect it to exert pressure or participate in international sanctions that could lead to instability and possible regime collapse in its "neighbor and ally" (Perlez & Huang, 2017). In response to Trump's attempts to convince it to collaborate with the U.S. (Jackson, 2019) in pressing North Korea to engage in diplomatic dialogue with Washington, China claimed that the U.S. was overestimating China's influence over North Korea (Snyder & Byun, 2018). In the summer of 2017, the U.S., convinced that China was easing its restrictions on North Korea and not doing enough to help, stepped up its pressure on China and imposed secondary sanctions on Chinese individuals, companies, and banks that maintained ties with North Korea (Cohen, 2019; Lu 2017). The diplomatic tension between China and the U.S. peaked in December 2017 when China refused to enforce the stringent sanctions demanded by the latest Security Council resolution (Snyder & Byun, 2018). By the early months of 2018, it was clear that the overall ties between China and North Korea had grown (Cohen, 2019).

North Korea

The cumulative effect of three elements account for Kim's increased motivation to "create a peaceful environment" (Kim, 2018) with the U.S.: the cost of the sanctions imposed on North Korea in 2017, the growing risk of sliding into a catastrophic war, and the leverage wielded by China, its ally.

The Costs of Increasing Sanctions. By the end of 2017, the North Korean economy was showing signs of distress due to the unprecedented severity of the sanctions, which culminated in new sanctions imposed by the UN and by the U.S. and its allies following North Korea's sixth and largest nuclear test (Jeong-Ho, 2018; Kim, 2018; Kim & Herskovitz, 2019). As Kim stated in his 2018 New Year's address: "Last year the moves of the United States and its vassal forces to isolate and stifle our country went to extremes, and our revolution faced the harshest-ever challenges" (Kim, 2018). Thus, in January 2018, as North Korea was entering its third year of Kim's five-year strategy for national economic development, the lifting of sanctions was viewed as critical for economic recovery (Kim, 2018).

The Growing Risk of a War. As military tensions increased in late 2017, North Korea feared the specter of what Kim (2018) called the "holocaust of a nuclear war forced by outside forces." Consequently, at the beginning of 2018, Kim called for an immediate improvement in inter-Korean relations to "prevent the outbreak of war and ease tension on the Korean Peninsula" (Kim, 2018).

Pressure from an Ally. China's leverage over North Korea, which it applied by wielding hard and soft power, served as another major source of North Korea's motivation to pursue negotiation. The economic coercion strategy of China, officially backing the U.S. "maximum pressure" strategy in 2017, played a major role in fomenting the economic crisis in which North Korea found itself at the end of 2017 (ICG, 2018b; Jeong-Ho, 2018; McCurry et al., 2017; Sun, 2018). In early 2018, the dialogue mediated by South Korea on direct negotiation between the U.S. and North Korea induced China to secure its interests by changing its coercive approach to North Korea to a geostrategic embrace. Soft power was now added to the hard power in leveraging North Korea. In the meetings Xi and Kim held in March and April 2018 in China, Chinese officials exercised this soft power by underlining China's historical and cultural bonds with North Korea and the importance of Chinese legitimation and approval of Kim's engagement in direct dialogue with the U.S. (Aall, 2007; ICG, 2018a; Myers & Perlez, 2018).

At the same time, reward power (Aall, 2007) was applied in the form of incentives offered to North Korea for improving diplomatic, economic, and cultural ties between the two countries. Kim sought China's support for an agreement with the U.S. on incremental denuclearization in return for economic benefits, including a lifting of sanctions (Albert, 2019a). Xi told Kim that if he wanted China's help, he must "meet

regularly at the level of decision-makers, communicate early and often, prioritize economic development, promote people-to people exchanges, and agree to denuclearization of the Korean Peninsula as a long-term goal" (ICG, 2018a, p. 3). Indeed, in the inter-Korean Panmunjom Declaration, held following Xi and Kim's second meeting, Kim reaffirmed North Korea's commitment to peninsular peace and denuclearization.

While China was using economic and diplomatic leverage to press North Korea to comply with its interests, relations between the two countries continued to improve. After the Singapore Summit in June 2018, China eased the sanctions imposed at the start of 2018 (McGuire, 2018; Silberstein, 2019; Sun, 2018).

This analysis of China's approach highlights its essential, albeit insufficient, role in motivating both North Korea and the U.S. to de-escalate their conflict. In the context of heightened tensions in the fall of 2017, Washington's growing frustration with China's inability to encourage a change in North Korea's nuclear pursuit motivated the United States to look for diplomatic channels with North Korea to achieve this goal. China's leveraging of hard power (throughout 2017) and soft power (since the beginning of 2018) vis-à-vis North Korea was a contributing source of North Korea's motivation to turn to negotiation and thus comply with its ally's wishes.

Sources of Optimism

The strong motivation of the U.S. and North Korea triggered several mechanisms that influenced the development of some optimism on both sides – that is, the perception that negotiations might yield greater benefits than the status quo offered. These include the mobilization of strongly motivated third parties, particularly South Korea. China played a more modest role in this respect. Two other mechanisms involved information gathering and "testing the waters," starting in January 2018. This entailed direct dialogue between the U.S. and North Korea, as well as dialogue facilitated by third parties and conciliatory steps both parties applied. These three mechanisms led to an increase in working trust and some perception of light at the end of the tunnel, boosting some optimism on both sides. Yet, as discussed below, neither side perceived that the other had moderated its aspirations, which is another state of mind (one of the three) which leads to an increase in optimism, according to readiness theory. Instead, in our case study, a fourth mechanism – wishful thinking – encouraged the increase in optimism. All of these sources of optimism reinforced the parties' strong motivation, as necessary conditions for the increase in the parties' readiness to begin negotiation. Yet, as the following analysis shows, the development of some optimism on the part of North Korea – that is, its belief that a final agreement might satisfy its goals and aspirations without demanding an exorbitant cost – was also based on another source, of a more structural nature: North Korea's confidence in its nuclear deterrence and its ability to stop the U.S. from pursuing a unilateral path.

The increase in optimism that was necessary for the parties to agree to start formal negotiations was not a linear process. In mid-May, there was regression in the working trust and perception of the light at the end of the tunnel, on both sides. However, by the end of the month, optimism was restored through intensive third-party mobilization efforts, as well as bilateral testing of the waters and information-gathering mechanisms.

Third-party Mobilization

South Korea. South Korea sought to leverage its hosting of the Winter Olympics in February 2018 to re-engage with North Korea after more than two years without any high-level contacts between the two Koreas, and used secret channels to invite North Korea to participate in the games (Friedman, 2018; Johnson, 2018). Kim's response came in his New Year's address on January 1, 2018, when he proposed collaboration between the two Koreas to alleviate tensions and bring peace and stability to the peninsula, and indicated the possibility of North Korea participating in the Winter Olympics (Kim, 2018).

Against the backdrop of this Olympic détente, South Korea conducted shuttle diplomacy between North Korea and the U.S., applying facilitative and formulation strategies as the major third party in the pre-negotiation process. South Korea played a key role in prodding the U.S. and North Korea toward direct negotiations, encouraging both sides to believe that the final agreement might satisfy their goals. Its activities cultivated working trust and perceptions of a glimpse of light at the end of the tunnel on both sides (Friedman, 2018; Johnson, 2018).

In the pre-negotiation stage, South Korea urged both parties to lower the threshold for engaging in direct talks (Johnson, 2018). During the months of early 2018, South Korea worked hard to convey each side's position and to bridge the gap between them on denuclearization. The South Koreans attempted to persuade the Americans that, in spite of all their apparent hostility, the North Koreans were, in fact, willing to seriously consider denuclearization, if offered sufficient security guarantees and economic rewards (Friedman, 2018).

South Korea's contribution was particularly salient in two major episodes. The first was in March 2018, when South Korea facilitated the agreement to convene a summit meeting between Kim and Trump. The second involved Moon's intensive engagement in late May 2018, when he managed to salvage the summit meeting after Trump had announced its cancellation (Campbell, 2018; J. Lee, 2018).

When talks about direct negotiations between North Korea and the U.S. reached an impasse in March 2018, South Korea immediately engaged in building the positive atmosphere required for the parties to reconsider the negotiation track. As tensions between North Korea and the U.S. rose with no diplomatic breakthrough in sight, South Korea felt that its "entire future was at stake." The fact that the U.S. was preparing to resume military exercises with South Korea dampened North Korea's willingness to engage in direct dialogue (Myers & Perlez, 2018). South Korea sent a high-level delegation to North Korea in an effort to break the impasse and this effort succeeded: Kim issued an invitation to Trump, delivered by President Moon's special envoy, to meet and discuss the denuclearization of the Korean Peninsula (Campbell, 2018; Snyder & Byun, 2018). The South Korean envoy also reported to Trump that Kim had expressed his readiness to begin negotiations and discuss the future of his nuclear arsenal if North Korea's security was guaranteed in line with a five-point agreement formulated by Kim and two South Korean officials (Davenport, 2020). Kim's commitment to refrain from conducting nuclear or ICBM tests during the talks with the U.S. was also conveyed. After receiving these messages, Trump promptly accepted Kim's invitation to discuss permanent denuclearization and preparations for the June 12 summit in Singapore began (Davenport, 2020; Helsel & Kim, 2018).

Moon further played a critical facilitation role in resolving the diplomatic crisis between the U.S. and North Korea in late May. Heated rhetoric was brewing on both sides, reinforcing the doubts about the other party's sincerity in exploring the negotiation option (Rucker et al., 2018). A North Korean delegation cancelled a meeting with top South Korean officials in protest over the ongoing U.S.-South Korea military exercises, which Pyongyang called provocative, and representatives from North Korea also failed to show up at a meeting with top U.S. officials in Singapore without any explanation (Jackson, 2019). Under these circumstances, and with North Korea threatening to walk away from the planned summit, Trump decided to cancel the summit before Kim could preempt him and cancel it himself (Rucker et al., 2018). Moon, who was caught by surprise by Trump's move, accelerated his mediation efforts, shuttling between the two parties in an attempt to clear up miscommunication, salvage the summit and prevent military escalation (J. Lee, 2018; Yonhap News Agency, 2018b). Moon and Kim held an urgent meeting and exchanged ideas on the U.S.-North Korea summit (Bishop, 2018; Kim & Smith, 2018). Moon, who had met with Trump just a week before, reassured Kim that the U.S. was ready to end its hostile relationship and advance economic cooperation if North Korea abandoned its nuclear ambitions (Friedman, 2018; M. Lee, 2018; Yonhap News Agency, 2018b). Following this meeting, Moon reported to Trump that Kim had reaffirmed his commitment to complete denuclearization and that "the real issue for Chairman Kim is not his firm determination for the complete

denuclearization. Chairman Kim is worried about whether he can trust that the U.S. will end the policy of hostility and guarantee the stability of his regime after denuclearization" (Kim & Smith, 2018). The South Korean leader's effectiveness in mitigating the crisis is reflected in the fact that talks between American and North Korean officials in preparation for the summit resumed a day after Moon's meeting with Trump.

China. China was another important channel for gathering information and gauging North Korea's intentions during the pre-negotiation phase (Kyodo, 2017; Mullany, 2017; Sang-Hun, 2017). Following the meetings between the leaders of North Korea and China, Xi relayed Kim's position to Trump, including Kim's willingness to negotiate and his expectations about the negotiations. China's official news agency quoted Kim as stating that "as long as relevant parties abolish their hostile policies and remove security threats against the DPRK, there is no need for the DPRK to be a nuclear state and denuclearization can be realized" (Haas, 2018). Kim was further reported to be hoping "to build mutual trust with the U.S. through dialogue" (Haas, 2018). This led Trump to note that "relationships and trust are building" (Haas, 2018).

As this analysis demonstrates, the facilitation strategies of third parties – with South Korea clearly playing a leading role, complemented by China's facilitation in the first half of 2018 – provided a source of optimism that prodded the two sides toward rapprochement.

Bilateral Information Gathering, Testing the Waters, and Wishful Thinking

In addition to the pivotal role of third-party mobilization, the U.S. and North Korea, both strongly motivated to alleviate their strained relations, conducted bilateral information gathering and tested the waters. This included conciliatory signals from both sides, which created a conciliatory spiral (Davenport, 2020). By the end of the Singapore Summit, these mechanisms had generated two of the three states of mind described by readiness theory: working trust and some perception of light at the end of the tunnel. This, in turn, generated some increase in optimism during the pre-negotiation stage. However, there was no substantial indication of lowered aspirations, which is the third state of mind the theory describes as conducive to optimism (Pruitt, 2007). Instead, it appears that both parties focused during the pre-negotiations on their shared desire to take advantage of what Pompeo referred to as the unique opportunity that the "two leaders have created through their visions of the future" (DOS, 2018). Under these circumstances, it appears that the process was influenced by wishful thinking and by the Trump administration's tendency to find evidence that the other party is reasonable and motivated to resolve conflicts (Pruitt, 2005).

Bilateral Information Gathering and Testing the Waters. Both parties' actions in early 2018 contributed to the development of working trust and perceptions of light at the end of the tunnel, thus contributing to optimism. These actions included trips to North Korea by Pompeo and his return to the U.S. with the three detained Americans, North Korea's announcement of the suspension of its nuclear and long-range missile tests on April 21, and Trump's response to this step: "very good news for North Korea and the World — big progress! Look forward to our Summit" (Helsel & Kim, 2018). The invitation of foreign journalists to witness North Korea dismantle a nuclear test site on May 24 can also be considered a signal of North Korea's intention of de-escalating the tense relations.

Another conciliatory step occurred on May 25, immediately after Trump's abrupt cancellation of the summit, when a North Korean official stated that Kim was still ready to sit with Trump and resolve issues (Haas & McCurry, 2018). This message was then welcomed by Trump, who called it "warm and productive" (Yonhap News Agency, 2018a) and noted that he was open to resuming the summit.

The preparation talks in late May between U.S. and North Korean officials were important for information gathering (Yonhap News Agency, 2018b), especially in the wake of the May crisis that had left

the parties unsure of whether the summit would actually take place. These meetings focused on exploring what the planned summit could achieve (DOS, 2018; He-suk, 2018). Encouraged by these discussions, the U.S. secretary of state noted that "the North Koreans appear to be contemplating a path forward where they can make a strategic shift, one that their country has not been prepared to make before" (DOS, 2018) and that the discussions had made "real progress in the last 72 hours toward setting the conditions … putting President Trump and Chairman Kim Jong-un in a place where we think there could be real progress made by the two of them meeting" (DOS, 2018).

From the perspective of readiness theory, we can argue that working trust was emerging between the parties. A close confidant of the North Korean leader came to the White House (the highest ranking North Korean official to visit in nearly two decades) to personally deliver a letter from Kim to Trump (He-suk, 2018), and the U.S. president responded by announcing that the summit would take place as planned. This emerging trust was reflected in Trump's note on these developments: "a lot of good will … the relationships are building, and that's a great positive" (He-suk, 2018). Trump also sent a conciliatory message to North Korea stating that he would no longer use the term "maximum pressure" and that no new sanctions would be implemented unless the talks broke down (He-suk 2018).

There were also emerging signs attesting to the development of some working trust and perception of light at the end of the tunnel on the North Korean side, thus leading to some optimism in Pyongyang about the outcome of negotiation. The planned Singapore Summit was described by North Korea as an event marking the end of hostile relations with the U.S., which would help foster "a radical switchover in the most hostile [North Korea]-U.S. relations" (McCurry, 2018).

The conciliatory spiral continued during the Singapore Summit with a detailed exchange of views on the future of North Korean-U.S. relations (Rosenfeld, 2018). Kim granted Trump's request to return the remains of American troops from the Korean War and Trump reciprocated by suspending the U.S.-South Korea military exercises slated for August. The two leaders seemed to enjoy warm relations during the meeting (Berlinger & Yeung, 2018).

Though these developments attest to the emergence of some working trust and perception of light at the end of the tunnel on both sides, it appears that no substantial scaling down of goals was evident on either side during the pre-negotiation stage. The fact that neither side had tempered its ambitions suggests that the state of mind of lowered aspirations, which according to the theory leads to optimism (Pruitt, 2007), did not exist. Thus, though Pompeo cited real progress in the discussions with North Korea in late May, he also described the conversations as difficult, underscoring the gaps between the two sides (DOS, 2018). The U.S. demanded verifiable and the irreversible dismantling of North Korea's nuclear program as a precondition for lifting sanctions, while North Korea rejected unilateral nuclear disarmament and insisted on the denuclearization of the Korean Peninsula and all neighboring areas, in addition to U.S. security guarantees (Sang-Hun, 2018). The U.S. sought an agreement that would require substantial denuclearization by North Korea and peace in return for economic and diplomatic normalization, while North Korea envisioned an incremental denuclearization process in return for economic rewards and the gradual lifting of sanctions, leading ultimately to a more comprehensive accord. The Americans realized in these discussions that bridging the gaps between the parties would not be a simple task (DOS, 2018; He-suk, 2018) and thus framed the forthcoming Singapore Summit as the beginning of a process "to work our way through" (DOS, 2018).

Wishful Thinking. The case material further suggests that Washington's strong motivation triggered the wishful thinking mechanism that engendered a slight increase in optimism about the success of the process (Pruitt, 2005). Wishful thinking (or "grasping at straws") (Pruitt, 2005) entails searching for evidence that the other side is ready to resolve the conflict. In the direct discussions between the U.S. and North Korea in late May, it was clear to the U.S. that seemingly insurmountable gaps existed between the two countries

(DOS, 2018), yet Pompeo described the forthcoming summit as a historic opening and warned that it would be "nothing short of tragic to let this opportunity go to waste" (DOS, 2018). The U.S. secretary of state portrayed Kim as the type of leader who is capable of making bold decisions that could change the future of both countries. He noted, however, that the upcoming summit and negotiations would be an "opportunity to test whether or not this is the case" (DOS, 2018). Washington's assessment was that Pyongyang viewed its nuclear program as providing vital security and that it would need to receive the right assurances before agreeing to terminate the program (Sang-Hun, 2018). The U.S. thought that it would need to convince North Korea of the bright future that awaited it after denuclearizing. Indeed, in the pre-negotiation discussions, the U.S. administration considered ways to entice North Korea to work toward an agreement by addressing Kim's hope for a more prosperous future for his people. This included an emphasis on the economic benefits the process offered (He-suk, 2018; Hjelmgaard, 2018; Kim, 2019; Yonhap News Agency, 2018c), as well as the opportunity for North Korea to become "integrated into the community of nations" (DOS, 2018). This was the message conveyed in a video presented by the U.S. delegates to Kim and his delegation at the beginning of the summit meeting, illustrating two potential outcomes: "one of moving back and one of moving forward" (Hjelmgaard, 2018).

North Korea's Confidence in Blocking U.S. Military Options. As noted, readiness theory asserts that optimism results from three states of mind: lowered aspirations, working trust, and perceived light at the end of the tunnel (Pruitt, 2007) and that motivation encourages these states of mind through several mechanisms. However, one can argue that another element, not indicated by the theory, played a key and role and prerequisite for North Korea's reassessment of whether an agreement with the U.S. could satisfy its aspirations. This element was North Korea's confidence, galvanized by the end of 2017, that it could block a U.S. military option, leaving the U.S. with no alternative other than negotiation.

The secret exploratory talks between American and North Korean officials in November 2017, aimed at establishing dialogue between the U.S. and North Korea, were not able to spur mutual optimism about the viability of the negotiations. Nevertheless, there were some indications that North Korea was indeed ready for dialogue, though not yet ready for direct talks with the United States – possibly because Kim first wanted to make more progress with his nuclear program (Wertz, 2018). Indeed, Kim became willing to change his approach toward negotiations only after he gained confidence in North Korea's nuclear capabilities (Kim, 2018). Thus, after deterring a U.S. military attack by bringing the U.S. mainland within its missile range, North Korea felt confident to change its unilateral approach and pursue economic development through conciliatory gestures and diplomatic dialogue (Jackson, 2019). In January 2018, Kim stated that North Korea's nuclear strength was its "national defense capability for reliably safeguarding our country's sovereignty" (Kim, 2018). North Korea had perfected its "national nuclear forces … which no force and nothing can reverse," and was now "capable of thwarting and countering any nuclear threats from the United States" (Kim, 2018). In February 2018, North Korea announced it would halt missile tests during U.S.-North Korean talks (Davenport, 2020) and expressed readiness to gradually eliminate its nuclear weapons in return for a lifting of sanctions.

To sum up, the application of readiness theory to this case study shows that an increase in motivation and optimism on both sides was a necessary condition for the increase in the parties' readiness for the de-escalatory process and negotiation. The strong motivation to negotiate and manage the crisis via diplomacy grew steadily toward the end of 2017 and was, in fact, the salient feature of the process. The increase in motivation on both sides in 2017 and early 2018 stemmed from the growing sense that the ongoing pursuit of unilateral tactics was too risky and costly, and offered no prospect of extracting concessions from the other side. North Korea's motivation was rooted in all three antecedents of motivation outlined by readiness theory. The growing motivation of North Korea and the U.S. served as fertile ground for optimism, as reflected in the parties' perceptions of the possibilities encapsulated in pursuing the direct negotiation

option. This optimism grew, albeit moderately, on both sides in the first six months of 2018 through the mechanisms discussed. As the parties became more optimistic about the possibility of achieving their goals through diplomacy, they decided to engage in negotiation.

Conclusion: Ripeness or Readiness for Negotiation in Crisis?

The study shows that both ripeness theory and readiness theory shed light on the factors underlying a state's change of policy from escalation to negotiation in crises, such as the crisis in U.S.-North Korea relations in 2017–2018. The study highlights the utility of ripeness theory's concise two-layer construct of perceptions of mutually hurting stalemate and way out in assessing the state of mind that led the parties to the negotiating table. However, it also indicates that ripeness theory falls short of reflecting the reality in this kind of non-linear and volatile episode, which involved conciliatory bilateral steps applied by both parties and intensive third-party engagement that helped and encouraged the parties to engage in diplomatic dialogue and stay the course. This is where readiness theory stands out with its unique contribution as a dynamic and deeper version of ripeness (Pruitt, 2005). The U.S.-North Korea case demonstrates that the concept of growing readiness, including a mapping of the gradual changes in the parties' readiness for negotiation, can lead to a more profound understanding of the fundamentals contributing to crisis management and negotiation. Such analysis of the complex fundamentals at play in the process that induces parties to replace unilateral and coercive strategies with diplomacy and negotiations can yield practical insights for parties that find themselves in similar episodes and for third parties mediating conflicts with high risk of escalating into military hostility.

Ripeness Versus Readiness: Two Outlooks

Analysis of the U.S.-North Korea de-escalation dynamics through the two conceptual frameworks of ripeness and readiness involves a focus on the perceptional elements required on both sides in the case of ripeness, and a focus on changes in complex multi-variable processes that occur separately on each side in the case of readiness. Ripeness theory is useful in examining the perceptions of MHS and WO as essential prerequisites for the parties' commitment at the Singapore Summit to work towards the complete denuclearization of the Korean Peninsula and to establish new relations for building a lasting and stable peace. Readiness theory, on the other hand, provides a deeper and more detailed analysis of the interplay of conditions that induce the processes leading to the changes in the motives and perceptions that constitute ripeness. In our case study, these processes were non-linear, included crisis episodes and were not necessarily symmetrical on both sides (Pruitt, 2005). They included: changes in the U.S. assessment of its ability to pressure North Korea to abandon it nuclear pursuit through coercive diplomacy; the influence of an ally, China, on North Korea; the changes in Kim's perception of North Korea's ability to counter the U.S. with its nuclear deterrent; the bilateral steps taken by the parties in a conciliatory spiral; and the mechanisms through which third parties (South Korea and China) influenced the behavior of North Korea and the U.S. Readiness theory's ability to elucidate and trace these multiple components and processes over time improves our understanding of the factors that drive de-escalation dynamics and lead parties to the negotiation table in the wake of severe crisis.

The Role of Third Parties in Fostering Readiness for Negotiation

The valuable and necessary role third parties played in the dynamics that led the parties to de-escalate their conflict and eventually sit at the table is one of the major findings highlighted by readiness theory analysis. This finding supports the assertion of Faure and Zartman (2005) that readiness thinking

introduces other elements (in addition to the two elements of ripeness) that are useful when ripening is needed, including the use of a third-party mediator (Faure & Zartman, 2005, pp. 304–305). Yet, the analysis of the case from the perspective of readiness theory goes beyond illuminating the third-party strategies that facilitated the transition from escalation into negotiation.

As suggested by Faure and Zartman (2005), our case study indeed sheds light on the crucial roles third parties can play in alleviating a crisis by facilitating communication and influencing the rivals' cost-benefit calculations. The application of readiness theory helped to identify the pressure applied by third parties, including UN sanctions and China's application of hard power, as a motivating factor for North Korea to adopt a more conciliatory stance. The study underlined facilitation strategies applied by South Korea and China that encouraged a certain degree of faith in both parties that the other side was serious about ending the conflict at the negotiating table. It also illustrated how China applied its soft power sources to prod North Korea to pursue the diplomatic track. However, the application of readiness theory also offers an in-depth understanding of the interplay of the multiple sources affecting the de-escalation process, including the impact of third-party interests, pressure and mobilization strategies, and the interplay of these elements with the other antecedents of the parties' readiness to negotiate an agreement. As demonstrated, South Korea's facilitation and ability to boost the parties' optimism occurred against the backdrop of increasing motivation (of both parties and of South Korea), and China's pressure complemented the other two sources of motivation indicated by the theory (that is, a sense that the conflict is unwinnable and a sense that the conflict is generating unacceptable costs or risks) in influencing North Korea. All three sources of motivation outlined by readiness theory served as necessary influences in convincing North Korea to adopt a conciliatory approach. Prospective third parties might consider this finding in future crisis episodes.

In this respect, readiness theory's view of South Korea's role in the case studied also exemplifies the usefulness of the concept of "readiness to intervene," a variant of readiness theory (Pruitt, 2005) that helps to explain "when and how third parties intervene in a conflict" (Pruitt, 2005, p.14). Motivated by a sense of urgency stemming from the risk of military escalation and by its need to prevent a second Korean War, South Korea was a crucial mediator in the pre-negotiation process, employing facilitative and formulation strategies (M. Lee, 2018). South Korea engaged in a hectic to and fro with the two parties in an attempt to put them back on the path of mutual trust building and help them identify areas of possible agreement between their divergent positions (J. Lee, 2018; Yonhap News Agency, 2018b).

False Optimism?

The application of readiness theory to the case study gave rise to an interesting observation that may help explain the fruitless U.S.-North Korea negotiations that followed the Singapore Summit. The analysis indicates that the strong motivation of the U.S. and North Korea to ease tensions triggered several mechanisms that influenced the development of some optimism: third-party engagement, bilateral testing of the waters, and information gathering. These mechanisms, in turn, led to an increase in working trust and some perception of light at the end of the tunnel, two of the three states of mind identified by the theory as engendering optimism. However, the analysis underlines the absence of the third state of mind the theory cites as conducive to optimism: lowered expectations. That is, there was no substantial indication of lowered aspirations on either side during the pre-negotiation stage in the first half of 2018. Thus, although there were signs of increased optimism as the crisis de-escalated, the absence of this third state of mind provided fertile ground for the development of wishful thinking, at least on the American side. In fact, the term "false optimism" may best describe the U.S. administration's belief that it could actually convince North Korea to denuclearize completely, and North Korea's belief that the U.S. and South Korea were ready to agree to peace on its terms, which included the complete de-nuclearization of the Korean Peninsula. Perhaps this false optimism explains, among other factors, why the negotiation process was largely unproductive. Did the

U.S. understanding of Kim's hopes for a brighter, more prosperous future reflect a real understanding of Kim's motivations, or rather a serious misperception of Kim's motivations based on Trump's approach? This observation on the emergence of false optimism and its influence on the U.S. decision to attend the Singapore Summit suggests the need for additional research on how the absence of one of the three states of minds affects the dynamics of the pre-negotiation stage and the parties' decision to negotiate. Future research should assess whether all three states of mind outlined by readiness theory are preconditions for generating some real optimism (as opposed to "false" optimism) about the possibility of reaching a mutually acceptable agreement with the other side. The original readiness theory does not address this question.

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negotiation and conflict management research

INTERNATIONAL ASSOCIATION FOR CONFLICT MANAGEMENT

Negotiation and Conflict Management Research

From the Field to the Laboratory: The Theory-Practice Research of Peter J. Carnevale

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Abstract

As colleagues and collaborators, we reflect on the work and legacy of Peter Carnevale, currently professor at the University of Southern California, and recipient of the 2002 Jeffrey Z. Rubin Theory-to-Practice Award of the International Association for Conflict Management (IACM). We review Carnevale's main contributions, including his work on time pressure and surveillance, strategies for mediation, emotions in negotiation, and the use and integration of distinct methods for studying conflict and negotiation. We share personal anecdotes from our time as PhD students and collaborators with Peter Carnevale, and we touch on lessons learned for doing science and mentoring the next generation.

Introduction

Trained in traditional experimental research, few scholars have crossed the theory/practice divide with such a strong focus on conceptual development. Whether relying on gaps in experimental research, insights from real-world mediations, or theory development that challenges existing knowledge, Peter J. Carnevale, recipient of the International Association for Conflict Management (IACM) 2002 Jeffrey Z. Rubin Theory-to-Practice Award, advances both research and practice through generating meaningful constructs. In particular, he is known for his field and laboratory studies on surveillance and accountability, time pressures, strategic choice in mediation, emotion in negotiation and the role of values and moral significance in bargaining. In this article, we focus specifically on his research/practice contributions to: (a) time pressures and constituents' surveillance of negotiators, (b) emotions in negotiation, (c) third-party power and interests and (d) methodological diversity.

Peter's career spans four decades of prolific research on negotiation, mediation and conflict management. In his first academic position in the College of Business Administration at the University of Iowa, Peter conducted research on third-party roles and public sector labor disputes. He then joined the Department of Psychology at the University of Illinois, Urbana-Champaign where he held an affiliated appointment in the Institute of Labor and Industrial Relations. During these 16 years, he continued his work on mediation, but also became one of the first scholars to study the role of emotion in negotiation, specifically positive and negative affect. This early work on emotion not only challenged the "rational" model that dominated the field but also produced important practical findings regarding when and how

to use positive/negative emotions, ones that appear in popular negotiation textbooks (Lewicki, Barry, & Saunders, 2016; Thompson, in press). He also engaged in field studies of intractable conflicts, such as the Chiapas dispute in Mexico, and he brought the field to the laboratory through studies of mediator alignment, inspired by the Arab-Israeli conflict. In the next era of his career, Peter moved to the Department of Psychology at New York University and then the Marshall School of Business at the University of Southern California where he is currently a Professor in the Department of Management & Organization. His research in this period ventured into computer simulations, particularly the use of avatars and virtual confederates in studying cooperation and emotional expressions in negotiation. As a scholar in high demand, he has also served as a Visiting Professor at INSEAD Business School in France, University of Western Australia, Chinese University of Hong Kong and Hebrew University in Jerusalem.

Peter is a prolific scholar who has garnered an impressive number of citations and prestigious awards. He is the author or co-author of over 110 publications, including two books, numerous articles, book chapters and research reports. His classic article that synthesizes the psychological research on "Negotiation and Mediation," published with Dean Pruitt in the *Annual Review of Psychology* in 1992, was awarded the Most Influential Article by the Conflict Management Division of the Academy of Management Association in 1998. His book, *Methods of Negotiation Research* (2006), co-edited with Carsten De Dreu, received the IACM Outstanding Book Award in 2008 and has become a reference guide for studies in conflict management across the disciplines. In addition to these accolades, Peter has mentored numerous scholars in conflict management, many who are current leaders in the field.

In recognition of his career, Peter was elected a Fellow of the International Association for Conflict Management in 2018, a Fellow of the Society for Personality and Social Psychology in 2015 and a Fellow of the Society for Experimental Social Psychology in 2009. He has garnered over three million dollars in external funding from such prestigious sources as the National Science Foundation and the U.S. Air Force Office of Scientific Research. These grants have supported both basic and applied research on strategic choice in mediation, culture and negotiation and emotion in human–machine collaborations. Importantly, Peter has brought methodological creativity and precision to negotiation and mediation studies. Guided by provocative questions, his research generates innovative concepts that not only advance theory but have important implications for the practice of conflict management (Figure 1).

In this article, we attempt to synthesize Peter's innovative scholarship and its implications for practice. First, Linda Putnam revisits Peter's early research on bargaining strategies, particularly the effects of time pressures and constituent surveillance on negotiator behaviors. Second, Mara Olekalns tracks Peter's journey through his pioneering studies of affect in negotiation to his current work on opponent's emotional displays and the use of avatars and embodied agents. Next, Don Conlon overviews Peter's work on mediation, third-party power and partisan interests, including his experiences in the field and the many bilateral takeaways from the field to the laboratory. Then, Carsten De Dreu highlights Peter's mastery of a wide range of methodological approaches and his role in a two-volume special issue of *International Negotiation* and the book, *Methods of Negotiation Research,* that has become the field's guide to research methods in conflict studies.

Bringing in the Real-World: Time Pressures and Surveillance —Linda Putnam

Peter and I met in 1988 at the first conference of the International Association for Conflict Management at George Mason University. I had read a number of his articles and knew his early work on negotiation strategies that involved extensive coding of verbal and nonverbal messages (Carnevale, Pruitt, & Seilheimer, 1981). When we met, I recall that we lamented that coding real-time interactions in negotiation was painful, time-consuming and exhausting, but typically led to really important findings about how negotiation worked. Well, I continued for a number of years with the laborious work of training coders, calculating reliabilities and charting bargaining strategies over time, while Peter brilliantly developed a

Figure 1. Linda L. Putnam and Peter Carnevale (left to right) receiving the Fellows Award from the International Association for Conflict Management, July 2018 in Philadelphia, PA.

way to streamline this process through automating lists of messages drawn from live negotiations and tracking them over time across bargaining simulations (Carnevale & Conlon, 1988; Hilty & Carnevale, 1993). I think that I mentioned to him that if I had only thought of this idea, I could have doubled the number of publications that I produced (which he did).

Peter's early work on negotiation strategies formed the basis for two important arenas of conflict research: time pressures in negotiation and constituent surveillance of bargainers. In each of these arenas, Peter introduced new concepts, created clever experimental designs and challenged the findings of prior research. Moreover, in selecting new concepts, Peter drew on insights from real-world negotiation and mediations.

Real-world practices in negotiation clearly demonstrated that the amount of time that bargainers had to negotiate mattered, but the question was how it mattered. Drawing from the earliest work on this topic (Pruitt & Johnson, 1970), Peter and his colleagues challenged the finding that negotiators who faced tight time pressures engaged in more concession making and reached agreement sooner than did those who did not have time constraints. Unwilling to accept these findings carte blanche, Peter and colleagues wondered if they would hold up under conditions of individual versus collective orientations, especially for multi-issue negotiations. This curiosity led to studies that qualified early findings, namely, time pressures for individualistic negotiators triggered contentious interactions in which bargainers relied on "I" messages, commitment statements, less information exchange and produced poor outcomes (Smith, Pruitt, & Carnevale, 1982); however, the same time constraints for collective-oriented

negotiators produced high joint gains. Time pressures then functioned as a double-edged sword—effective for collective-oriented bargainers but detrimental to individualistic negotiators (Carnevale & Lawler, 1986).

Making another creative shift, Peter brought his work on time pressures to the study of mediation. Drawing on the strategic choice model, he and Don Conlon (Carnevale & Conlon, 1988) tracked the use of mediator approaches over time across six rounds of interactions. This work showed that as deadlines neared (high time pressures), mediators abandoned their traditional reliance on inaction or integrating strategies and increased their use of pressing and compensation tactics. Thus, over time even mediators succumbed to time pressures and pushed parties to reach a settlement.

The idea of time has continued to occupy Peter's creative energies. Temporality also refers to how recent or distance a negotiator is from a bargaining event. In a series of multiple studies, Peter and colleagues found that negotiators who adopted a distance lens had more multiple-issue offers, made more trade-offs on low-priority items and reach higher individual and joint gains than did bargainers who treated the negotiation as occurring recently. Temporality then, in terms of distance from the event, provided negotiators a big picture perspective rather than concentrating on the incidental details of the deal (Henderson, Trope, & Carnevale, 2006). Overall, Peter and his colleagues have brought complexity to our understanding of the role of time in negotiation and how it functions in relation to bargaining strategies.

Another critical arena in which Peter made significant contributions was the role of accountability in bargaining. In actual negotiations, such as the labor–management context, bargainers were accountable to their constituents and negotiation teams. Drawing from this real-world context, Peter conducted early research on visual access and constituent surveillance of negotiators. In investigations that became textbook classics, Peter showed that when constituents were able to observe bargainers, negotiators adopted tougher, more contentious tactics (Carnevale et al., 1981; Pruitt et al., 1986) than when visibility was low. Specifically, in conditions of high visual access, negotiators used more pressure tactics, including threats and arguments, as well as efforts to raise their own status. Moreover, watching negotiators in action diminished cooperative bargaining even when constituents did not hold their representatives accountable for settlements (Carnevale et al., 1981).

Another very significant contribution of this work stemmed from including gender in studies of surveillance. Moving away from the notion that biological sex was a source of difference, Peter in his work with Ed Lawler conceptualized gender as a complex variable. Under surveillance, males relied on contentious tactics while in the absence of surveillance, females were more contentious than were males (Carnevale & Lawler, 1986). This finding set the stage for future studies that explored the contextual factors of dyad, organizational role and relationships that impinged on gender behaviors in negotiation (Bowles, Babcock, & McGinn, 2005; Stuhlmacher & Linnabery, 2013). In effect, Peter's early work on time pressures, surveillance and gender brought real-world features of negotiation into the laboratory.

Peter's research also opened new frontiers in negotiation studies. In particular, his work on temporality raised awareness of time sensitivity (that is, how fast or slow the overall bargaining process moved) that was later examined in cross-cultural negotiations (Alon & Brett, 2007; Macduff, 2006). In addition, early investigations on negotiator–constituent surveillance opened up opportunities to focus on agent–principal relationships, specifically, the norms, rules and legitimacy of negotiators as agents (Docherty & Campbell, 2007). Finally, studies on the situational/contextual effects of gender introduced complexity to this construct as evident in recent research on gender saliency and role congruency in negotiation (Olekalns & Kennedy, in press). Overall, Peter's early work in these three arenas paved the way for new research agendas and the development of innovative constructs in negotiation, including the study of emotion.

Perspectives on Emotion—Mara Olekalns

The role of emotion in negotiation, although rapidly gaining research attention, continues to be underinvestigated relative to other factors that shape negotiation processes and outcomes. Against this

backdrop, Peter appears as a forerunner of the more recent interest in how negotiations are influenced by felt and expressed emotions. In research with Alice Isen, he demonstrated that positive affect reduced contention and increased negotiators' joint gains. Hinting at research yet to come on how communication media might shape negotiations, he also showed that positive affect influenced negotiators' behaviors and outcomes only in face-to-face negotiations (Carnevale & Isen, 1986). Jumping ahead a decade, he continued to focus on positive affect, this time in the context of decision frames. Having replicated the traditional framing effect in a control condition, he showed that it could be reversed if negotiators were happy. Loss-framed negotiators who were happy bargainers made more concessions than did emotionally neutral negotiators (Carnevale, 2008). Between these two experiments, Peter and I collaborated on a research project that reflected his interest in emotion and my interest in how negotiators interpreted their opponents' messages. In this research, we found that an ambiguous message resulted in more positive emotions when it followed a competitive message than when it followed a cooperative one (Olekalns et al., 2005).

This sequence of experiments, which fits broadly within a decision-making approach to studying emotions in negotiation (Barry, Fulmer, & Goates, 2006), hints at the themes that underpin Peter's more recent research: communication media and the inferential processes triggered by emotions. But before I turn to that research, I introduce a small digression. A quality that shines through all of Peter's research is the combination of methodological creativity with experimental precision. As an example, I mention his research on misrepresentation in negotiation. For this research, he created a quantifiable negotiation task that included a *compatible issue*, one that both parties valued equally, and an *indifference issue*, that is, an issue worth nothing to one negotiator while having value to the other. These issues created a novel experimental tool for exploring triggers to deception in negotiation. Negotiators could, of course, be honest with each other. But, more often than not, both the compatible and indifference issues paved the way for negotiators to lie by omission, neglecting to reveal zero value, or to lie by commission, claiming that the issue had value for them (Carnevale et al., 2001; O'Connor & Carnevale, 1997). Peter's creation of the indifference issue seeded my research on deception in negotiation and continues to be central to my investigations of how context shifts negotiators' moral thresholds.

While on the topic of ethics, we can pause to consider Peter's investigations of emotion and ethics. In research with Tunguz, he turned his attention to emotional labor, an ethically nuanced requirement for employees to express organizationally prescribed emotions. In this study, Tunguz and Carnevale (2011) explored the conditions under which such emotion display rules were likely to be most effective in shaping how individuals conducted a job interview. Participants in this experiment were either made accountable for the outcome of the interview or the way in which it was conducted. Tunguz and Carnevale (2011) reported that process accountability increased the expression of positive emotions and that a combination of process and outcome accountability resulted in the suppression of positive emotions; further, process accountability suppressed the expression of negative emotions. Shifting to a different direction, Dehghani et al. (2014) explored the impact of emotions when issues had moral significance for negotiators. Displaying that hallmark creativity, Peter and his co-authors developed a web-based task in which participants could claim ownership of—or give away—objects, and had the ability to express their emotional reactions to their opponent's offers. Objects were considered to have moral significance if participants were unwilling to give them away, irrespective of the benefits of doing do. In a series of experiments, Dehghani et al. (2014) showed that the usual effects of anger and sadness in negotiation are reversed when an issue has moral significance; specifically, under these conditions, a sad opponent elicited more concessions than an angry opponent. Interestingly, they also found that in negotiations with moral significance, negotiators "caught" their opponents' sadness.

This experiment is part of a series of studies that use avatars and embodied agents to explore the role of emotion in negotiation. It fits within a social–functionalist approach to emotion which focuses on the inferences that negotiators draw from their opponents' expressed emotions. Two sets of experiments explored the idea of reverse appraisal, that is, the impressions that negotiators form of their opponents

based on their opponents' emotional displays. In a repeated Prisoner's Dilemma Game, de Melo, Carnevale and Gratch (2012) used embodied agents to explore how expressed emotions affected negotiators' cooperativeness. Varying only the facial expressions that the agents displayed, they showed that participants were more cooperative when agents' emotions signaled cooperation than when agents' emotions signaled competition. They concluded that this finding stemmed from participants use of emotional expressions to infer agent's intentions. Continuing to explore reverse appraisal, de Melo et al. (2014) teased out a more nuanced story. They first showed that context affected the impact of expressed emotions; that is, in a mutual cooperation condition, participants predicted more cooperation when the agent expressed joy while expressions of regret lowered expectations of cooperation in a mutual cooperation condition but increased them when the counterpart chose an exploitative strategy. Subsequent experiments in this series showed that inferred goal conduciveness mediated the emotion–cooperation relationship. In the context of mutual cooperation, the belief that the situation was helping (or hindering) an opponent's goal attainment, mediated relationships between joy and cooperation, whereas the perception that the opponent blamed himself for the situation mediated the relationship between regret and cooperation. By comparison, in the context of mutual defection, self-blame mediated the relationship between expressed emotions and the expectation that an opponent would cooperate. In the final experiment in this sequence, De Melo, Gratch and Carnevale (2015) showed that the impact of emotion expressions was greater when participants interacted with an avatar than when they interacted with an agent.

Peter's research takes us on a path far from the usual focus on how negotiators' affect shapes dealmaking by showing us that to fully understand the role of emotions necessitates looking beyond their impact on first offers and concession making. Drawing on social inferential models of emotions, his research elucidates the ways in which individuals use their own and others' emotions to inform negotiations. In particular, the idea of reverse appraisal serves as an important reminder that the inferences that others draw from our emotional expressions play a critical role in how opponents react to our actions at the negotiating table. Moving away from studies of emotion, Peter also focuses on third parties as influencing negotiation and mediation.

A Master of the "Bilateral Takeaway"—Don Conlon

I first met Peter Carnevale in the Fall of 1985 at the University of Illinois. In some ways, our initial connection had less to do with research interests and more to do with habitual routines. Peter's office, on the 2nd floor of the Psychology Building, was the same office where Allan Lind had worked before Allan left the University of Illinois. I had worked with Allan on third-party/justice research since my undergraduate days. While I was now a doctoral student in the business school at Illinois, I still interacted with many doctoral students in psychology, and so it was still natural to wander over to that office. Once we were introduced to each other, I realized that Peter's research shared similarities with what I had been working on with Allan. Allan's research at the time focused on disputants' reactions to "formal" third parties (usually judges, but sometimes other roles). Peter's research also developed a focus on third parties, but it centered less on formal roles and more on mediation. In addition, Peter's work not only examined disputants' reactions to mediation, but also considered the mediator himself/herself as a person of interest.

I found Peter's ideas related to mediation to be very interesting. Yet, looking back at his curriculum vita, I noticed that he had not focused on mediation in his training with Dean Pruitt (negotiation was more of the focus then). So, how did Peter end up with an interest in third parties? My (admittedly hazy) recollection is that during his first academic stop as an assistant professor at the University of Iowa, Peter collaborated with Richard Pegnetter on a research project in which they interviewed and surveyed 32 professional mediators involved in public sector labor disputes (Carnevale & Pegnetter, 1985). This would begin a habitual routine for Peter that involved interacting with real-world third parties (and

negotiators) who engaged in conflict resolution, while simultaneously conducting rigorous experiments. His work thus reflected a series of "bilateral takeaways" because Peter could take what he learned in the laboratory and apply it to the field (reality) and vice versa.

Peter's 16-year stint at Illinois was very productive and produced at least 15 refereed journal publications in the area of mediation or third parties—roughly half of his research output during these years focused on this area. Reviewing this period of his academic life reminds me of just how multitalented and passionate a scholar Peter is, because the work runs the gamut from theory and review pieces (e.g., Carnevale, 1986a; Carnevale & Pruitt, 1992) to laboratory and experimental works (e.g., Carnevale & Conlon, 1988; Idaszak & Carnevale, 1989) to field studies (Lim & Carnevale, 1990; McLaughlin, Carnevale, & Lim, 1991). His passion for mediation and its proper seat at the conflict resolution table might best be seen in his occasional spirited defense of his views on mediation versus those of other titans in the conflict management field, such as Evert van de Vliert (Carnevale, 1992) and Keith Murnighan (Carnevale, 1986b). In fact, his philosophical differences with Keith Murnighan regarding the role of third-party power and self-interest relative to disputants led the two of them (along with me—the least powerful third party you could imagine in this context) to design and publish a study on different third-party roles that varied in terms of their power and interest alignment with the disputants (Conlon, Carnevale, & Murnighan, 1994).

This period of Peter's academic career saw many of his works focus on elements of third- party power and third-party interests. Third-party power was operationalized in many different ways, including the ability (but not the necessity) to impose settlements on disputants (Conlon et al, 1988), the availability to provide disputants with resources or incentives (both positive and negative, Harris & Carnevale, 1990; Idaszak & Carnevale, 1989) or the ability to make proposals that clearly favored one side over the other (overt support, Wittmer, Carnevale, & Walker, 1991). In terms of interests, several of his works unpacked the topic of mediator alignment and challenged the idea that a mediator had to be a disinterested neutral in order to be effective. Carnevale's work in this area clearly showed that a mediator who had stronger affiliations to one side over the other was not necessarily a bad thing; in fact, such a mediator could effectively elicit concessions and cooperation from both sides under the right conditions (Arad & Carnevale, 1994; Conlon, Carnevale, & Ross, 1994).

What is less well-known is how Peter's interest and study of "real-world" conflict has been informed by this work and vice versa. For instance, consider the intractable conflict between the government of Mexico and the Zapatista Army of Liberation (colloquially known as the Chiapas conflict). Tensions between the indigenous population in the Mexican state of Chiapas and the Mexican government came to a boil on New Year's Day 1994 when local militias seized control from the government. The government responded with a show of force (bombs and tanks) and with the help of the Catholic Church (now *there's* an interesting mediator!) things returned to a very uneasy peace roughly two weeks later (Grant, 2014). To the Mexican government's credit, they must have realized that the status quo was untenable, and they needed some conflict management expertise. Peter spent two weeks in March of 1995 in Mexico, making over two dozen presentations on mediation and conflict management to a variety of audiences (including the Ministry of the Interior of Mexico, the Governor and cabinet of Jalisco, nongovernment officials, university faculty and students, union members and members of the legal profession) in a variety of cities (Mexico City, Monterrey, Guadalajara, and Juarez). I suspect that some of what Peter was able to tell them came from the many studies he had conducted on mediation (as well as bilateral negotiation) and that the topics of power and interests were central to improving their understanding of the situation. But, in the spirit of bilateral takeaways, I suspect Peter gained many ideas to pursue in the laboratory from these experiences as well.

Perhaps an even more obvious bilateral takeaway stems from Peter's work that connects to the Arab-Israeli conflict. Peter had a long-standing interest in this topic, assigning his students a book that highlighted Henry Kissinger's third-party intervention activities as part of our reading list when I was in his doctoral seminar (Rubin, 1981). This may have been one of the inspirations for his studies on partisan

third parties noted above. Regardless, his most visible example of borrowing from the field to the laboratory might come from the study he did that compared pro-Israeli and nonpartisan (neutral) reactions to third-party proposals for settling the conflict over Jerusalem. Arad and Carnevale (1994) developed two proposals for settlement, one favoring the Israeli preferences and one more even-handed (compromise) in nature. Participants evaluated one of the two proposals and were told that the proposal came from one of three sources that varied in their alignment with Israeli interests: the "President of the American Jewish Congress" (positive alignment), from the "President of the Arab League" (negative alignment) or from "the Swiss prime minister" (neutral alignment). The results document that those with partisan interests used the favorableness of the third party's proposal to their preferences as indicative of the third party's trustworthiness, whereas those with nonpartisan interests used the evenhandedness of the proposal in determining their trust judgments.

Of course, the Arad and Carnevale (1994) article makes clear they were comparing the reactions of people (in this case, students) who were pro-Israeli with people who were neutral, not with people who were pro-Arab (who would be partisan in the opposite direction from the first group). It would be much more difficult to reach agreements when both sides are strongly partisan. Such a real-world example presented itself in July of the year 2000, when Israeli prime minister Ehud Barak, Palestinian Authority chairman Yasser Arafat and U.S. president Bill Clinton gathered at Camp David. For two weeks, these individuals and their respective teams strived to develop a solution that would end the Israeli–Palestinian conflict, but ultimately, no agreement was reached. Peter studied this more complex situation when he, along with many of the participants from the Summit, participated in a conference at Tel Aviv University in 2003 that focused on the failed dispute resolution attempt made at the July 2000 Camp David Summit. Peter's take on what might explain the failed mediation effort (Carnevale, 2005) focused on three areas, namely problems of agenda (e.g., sequencing of issues to discuss), problems of time pressure (e.g., was their really enough preparation time to secure a deal in the 2-week summit period?) and problems of mediation (e.g., controlling the communication made by the negotiators, as well as self-control by the mediator). Again, we see Peter using the lessons from the real world in some of his publications post-Camp David, such as his work on message framing (Olekalns et al., 2005) and his work on time perspectives in negotiation (Henderson et al., 2006).

As I hope this section of the paper has made clear, Peter's career has been one that has moved seamlessly between the laboratory and the field, and his work in one area has helped inform his work in the other. For those of us who practice and study dispute resolution, I hope Peter keeps moving back and forth between these two worlds. This process of moving back and forth between the laboratory and the field and vice versa also led to his development of diverse and creative research methods.

All Roads Lead to Rome: A Multi-Method Approach to Conflict —Carsten De Dreu

Peter Carnevale and I met for the first time at the 1990 meeting of the International Association for Conflict Management in Den Dolder, the Netherlands. My dissertation chair, Evert van de Vliert, had arranged for me to visit Peter in Urbana-Champaign the next semester and IACM provided the venue to meet and discuss possible projects. I was a junior PhD student; Peter was an established scientist in our field with no published paper I had not read. Our encounter and collaborative work in the years that followed have shaped my thinking and scientific approach profoundly in two ways.

First, my dissertation project was concerned with the way that cognitive biases and gain–loss framing, in particular, shape bargaining processes and negotiation behavior (De Dreu et al., 1992a; De Dreu et al., 1992b). Peter was pondering the same question (e.g., McCusker & Carnevale, 1995), adding the idea that cognitive biases may have a motivational grounding; that is, people may be motivated to think in certain ways and that inert cognitive biases may accentuate the goals people pursue. Grounded in his early work with Dean Pruitt (e.g., Carnevale, Sherer & Pruitt, 1979; Pruitt et al., 1983), Peter considered incentive

systems, in particular those that motivate cooperation as key in not only driving negotiation behavior and outcomes, but perhaps also the emergence and influence of cognitive biases and heuristics. His insight, and the subsequent studies we conducted in his research laboratory at the University of Illinois, Urbana-Champaign (e.g., De Dreu et al., 1994), became a stepping-stone in my early career studies in motivated information processing in negotiation (De Dreu & Carnevale, 2003; De Dreu, Weingart & Kwon, 2000), group decision-making (De Dreu, Nijstad & Van Knippenberg, 2008) and team innovation (De Dreu, 2007; De Dreu & West, 2001). Across these context and settings, Peter's intuition that cooperative (versus competitive) incentives cue decision-makers out of hurtful biases in thinking and reasoning turned out key.

Already early in his career, Peter demonstrated an open mind to methods. Too often, social scientists are single-mindedly focused on the method that brought them success, be it behavioral experiments, in-depth interviews, self-report questionnaires, agent-based simulations or introspective arm-chair philosophy. Peter's work, in contrast, was methodologically eclectic, relying on behavioral experiments on integrative negotiation (Carnevale & Isen, 1986; Carnevale & Lawler, 1986), in-depth interviews with stakeholders in intractable conflict (Carnevale & Pegnetter, 1985) or, more recently, social robotics (e.g., De Melo et al., 2015). Methods were subordinate to the research questions and were instrumental to probing clever observations of actual conflicts, such as the Israel-Palestinian conflict, labor negotiations and third-party interventions.

Peter's open mind with regard to methods cumulated in our two-volume Special Issue for *International Negotiation* (Carnevale & De Dreu, 2004; Carnevale & De Dreu, 2005a; Carnevale & De Dreu, 2005b; also see Carnevale & De Dreu, 2006). Across the range of quantitative and qualitative methods used and discussed in the contributions to these special issues, we observed substantial convergence in findings—multiple methods can validate each other and inform each other, with the sum significantly exceeding its parts (De Dreu & Carnevale, 2005). It was an insight and lesson that deeply influenced my own work and advocacy. All roads lead to Rome, and social and behavioral science is no different.

Peter's scholarship and curiosity, along with his mastery of a range of methodological approaches to the study of conflict and negotiation, has shaped my thinking and doing in numerous ways. I pride myself for having had two mentors—Evert van de Vliert and Peter Carnevale—who alone and in combination set the stage for life-long learning and discovery. It is difficult to overestimate the impact of Peter's hosting of me in Urbana-Champaign, allowing me the freedom to pursue my own thinking and interests with fellow students like Michele Gelfand, Chris McCusker, and Joe Lualhati and, last but not least, teaching me how—and why—to study conflict.

Coda

As the 2002 Jeffrey Z. Rubin Theory-to-Practice recipient, Peter Carnevale has advanced theory and practice in conflict studies through his bilateral takeaways between the laboratory and the field, his development of innovative constructs and his methodological diversity. His research journeys into the role of time pressures in negotiation, constituent–negotiator relationships, emotion and reverse appraisals, third-party power and interests, computer simulated bargaining and multiple methods in conflict studies have laid the groundwork for future scholarship and generated valuable insights for researchers and practitioners. We pay tribute to him, his career and the many contributions he has made to conflict management.

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