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Are some negotiators better than others? Individual differences in bargaining outcomes *

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ABSTRACT

The authors address the long-standing mystery of stable individual differences in negotiation performance, on which intuition and conventional wisdom have clashed with inconsistent empirical findings. The present study used the Social Relations Model to examine individual differences directly via consistency in performance across multiple negotiations and to disentangle the roles of both parties within these inherently dyadic interactions. Individual differences explained a substantial 46% of objective performance and 19% of subjective performance in a mixed-motive bargaining exercise. Previous work may have understated the influence of individual differences because conventional research designs require specific traits to be identified and measured. Exploratory analyses of a battery of traits revealed few reliable associations with consistent individual differences in objective performance—except for positive beliefs about negotiation, positive affect, and concern for one's outcome, each of which predicted better performance. Findings suggest that the field has large untapped potential to explain substantial individual differences. Limitations, areas for future research, and practical implications are discussed.

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1. Introduction

A long-standing mystery within the field of negotiation—a mutual decision-making process to allocate scarce resources (Pruitt, 1983)—is the influence of individual differences on performance. Conventional wisdom suggests that some people seem more adept, natural, comfortable, and successful at negotiating. Differences in skill seem so vast that students often question whether they are innate or acquired (Kray & Haselhuhn, 2007). Indeed, the strong intuition that some negotiators are better than others resonates with theoretical perspectives in psychology on the pervasive influence of enduring personal dispositions on interpersonal behavior (Sternberg & Dobson, 1987; Thompson, 1990b).

However, empirical research has been less than compelling in validating this common wisdom. Large-scale reviews have long concluded that individual differences are unreliable predictors of negotiation outcomes, resulting in a preponderance of null and inconsistent results (Lewicki, Litterer, Minton, & Saunders, 1994; Terhune, 1970; Thompson, 1990b). Previous

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authors have gone so far as to conclude that "personality and individual differences appear to play a minimal role in determining bargaining behavior" (Thompson, 1990b, p. 515). Given these conclusions, negotiation researchers have tended, over time, to reduce their emphasis on individual differences (Neale & Northcraft, 1991).

Even so, the death knell for the effect of individual differences on negotiation outcomes may be premature (Barry & Friedman, 1998; Thompson, 1990b). Recent work on specific individual difference factors such as gender (e.g., Bowles, Babcock, & McGinn, 2005; Kray & Thompson, 2005), positive expectations (Ames, 2007; Sullivan, O'Connor, & Burris, 2006), and motivational styles (e.g., Carnevale & De Dreu, 2006) has been more promising and increasingly consistent. In addition to this positive trend, we believe there are at least three reasons to continue pursuing the question of individual differences in negotiation by extending previous work in the area. First, the present study extends past research by using a conceptual model that was designed to explore the role of individual differences in the context of inherently interpersonal, dyadic interactions. Second, we extend past work by examining subjective negotiation outcomes as well as objective outcomes. Third, we take as our starting point a theoretical framework of individual differences defined as consistency over time in an individual's behaviors when that individual is placed in the same situation (e.g., Mischel & Shoda, 1995). Decades of research and theoretical development in the area of personality have demonstrated that traits represent valid, enduring sources of consistency—rather than illusory constructs of social construction, measurement, collusion among observers, shared stereotypes, or other artifacts (Kenrick & Funder, 1988). Even so, in keeping with the interaction of Person × Situation on the influence of personality (e.g., Mischel, 1977), it is worth questioning whether the direct main effects of individual differences have any predictive power for negotiation performance.

Whereas negotiations research to date has focused on seeking to identify the specific traits that predict successful performance, we start by asking the broader question of whether individuals are even consistent in their performance across negotiations. By aligning the design of our empirical work closely with theoretical perspectives on interpersonal interaction and the role of enduring dispositions, we attempt to validate the longstanding intuition that some negotiators are better than others.

1.1. The Social Relations Model

The present work uses Kenny's (1994) *Social Relations Model* (SRM), which is a conceptual and statistical model that was developed for studying the influence of individual differences on the outcomes of inherently dyadic interactions. After all, one-on-one negotiation involves two distinct interaction partners, both of whom may influence the negotiation outcomes. In order to attribute a dyadic result to the influence of an individual, researchers using the SRM require each individual to engage in multiple interactions, and they examine the consistency of results across these interactions. Accordingly, for the current study, we conducted *round-robin* groups of 4 or 5 participants in which each participant negotiated with every other member of the group. Statistically, an SRM analysis partitions the variation in negotiation outcomes into four components: (a) *negotiator* (or *actor*) effects, which refer to the typical outcomes that the individual negotiator achieves; (b) *counterpart* (or *partner*) effects, which refer to typical outcomes that others achieve when paired with that individual negotiator; (c) *relationship* (or *dyadic*) effects, which refer to the outcomes achieved by an individual negotiator when paired with a particular counterpart after the individual-level effects of both parties are controlled for; and (d) measurement error. The algorithms of the SRM correct for interdependence among individuals and allow researchers to draw conclusions about individual outcomes—even when those outcomes were generated through interactions with other individuals in the data set.

Negotiator effects correspond most closely to previous research examining the straightforward effects of personality or demographic background variables on performance. However, the SRM models individual differences in performance directly in the form of cross-negotiation consistency. Unlike in past work, the SRM allows us to examine the absolute magnitude of such individual differences without the need to measure—or even to specify—the nature of these differences. Thus, we are not limited by the imagination or by the psychometric quality of existing trait assessments. Examination of negotiators' consistency across multiple interaction partners corresponds closely to past definitions of negotiation style as relatively stable clusters of behaviors that reappear across bargaining encounters (Shell, 2001). Counterpart effects allow us to understand not only the systematic effects of traits on a negotiator's own outcomes but also their effects on the typical outcomes of the negotiator's interaction partners. After all, personality is not only about our own behavior but also about the behavior that we tend to elicit in others (Mischel, 1977). Taken together, the use of SRM allows us to take a deliberately exploratory approach to the important question of whether there exist individual differences in negotiation performance.

Beyond individual differences, the SRM also allows us to examine the influence on negotiation outcomes of the unique pairing of two individual negotiators. The dyadic (or relationship) effect refers to whether a particular negotiator performs unusually well or unusually poorly when paired with a certain counterpart—compared with the outcome that would be predicted only based on the typical outcomes of the two individual negotiators. Statistically, a dyadic effect is an interaction term that indicates the degree of systematic performance in a dyad that is not accounted for by the main effects of negotiator and counterpart skill. Conceptually, the relationship effect describes a phenomenon that is emergent at the dyadic level; that is, it is embedded within a system rather than residing in any one individual involved (Metts, 1998). A negotiator may "click" with some partners but "cross wires" with others. Methodologically, dyadic effects can be assessed only when outcome variables use multiple-item scales, for which SRM uses a form of split-half reliability to distinguish dyadic effects from measurement error. Although the focus of the present study is on individual differences, the SRM also provides estimates of relationship effects, and we describe these effects for completeness with respect to the model.

1.2. Subjective outcomes in negotiation

The present work also extends past research by drawing from a recent model of social psychological outcomes in negotiation. In keeping with negotiation researchers' nearly single-minded focus on predicting objective economic outcomes (Mestdagh & Buelens, 2003), researchers past pursuits of individual differences have not paid as much attention to associations with social, perceptual, and attitudinal consequences of negotiation as they have to associations with objective scores. However, the role of personality in negotiation may be particularly strong in influencing subjective versus objective outcomes (Barry & Friedman, 1998; Neale & Northcraft, 1991).

Accordingly, we examine the influence of individual differences on a wider definition of success that encompasses a recent four-factor model of *subjective value* (SV) in negotiation, defined as the "social, perceptual, and emotional consequences of a negotiation" (Curhan, Elfenbein, & Xu, 2006, p. 494). First, negotiators' feelings about instrumental outcomes—beyond the explicit terms of the agreement—comprise subjective perceptions about whether the economic outcome is beneficial, balanced, and consistent with principles of legitimacy and precedent. Second, negotiators' feelings about the self comprise the feeling of losing face versus feeling competent and satisfied that one has behaved appropriately. Third, negotiators' feelings about the process of the negotiation comprise the perception that one has been heard and been treated justly, and that the process was efficient. Fourth, negotiators' feelings about the relationship comprise positive impressions, trust, and a solid foundation for working together in the future. As such, this umbrella construct of SV represents an integrative framework that connects existing lines of negotiations research on related topics such as trust, justice, relationships, and outcome satisfaction.

Curhan et al. (2006) established convergent, discriminant, and criterion validity for a measure of SV and outlined three distinct reasons why SV can be important to negotiators. First, it can serve as a good in itself. Feelings of satisfaction, confidence, pride, and connection with others are intrinsically rewarding apart from self-interest (Lax & Sebenius, 1986; Miller, 1999; Mills, 1940). Second, in the absence of direct information from the environment and a detailed analysis of one's performance, SV can serve as the best available intuition about one's objective value. Thus, SV can provide feedback that influences learning and future behaviors. Individuals respond to the subjective features of their environments, and objective features tend to be experienced indirectly via subjective perceptions (Eagley & Chaiken, 1998). Third, the SV resulting from a negotiation may feed back, positively or negatively, into future objective outcomes (Curhan, Elfenbein, & Eisenkraft, in press). Thus, it is worthwhile to extend research on individual differences and negotiation performance with a sufficiently inclusive definition of negotiation performance.

1.3. Trait measures

In addition to the primary goal of the present work to document the extent of individual differences in negotiation performance, a secondary goal is an exploratory analysis of the extent to which these performance differences can be explained on the basis of existing trait measures. Toward this end, the SRM offers two methodological advantages that extend past work. On a psychometric level, the SRM increases reliability through the use of repeated measures of negotiation outcomes aggregated across three or four interactions. It is possible for null and inconsistent findings to emerge if the influence of traits on negotiation performance is real but too subtle to emerge reliably in a single negotiation. By contrast, in research examining the association between personality and general job performance, such performance is measured by ratings or other outcomes that represent the result of extensive experience over time (Barrick & Mount, 1991). Further, the SRM solves the methodological problem associated with the inherent mismatch between individual-level traits and dyadic-level negotiation outcomes. Typically, researchers conduct one-time negotiations and address the mismatch in levels of analysis by examining one role at a time (e.g., Barry & Friedman, 1998), dyad-level averages (e.g., Barry & Friedman, 1998), or individuals and dyads simultaneously via multilevel modeling (e.g., Mueller & Curhan, 2006). By contrast, the SRM examines the consistency in outcomes that emerges across an individual's multiple interactions, and it attributes this consistency to the individual. Such individual-level values can be outputted for use in conventional analyses that examine the correlations of negotiation performance with existing trait measures.

In the interest of exploration, and without specific hypotheses, we include approximately two dozen trait measures that have been previously examined in both academic research and teaching on negotiations, which span the range from ascribed characteristics to general tendencies, skills, and attitudes. These traits—listed in the Method section below—can be categorized broadly in terms of (a) positive negotiation-related expectations and beliefs such as self-efficacy and comfort with negotiation tactics, (b) motivational styles such as social orientations and the endorsement of ethically questionable behavior, (c) abilities such as cognitive and emotional intelligence, (d) enduring dispositions such as trait affect and the big five personality traits, and (e) visible personal characteristics such as sex and age.

2. Method

2.1. Participants

One hundred forty-nine people in a master's-level negotiation course completed trait measures as their first classroom assignment. For negotiation exercises, they were randomly assigned to 21 five-person groups and 11 four-person groups. Responses from an additional 10 participants who dropped the class and did not complete measures were discarded. Of

the 276 negotiations completed by the 149 participants, data are excluded from 16 of the negotiations—4 because of impasses, 4 in which partners did not complete the post-negotiation questionnaire, and 8 in which the counterparts reported discrepant outcomes. Background information about participants appears in the descriptive statistics in Table 1.

2.2. Trait measures

At the outset of the course, students completed a battery of surveys. To limit socially desirable responding, we assured participants that the results of these surveys would be used only to provide them with fully confidential individualized reports and for research analyses that would not contain any personally identifiable information. This battery included measures across the five broad areas below.

Positive negotiation expectations and beliefs included (a) the Negotiation Self-Efficacy Scale (Sullivan, O'Connor, & Burris, 2006) subscales for *Distributive Self-Efficacy* and *Integrative Self-Efficacy*; (b) the *Appropriateness of Price Negotiation Scale* (Curhan, 2005); (c) Robinson, Lewicki, and Donahue's (2000) scale on endorsing *traditional bargaining tactics*; (d) the *Implicit Negotiation Beliefs* scale (Kray & Haselhuhn, 2007), which examines the extent to which respondents believe that negotiation skills can be learned; and (e) *formal negotiation experience*, assessed with the question "How much formal experience have you had negotiating (this includes negotiation/mediation courses or formal job experience)?" (rated on a scale on which 1 = no experience, 4 = some experience, and 7 = I'm an expert).

Motivational styles included (a) the Thomas–Kilmann Conflict Mode Instrument (Thomas & Kilmann, 1974), with subscales for Accommodating, Avoiding, Collaboration, and Competing that were aggregated into the two social orientation dimensions of *Concern for One's Own Outcome* and *Concern for the Other's Outcome*, according to the Dual Concern model on the basis of which the Thomas–Kilmann Scale was developed (Pruitt & Rubin, 1986), and (b) the Self-Reported Inappropriate Negotiation Strategies Scale (SINS; Robinson et al., 2000) subscales for the endorsement of misrepresenting information, making false promises, attacking a counterpart's network, and inappropriate information gathering, together aggregated into a factor of *ethically questionable tactics*.

Abilities were assessed with (a) scores on the *Graduate Management Admissions Test* (GMAT) as a measure of cognitive intelligence, provided by university sources; (b) the *Mayer–Salovey–Caruso Emotional Intelligence Test*, Version 2.0 (MSCEIT; Mayer, Salovey, & Caruso, 2002); (c) a *creativity* task, which was a modified version of the Thinking Creatively With Words section of the Torrance (1966) Tests of Creative Thinking, coded for fluency, flexibility, and originality (composite α = .94) based on methods used in past work (Coney & Serna, 1995; Kurtzberg, 1998) by a single coder with a second coder independently assessing 20% of the responses to establish high reliability (.96); and (d) *cognitive complexity*, also known as integrative complexity (e.g., Suedfeld, Tetlock, & Streufert, 1992), coded from three brief open-ended questions about students' goals for enrolling in the course that were completed without students' awareness that the responses would be coded. After training and achieving reliability of at least .93 on the integrative complexity test (Baker-Brown et al., 1992), one coder did all coding, and the other independently assessed 20% of the responses to establish high reliability (.90).

Table 1Social relations model variance partitioning of subjective value for negotiators, their counterparts, and dyads in an integrative bargaining exercise

Variable	Variance partitioni	ng		Dyadic	Order effects			
	Individual differen	Dyad effects	Error	reciprocity	Negotiator	Counterpart		
	Negotiator effects (%)	Counterpart effects (%)	Total (%)	(%)	(%)		effects	effects
Objective value	27.6°°	18.8**	46.4**	_	53.6	57 ^{**}	3.22**	-2.41**
Negotiation activities Claiming value Creating value Identifying compatibilities	- - -	_ _ _	49.6** 16.6** 20.1**	_ _ _	50.4 83.4 79.9	-1.00^{a} 1.00^{b} 1.00^{b}	3.30** 0.97 0.33	- - -
Logrolling Subjective value Instrumental Self Process Relationship			9.4° 18.9° 16.6° 14.8° 24.8° 31.7°	28.4** 34.3** 22.5** 36.3** 40.9**	90.6 52.7 49.1 62.7 38.9 27.4	1.00 ^a .12 [*] 0609 .28 ^{**} .30 ^{**}	0.84 0.11 0.06 -0.20 0.66 0.28	- 0.47 -0.34 0.40 0.85 0.44

Note. N = 106. Variance estimates and significance tests were calculated with Soremo (Kenny, 1998). For objective outcomes, due to the use of a single-item measure, the dyadic effects cannot be separated from error. In the case of individual components of objective value that are perfectly symmetric or inversely symmetric, negotiator and counterpart effects cannot be distinguished from each other. Order effect coefficients are *t* values reported for the effects of greater experience. Values have been transformed for compatible value (binary: 1 = discovered both compatible issues, 0 = otherwise), integrative value (log-transformed), and value created (log-transformed).

^a Value claiming has a perfect negative correlation by design between the outcomes of two parties.

^b Logrolling, identifying compatibilities, and value creation are symmetric between the outcomes of two parties.

[°] p < .05.

^{**} p < .01.

Enduring dispositions included (a) the Positive and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988) trait measures of *Positive Affect* and *Negative Affect*; (b) the NEO Five-Factor Personality Inventory–Short Form Costa & McCrae, 1992 scales for *Extraversion*, *Agreeableness*, *Conscientiousness*, *Neuroticism*, and *Openness*; (c) the *Machiavellianism* Mach-IV scale (Christie & Geis, 1970); (d) Schwartz et al.'s (2002) measure of *Maximization and Regret*; and (e) Rosenberg's (1965) *Self-Esteem* Scale.

Visible personal characteristics included (a) self-reports of demographic variables sex, age, and English as a native language and (b) University facebook photographs coded for physical attractiveness by two to three raters ($\alpha = .85$).

2.3. Negotiation task

The relatively modest nature of findings for general consistency in behavior has been attributed to researchers' failure to measure differences across the situational contexts in which behavior has been assessed (Mischel & Shoda, 1995). Accordingly, the direct influence of individual differences on negotiation performance may be obscured if negotiators are observed across a range of tasks that differ in their situational constraints. For this reason, our participants engaged in a series of negotiation tasks that were as identical as possible in their objective characteristics, thus allowing us to examine the potential predictive power of main effects of individual differences on negotiation performance.

These tasks were mixed-motive negotiation exercises, also known as "win-win" or *integrative bargaining*. By contrast with distributive bargaining—or "zero-sum" negotiation—in integrative bargaining, there are multiple issues involved, and parties' interests are neither completely opposed nor completely compatible. This leaves open the possibility of creating joint value for the dyad by making trade-offs on issues of varying importance—such as determining the financing and options for a new automobile—and by identifying compatible interests—such as determining the car's color. Success in integrative negotiations typically results from applying greater thought and effort, considering multiple issues simultaneously, sharing information, engaging in problem solving, and avoiding overtly contentious behavior (e.g., Pruitt & Rubin, 1986; Walton & McKersie, 1965).

We adapted the popular New Recruit exercise (Neale, 1997), which has been used frequently in negotiations research, in order to create five negotiation scenarios that were all exactly parallel in the type of issues included. Given Thompson's (Thompson, 1990a; Thompson, Loewenstein, & Gentner, 2000) findings that negotiators undergeneralize their learning from one negotiation setting to another, the overt topics referred to distinct settings: the merger of two hotel chains, the purchase of a luxury car, the rental of a home, a negotiation between a director and producer about a movie, and the negotiation of a contract between a health insurer and a small business owner. Every case included two distributive issues (in which negotiators' interests are fully opposed), two compatible issues (in which negotiators' interest are fully aligned; Thompson & Hrebec, 1996), and four logrolling or trade-off issues (which vary in importance, so that there is room to create value by trading off those of lower priority; Froman & Cohen, 1970; Pruitt, 1983). For each issue, the negotiators were given five options and a point value for each option, along with a brief explanation to provide logic for the negotiator's preference. A number of rules ensured that the five cases were as similar as possible: (a) all point values increased linearly; (b) every negotiation had the same maximum and minimum for distributive potential (4700 and -200 points, respectively); (c) every negotiation had the same maximum and minimum for integrative potential (6200 and 2800 points, respectively); (d) every role used negative numbers for at least one distributive issue and one logrolling issue; (e) the compatible issues were assigned smaller total values and stepped by smaller intervals; (f) for the two compatible issues, each negotiator had one issue where the compatibility was relatively unexpected intuitively (e.g., in the luxury car negotiation, the salesperson preferred to include additional luxury features, and the buyer preferred a delay in delivery of the car), in order to give each negotiator the advantage of likely asymmetry in realizing that the issue was compatible; and (g) in order to provide as flexible as possible a benchmark for performance, instructions stated that an impasse was worth zero points.

As an incentive for high performance, students received entries for a \$125 lottery for each exercise for which they completed a deal, with entries proportional to their negotiation scores. Impasses incurred no penalty other than forgoing lottery entries. The negotiation task was assigned on the second meeting of the course, and completed during the 6-day period prior to the third class meeting.

2.4. Order effects

Given that participants may gain relevant experience across the three or four exercises in which they take part, any patterns associated with learning could add measurement error to our estimates of individual differences. We tested order effects using the time stamps of the Internet-based post-negotiation surveys in order to code the chronological order of each individual's exercises.

2.5. Post-negotiation questionnaire

Students filled out a post-negotiation questionnaire for each exercise, via the Internet, as soon as they completed the transaction or realized that no deal could be reached. They completed the Subjective Value Inventory (Curhan et al., 2006) and, if a deal was reached, participants also recorded the terms of the deal by selecting one of the five options for each of the eight issues.

2.6. Scoring of objective value

In order to make performance outcomes comparable, we standardized all scores within each exercise, within each role. For example, in the luxury car purchase, the car buyers received a *Z*-score that compared their outcome to that of other car buyers. The scoring instructions already coded higher scores as better outcomes for all roles—even though, for example, car buyers preferred a lower car price and car sellers preferred a higher car price. Impasses occurred in four dyads and were treated as missing data.

2.7. Negotiation activities

Integrative bargaining scenarios are multifaceted in that they involve a balance between creating value for the pair and claiming value for oneself. As additional perspectives on negotiation performance, we included these activities as outcome variables. *Creating value* was the total points earned by the dyad. This reflected the extent to which members of the pair were successful in uncovering their hidden compatibilities and in logrolling by making trade-offs between items of higher versus lower priority. Accordingly, we further split the measure of creating value into measures of *identifying compatibilities* and *logrolling. Claiming value* was the proportion of the total points earned by the negotiator, which reflected the extent to which the individual was able to command resources for him- or herself. Due to non-normal distributions, we used logarithmic transformations for creating value and logrolling, and we coded identifying compatibilities as a binary value (with 1 for settlements that included the maximum value for both compatible issues and 0 otherwise).

3. Results

Supplementary Table S1 contains descriptive statistics and correlations among trait measures. Supplementary Table S2 contains descriptive statistics and correlations among negotiation performance and negotiation activity measures. Both of these tables are available via the Internet at http://www.supplementarytables.com.

3.1. Variance explained by individual differences

Table 1 summarizes the results of SRM analyses for objective and subjective performance, using the SOREMO software package (Kenny, 1998). Because SOREMO cannot accommodate missing data, these analyses included only those groups of four or five that had no impasses or those groups of five for which the removal of one person with an impasse could yield a round of four with no missing data. This process yielded a total sample of 106.

Supporting the existence of individual differences in the objective outcomes that negotiators achieve, 46% of the variance in scores could be attributed to consistent individual differences in performance across interactions—of which 28% could be attributed to the systematic differences in the performance of the focal negotiator, and 19% could be attributed to systematic differences in the performance that a negotiator typically elicits in others. Such values can be interpreted akin to a multiple correlation squared (i.e., R^2) in that they refer to the amount of variance explained. The variance explained by individual differences in value creating was 17% and value claiming was 50%, which could not be separated meaningfully into negotiator versus counterpart effects because of the perfect positive and negative correlations, respectively, between these values for negotiation partners. This prevents the SRM from distinguishing meaningfully between negotiator and counterpart effects—because one's strength helps the other in the case of creating value, and one's strength is akin to the other's weakness in the case of claiming value. Within creating value, there were also significant effects of individual differences in performance across uncovering compatibilities and logrolling. Because the objective score is effectively a single-item measure for each negotiation pair, dyadic effects cannot be distinguished from measurement error.

Supporting the existence of individual differences in the subjective outcomes that negotiators achieve, 19% of the variance in reported values could be attributed to consistent individual differences. Of this 19%, 6% resulted from negotiator effects—that is, consistent differences in self-reports of SV—and 13% resulted from counterpart effects—that is, consistent differences in the SV that one elicits in others. Counterpart effects were significant in each case and generally larger than negotiator effects, which suggests, intriguingly, that individuals are less consistent in their own subjective negotiation experience than they are in the experience they create for others. Dyadic effects were large and significant for all factors, suggesting that subjective outcomes vary greatly from pairing to pairing beyond simple combinations of individual differences across negotiators.

3.2. Dyadic reciprocity

The sixth column in Table 1 lists the dyadic reciprocity, which is the degree of correlation between partners' outcomes. By design, this is a perfect positive correlation for creating value and uncovering compatibilities and a perfect negative correlation for claiming value. For overall objective value, this dyadic correlation of –.57 indicates a substantial competitive component to these mixed-motive negotiation exercises. For subjective outcomes, this value is akin to an intraclass correlation that represents the level of mutual agreement between the negotiation partners in how they rated each interaction. In spite

Table 2 Correlations between individual difference and outcome measures in an integrative bargaining exercise

Variable		Negotiation activities				Subjective value									
	Objective value	Creating value	Claiming value	COMP	LOGR	Negotiator effects					Counterpart effects				
						INST	SELF	PROC	RELN	Total	INST	SELF	PROC	RELN	Total
Positive negotiation expectations and belie	fs														
1. Composite	.30**	.13	.28**	.05	.16 [†]	.13	.20	.07	.03	.12	13	08	20°	18 [*]	18
2. Distributive self-efficacy	.18 [*]	.09	.17 [*]	.06	.08	.09	.18*	.01	06	.06	15^{\dagger}	12	27 ^{**}	30 ^{**}	26
3. Integrative self-efficacy	.21**	.08	.21*	.05	.09	.23**	.31	.25**	.13	.27**	01	.01	16^{\dagger}	12	10
4. Appropriateness of price negotiation	.19 [*]	.08	.19 [*]	.16 [†]	.11	02	.05	05	08	03	15^{\dagger}	03	10	07	09
5. Implicit negotiation beliefs	.18 [*]	.06	.18*	04	.12	.09	.15 [†]	.14†	.23**	.18*	.02	.02	.04	.04	.03
6. Traditional bargaining tactics	.16 [*]	.03	.17 [*]	10	.11	04	.09	02	.00	.01	05	07	02	05	05
7. Formal negotiation experience	.11	.05	.09	07	.05	01	09	−.15 [†]	14^{\dagger}	11	09	12	10	08	11
Motivational styles															
8. Concern for own outcome	.21**	.17*	.16 [†]	.03	.14†	.06	.07	.03	.08	.07	10	.00	04	03	04
9. Concern for other's outcome	03	06	.01	.11	08	.10	.02	.09	.13	.10	.01	07	.00	.01	01
10. Ethically questionable tactics	.03	.09	01	06	.08	02	14^{\dagger}	12	−.19 [*]	14^{\dagger}	.09	.12	06	09	02
Abilities															
11. GMAT	10	.26*	−.21 [†]	.07	.09	.10	.04	.01	06	.03	.29**	.23*	.16	.14	.21
12. MSCEIT	.06	.08	.04	.04	.06	.14 [†]	.20*	.17	.16 [†]	.20°	.04	07	.05	.13	.06
13. Cognitive complexity	04	.06	07	.16 [†]	.02	06	.04	16^{\dagger}	02	07	.09	.05	.08	.08	.08
14. Creativity	.05	.17*	01	.25**	.06	.03	.12	.03	.01	.05	.08	.02	.00	.02	.02
Enduring dispositions															
15. Positive affect	.17 [*]	.01	.18*	.00	.09	.20°	.27°	.18*	.22**	.25**	08	03	10	07	08
16. Negative affect	04	12	.00	07	07	16^{\dagger}	20^{*}	13	14^{\dagger}	−.19 [*]	03	.01	.00	07	03
17. Extraversion	.13	.09	.09	.07	.03	.26**	.15 [†]	.24**	.25**	.27**	01	05	03	04	04
18. Conscientiousness	.01	04	.03	.02	07	.11	$.14^{\dagger}$.16 [†]	.23**	.19°	.07	.10	.09	.12	.11
19. Agreeableness	.02	.04	.03	.11	.02	.17*	.20*	.14 [†]	.24**	.22**	.06	.00	.12	.15 [†]	.11
20. Neuroticism	08	08	05	07	01	17^{*}	22 ^{**}	19°	20^{*}	23 ^{**}	.05	.06	.06	.00	.04
21. Openness	.04	.08	.04	.07	.06	.14†	.20*	.10	.15 [†]	.17°	.02	12	02	08	06
22. Machiavellianism	09	01	11	07	.06	16 [†]	28°	19°	23 ^{**}	25 ^{**}	.02	03	08	08	06
23. Maximization and regret	02	.01	01	.12	.01	18 [*]	12	11	08	15^{\dagger}	.04	.02	.02	.01	.02
24. Self-esteem	.11	.09	.08	.01	.05	.35**	.34**	.28**	.28**	.37**	.02	03	03	.05	.01
Visible personal characteristics															
25. Female	01	04	.00	01	02	.01	05	.11	.10	.05	−.17 [*]	10	15^{\dagger}	09	13
26. Age	.08	01	.09	08	.04	.05	05	02	02	01	19°	06	18°	13	15
27. Non-native English	.10	.04	.08	01	.10	.10	.13	02	06	.04	24 ^{**}	14^{\dagger}	32 ^{**}	28 ^{**}	29
28. Attractiveness	07	08	04	13	05	.02	01	.02	.07	.03	20°	14	18 [†]	13	18

Note. N = 149. Estimates for individual-level outcome measures were calculated with the lme4 package for the R software language (Bates & Sarkar, 2006). Values have been transformed for logrolling and creating value (both log-transformed), and compatible value (binary: 1 = discovered both compatible issues, 0 = otherwise). COMP, uncovering compatibilities; LOGR, logrolling; INST, instrumental; SELF, self; PROC, process; and RELN, relationship; GMAT, Graduate Management Admissions Test; MSCEIT, Mayer-Salovey-Caruso Emotional Intelligence Test.

[†] p < .10. † p < .05. * p < .01.

of the negative interdependence inherent in the objective situation, negotiators' subjective experiences were either independent—in the case of beliefs about their instrumental performance and feelings about the self—or positively correlated to reveal strong agreement between partners about the quality of their negotiation process and relationship.

3.3. Trait measures

Given the promising levels of individual consistency in negotiation outcomes, it is worth exploring to what extent these systematic individual outcomes correspond with existing trait measures. In order to conduct this analysis, SRM analyses can generate negotiator and counterpart effects for each outcome variable. These outputs can, in turn, be used as individual-level variables in conventional analyses. However, because even one cell of data that is missing due to an impasse requires the removal of an individual from analysis in the SOREMO software, this has the effect of removing 43 of the 149 participants because they either had missing data or were in a group of four in which at least one other member had missing data. Thus, as an alternative to preserve these data, we calculated these individual effects using the lmer function in the R software package (Bates & Sarkar, 2006). This function implements most underlying algorithms of the SRM, but it is more flexible in that it can accommodate missing data. As a measure of the convergent validity between these two approaches, for participants with no missing data the results of the two methods correlated at 1.00 for objective value and .98 for SV.

Table 2 summarizes correlations between trait measures and consistent negotiation performance. The measures broadly characterized as positive negotiation expectations, and beliefs were the most consistent predictors of objective performance (composite r = .30, p < .01). Further, the motivational trait of concern for one's own outcome (r = .21, p < .01) and the enduring disposition of positive affect (r = .17, p < .05) each predicted higher performance.

In order to understand the processes that may be responsible for these findings, we examined the negotiation activities that were associated with these traits. In the case of positive negotiation expectations and beliefs as well as positive affect, the better performance appeared to result from greater claiming of value. We tested mediation formally using the four procedures outlined in Baron and Kenny (1986). First, we note from Table 2 that both trait variables are significantly associated with better overall scores. Second, we also note from Table 2 that both trait variables are significantly associated with claiming value. Third, we note from Table S2 that claiming value predicts better overall scores. Fourth, for each trait measure we ran a multiple regression that included both the trait and claiming value in predicting negotiation scores. For positive negotiation expectations and beliefs, the coefficient was reduced from $\beta = .31$ to $\beta = .04$, Sobel test Z = 3.78, p < .01. For positive affect, the coefficient was reduced from β = .17 to β = .00, Sobel test Z = 2.20, p < .05. This means that positive affect and positive beliefs allowed negotiators to influence their counterpart and capture a greater proportion of the pool of resources over which they negotiated. In the case of concern for one's own outcome, the better performance appeared to result from greater creation of value-in particular, due to logrolling. Again, we tested mediation by noting from Table 2 and S2 the significant associations among concern for one's outcome, creating value, and negotiation performance. In a regression model predicting negotiation performance from both creating value and concern for one's outcome, the coefficient for the latter was reduced from β = .21 to β = .15, Sobel test Z = 1.89, p < .05. Although the association between concern for one's outcome and logrolling scores was only marginally significant, we tested mediation and found that including logrolling in a regression predicting negotiation performance reduced the coefficient for concern for one's outcome from β = .21 to β = .12, Sobel test Z = 1.67, p < .05. This means that such concern allowed negotiators to uncover opportunities to make mutually rewarding tradeoffs, and to convince others to yield resources.

Two traits predicted negotiation activities but not negotiators' total scores. Those high in cognitive intelligence were able to create more value than others, but they claimed marginally less value and had overall scores no different than others. Those high in creativity were able to create more value, due primarily to uncovering hidden compatibilities.

Examining subjective outcomes, we find a number of patterns. Many enduring dispositions predicted more or less satisfying self-reported negotiation experiences but had no impact on objective scores. This could represent a perceptual lens or common method bias in that the same source reported both sets of reports.

There appeared to be two general trends in the subjective experience typically reported by one's counterpart. First, counterparts tended to be sensitive to their own objective performance in that they were more satisfied when paired against negotiators whose traits tended to predict better scores for the counterpart. For example, counterparts tended to feel worse about working with negotiators who held strong positive beliefs and expectations—who were objectively challenging opponents. By contrast, counterparts tended to feel good about working with those high in cognitive intelligence, which typically created value for the pair without claiming too much for themselves. Second, visible personal characteristics were the only traits associated with partner SV yet not with objective scoring. Partners were generally less satisfied negotiating against those who were female, older, non-native English speakers, or physically attractive.

3.4. Order effects

The final two columns of Table 1 list the results of a series of *t* tests examining whether there were changes in any of the negotiator or counterpart effects as a function of increasing experience in the negotiation task. To account for the interdependence of data points within the round-robin groups, we conducted these tests using random-effects models implemented with the lme4 package for the R software language (Bates & Sarkar, 2006). The results of these tests show significant effects of task familiarity on objective performance, with greater experience yielding both higher scores for the

negotiator and lower scores for his or her counterpart. Learning effects appear to be driven by value claiming. Given these effects, we repeated the trait correlations reported in Table 2 and described above, in the form of partial correlations that controlled for negotiation order, which changed the reported effects by an average of only r = .016 in effect size (maximum r = .098). No correlations differed significantly when controlling versus not controlling for order effects. For SV, no tests reached or approached significance, which suggests that there were neither effects of task learning nor fatigue in subjectively reported performance.

4. Discussion

The present study addresses the long-standing mystery of stable individual differences in negotiation behavior and performance, for which strong intuition and conventional wisdom have clashed with inconsistent and null empirical findings. Although large-scale review articles have questioned whether individual differences can reliably predict negotiation outcomes (Lewicki et al., 1994; Terhune, 1970; Thompson, 1990b), we agree with Lewicki et al.'s (1994) assertion that "researchers may have closed the book on the effects of individual differences on negotiation prematurely" (p. 348). Defining individual differences operationally in terms of consistent patterns in performance across multiple negotiations offers a novel perspective on this long-standing debate. We found that nearly one half of the variance in the objective outcomes of integrative bargaining encounters can be attributed to negotiators' stable individual differences. One fifth of the variance in subjective outcomes resulted from such individual differences.

Our study differs from previous negotiations research through its use of Kenny's (1994) Social Relations Model (SRM), originally developed for use in research on personality and interpersonal judgment. SRM is designed to disentangle the role of individual differences in the context of interpersonal processes that are inherently dyadic. Accordingly, SRM allowed us to model individual differences directly in the form of cross-negotiation consistency, and to see their magnitude without the need to specify in advance and measure appropriately the particular traits or characteristics that might influence negotiation success. This is aligned with a theoretical framework of individual differences defined in terms of consistency over time in an individual's behaviors when placed in the same situation (e.g., Mischel & Shoda, 1995). Given modest empirical findings for trait measures in past negotiations research—as well as theoretical perspectives on the interaction of Person × Situation influence of personality (e.g., Mischel, 1977)—it was worth questioning whether the direct main effects of individual differences would have any predictive power for negotiation performance. This is an empirical question, and our findings argue strongly in favor of such effects.

In the present study, we also increased the reliability of outcome measures in that each participant took part in multiple exercises, and results were aggregated across these distinct and possibly idiosyncratic encounters. By contrast, conventional negotiation studies use the equivalent of single-item measures. Further, the SRM allowed us to examine individual differences not only in negotiators' own performance and subjective experience but also in the performance and experience that negotiators typically elicit in their counterparts. It is interesting that—in keeping with theoretical perspectives that personality encompasses both our own behavior and the behavior that we typically evoke in others (Mischel, 1977)—there was greater consistency in the subjective satisfaction that negotiators tended to elicit in their counterparts than there was consistency in negotiators' own satisfaction. These substantial counterpart effects merit further empirical and theoretical attention

Perhaps consistent with a greater focus of untrained negotiators on competitive than cooperative bargaining techniques, we found greater individual differences in claiming versus creating value.

4.1. Individual traits

As a secondary goal, on an exploratory basis we also attempted to specify and measure a battery of approximately two dozen trait measures that have been investigated in negotiation contexts, which could be categorized broadly in terms of negotiation-related expectations and beliefs, motivational styles, abilities, enduring dispositions, and visible personal characteristics. Although one does not need the SRM to examine such associations between trait variables and negotiation outcomes, one might expect the present design to have a better chance than most to find such associations, in that our negotiation performance variable was an aggregate of repeated measures. Because, by contrast, most conventional studies of individual differences have used what amount to single-item scales as their dependent measures, we suggest that such work may have been statistically underpowered. Lay theories about negotiation traits are based on extensive experience over time, rather than one-time negotiations. Further, SRM represents an improvement upon past research methodology in that it makes an appropriate statistical match between individual-level traits and dyad-level negotiation outcomes.

The results of these exploratory analyses were relatively modest, with few of the associations examined being found statistically reliable. Even those that reached significance should be interpreted with caution in light of the large number of variables tested. That said, the data did show several consistent patterns that support past theory and research on personality and negotiation—particularly on the roles of negotiation-related expectations (e.g., Sullivan, O'Connor, & Burris, 2006), positive affect (e.g., Barry, Fulmer, & Van Kleef, 2004; Forgas, 1998), and motivational orientation (e.g., Carnevale & De Dreu, 2006; Pruitt & Rubin, 1986).

Examining objective scores, we found that the strongest trend among trait associations was for negotiation-related expectancies and beliefs, which were also the most proximal traits to the negotiation context itself. These

traits—self-efficacy, endorsement of the appropriateness of price negotiation, endorsement of the appropriateness of traditional bargaining techniques, implicit beliefs that negotiation skills can be learned, and formal experience—all relate to negotiators' confidence, comfort, and willingness to work hard at the often challenging task of integrative bargaining (Curhan, 2005; Kray & Haselhuhn, 2007; Robinson et al., 2000; Sullivan, O'Connor, & Burris, 2006). Such beliefs and negotiation success are mutually reinforcing: As much as confidence may improve performance through a self-fulfilling process, so too does past success increase future confidence. Examining the negotiation processes revealed that those with strong positive negotiation expectancies and beliefs claimed a greater proportion of the total negotiation value than did those with weak beliefs. Among the enduring dispositions, positive affect appeared to predict higher outcomes, which fits with a growing literature on the role of trait and state affect in negotiation (e.g., Barry et al., 2004; Carnevale & Isen, 1986; Forgas, 1998). As with positive beliefs, those high in positive affect appeared to outperform their low-positive affect peers through more effective value claiming. Among the motivational styles, in the integrative setting negotiators tended to score higher for themselves—perhaps not surprisingly—if they reported more concern for their own outcomes (Pruitt & Rubin, 1986; Walton & McKersie, 1965).

In the case of negotiators' SV, some enduring dispositions appeared to serve either as a perceptual lens through which negotiators evaluate each interaction or as an artifact that biased their reports. In the case of the SV that one elicits in others, counterparts appeared sensitive to their likely scoring and also visible personal characteristics. In the absence of objective performance differences across these visible characteristics such as being a female or a non-native English speaker, we speculate that negotiators may have felt thwarted if they had expected an easy win in such cases yet found their counterparts to be as formidable as any other. Alternatively, negotiators may have felt badly about engaging in competition against members of these groups.

Taken together, our findings suggest that there are substantial consistent individual differences in negotiation performance—but that the field has large untapped potential in determining the specific traits that predict them. Thus, the present work may help to justify the continued search for individual difference variables that reliably predict negotiation performance, in the face of calls to close the book on this research topic after decades of inconsistent results.

4.2. Dyadic effects

As important as individual differences can be, it is also worthwhile to look beyond them. In the case of SV, the use of multiple-item response scales allowed us to distinguish systematic dyadic effects from measurement error. This represents the extent to which an individual experienced more or less satisfaction when uniquely paired with a certain counterpart than the simple combinations of their individual differences would predict. These dyadic effects are more than mere error in that they are systematic across the multiple questionnaire items completed by participants.

Indeed, the largest share of variance in SV appeared at the dyad level, representing the subjective experience resulting from the unique pairing of negotiators. Thus, it appears that negotiators did not merely repeat the same interaction over and over with new partners on the basis of their stable traits alone but that each interaction actually stands on its own. Dyad effects were greatest for feelings about the process and relationship with one's counterpart, which together are components of a larger construct of rapport (Curhan et al., 2006). This is consistent with findings in interpersonal relationships more generally, in which constructs such as liking live largely at the relationship level (Kenny, 1994). Using trust as a metaphor, colloquial language suggests that there are individual differences in the trait-level factors of being trusting and trustworthy—but, beyond individual factors; some unique pairings of people develop trust versus mistrust. Our results suggest that the same is true for negotiators' subjective experience of rapport. Dyadic effects also were surprisingly substantial and significant even for feelings about oneself—suggesting that, consistent with the looking glass self of symbolic interactionism (Cooley, 1902), to some extent individuals reinvent how they feel about themselves in every negotiation.

In light of the apparent importance of dyad-level outcomes, the field of negotiations needs more theoretical development that encompasses this relational level. Broadly speaking, dyadic effects can result from two different types of mechanisms (Metts, 1998). First, there are compositional effects that arise from the match versus mismatch of the two individuals involved, for example, their similarity rather than absolute values in terms of attitudes, personality, negotiation styles, or other tendencies. Second, a relationship effect can result from mutual influence between the two individuals involved, for example, the quality of a dyad's idiosyncratic interaction when negotiating.

Related to dyad-level variance was our exploration of dyadic reciprocity, the extent to which performance converges versus diverges across counterparts. Although the competitive structure inherent in negotiation gives objective outcomes a largely negative correlation, participants did not appear subjectively to experience this competitive structure. Participants converged positively in their ratings of their relationship and process, and they responded independently in their subjective ratings of instrumental success and feelings about themselves. Given that the dyadic reciprocity among subjective reports should be negative if negotiators are responding only to the objective nature of the setting, this finding has important theoretical implications that illustrate the divergence between objective and subjective value in negotiation.

4.3. Learning over time

Our study examined order effects primarily to ensure against a potentially confounding factor, whereby any systematic change such as familiarity or fatigue across the three to four exercises in which each participant took part could add measurement error and dampen the apparent consistency across sessions. Even so, these results themselves also warrant atten-

tion, given substantial interest in the learning of negotiation skills among researchers who not only study the topic but also frequently teach about it as well (e.g., Loewenstein, Thompson, & Gentner, 2003). We found that negotiators' objective scores improved with experience, in particular due to their better value claiming. It is interesting that greater experience—in the absence of systematic feedback—did not assist negotiators with value creation, which replicates past work in this area (Nadler, Thompson, & Van Boven, 2003). Also interesting is that for SV, no tests of order effects reached or approached significance—which suggests no learning or fatigue among untrained negotiators in the development of effective working relationships and other subjective factors.

4.4. Limitations and future research

Future work should expand on the strengths of this study while remedying its many limitations. First, we advocate that future research take a less exploratory and more targeted approach to examining existing trait measures. Our battery of trait measures was intended to be broad, but it was by no means exhaustive. Alternatively, future research that attempts to explain individual differences might move away from examining existing traits to examining behavioral processes—in an attempt to open the black box of exactly how different people manage to achieve different negotiation outcomes. Given that there has been pessimism about whether individual differences in negotiation even exist, the present study was a worthwhile first step toward justifying the investment of labor-intensive coding that would be required for such an endeavor. Ultimately, research on personality in negotiation needs to move from a disparate collection of predictions to a comprehensive theory (Thompson, 1990b). The present study was deliberately exploratory as a necessary first step to validate the extent to which comprehensive theories that incorporate main effects of traits are warranted because they, indeed, have significant variance to explain.

Second, future work should examine negotiation tasks that are as realistic as possible, notably including situations that are flexible enough to match the real-world in which agreements are not constrained to five multiple-choice options on eight issues. The negotiation task was constrained and potentially artificial, with roles delineated for participants and no opportunity for them to improvise or gather and organize information outside of the role. Tasks could be developed with open-ended outcomes that match real-world scenarios, yet still be coded for scoring purposes. Such flexibility is also likely to enhance the possibilities for individual differences to emerge. Related to the issue of realism, a limitation of the present work is that—in keeping with the vast majority of negotiations studies (Mestagh & Buelens, 2003)—participants were students engaged in a classroom exercise rather than in a high-stakes real-life negotiation. We made this trade-off to the extent that it was unfeasible to find field settings in which the same participants could take part in multiple similar negotiations with outcomes that could be objectively known to researchers. However, we believe that students took the exercises seriously despite financial stakes no greater than \$125 lotteries. First, our participants were master of business administration students with significant work experience, who were concerned about maintaining a positive professional reputation, and who knew that the results of these exercises would be relatively visible to their peers. Second, the negotiations elective is an intrinsically popular class that attracts the majority of students—given that most of the students see negotiation and conflict management, broadly speaking, as highly applicable to their work life across a range of future positions and industries.

Third, in keeping with Person × Situation approaches to the influence of personality (Mischel, 1977), potential moderators of the influence of individual differences are worth further pursuit. A range of situational factors can interact with personality traits to influence the magnitude of their effects (Thompson, 1990b). The round-robin design that we used in the present study, in which each member of a small group interacts with each other member of the group, can be adjusted readily to accommodate potential moderators by assigning entire groups to separate experimental conditions. Alternately, in a block round-robin design (Boldry & Kashy, 1999; Elfenbein, Foo, Boldry, & Tan, 2006), half of the members of each group receive one of two individual-level experimental conditions and each person interacts with counterparts from each condition. Such extensions of the round-robin design could help to reveal moderating influences of the particular trait measures for which the present study did not observe main effect findings. However, as valuable as Person × Situation interaction approaches may be for negotiation, the present results—in which nearly half of the variance in performance was predicted by consistent individual differences—confirm that further examination of main effects is still worthwhile as a complementary approach. Indeed, the heterogeneity in the tasks used across past negotiations research may have understated the consistent role of individual differences.

Fourth, our study is limited by its sample size. For the SRM analyses, statistical power was adequate, and our current sample size was within conventional levels (Kenny, 1994), given that the SRM draws on multiple measures for each participant. However, our exploratory analyses of trait measures were conducted at the individual level and would benefit from larger samples and replication.

Finally, we argue that the promising findings for SV suggest the need to include subjective factors in future work.

5.5. Practical implications

The present results have implications for teaching negotiation, a popular course given its wide practical value in work, civic, and family life. To the extent that performance is driven by stable individual differences, instructors might want to focus attention on self-assessments and performance feedback in order to help students self-select into appropriate roles that fit their skills and characteristics. Organizations often have discretion in selecting negotiators to advocate for their interests

(Fulmer & Barry, 2004), and those who find themselves deficient in negotiation performance can enlist trusted others on their behalf. For subjective performance, the large dyad-level effects suggest that negotiators should be encouraged to find relationship partners with whom they work well—and to put effort into making their relationships work. Large counterpart effects for SV suggest that training may help increase sensitivity to creating a positive experience for negotiation partners.

As much as the present results suggest a strong role for individual traits in negotiation, they also suggest the power of negotiation training. The most consistent findings were for constructs related to expectancies and beliefs such as self-efficacy, the endorsement of conventional negotiation activities, and implicit beliefs that negotiation skills are bred rather than born. Such beliefs can be shaped even via brief experimental manipulations (e.g., Kray & Haselhuhn, 2007) and thus also, presumably, through coursework that emphasizes developing comfort and confidence with the negotiation setting. Indeed, expectancies are more easily changed than are enduring dispositions or other individual difference factors (Ames, 2007). Further, future research that helps to unpack the underlying behavioral mechanisms by which stable traits influence negotiation performance can identify actions that low performers can attempt to add to their behavioral repertoire (Fulmer & Barry, 2004) without necessarily undergoing a transformation in personality.

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References

Ames, D.R. (submitted for publication). Assertiveness expectancies: How hard people push depends on the consequences they predict. Manuscript submitted for publication.

Baker-Brown, G., Ballard, E. J., Bluck, S., deVries, B., Suedfeld, P., & Tetlock, P. (1992). The integrative complexity coding manual. In C. Smith (Ed.), Handbook of thematic analysis (pp. 605–611). Cambridge, England: Cambridge University Press.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.

Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. Personnel Psychology, 44, 1-26.

Barry, B., & Friedman, R. A. (1998). Bargainer characteristics in distributive and integrative negotiation. *Journal of Personality and Social Psychology*, 74, 345–359.

Barry, B., Fulmer, I. S., & Van Kleef, G. (2004). I laughed, I cried, I settled: The role of emotion in negotiation. In M. J. Gelfand & J. M. Brett (Eds.). The handbook of negotiation and culture: Theoretical advances and cross-cultural perspectives (pp. 71–94). Palo Alto, CA: Stanford University Press.

Bates, D., & Sarkar, D. (2006). Ime4: Linear mixed-effects models using \$4 classes for R package version 0.995-2 [Computer software]. Vienna, Austria: R Foundation for Statistical Computing.

Boldry, J. G., & Kashy, D. A. (1999). Intergroup perception in naturally occurring groups of differential status: A social relations perspective. *Journal of Personality and Social Psychology*, 77, 1200–1212.

Bowles, H. R., Babcock, L., & McGinn, K. L. (2005). Constraints and triggers: Situational mechanics of gender in negotiation. *Journal of Personality and Social Psychology*, 89, 951–965.

Carnevale, P. J., & De Dreu, C. K. W. (2006). Motive: The negotiator's raison d'être. In L. Thompson (Ed.), Frontiers of social psychology: Negotiation theory and research (pp. 55–76). New York: Psychology Press.

Carnevale, P. J. D., & Isen, A. M. (1986). The influence of positive affect and visual access on the discovery of integrative solutions in bilateral negotiation. Organizational Behavior and Human Decision Processes, 37, 1–13.

Christie, R., & Geis, F. (1970). Studies in Machiavellianism. New York: Academic Press.

Coney, J., & Serna, P. (1995). Creative-thinking from an information-processing perspective—A new approach to Mednicks theory of associative hierarchies. *Journal of Creative Behavior*, 29, 109–132.

Cooley, C. H. (1902). Human nature and the social order. New York: Scribner.

Costa, P. T., Jr., & McCrae, R. R. (1992). Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual. Odessa, FL: Psychological Assessment Resources.

Curhan, J.R. (2005). The Appropriateness of Price Negotiation Scale. Unpublished survey instrument, Massachusetts Institute of Technology, Cambridge, MA. Curhan, J. R., Elfenbein, H. A., & Xu, H. (2006). What do people value when they negotiate? Mapping the domain of subjective value in negotiation. Journal of Personality and Social Psychology, 91, 493–512.

Curhan, J.R., Elfenbein, H.A., & Eisenkraft, N. (in press). The objective value of subjective value: A multiround negotiation experiment. *Journal of Applied Social Psychology*.

Eagley, A. H., & Chaiken, S. (1998). Attitude structure and function. In D. T. Gilbert & S. T. Fiske (Eds.), *The handbook of social psychology* (pp. 788–827). Boston: McGraw-Hill.

Elfenbein, H. A., Foo, M. D., Boldry, J. G., & Tan, H. H. (2006). Dyadic effects in nonverbal communication: A variance partitioning analysis. *Cognition and Emotion*, 20, 149–159.

Forgas, J. P. (1998). On feeling good and getting your way: Mood effects on negotiation strategies and outcomes. *Journal of Personality and Social Psychology*, 74, 565–577

Froman, L. A., & Cohen, M. D. (1970). Compromise and logroll: Comparing the efficiency of two bargaining processes. *Behavioral Science*, 30, 180–183. Fulmer, I. S., & Barry, B. (2004). The smart negotiator: Cognitive ability and emotional intelligence in negotiation. *International Journal of Conflict Management*, 15, 245–272.

Kenny, D. A. (1994). Interpersonal perception: A social relations analysis. New York: Guilford Press.

Kenny, D.A. (1998). SOREMO [computer program]. Retrieved December 1, 2006. Available from: http://nw3.nai.net/~dakenny/kenny.htm.

Kenrick, D. T., & Funder, D. C. (1988). Profiting from controversy: Lessons from the person-situation debate. American Psychologist, 43, 23-34.

Kray, L. J., & Haselhuhn, M. P. (2007). Implicit negotiation beliefs and performance: Experimental and longitudinal evidence. *Journal of Personality and Social Psychology*, 93, 49–64.

Kray, L. J., & Thompson, L. (2005). Gender stereotypes and negotiation performance: An examination of theory and research. Research in Organizational Behavior, 26, 103–182.

Kurtzberg, T. R. (1998). Creative thinking, cognitive aptitude, and integrative joint gain: A study of negotiator creativity. *Creativity Research Journal*, 11, 283–293.

Lax, D. A., & Sebenius, J. K. (1986). Interests: The measure of negotiation. Negotiation Journal, 2, 73-92.

Lewicki, R. J., Litterer, J. A., Minton, J. W., & Saunders, D. M. (1994). Negotiation (2nd ed.), Burr Ridge, IL: Irwin.

Loewenstein, J., Thompson, L., & Gentner, D. (2003). Analogical learning in negotiation teams: Comparing cases promotes learning and transfer. *Academy of Management Learning and Education*. 2. 119–127.

Mayer, J. D., Salovey, P., & Caruso, D. R. (2002). Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) user's manual. Toronto, Canada: MHS.

Mestdagh, S., & Buelens, M. (2003). Thinking back on where we're going: A methodological assessment of five decades of research in negotiation behavior. Paper presented at the 16th Annual International Association for Conflict Management Conference, Melbourne, Australia.

Metts, S. (1998). "But I thought that we were more than error variance": Application of the social relations model to personal relationships. In R. L. Conville & L. E. Rogers (Eds.), *The meaning of "relationship" in interpersonal communication* (pp. 107–131). Westport, CT: Praeger.

Miller, D. T. (1999). The norm of self-interest, American Psychologist, 54, 1053–1060.

Mills, C. W. (1940). Situated actions and vocabularies of motive. American Sociological Review, 5, 904-913.

Mischel, W. (1977). The interaction of person and situation. In D. Magnusson & N. S. Endler (Eds.), Personality at the crossroads: Current issues in interactional psychology (pp. 333–352). Hillsdale, NJ: Erlbaum.

Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, 102, 246–268.

Mueller, J. S., & Curhan, J. R. (2006). Emotional intelligence and counterpart mood induction in a negotiation. International Journal of Conflict Management, 17, 110–128.

Nadler, J., Thompson, L., & Van Boven, L. (2003). Learning negotiation skills: Four models of knowledge creation and transfer. *Management Science*, 49, 529–540.

Neale, M. A. (1997). The new recruit. Evanston, IL: Dispute Resolution Research Center, Northwestern University.

Neale, M. A., & Northcraft, G. B. (1991). Behavioral negotiation theory: A framework for conceptualizing dyadic bargaining. *Research in Organizational Behavior*, 13, 147–190.

Pruitt, D. G. (1983). Achieving integrative agreements. In M. H. Bazerman & R. J. Lewicki (Eds.), Negotiating in organizations (pp. 35–49). Beverly Hills, CA: Sage.

Pruitt, D. G., & Rubin, J. Z. (1986). Social conflict: Escalation, stalemate, and settlement. New York: McGraw-Hill.

Robinson, R. J., Lewicki, R. J., & Donahue, E. M. (2000). Extending and testing a five factor model of ethical and unethical bargaining tactics: Introducing the SINS scale. *Journal of Organizational Behavior*, 21, 649–664.

Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.

Schwartz, B., Ward, A., Monterosso, J., Lyubomirsky, S., White, K., & Lehman, D. R. (2002). Maximizing versus satisficing: Happiness is a matter of choice. Journal of Personality and Social Psychology, 83, 1178–1197.

Shell, G. R. (2001). Bargaining styles and negotiation: The Thomas-Kilmann Conflict Mode Instrument in negotiation training. *Negotiation Journal*, 17, 155–174.

Sternberg, R. J., & Dobson, D. M. (1987). Resolving interpersonal conflicts: An analysis of stylistic consistency. *Journal of Personality and Social Psychology*, 52, 794–812.

Suedfeld, P., Tetlock, P. E., & Streufert, S. (1992). Conceptual/integrative complexity. In C. P. Smith, J. W. Atkinson, D. C. McClelland, & J. Veroff (Eds.), Motivation and personality: Handbook of thematic content analysis (pp. 393–400). New York: Cambridge University Press.

Sullivan, B. A., O'Connor, K. M., & Burris, E. R. (2006). Negotiator confidence: The impact of self-efficacy on tactics and outcomes. *Journal of Experimental Social Psychology*, 42, 567–581.

Terhune, K. (1970). The effects of personality in cooperation and conflict. In P. Swingle (Ed.), *The structure of conflict* (pp. 193–234). Beverly Hills, CA: Sage. Thomas, K. W., & Kilmann, R. H. (1974). *Thomas–Kilmann conflict mode instrument*. Tuxedo, NY: Xicom.

Thompson, L. (1990a). An examination of naive and experienced negotiators. Journal of Personality and Social Psychology, 59, 82-90.

Thompson, L. (1990b). Negotiation behavior and outcomes: Empirical evidence and theoretical issues. Psychological Bulletin, 108, 515–532.

Thompson, L., & Hrebec, D. (1996). Lose-lose agreements in interdependent decision making. Psychological Bulletin, 120, 396-409.

Thompson, L., Loewenstein, J., & Gentner, D. (2000). Avoiding missed opportunities in managerial life: Analogical training more powerful than individual case training. *Organization Behavior and Human Decision Processes*, 82, 60–75.

Torrance, E. P. (1966). Torrance tests of creative thinking: Directors manual and scoring guide. Lexington, MA: Personnel Press.

Walton, R. E., & McKersie, R. B. (1965). A behavioral theory of labor negotiations. New York: McGraw Hill.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063–1070.