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Sense and sensibility: The role of cognitive and emotional intelligence in negotiation

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Abstract

This study tested whether EI (conceptualized as a performance-based ability) predicted economic and relational outcomes in an employee-recruiter negotiation above general mental ability (GMA) and whether a novel measure of emotion recognition ability (ERA; a central component of EI) predicted these outcomes better than an established broad ability EI test. Results showed that GMA was unrelated to negotiation outcomes. Higher scores on the ERA test and the emotional understanding subtest of the broad EI measure were associated with higher dyadic gains and higher individual gains for participants' counterparts. Negotiators with high ERA were also perceived as more cooperative and likable and showed higher self-ratings of cooperativeness. Overall, the ERA test predicted outcomes more consistently than the broad ability EI test.

Keywords: negotiation, emotional intelligence, emotion recognition ability, general mental ability, social interaction

Sense and sensibility:

The role of cognitive and emotional intelligence in negotiation

Negotiation is a specific type of interpersonal interaction in which two or more individuals try to accomplish their (usually conflicting) objectives (Thompson, 1990). Negotiations occur in close relationships (e.g., deciding on the destination of a vacation trip with the partner), in the workplace (e.g., negotiating the terms of an employment contract), in economics (e.g., negotiating a business merger), and most other domains of everyday social life. For many decades, negotiation has been investigated through a rational decision-making lens that focused on objectively quantifiable outcomes such as points or money earned. In addition, the view that negotiators' individual differences have negligible effects on such outcomes has long dominated the field (Thompson, 1990). More recently, the rational perspective has shifted towards a higher interest in the social and emotional aspects of negotiations (Olekalns & Druckman, 2012). Indeed, negotiations can elicit many different emotions such as surprise, irritation, happiness, or interest, which are highly likely to affect the results. Not only do they influence the specific agreement about payoffs (often referred to as an "objective" outcome), but they also shape psychosocial outcomes such as rapport, commitment, liking, or trust (Curhan, Elfenbein, & Xu, 2006). With the shift from a predominantly cognitive to a more socio-emotional and interpersonal perspective on negotiation there has also been renewed interest in and evidence for the role of individual differences (Sharma, Bottom, & Elfenbein, 2013). Here, we investigate to what extent two types of ability, general mental ability (GMA) and ability emotional intelligence (EI), predict objective and relational outcomes in a dyadic negotiation.

While GMA has long been studied as a predictor of performance, particularly in workplace settings (see Schmidt & Hunter, 2004, for an overview), EI is a relatively new construct that has gained increasing popularity over the past 20 years. Similarly to GMA, high EI is generally thought of as an adaptive characteristic for many aspects of one's private and professional life (Mayer & Salovey, 1997). EI has been conceptualized in two different ways; first, as a set of non-cognitive traits and behavioral

dispositions that are measured with self-report questionnaires (“trait EI”), and second, as a set of cognitive abilities that are measured with performance-based tests (“ability EI”; for an overview, see Roberts, MacCann, Matthews, & Zeidner, 2010). The latter approach, represented by Mayer and Salovey’s (1997) four-branch model, defines EI as the ability to use emotional information efficiently to guide reasoning and behavior. Because of its clearer link to traditional concepts of emotion and intelligence, ability EI is to date accepted by many as the superior conceptualization of EI (Roberts et al., 2010) and is adopted in the present study. Mayer and Salovey’s (1997) model proposes four EI branches: 1) recognition of emotion in others and in oneself (*Emotion Perception*), 2) using emotions to facilitate task performance (*Emotion Facilitation*), 3) knowledge about relationships between emotions and situations (*Emotional Understanding*), and 4) the regulation of one’s own and others’ emotions (*Emotion Management*).

Many scholars consider emotion perception the core component of EI because it causally precedes the other branches and emerges earlier in development (e.g., Mayer & Salovey, 1997; Joseph & Newman, 2010; Côté, 2014). The vast majority of research within the emotion perception branch focuses on the ability to accurately perceive emotions in others from their nonverbal behavior, hereafter referred to as emotion recognition ability (ERA). In fact, individual differences in ERA were widely studied and respective tests were developed long before the term EI was first used (see e.g., Ekman and Friesen, 1974; Buck, 1976). ERA continues to be investigated somewhat independently from EI and from the other facets of the emotion perception branch (i.e., perceiving emotions in oneself), with meta-analyses demonstrating links between higher ERA and better social relationships, mental health, and job performance (Hall, Andrzejewski, & Yopchick, 2009; Elfenbein, Foo, White, Tan, & Aik, 2007).

There are several ways through which GMA and ability EI have been theorized to affect negotiation outcomes. Fulmer and Barry (2004) suggested that GMA should be positively related to economic gains because it entails a higher capacity to learn and to process information more quickly, which should facilitate more rapid information acquisition regarding the other party’s interest. Further,

high GMA should lead to more accurate decision making in negotiation because it enables more rational judgment and bias avoidance. For example, intelligent negotiators should be less susceptible to the fixed pie bias in integrative negotiations, increasing the possibility of higher joint gains. Fulmer and Barry (2004) suggested that the link between GMA and economic gains should be particularly pronounced in complex negotiations that require quick adaptation throughout the task.

As for ability EI, Fulmer and Barry (2004) proposed four interrelated paths that can affect negotiation: Information acquisition, decision-making soundness, emotional tactics, and emotion induction in others. More specifically, recognizing and understanding the other person's intentions from nonverbal and verbal information (EI branches 1 and 3) might allow the negotiator to shape their tactical approach accordingly and to induce desired emotions in their counterpart (branch 4). This might elicit more cooperation in the partner and ultimately higher outcome satisfaction in both negotiators. Further, accurate perception of one's own emotions (branch 1) and emotion facilitation skills (branch 2) might prevent the negotiator from taking too high risks in affectively laden moments or from evaluating offers in a biased way. Relatedly, effective emotion regulation (branch 4) can help maintain a cooperative, problem solving-oriented attitude, and helps expressing emotions in a strategic way, which contributes to higher joint economic gains. Moreover, by effectively managing the counterpart's emotions, a negotiator could also get concessions that will increase their individual gains (Der Foo, Elfenbein, Tan, & Aik, 2004). It is important to note that due to their hierarchical dependency, the four EI branches are assumed to collectively affect performance.

The four currently available studies on GMA in negotiations (Barry & Friedman, 1998, Kurtzberg, 1998, Elfenbein et al., 2008, Kong, Bottom, & Konczak, 2011- study 1) found a positive relationship with dyadic gains, although effects were small. Two of the studies did not assess relational outcomes, one study (Kong et al., 2011) found no relationship with relational outcomes, and one study (Elfenbein et al., 2008) found a marginally positive relationship between a negotiator's GMA score and the counterpart's subjective value. Three published studies investigated the relationship between ability

EI (measured with a performance-based test) and negotiation outcomes. All studies reported positive associations with relational variables (counterpart's outcome satisfaction, Mueller & Curhan, 2006; counterpart's relationship satisfaction, Kong, Bottom, & Konczak, 2011; perceptions of negotiation process and outcomes, Elfenbein, Curhan, Eisenkraft, Shirako, & Baccaro, 2008). Only one study (Kong et al., 2011) found that EI, specifically emotional understanding, predicted higher joint gains. However, this was only the case when participants were paid money contingent on their performance, suggesting that without financial incentives, negotiators might engage more in relational instead of economic goals. In addition, one study that only investigated the emotion perception branch found that higher ERA predicted higher dyadic gains and marginally, higher individual gains (Elfenbein et al., 2007). Relational outcomes were not assessed in this study. Taken together, the findings regarding the role of ability EI and its branches especially in economic outcomes remain sparse and inconclusive.

The available studies on GMA and ability EI are limited in several ways. First, gains were only truly "economic" in Kong et al.'s (2011) and Elfenbein et al.'s (2007) studies, while in the other studies participants were not paid contingent on their performance. However, without a specific incentive to win more points the perceived value of gains might vary a lot among negotiators, which might explain why in those studies ability EI did not predict gains. Second, none of the studies examined the incremental validity of ability EI and GMA. However, ability EI is substantially correlated with GMA (MacCann, Joseph, Newman, & Roberts, 2014). It might therefore be possible that the empirical relationship between ability EI and outcomes is entirely explained by GMA, and that ability EI does not incrementally predict more successful negotiations. Therefore, it is essential to investigate cognitive and emotional abilities in the same study. Third, the majority of the previous studies did not use statistical models specifically designed to analyze dyadic data and has therefore relied on dyad's mean scores of GMA, EI, and outcomes that do not provide information on the role of individuals' abilities.

A final important limitation is that three out of four studies on ability EI used the same EI measure, the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer, Salovey, Caruso, &

Sitarenios, 2003). The MSCEIT is the only widely used test that measures all four ability EI branches. Most of its items contain a Likert-scale to rate the appropriateness of each answer. The test is scored using group consensus where the score awarded to each response option is determined by the percentage of people in a norming sample that chose this answer. This scoring method has been widely criticized because it lacks a theoretical foundation (i.e., it is unclear whether a more popular answer is really the “better” one) and yields the highest scores for individuals that agree with the majority of the population. The MSCEIT is therefore not suitable for discriminating between individuals in the higher ability range (Roberts et al., 2010). As an example, the MSCEIT subtest measuring ERA consists of four pictures of facial expressions for each of which participants rate the extent to which five different emotions are present, yielding 20 items. Given that for 15 of these items “not at all” is the most frequently chosen option, a person ironically obtains high scores for detecting the presence of “no emotion” (Fiori et al., 2014). As Roberts et al. (2010) and others have noted, existing findings on the predictive validity of ability EI might be specific to the MSCEIT because it is the only widely used test and uses a debatable response format and scoring rubric. Several researchers have recommended the use of ERA tests as alternative measures of EI (Cherniss, 2010; MacCann, Pearce, & Roberts, 2012). In ERA tests, participants are typically presented with pictures or recordings of emotional expressions and are asked to choose which emotion out of a list best represents what the target person was expressing. Responses are scored based on an objective criterion, usually the target’s intention. Recent ERA tests, such as the Geneva Emotion Recognition Test (GERT), use a higher number of emotions and short video clips that convey not only facial expressions, but also tone of voice, posture, and gestures. Such tests are considered more ecologically valid and are suitable for discriminating among individuals in the higher ability range (Schlegel et al., 2014).

The Present Study

The present study aims at jointly investigating the role of GMA and ability EI in economic and relational outcomes of a dyadic negotiation while addressing the limitations of previous studies. There

are two main goals: First, this study tests whether GMA and ability EI independently and incrementally predict relational and economic outcomes, using recent statistical models for analyzing dyadic data and a negotiation task in which participants are paid contingent on the points they earn. Second, the study compares two measures of ability EI with respect to their predictive validity – the MSCEIT which measures all four branches of the construct but suffers from certain psychometric problems, and the GERT which measures only ERA within the emotion perception branch but has psychometric advantages in terms of ecological validity and measurement precision.

To assess these questions we chose an employment contract negotiation between a “recruiter” and an “employee”. In this task, joint economic gains reflect to what extent a dyad has succeeded in integrating both parties’ interests to fix a mutually beneficial deal. Individual economic gains reflect which part of the dyad’s shared pie a negotiator claimed for him- or herself. Relational variables in this study include (1) ratings of one’s own cooperative intentions and behaviors during the negotiation, and (2) the perceived cooperativeness and likeability of the counterpart, which in organizational contexts can both be expected to have long-term positive effects on motivation, citizenship, and ultimately, work performance.

Based on the results of past studies, we took gender and negotiator role into account in all analyses. Some studies showed that female dyads achieved lower gains than male dyads (Kray, Thompson, & Galinsky, 2001) and that women place more importance on relational outcomes than men (Gelfand, Major, Raver, Nishii, & O’Brien, 2006). In Kong et al.’s (2011) study on EI, counterparts of female negotiators earned more points. In addition, women typically score higher on ERA than men (Hall & Matsumoto, 2004). The relationships between ERA, EI, and negotiation outcomes might thus be affected by gender. We also tested whether the roles in the negotiation task affect the ability-performance links. Previous research suggests that roles in negotiation exercises (such as employee and recruiter) are associated with typical “scripts” of behavior that negotiators tend to pursue, e.g., the recruiter leading the flow of offers (Elfenbein et al., 2007). Effects of individual differences on

negotiation performance are sometimes only found for the high-power role (e.g., Anderson & Thompson, 2004; Elfenbein et al., 2007).

Method

Participants

One hundred and thirty participants (66 male; age range 18 to 35; $M = 23.46$ years, $SD = 4.04$ years) took part in this study for payment which was partly based on their negotiation performance (see below). Participants were recruited through flyers and posters distributed at a large Swiss university and were undergraduate students (various disciplines, $N=109$), graduate students ($N=4$), young professionals ($N=14$), or unemployed ($N=3$). All participants were native French speakers and completed the study in French. A power analysis conducted with G*Power (Version 3.1.9.2; Faul, Erdfelder, Lang, & Buchner, 2007) revealed that an N between 90 and 199 is necessary to detect small-to-medium effect sizes for a single regression coefficient in a multiple linear regression (f^2 of 0.04 to 0.09, corresponding to standardized regression coefficients of .20 to .30) for a power of .80 and an alpha level of 0.05. The study is somewhat underpowered for detecting regression coefficients below .25.

Procedure

Interested individuals were contacted by phone and provided basic demographic information (gender, age, study domain). We then invited participants in pairs matched on gender and age to our laboratory (33 male pairs and 32 female pairs). Participants were unacquainted except for one female and one male dyad. Each participant was paid CHF 60 for completing the study independently of the negotiation results. In addition, participants were told that they could earn extra money during the negotiation, without telling them an exact amount. All participants gave informed consent in accordance with the university's ethical code on experimentation with human subjects.

In the laboratory, participants were seated in different rooms and received instructions for the French translation and adaption of the widely used "New Recruit" exercise (Pinkley, Neale, & Bennett, 1994). Participants were randomly assigned to either the employee or the recruiter role and were

instructed to discuss the terms of a work contract consisting of eight issues such as salary, vacation days, and reimbursement of moving expenses. Instructions included a payoff schedule for the respective role which indicated how many points the participant would earn for each of the five options for agreement per issue (see Supplementary Table S1). Two of the issues were distributive, meaning that the potential gains of the two parties were diametrically opposed. Two issues were compatible, meaning that participants earned the same amount of points for each possible option. The remaining issues were logrolling issues with different values for the participants, allowing them to reach integrative agreements by trading off more and less important issues. Participants were instructed to earn as many points as possible as their gains would be converted into money, and they did not have access to their partner's payoff matrix. They were told that they would not receive any extra money for the negotiation if they did not reach an agreement within 30 minutes. After reading the instructions, participants were seated face to face in one room. The negotiation was audio- and video-recorded, without the experimenter being present in the room. Upon reaching an agreement, participants signed a "contract" with the options that they chose for each issue. After the negotiation, participants completed a questionnaire measuring relational outcomes before learning how much extra money they and their counterpart had gained. In our sample, the extra money ranged from CHF 9 to CHF 32 ($M = \text{CHF } 19$).

Prior to the laboratory session (between one week and one day before), participants completed measures of ability EI and ERA in an online survey. GMA was assessed during the laboratory session with half the participants receiving the test before and half the participants receiving the test after the negotiation (negotiator roles were counterbalanced). We also collected hormonal and physiological measures which are not part of the present analyses (see Supplementary Material for details).

Participants also completed the Big Five Inventory (John, Donahue, & Kentle, 1991). As none of the Big Five traits (openness, conscientiousness, extraversion, agreeableness, neuroticism) was correlated with negotiation outcomes, we did not further control for them.

Measures

Economic outcomes. We calculated participants' *individual gains* based on the signed "contract sheets" as the sum of points that each participant earned on all eight issues. Individual gains could range from -8,400 to 13,200 points and reflect the value claimed by each participant from the total "pie". *Dyadic gains* of each dyad were calculated as the sum of the recruiter's and employee's individual gains on all the eight issues. Dyadic gains could range from -2,600 to 13,200 points and reflect total value created by the dyad.

Geneva Emotion Recognition Test. The GERT (Schlegel et al., 2014) contains 83 brief video clips with sound in which actors express 14 emotions (pride, joy, amusement, pleasure, relief, interest, anxiety, fear, despair, sadness, disgust, irritation, anger, and surprise). After each clip, participants are asked to select the emotion word that best describes the expression in the clip. Responses are scored as "correct" or "incorrect", where the correct response is the emotion which the actor had been instructed to portray. The percentage of correct responses represents participants' ERA. The GERT was developed with advanced psychometric methods (Item Response Theory) and shows good measurement precision.

Mayer-Salovey-Caruso Emotional Intelligence Test. The MSCEIT (Mayer et al., 2003) consists of 141 items measuring four branches of EI (emotion perception in others, emotion facilitation, emotional understanding, emotion management) using eight different tasks such as rating emotions in pictures, evaluating how moods impact thinking, and rating the effectiveness of different actions. The MSCEIT yields branch scores and a total score that are calculated based on the consensus scoring described earlier.

NV5-R. The NV5-R test battery (Thiébaud & Bidan-Fortier, 2003) measures GMA in adults and has been extensively validated in French-speaking populations (e.g., Thiébaud & Richoux, 2005). We used the 20-minute general reasoning subtest which measures inductive and deductive reasoning with numeric, spatial, and lexical content. Example tasks include completing series of numbers, odd-word-out questions, and assessing the correctness of inferences deducted from given premises.

Relational variables. To assess *self-reported cooperativeness*, three items were taken from Brackett et al.'s (2006; study 3) self-report questionnaire on socially competent behavior in dyadic interaction. The items were: (1) I made it easy for the other participant to talk to me; (2) I was genuinely involved in the conversation; (3) My actions were an accurate representation of how I normally behave. These three items were complemented with six additional items that we developed to tap negotiation-specific cooperative intentions and behaviors: "Throughout the negotiation, I tried to ... (1) be cooperative, (2) avoid hostility, (3) stay professional, (4) stay rational, (5) act in a way that would make the other person feel good, (6) create a good relationship with the other person." The total nine items on this scale showed good internal consistency ($\alpha=.80$) suggesting that they measure one underlying dimension. This scale reflects the behavioral intentions and degree of other-directedness that participants had during the negotiation. To assess *other-rated cooperativeness*, we transformed the self-report items into ratings of the negotiation counterpart. Additionally, we included items that specifically measured how much the participant liked the other person and which impression the other person made. This scale consisted of seven items; (1) The other person made it easy for me to talk to him/her; (2) He/she was genuinely involved in the conversation; (3) He/she acted cooperatively; (4) He/she left a good impression with me; (5) He/she avoided hostility; (6) I like the other person; (7) He/she created a good relationship with me. This scale had an alpha of .84. High scores on this scale indicate that a negotiator was perceived as a pleasant interaction partner who engaged in cooperative behaviors and successfully created rapport.

Data Analysis

One dyad reached an impasse and received zero points. Both negotiators in this dyad had average scores on the NV5-R, MSCEIT, and GERT. Because their points represented a statistical outlier (>3 SDs below average), results are reported without this dyad. When recalculating the multiple regressions described below with the dyad that had reached an impasse, effects did not change. In order to test the effects of GMA and ability EI on *joint gains*, we ran three multiple regressions with joint

gains of the 64 dyads as the dependent variable in each model, and the NV5-R, GERT, and the MSCEIT total score as predictors, respectively, in the separate regressions. In all of the regression models, there were six independent variables: Gender, the two test scores for the employee and recruiter (NV5-R, GERT, or MSCEIT total score, respectively), the two interaction terms of the respective employee's and recruiter's test score with gender, and the interaction term of employee's and recruiter's test scores. This last interaction term was included to explore whether higher joint gains were predicted by negotiators' abilities independently or whether the dyad's composition mattered. All test scores were centered prior to the analysis. In the same fashion, we additionally ran multiple regressions for the four MSCEIT subscales to explore the contribution of each ability EI dimension.

To test the effects of cognitive and affective abilities on *individual outcomes*, we ran nine Actor-Partner Interdependence Models (APIMs; Kenny, Kashy, & Cook, 2006); i.e., one APIM for each of the three tests (NV5-R, GERT, and MSCEIT) predicting each of the three outcome variables (individual gains, self-rated and other-rated cooperativeness). Additionally, we analyzed the four MSCEIT subscales as predictors of these outcomes in separate APIMs. APIMs were used because they analyze each person's individual outcome while controlling for the partner's outcome, and therefore account for the fact that individual outcomes are nested within dyads and are not independent from each other. The degree of interdependence was assessed prior to the analyses by calculating the Pearson Product-moment correlation between employees' and recruiters' individual outcomes. As recommended by Kenny et al. (2006), a liberal significance test ($p=.20$) was used to evaluate interdependence. APIMs allow for the estimation of actor effects (i.e., the effect of a person's independent variable on his or her own outcome) and partner effects (i.e., the effect of a person's independent variable on his or her partner's outcome). Each APIM included six independent variables: Gender, employees' and recruiters' scores on the respective ability (GERT, MSCEIT total score and branch scores, or NV5-R), their respective interaction terms with gender, and the interaction term of employee's and recruiter's ability scores. The two dependent variables in each APIM were the negotiators' individual gains, self-rated

cooperativeness, or other-rated cooperativeness, respectively (see Supplementary Material and Figures S1 and S2 for more details). The APIMs were estimated with MPlus using a structural equation framework (Muthén & Muthén, 2007) based on the covariance matrix of the independent and dependent variables. As suggested by Kenny et al. (2006, p. 179), all variables in the models were standardized using the means and standard deviations of the whole sample, and the tables report the unstandardized estimates in order to keep the coefficients comparable across negotiator roles.

The dataset used for the present analyses will be shared, along with the syntax for running the analyses, in the journal's open repository.

Results

Descriptive Statistics and Analysis of Interdependence

Descriptive statistics of all independent and dependent variables and first-order correlations are presented in Table 1. The Pearson correlations between the two dyad members' scores on the three individual outcomes variables were as follows: $r_{(individual\ gains)} = -.77$ ($p < .001$), $r_{(self-rated\ cooperativeness)} = .18$ ($p = .146$), and $r_{(other-rated\ cooperativeness)} = -.03$ ($p = .835$). Individual gains and self-rated cooperativeness were thus analyzed using APIMs to account for their interdependence between dyad members. For the sake of coherence and in order to assess actor and partner effects, perceived cooperativeness/likability was analyzed in the same way. As expected, GERT and MSCEIT were moderately correlated, and low to moderate positive correlations were found between GMA, GERT, and MSCEIT (see Table 1).

Joint Gains

The results of the multiple regressions predicting joint gains are displayed in Table 2. Contrary to Hypothesis 1, the NV5-R and total MSCEIT scores did not predict joint gains. In line with Hypothesis 1, higher scores of recruiters on the GERT and the MSCEIT emotional understanding branch were related to higher joint gains. This effect was enhanced in female dyads as shown by a significant interaction with gender. The results for the other MSCEIT branches were not significant and are shown in Supplementary Table S2. In order to test the *incremental validity* of EI and GMA, we

entered those variables that were significant predictors of joint gains in the separate regressions (Table 2) in a hierarchical regression (Table 3). In step 1, we entered gender, recruiters' GERT scores, and their interaction term with gender; in step 2, we added recruiters' MSCEIT emotional understanding scores and their interaction with gender; and in step 3 we added recruiters' NV5-R scores and their interaction with gender. Employees' scores were not included as no significant associations were found in the individual multiple regressions for each predictor. The increase in R^2 from step 1 to step 2 was marginally significant ($\Delta R^2 = .05$, $\Delta F(1,57)=3.60$, $p=.06$) and there was no increase in R^2 from step 2 to step 3. Results showed that emotional understanding predicted joint gains incrementally above the GERT and remained the only significant predictor in the model, while GMA did not predict joint gains individually or incrementally above EI.

Individual Gains

The APIMs analyzing the relationships of GMA, overall MSCEIT, and GERT with individual gains are presented in Table 4. Supplementary Table S3 presents the results for the different MSCEIT branches. Contrary to Hypothesis 1, GMA did not predict individual gains. Higher total MSCEIT scores and higher GERT scores were not related to one's *own* individual gains as predicted, but to higher individual gains *of the counterpart* (Table 4). Specifically, higher MSCEIT total scores as well as emotion perception and emotion management branch scores in employees were significantly related to higher gains of the counterpart recruiters (Table S3). Higher GERT scores in recruiters predicted higher gains in their counterpart employees. Moreover, we found an interaction effect of employees' and recruiters' GERT scores, indicating that employees with high ERA obtained higher individual gains when the recruiters scored high in ERA too (see Table 4).

In order to assess the incremental validity of EI and GMA for the individual-level outcomes (individual points, self- and other-rated cooperativeness), we added, in a first step, employees' and recruiters' MSCEIT scores, and in a second step, employees' and recruiters' NV5-R scores, to the APIM with GERT scores as independent variables (i.e., to the models in the upper part of Table 4). For

individual points, adding MSCEIT scores yielded a significant partner effect of employees' MSCEIT on recruiters' points (Beta = .23, $p < .05$). This path was already marginally significant in the MSCEIT only model (Beta = .32, $p < .06$; see Table 4), suggesting that the effects of the MSCEIT and GERT are independent and complementary, rather than incremental: Recruiters' gains were predicted by employees' MSCEIT scores, whereas employees' gains were predicted by recruiters' GERT scores. Adding NV5-R scores to the model did not yield any significant paths.

Relational Variables

The results describing the relationship between NV5-R, MSCEIT, GERT, and relational variables are presented in Table 4 and Supplementary Table S3 for the different MSCEIT branches. Contrary to Hypothesis 1, the NV5-R was unrelated to self-rated and other-rated cooperativeness. Total EI scores were unrelated to self-reported cooperativeness, but predicted other-rated cooperativeness/likability for employees. Specifically, employees were perceived as more cooperative/likable when both they themselves and the recruiters had high total EI. Analyses for the EI branches (Table S3) showed that first, higher Emotional Understanding was related to higher self-rated cooperativeness for both employees and recruiters, and second, recruiters with higher emotion facilitation and emotion management were rated as more cooperative/likable by employees. In line with Hypothesis 1, higher GERT scores predicted higher self-rated cooperativeness and other-rated cooperativeness/likability in both employees and recruiters (Table 4). Specifically, recruiters with higher GERT scores received higher ratings of cooperativeness/likability from employees; and employees with higher GERT scores received higher cooperativeness/likability ratings from recruiters when both negotiators scored high in ERA.

For other-rated cooperativeness, adding MSCEIT scores to the GERT model did not yield significant effects for the MSCEIT, suggesting that the MSCEIT did not incrementally predict this outcome above the GERT. Adding NV5-R scores yielded a significant positive actor effect of recruiters' intelligence on how they were rated by their partner (Beta = .36; CI [.05; .66], $p < .05$). Finally, for self-

rated cooperativeness, adding MSCEIT scores to the model did not yield significant effects of the MSCEIT. Further adding NV5-R scores yielded a significant partner effect of recruiters' intelligence on their partners' self-rated cooperativeness (Beta = .34, CI [.01; .68], $p < .05$). Taken together, results suggest that the total MSCEIT score did not add incremental validity beyond the GERT for individual negotiation outcomes, while recruiters' NV5-R scores incrementally predicted some of the relational outcomes. However, these two effects for the NV5-R were not significant when NV5-R was assessed individually (lower section of Table 4). The role of intelligence in individual outcomes thus remains limited.

Discussion

In the present study, we investigated whether ability EI and GMA predicted joint and individual economic and relational indicators of negotiation performance. Overall, the GERT was related to all four outcome variables, although effects depended on the negotiator's role and to some extent, on gender. The total MSCEIT predicted only individual points. Some MSCEIT branches predicted other outcomes as well, but results were inconsistent as each branch predicted only one or two of the four outcomes. Notably, emotional understanding predicted joint gains incrementally above the GERT. Apart from this association, GERT and MSCEIT seemed to explain negotiation outcomes in a complementary, rather than an incremental fashion. Finally, GMA was largely unrelated to negotiation outcomes in the individual analyses. We therefore concluded that in the present study, ability EI emerged as a more consistent predictor of negotiation outcomes than GMA.

The finding that higher ERA and emotional understanding in recruiters were associated with higher joint gains implies that dyads with such recruiters identified and agreed on more integrative solutions. ERA and emotional understanding were the two EI branches linked to the "better information acquisition" pathway hypothesized by Fulmer and Barry (2004), suggesting that this might be the primary mechanism through which ability EI helps increasing economic outcomes. Analyses of individual gains also showed that recruiters with higher GERT scores increased their counterpart's

gains. Similarly, recruiters' individual gains were relatively higher if their counterparts scored higher on the overall MSCEIT. Overall, people with higher affective abilities, while not earning fewer points themselves, tend to accommodate their interaction partners by sacrificing a larger part of the additionally created value. It does not seem to be the case that negotiators high in EI use the information that they acquire about their counterpart (only) to their own advantage. This finding supports the idea that ability EI is associated with high other-directedness and a high sensitivity for the other person's interests and feelings as suggested by previous studies (Foo et al., 2004; Mueller & Curhan, 2006). However, one previous study (Elfenbein et al., 2007) found that ERA was (marginally) related to negotiators' *own* individual gains. This discrepancy might be related to the different samples of the studies. Elfenbein et al.'s (2007) exercise was part of a management class with business students, which might have shaped their motivation to increase their own gains, e.g., due to potential reputational consequences. Here, participants had different professional backgrounds and the task was framed as "important to everyday life", which could have emphasized the importance of relational variables.

In contrast to previous studies and the theoretical predictions of Fulmer and Barry (2004), we did not find any relationship between GMA and economic gains. One reason for this might be that these studies used different negotiation tasks. Barry and Friedman (1998) used an open negotiation scenario that did not include fixed issues and options to discuss but resulted in a qualitative statement that was rated for utility. Their task might thus have provided larger potential to benefit from GMA when developing integrative and creative solutions. Elfenbein and colleagues (2008) used structured scenarios similar to ours, but over several negotiation rounds with different partners. It might be that the beneficial effect of GMA develops only after some experience, allowing intelligent negotiators to learn about the strategies underlying successful negotiation. In addition, we used a measure of basic reasoning (the "g" factor; Carroll, 1993) that included inductive and deductive reasoning with numeric, spatial, and lexical content, while the other studies assessed GMA with GMAT (Graduate Management Admission Test) scores. The GMAT assesses many different aptitudes including interpreting graphs and tables and

analytical writing, which go beyond the scope of the NV5-R. Finally, Sharma et al. (2013) noted that student samples have little variance in GMA which could attenuate GMA effects. However, our GMA test ($M=.65$, $SD=.13$) had higher variance than the MSCEIT ($M=.45$, $SD=.06$) and GERT ($M=.70$, $SD=.10$), speaking against this possibility. The fact that GMA was positively correlated with the MSCEIT and the GERT makes it even more noteworthy that it was mostly the affective abilities and not GMA that predicted negotiation outcomes. This might suggest that high GMA is not enough to achieve good negotiation outcomes as these might depend more on the interpersonal aspects of the conversation (communicating one's own intentions, grasping the other person's intentions, evaluating his/her willingness to accept an offer, etc.).

The analysis of negotiator role revealed that especially for economic outcomes, ability EI was important mainly for the recruiter. Previous research suggests that negotiations in the laboratory follow implicit scripts of negotiations in real life in which recruiters tend to lead the discussion and control the flow of offers due to their higher power (Elfenbein et al., 2007). In contrast, employees might feel in a more subordinate position in which they cannot influence outcomes that much. However, it is worthwhile mentioning that in the case where both negotiators had high ERA, employees obtained more individual gains than when only the recruiter had high ERA. This interaction effect is in line with literature on group performance and team composition, suggesting that interpersonal communication in a dyad might have "emergent" properties beyond the negotiators' individual abilities (Elfenbein, Polzer, & Ambady, 2007). That is, recruiters with high ERA might create a cooperative climate which enables employees to translate higher ERA into more points.

Generally, the findings in our study were similar for women and men. However, female dyads were found to benefit relatively more from higher EI than male dyads in that joint gains were relatively higher in female dyads with emotionally intelligent recruiters. This could be explained by gender differences in expressivity: Women are typically more emotionally expressive than men (e.g., Kring & Gordon, 1998). Female negotiators might therefore send more nonverbal cues about their preferences or

intentions, providing a better opportunity for counterparts with high EI to accurately decode this information and consequently, to use it for achieving better joint gains.

An important finding in the present study was that the GERT predicted all four outcome variables, whereas the overall MSCEIT and its subtests were each only related to one or two outcome measures. This is the first negotiation study that measured ERA using short video clips that contain dynamic cues from the face, the voice, and the body for 14 different emotions, instead of using static pictures of facial expressions of only a few basic emotions. Given that EI researchers have raised the concern that findings on ability EI might be specific to the MSCEIT and suggested to use ERA tests as an alternative (e.g., Roberts et al., 2010) the present study makes an important contribution to the literature from a psychometric, practical, and theoretical perspective.

First, from a psychometric perspective, our findings imply that the GERT might be more predictive of outcomes than the emotion perception subtest of the MSCEIT and the MSCEIT total score due to its scoring based on objective criteria rather than group consensus and its superior psychometric properties in terms of item difficulty and measurement precision. The GERT also captures ERA in a more comprehensive way than the MSCEIT by including different sensory modalities, more emotions, and more actors. The fact that none of the previous negotiation studies using the MSCEIT found robust results for emotion perception supports the idea that these findings were specific to the MSCEIT and do not generalize to the theoretical construct of emotion perception. Future research should follow the recommendation of MacCann et al. (2011), Cherniss (2010), and others to use validated ERA tests as alternative measures within the ability EI framework, and attempt to corroborate the present findings in other interpersonal settings. Conclusions about how well ability EI and its branches predict outcomes should not be based exclusively on studies using the MSCEIT.

Second, from a practical perspective, the GERT might present a viable alternative to the proprietary and relatively expensive MSCEIT as it is available free of charge and, in its short version (Schlegel & Scherer, 2016), takes only 10 to 15 minutes to complete. Third, on a theoretical level, our

results seem to support the idea that understanding and especially perceiving emotions in the other party is a fundamental interpersonal skill in negotiation, as it leads to better information acquisition which then enables the negotiator to use strategies to manage these emotions. As noted by Powtorowski and Kopelman (2008), emotions cannot be effectively managed unless these emotions have been accurately detected and interpreted, which is most closely related to the perceiving emotions and emotional understanding EI branches. The finding that the GERT was the most robust predictor of negotiation outcomes is also consistent with Joseph and Newman's (2010) cascading EI model that places emotion perception at the beginning of the hierarchy of EI branches. These results suggest that the emotion perception branch might deserve more attention in future research on EI in the workplace as well as interpersonal interactions more generally, and should encourage EI and ERA researchers to integrate their largely separate lines of work.

There are several limitations to our study. First, our measures of participants' performance were based on a single negotiation, rather than a repeated testing across different dyads. Future research might benefit from round-robin designs in which participants interact with different partners (Boldry & Kashy, 1999), as well as from a larger sample size than in the present study. Second, we did not yet examine which behaviors make people with high affective abilities more successful negotiators. Mechanisms potentially facilitating better economic and relational outcomes such as verbal (e.g., the use of more integrative strategies and offers) and nonverbal behaviors (e.g., more positive facial expressions and body postures) remain to be investigated. Third, the study was conducted in a laboratory setting with students and the exercise used lacks the context of a real hiring process, as in real life an employment negotiation is much more consequential. Nevertheless, we believe that similar processes and tasks (e.g., recognizing and attending to the counterpart's intentions and emotions) are required to achieve favorable outcomes both in laboratory and in real-life negotiation settings. In addition, negotiation represents a specific case of interpersonal interaction, and we would expect that ability EI will matter in facilitating rapport and better outcomes in other types of interpersonal interactions too

(see e.g., Brackett et al., 2006). Further research is needed to examine whether the present findings generalize to negotiations in real-life settings as well as other types of social interactions in private and professional contexts.

To conclude, the present study adds further evidence to the “new dawn for individual differences” in negotiation (Sharma et al., 2013) and the present findings are particularly notable given that in negotiation, emotions have long been viewed as impeding good performance (Olekalns & Druckman, 2012). This study demonstrated that effectively appraising and managing the emotional and interpersonal levels in negotiation is crucial for achieving better outcomes. Beyond negotiation, ability EI (and ERA in particular) might also prove beneficial in other types of interpersonal interactions across all domains of everyday life.

References

- Anderson, C., & Thompson, L. L. (2004). Affect from the top down: How powerful individuals' positive affect shapes negotiations. *Organizational Behavior and Human Decision Processes*, *95*, 125–139.
- Barry, B., & Friedman, R. A. (1998). Bargainer characteristics in distributive and integrative negotiation. *Journal of Personality and Social Psychology*, *74*, 345–359.
- 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.
- Brackett, M. A., Rivers, S. E., Shiffman, S., Lerner, N., & Salovey, P. (2006). Relating emotional abilities to social functioning: A comparison of self-report and performance measures of emotional intelligence. *Journal of Personality and Social Psychology*, *91*, 780–795.
- Buck, R. W. (1976). A test of nonverbal receiving ability: Preliminary studies. *Human Communication Research*, *2*, 162–171.
- Carroll, J. B. (1993). *Human cognitive abilities: A survey of factor-analytic studies*. Cambridge University Press. ISBN: 0-521-38275-0
- Cherniss, C. (2010). Emotional intelligence: Toward clarification of a concept. *Industrial and Organizational Psychology*, *3*, 110–126.
- Côté, S. (2014). Emotional Intelligence in Organizations. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*, 459–488. doi:10.1146/annurev-orgpsych-031413-091233
- 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.
- Der Foo, M., Elfenbein, H. A., Tan, H. H., & Aik, V. C. (2004). Emotional intelligence and negotiation: The tension between creating and claiming value. *The International Journal of Conflict Management*, *15*, 411–429.
- Ekman, P., & Friesen, W. V. (1974). Nonverbal behavior and psychopathology. In R. J. Friedman & M. Katz (Eds.), *The psychology of depression: Contemporary theory and research* (pp. 3–31). Washington, DC: Winston & Sons.

- Elfenbein, H. A., Curhan, J. R., Eisenkraft, N., Shirako, A., & Baccaro, L. (2008). Are some negotiators better than others? Individual differences in bargaining outcomes. *Journal of Research in Personality*, *42*, 1463–1475.
- Elfenbein, H. A., Foo, M. D., White, J., Tan, H. H., & Aik, V. C. (2007). Reading your counterpart: The benefit of emotion recognition accuracy for effectiveness in negotiation. *Journal of Nonverbal Behavior*, *31*, 205–223.
- Elfenbein, H. A., Polzer, J. T., & Ambady, N. (2007). Team emotion recognition accuracy and team performance. *Research on emotion in organizations*, *3*, 87–119.
- Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, *39*(2), 175–191.
- Fiori, M., Antonietti, J.-P., Mikolajczak, M., Luminet, O., Hansenne, M., & Rossier, J. (2014). What is the ability Emotional Intelligence Test (MSCEIT) good for? An evaluation using Item Response Theory. *PloS One*, *9*(6), doi:10.1371/journal.pone.0098827
- Gelfand, M. J., Major, V. S., Raver, J. L., Nishii, L. H., & O'Brien, K. (2006). Negotiating relationally: The dynamics of the relational self in negotiations. *Academy of Management Review*, *31*, 427–451. doi: 10.5465/AMR.2006.20208689
- Hall, J. A., Andrzejewski, S. A., & Yopchick, J. E. (2009). Psychosocial correlates of interpersonal sensitivity: A meta-analysis. *Journal of Nonverbal Behavior*, *33*, 149–180.
- Hall, J. A., & Matsumoto, D. (2004). Gender differences in judgments of multiple emotions from facial expressions. *Emotion*, *4*, 201–206.
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory-Versions 4a and 4b*. Berkeley, CA: University of California, Berkeley, Institute of Personality and Social Research.
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. Guilford Press. ISBN-13: 978-1572309869

- Kong, D., Bottom, W. P., & Konczak, L. (2011). Re-examining the role of emotional intelligence in negotiations. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1872141.
- Kray, L. J., Thompson, L., & Galinsky, A. (2001). Battle of the sexes: Gender stereotype confirmation and reactance in negotiations. *Journal of Personality and Social Psychology*, *80*, 942–958.
- Kring, A. M., & Gordon, A. H. (1998). *Sex differences in emotion: expression, experience, and physiology*. *Journal of Personality and Social Psychology*, *74*(3), 686–703.
- MacCann, C., Joseph, D. L., Newman, D. A., & Roberts, R. D. (2014). Emotional intelligence is a second-stratum factor of intelligence: Evidence from hierarchical and bifactor models. *Emotion*, *14*(2), 358–374.
- MacCann, C., Pearce, N., & D. Roberts, R. (2011). Emotional intelligence as assessed by situational judgment and emotion recognition tests: Building the nomological net. *Psihologijske Teme*, *20*(3), 393–412.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3–31). New York: Basic Books. ISBN-13: 978-0465095872
- Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2003). Measuring emotional intelligence with the MSCEIT V2.0. *Emotion*, *3*, 97–105.
- Mueller, J. S., & Curhan, J. R. (2006). Emotional intelligence and counterpart mood induction in a negotiation. *International Journal of Conflict Management*, *17*, 110–128.
- Muthén, L. K., & Muthén, B. O. (2011). *Mplus User's Guide* (6th ed.). Los Angeles, CA: Muthén & Muthén.
- Olekalns, M., & Druckman, D. (2012). With feeling: How emotions shape negotiation. In B. Martinovski (Ed.), *Emotion in Group Decision and Negotiation*.
- Pinkley, R. L., Neale, M. A., & Bennett, R. J. (1994). The impact of alternatives to settlement in dyadic negotiation. *Organizational Behavior and Human Decision Processes*, *57*, 97–116.
- Roberts, R. D., MacCann, C., Matthews, G., & Zeidner, M. (2010). Emotional intelligence: Toward a consensus of models and measures. *Social and Personality Psychology Compass*, *4*, 821–840.

- Schlegel, K., Grandjean, D., & Scherer, K. R. (2014). Introducing the Geneva Emotion Recognition Test: An example of Rasch-based test development. *Psychological Assessment, 26*, 666–672.
- Schlegel, K., & Scherer, K. R. (2016). Introducing a short version of the Geneva Emotion Recognition Test (GERT-S): Psychometric properties and construct validation. *Behavior Research Methods, 48*, 1383 - 1392.
- Sharma, S., Bottom, W. P., & Elfenbein, H. A. (2013). On the role of personality, cognitive ability, and emotional intelligence in predicting negotiation outcomes A meta-analysis. *Organizational Psychology Review, 3*, 293–336.
- Thiébaud, E., & Bidan-Fortier, C. (2003). *Batterie de tests d'aptitudes cognitives NV5-R – Manuel*. Éditions du Centre de Psychologie Appliquée/ Pearson: Paris, France.
- Thiébaud, E., & Richoux, V. (2005). Élément de validité prédictive des scores à la batterie de tests d'aptitudes cognitives NV5-R. *Pratiques psychologiques, 11*, 403–416.
- Thompson, L. (1990). Negotiation behavior and outcomes: Empirical evidence and theoretical issues. *Psychological Bulletin, 108*, 515–532.

Table 1

Descriptive Statistics and First-order Correlations Between Independent and Dependent Variables

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) GERT	.70 (.10)										
(2) MSCEIT total	.48**	.45 (.06)									
(3) MSCEIT Emotion Perception	.31**	.79**	.49 (.11)								
(4) MSCEIT Emotion Facilitation	.40**	.81**	.49**	.44 (.09)							
(5) MSCEIT Emotional Understanding	.36**	.65**	.29**	.41**	.49 (.07)						
(6) MSCEIT Emotion Management	.42**	.70**	.33**	.51**	.44**	.38 (.07)					
(7) NV5-R General Mental Ability	.36**	.22*	.08	.20*	.30**	.19*	.58 (.15)				
(8) Dyadic points	.12	.17	.16	.18*	.13	.04	-.01	9450 (1643)			
(9) Individual points	.10	-.09	-.05	-.09	-.04	.00	.02	.35**	4725 (2375)		
(10) Self-rated cooperativeness	.07	.08	-.02	.13	.10	.15	.05	.09	.00	4.08 (0.58)	
(11) Other-rated cooperativeness	.14	.22*	.07	.17	.28**	.11	.17	.14	-.14	.16	4.18 (0.63)

Note. MSCEIT = Mayer Salovey Caruso Emotional Intelligence Test. Cells show Pearson correlations. The diagonal shows means and standard deviations (in parentheses). Possible values range from 0 to 1 for GERT, MSCEIT, and NV5-R; and from 1 to 5 for self-and other-rated cooperativeness. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2

Multiple Regression Models Predicting Joint Gains

Independent variables (included in each model)	GERT				MSCEIT total score			
	<i>Beta</i>	<i>t</i>	<i>sr</i>	<i>B (CI)</i>	<i>Beta</i>	<i>t</i>	<i>sr</i>	<i>B (CI)</i>
(Constant)		34.08		9990.0 (9403; 10.577)		31.79		9968.1 (9339.1; 10597.1)
Gender (0=male, 1=female)	-.24	-1.88	-.23	-794.6 (-1641.4; 52.2)	-.30*	-2.16	-0.27	-980.4 (-1892.5; -68.4)
EM's score	-.01	-0.06	-.01	-140.5 (-4667.4; 4386.3)	.13	0.85	0.11	3487.7 (-4729.4; 11704.8)
RE's score	.31*	2.19	.26	4612.2 (390.2; 8834.1)	.27	1.74	0.22	7091.6 (-1096.3; 15279.4)
Gender x EM's score	.05	0.34	.04	857.3 (-4168.2; 5882.8)	-.09	-0.57	-0.07	-2374.3 (-10670.1; 5921.5)
Gender x RE's score	.28*	2.00	.24	4417.7 (-8.4; 8843.8)	.03	0.19	0.02	768.5 (-7497.7; 9034.8)
EM's score x RE's score	.23	1.41	.17	31246.5 (-13134.8; 75627.8)	-.05	-0.27	-0.03	-16005.9 (-136278.3; 104266.6)
R ² (adjusted R ²)				.17 (.08)				.14 (.05)
	MSCEIT Emotion Understanding				NV5-R			
	<i>Beta</i>	<i>t</i>	<i>sr</i>	<i>B (CI)</i>	<i>Beta</i>	<i>t</i>	<i>sr</i>	<i>B (CI)</i>
(Constant)		33.30		9618.9 (9040.1; 10197.7)		32.24		9650.8 (9051.3; 10250.2)
Gender (0=male, 1=female)	-.14	-1.14	-.14	-460.9 (-1275.1; 353.2)	-.16	-1.19	-.15	-528.8 (-1420.1; 362.6)
EM's score	-.07	-0.54	.37	8891.4 (3189.9; 14592.8)	.05	0.39	.05	640.4 (-2662.0; 3942.8)
RE's score	.42**	3.13	-.06	-1693.3 (-8010.4; 4623.8)	.21	1.49	.19	2730.9 (-952.8; 6414.6)
Gender x EM's score	-.06	-0.45	.26	5848.7 (420.4; 11276.8)	.11	0.80	.04	564.4 (-3111.4; 4240.1)
Gender x RE's score	.28*	2.16	-.05	-1461.0 (-7957.4; 5035.3)	.04	0.31	.10	1349.7 (-2020.1; 4719.5)
EM's score x RE's score	.05	0.31	.04	11945.5 (-64222.1; 88113.1)	.00	-0.01	.00	-88.7 (-25482.1; 25304.7)
R ² (adjusted R ²)				.22 (.14)				.10 (.01)

Note. GERT= Geneva Emotion Recognition Test, MSCEIT= Mayer-Salovey-Caruso Emotional Intelligence Test, NV5-R= General reasoning test, EM=Employee, RE=recruiter. The columns represent separate regressions for each independent variable. In each regression, dyads'

points are the dependent variable. The results for the other MSCEIT branches are shown in Supplementary Table S3. sr = semipartial correlation; B (CI) = unstandardized regression coefficient with confidence interval. * $<.05$, ** $<.01$.

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Table 3

Multiple Regression Predicting Joint Gains Simultaneously From Recruiters' GERT, MSCEIT Emotional Understanding, and NV5-R Scores

	<i>Beta</i>	<i>t</i>	<i>sr</i>	<i>B (CI)</i>
(Constant)		30.49		9773.1 (9130.5; 10415.7)
gender	-.19	-1.42	-.17	-622.9 (-1501.2; 255.3)
Recruiter's GERT	.08	0.58	.07	1219.5 (-3198.0; 5637.1)
Recruiter's MSCEIT Emotional Understanding	.32*	2.07	.25	6791.6 (224.4; 13358.7)
Recruiter's NV5-R	.06	0.46	.05	869.5 (-2949.8; 4688.8)
Gender x Recruiter's GERT	.12	0.89	.11	1962.6 (-2454.9; 6380.2)
Gender x Recruiter's MSCEIT Emotional Understanding	.26	1.65	.20	5407.7 (-1159.5; 11974.9)
Gender x Recruiter's NV5-R	-.10	-.72	-.09	-1363.9 (-5183.2; 2455.5)
R ² (adjusted R ²)		.23 (.13)		

Note. GERT= Geneva Emotion Recognition Test, MSCEIT= Mayer-Salovey-Caruso Emotional Intelligence Test, NV5-R = General reasoning test. *sr* = semipartial correlation; *B* (CI) = unstandardized regression coefficient with confidence interval. * $<.05$.

Table 4

Actor-Partner Interdependence Models Predicting Individual Gains and Relational Outcomes from General Mental Ability, Emotional Intelligence, and Emotion Recognition Ability

Independent variables/ interaction effects	Dependent variables					
	Individual gains		Other-rated cooperativeness/ likeability		Self-rated cooperativeness	
	<i>B (CI)</i>	<i>t</i>	<i>B (CI)</i>	<i>t</i>	<i>B</i>	<i>t</i>
<i>GERT</i>						
Actor EM	(1) .11 (-.30; .52)	0.52	.13 (-0.27; .53)	0.62	.42* (.01; .84)	2.00
Actor RE	(2) -.03 (-.38; .31)	-0.18	.31 (-0.02; .64)	1.82	.33* (.03; .62)	2.20
Partner EM → RE	(3) -.08 (-.46; .30)	-0.42	.23 (-0.14; .60)	1.21	-.11 (-.44; .22)	-0.65
Partner RE → EM	(4) .42* (.05; .79)	2.21	.32 (-0.07; .72)	1.60	.11 (-.27; .49)	0.58
Gender → EM	(5) -.24 (-.76; .28)	-0.92	.29 (-0.22; .80)	1.12	-.27 (-.80; .25)	-1.00
Gender → RE	(6) -.10 (-.58; .37)	-0.42	-.09 (-0.55; .38)	-0.38	.01 (-.40; .42)	0.05
<i>Interaction effects</i>						
Gender x EM → EM	(7) -.19 (-.82; .43)	-0.59	-.55 (-0.16; .06)	-1.77	-.29 (-.92; .34)	-0.91
Gender x RE → RE	(8) .12 (-.39; .62)	0.46	-.16 (-0.64; .34)	-0.64	-.28 (-.71; .15)	-1.27
Gender x EM → RE	(9) .12 (-.45; .69)	0.41	-.11 (-0.67; .44)	-0.39	-.37 (-.86; .13)	-1.48
Gender x RE → EM	(10) -.49 (-1.04; .06)	-1.75	-.25 (-0.80; .31)	-0.86	.39 (-.17; .94)	1.39
RE x EM → RE	(11) -.16 (-.42; .09)	-1.23	.01 (-0.24; .26)	0.08	.24* (.02; .45)	2.18
RE x EM → EM	(12) .30* (.02; .58)	2.14	.32* (.04; .60)	2.29	-.12 (-.40; .16)	-0.86
<i>R</i> ² (EM/RE)	.10/.04		.13/.12		.18/.16	
<i>MSCEIT</i>						
Actor EM	-.31 (-.70; .09)	-1.55	-.02 (-.42; .38)	-0.1	.06 (-.38; .50)	0.27
Actor RE	-.14 (-.47; .20)	-0.82	.29 (-.07; .66)	1.53	.16 (-.19; .50)	0.94
Partner EM → RE	.32 (.00; .64)	1.94	.06 (-.30; .41)	0.33	-.03 (-.36; .30)	-0.18
Partner RE → EM	.36 (-.04; .77)	1.71	.33 (-.08; .75)	1.57	.06 (-.39; .51)	0.26
Gender → EM	-.25 (-.80; .31)	-0.89	.26 (-.30; .83)	0.9	-.02 (-.63; .60)	-0.06
Gender → RE	-.26 (-.71; .19)	-1.13	-.04 (-.53; .46)	-0.16	.04 (-.43; .50)	0.17
<i>Interaction effects</i>						
Gender x EM → EM	.25 (-.42; .91)	0.74	-.23 (-.90; .45)	-0.66	.54 (-.20; 1.28)	1.42
Gender x RE → RE	.22 (-.28; .72)	0.85	-.09 (-.64; .46)	-0.32	.19 (-.33; .70)	0.73
Gender x EM → RE	-.12 (-.66; .43)	-0.43	.46 (-.14; .05)	1.53	-.14 (-.69; .42)	-0.5
Gender x RE → EM	-.29 (-.90; .33)	-0.94	.20 (-.42; .82)	0.63	.15 (-.54; .83)	0.43
RE x EM → RE	-.11 (-.34; .12)	-0.92	.02 (-.23; .27)	0.15	.10 (-.13; .33)	0.83
RE x EM → EM	.08 (-.20; .36)	0.57	.29* (.00; .57)	1.93	-.12 (-.43; .19)	-0.75
<i>R</i> ² (EM/RE)	.11/.09		.17/.18		.10/.09	
<i>NV5-R</i>						
Actor EM	-.09 (-0.45; .26)	-0.50	.18 (-.15; .51)	1.13	-.01 (-0.36; .33)	-0.06
Actor RE	.07 (-0.26; .40)	0.41	.25 (-.08; .58)	1.47	.05 (-0.24; .35)	0.33
Partner EM → RE	.20 (-0.11; .52)	1.25	.01 (-.30; .33)	0.06	.09 (-0.19; .38)	0.60
Partner RE → EM	.11 (-0.26; .48)	0.58	.06 (-.32; .43)	0.32	.28 (-0.08; .65)	1.47
Gender → EM	-.13 (-0.68; .42)	-0.46	.19 (-.33; .70)	0.73	.00 (-0.54; .53)	0.00
Gender → RE	-.10 (-0.58; .38)	-0.40	.06 (-.43; .54)	0.24	-.08 (-0.51; .36)	-0.36
<i>Interaction effects</i>						
Gender x EM → EM	.19 (-0.36; .73)	0.68	-.16 (-.67; .35)	-0.62	.27 (-0.27; .80)	1.00
Gender x RE → RE	-.15 (-0.68; .38)	-0.56	.01 (-.52; .54)	0.04	.13 (-0.34; .61)	0.54
Gender x EM → RE	-.34 (-0.82; .15)	-1.36	.05 (-.44; .53)	0.2	-.17 (-0.61; .27)	-0.77
Gender x RE → EM	.09 (-0.51; .69)	0.30	.41 (-.17; .98)	1.41	.48 (-0.10; 1.06)	1.60
RE x EM → RE	-.06 (-0.30; .18)	-0.50	-.08 (-.32; .16)	-0.67	-.19 (-0.40; .03)	-1.73
RE x EM → EM	.06 (-0.21; .33)	0.43	-.19 (-.44; .06)	-1.46	-.03 (-0.30; .23)	-0.21
<i>R</i> ² (EM/RE)	.03/.04		.14/.07		.18/.08	

Note. GERT= Geneva Emotion Recognition Test, MSCEIT= Mayer-Salovey-Caruso

Emotional Intelligence Test, NV5-R=general reasoning test, EM=employee, RE=recruiter, B=

Unstandardized regression coefficients. Gender was coded 0 (men) and 1 (women). Actor effects refer to effects of one's independent variable on one's own outcome, partner effects refer to the effect of one's independent variable on the partner's outcome. Numbers in brackets from 1 to 12 correspond to the path numbers in Supplementary Figure S2 that visualizes the actor-partner interdependence model predicting individual gains from GERT scores. Displayed are unstandardized regression coefficients based on model estimations with standardized variables. * $<.05$.

Highlights

- Emotional abilities but not general mental ability predicted negotiation outcomes.
- Emotion recognition ability predicted higher gains and perceived likeability.
- Results support the validity of a new test of emotion recognition ability.