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# ***The Relationship between Emotional Intelligence and Negotiation Performance: Preliminary Findings of an Experimental Study with International Business Students***

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## **ABSTRACT**

While the construct of emotional intelligence (EI) has been discussed for many years, its relationship with business negotiations performance is still unclear due to contradictory findings. Those range from a very large to a next to nil explanatory power of EI in explaining the variance of performance outcomes (Dana L. Joseph et al. 2014). Several reasons that may account for the inconsistent results are discussed in this paper: One reason might be that the relationships of IQ, EI and negotiation performance (esp. in business settings) are not, as predominantly supposed, linear positive but follow a non-linear slope. Thus, high levels of emotional intelligence would cause a smaller marginal contribution or even lower performance outcome than medium levels. A second possible reason for inconsistent results may be that important interaction effects have not been controlled for and effects are blurred because variables that are seemingly unrelated show significant relationships when subgroups are inspected. This paper aims to examine possible linear and non-linear direct relationships between IQ, EI and negotiation performance as well as interaction effects with several other variables. Findings show effects of EI on negotiation performance and interaction effects with gender, job experience, and IQ. Higher levels of emotional intelligence lead to better negotiation results, and this is a linear relationship. At lower levels of IQ the effect of EI becomes stronger; as such there might be a compensation effect of deficiencies of IQ with an increase of EI. Job experience reinforces the effect of EI on negotiation outcome. However, this effect is not linear, as with higher experienced people, it decreases at higher levels of EI. Finally, EI explains a larger proportion of the variance of negotiation outcomes with male than with female test persons.

## **1 INTRODUCTION**

On instinct, when it comes to negotiation, many people would say that it is better to negotiate with or buy from someone you like. In contradiction to this, e.g. Harvard researchers Fisher et al. (2011) in their seminal book on negotiation "Getting to yes – negotiating agreement without giving in" advocate negotiators "to separate the problem from the people" (p. 47) if they wish to be successful. According to them, emotions are detrimental to negotiation success and, accordingly, should be avoided. These opposing perspectives lay the ground to investigate the role of emotions in negotiations (operationalized through the concept of emotional intelligence) more carefully. The main research question of this contribution hence can be put as follows: "What is the effect of having higher or lower emotional intelligence on negotiation outcomes, and which moderating variables do play a role?"

Generally it can be stated that, to go through the process of negotiation and reach a decision, social context plays a role. This becomes even more relevant in a globalized and culturally diverse market, being the reality for many business environments. Requirements like 'emotional intelligence', 'social competencies', or 'social skills' are frequently found in job advertisements. Lawler (2001) in his 'affect theory of social exchange' states that EI plays a role in performing sustainable exchange processes. Empirical publications investigate social and emotional competencies and their impact on various performance measures (Deeter-Schmelz und Sojka 2003; Zeidner et al. 2004; McClaren 2013; Evans et al. 2012; Erevelles und Fukawa 2013; Boyatzis et al. 2012; Higgs 2004; Mulki et al. 2015). This study focuses precisely on the role of emotional intelligence in bargaining settings. Several studies have researched the effect of emotions in seller-buyer constellations, marketing exchanges, and relationship development (Andersen und Kumar 2006; Kidwell et al. 2011; Kim et al. 2014a). The purpose of this paper is to develop an understanding of the interaction between objective negotiation outcome and emotional intelligence of negotiators in seller-buyer constellations while taking into account factors that might influence the relationship of these variables.

## **2 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

The literature review section reflects on the main constructs and provides the rationale for linking them by our hypothesis. Negotiation performance as ultimate dependent variable, EI as a predictor and three interaction variables (IQ, experience, and gender) are discussed and subsequently, hypotheses are derived.

### **2.2 Emotional intelligence**

Identifying sales representatives' personal traits and skills and developing staff competencies is an important competitive advantage in business. Requirements like 'emotional intelligence', 'social competencies', or 'social skills' are frequently found in job advertisements. Lawler (2001) in his 'affect theory of social exchange' states that EI plays a role in performing sustainable exchange processes. There are two main research streams in the field of emotional intelligence. The ability based EI conceptualization (cf. e.g. Mayer et al. 2004) understands EI as a mental ability like IQ, which can be objectively determined by comparing the measured EI levels of a person with an externally determined 'maximum value'. Trait EI theories, in contrast, anchor emotional intelligence in the sphere of personality traits and comprise self-perceived skills and behavioral dispositions at lower levels of personality hierarchies (Petrides 2011). Trait EI can also be phrased as "emotional self-efficacy". Self-efficacy is related to a person's belief of having the right skills and abilities (based on past experience) to show behaviors which are congruent with reaching their targets (Bandura 1977). Emotional self-efficacy is the perception of an individual to possess a certain level of emotional skills. Trait EI theories state that different EI profiles are more advantageous in certain situations, versus less in other contextual settings: 'For example, being reserved and non - supportive is not a mark of emotional dimness, but is a personality trait that happens to be more adaptive than sociability and emotional expression in, say, research contexts' (Petrides 2011, p. 660–661).

Within the contextual framework of this study, the authors decided to use trait EI theory, developed and presented by Petrides and Furnham (Petrides und Furnham 2000; Petrides 2010). This theory seems applicable to discuss negotiation performance and its predictors for various reasons: First, it abandons the idea of measuring against a predefined 'maximum'

level of EI, and accepts the subjectivity of emotional perception and emotional self-efficacy. Secondly, the theory is applicable throughout different contextual settings. Thirdly, trait EI has been operationalized and applied in numerous publications in psychology as well as in social sciences and provides solid psychometric properties across different translations and adaptations of its measurement instruments (Telle et al. 2011; López-Pina et al. 2010; Shipley et al. 2010; Andrei et al. 2016).

### **2.3 Negotiation and negotiation performance**

Pruitt (2013, p. xi) defines negotiation “as a form of decision making in which two or more parties talk with one each other in an effort to resolve their opposing interests”. When heading into a negotiation, the parties have different interests and objectives concerning the outcome of the negotiation (Carnevale et al. 1981; Thompson et al. 2010). The most common negotiation objective is a fusion of different interests (Deutsch 1949). Negotiation intentions can vary in their nature as highly competitive, highly cooperative or mixed motives. The intention of a negotiation can vary between these three objectives and can have highly competitive, cooperative or mixed motives as origin (Lax und Sebenius 1986). The topic of negotiation has been studied from various perspectives: as an economic model (Lax and Sebenius 1986), within decision-making behavioral theory, or in social psychology (Bazerman et al. 1985). There are many factors found to be influential on negotiation outcome or moderating negotiators’ performance. Only until recently, emotions were not studied thoroughly in the concept of negotiation. Contemporary research has started paying more attention to the emotional competences of negotiators and their contribution to a negotiation outcome. Several studies show that positive emotions contribute to a better decision making process, facilitating problem solving thinking and creative ideas (Carnevale und Isen 1986), win/win settlements (Hollingshead und Carnevale 1990), satisfaction of an opponent (Forgas 1998), and establishment of relationship (Lawler et al. 2000). Emotional competences imply management of positive and negative emotions and correct assessment of emotions of others. Therefore, emotional aptitude of negotiators is crucial for enhancement of negotiation performance and reaching desirable outcomes (Kim et al. 2014b).

Negotiation performance, for this study, is defined as only the quantifiable result of a negotiation about the price of a product and its accompanying services in a single transaction. Clearly, this definition covers only one dimension of negotiation performance. Other aspects that are e.g. more behaviorally oriented, like establishment of sustainable relationships, or compromising on a bad deal in one transaction to increase the likelihood of succeeding in another negotiation, are not discussed here.

### **2.4 Linear effects of EI on negotiation performance**

Bar-On (1997) in his studies suggests that EI is considered to be a better predictor of job success than IQ. Goleman (1995) suggests that for personal success EI is an entering point. Both suggest that EI plays an important role in a carrier success; it helps to socialize, empathize, and negotiate which is essential for a growing globalized economy. O’Boyle et al. (2011) find in a meta-analysis that EI supports individual performance in a work-related activities including leadership and teamwork projects, while IQ tends to support work activities related to individual cognitive assignments and academic tests. There have been numerous research studies done supporting the idea of EI being a contributing factor to the employees’ performance at a workplace. Kidwell et al. (2011) find a moderate positive relationship between ability EI and performance as well as interaction effects of EI on the

relationship between customer orientation and manifest influence on performance. Lassar and Shepherd (2013) reported a positive relationship between trait EI and self-reported performance. Mulki et al. (2015) found a positive relationship of 'emotion regulation' as one of the dimensions of EI scale with self-reported job performance. Henning-Thurau et al. (2006) found that authentic emotional labor of service staff, rather than the extent of smiling, influences the customer's emotions and perceptions. Hasford et al. (2015) investigated the persuasive power of emotions on decisions. Lee and Ching Lim (2010) found that emotional receptivity and the level of emotional intensity displayed by the marketer leads to greater enjoyment and liking by the customer. Day and Carroll (2004) used an ability measure to test the relationship of EI and task performance and they reported only a weak relationship between the two constructs. Based on aforementioned findings, we propose the following hypothesis:

*H1: There is a positive direct effect of EI on negotiation outcome. With increasing levels of EI, negotiation performance increases as well.*

## **2.5 Non-linear effects**

Concave or curvilinear effects are scarcely modelled and empirically tested in management research, however they might be assumed when investigating social relationships. Diener et al. (2002) demonstrate that friendliness has a concave relationship with income. Too high levels of friendliness might lead customers to perceive staff's behavior as obtrusive, pretentious, or dishonest. Analogous, a negotiator who is playing very well on the 'emotional piano' could be perceived as manipulative and less credible. The client becomes mistrustful and may doubt the seller's authenticity. Conversely, negotiators who rate very high in emotionality, empathy, or friendliness, might take over the customer's perspective at the expense of the own benefit, and as such performance might not be optimal. Grant und Schwarz (2011) address this issue in their article 'Too Much of a Good Thing : The Challenge and Opportunity of the Inverted U'. They present numerous examples of generally positive traits and skills which – in excess – lead to negative effects. With respect to EI, there have been studies questioning the linearity of the relationship in related fields like leadership, Management, or Entrepreneurship (Huy Le et al. 2011; Jordan et al. 2010; Lindebaum und Cartwright 2011; Kafetsios et al. 2011; Moeller und Kwantes 2015). This phenomenon is addressed as 'curse of emotion' (Antonakis et al. 2009), or, as Kilduff et al. (2010) put it, the 'dark side of emotional intelligence'. Most empirical findings so far have found, if at all, a linear-positive relationship of EI and sales performance, with different levels of the strength of this relationship. A „the more the better“ paradigm is prevailing (Boyatzis et al. 2012; Kidwell et al. 2011; Higgs 2004; Mulki et al. 2015; Deeter-Schmelz und Sojka 2003). There is recent research in various management disciplines like leadership, entrepreneurship, general management ...) which challenges the paradigm of „the more the better“ (Huy Le et al. 2011; Jordan et al. 2010; Lindebaum und Cartwright 2011; KAFETSIOS et al. 2011; Moeller und Kwantes 2015). What concerns EI, it is argued that people who are able to manage their and the emotions of others in a very intensive way might be perceived as manipulative and dishonest when it comes to risky business situations. This phenomenon is named „curse of emotions“ (Antonakis et al. 2009). Another explanation concerns a lack of ability to „fight through“ tough negotiations and stand in for a position even if it might insult or embarrass the counterpart. People with high levels of empathy might tend to concede more likely in favour of a good relationship. (nachzitiieren). On the other end of the scale, people with low emotional skills and competencies are in trouble of establishing and maintaining good

relationships, which is evident. In the case of cognitive intelligence (IQ) research in related fields also suggests that a linear increment of cognitive abilities not necessary leads to the same increment of performance. For instance, very high levels of IQ might „force“ people to calculate many alternatives and question open details (as they have many details in mind) and as such do not reach an agreement or lack at least efficiency in reaching an agreement. An inverted U-shaped curve might explain weaker linear relationships as they are found in several papers (Barrick und Mount 1991). This paper questions this linear relationship, and attempts to also inspect a curvilinear relationship, of EI with respect to negotiation outcome. Hence, we propose:

*H2: A non-linear (quadratic) regression function approximates the effect of EI on negotiation outcome more precisely than a linear function, thus, with increasing levels of EI, negotiation performance first increases, and as of a certain level of EI, negotiation performance declines again.*

## **2.6 Cognitive intelligence (IQ) as a moderator**

Cognitive intelligence (also referred to as the „G“ factor or „IQ“) is defined as a general mental capability that involves the ability to reason, plan, solve problems, think abstractly, and comprehend complex ideas. It is commonly assumed that successful people are equipped with a higher cognitive intelligence than the average of the population.

However, IQ cannot be seen as the sole driver of success or performance. Dual process theories (Cacioppo und Gardner 1999; Chaiken 1980; and later: Evans 2003) argue that cognitive as well as emotional components influence decisions. In marketing, Kidwell et al. (2011) found that the correlation between EI and sales performance is positive at higher levels of cognitive ability. Verbeke et al. (2008) used two samples of sales people comparing influences of IQ and social competencies on performance. Their findings indicate a significant moderating effect of social competencies on the IQ-Performance relationship such as high levels of social competencies lead to a much stronger influence of IQ on performance and vice versa.

IQ as well as EI have an influence on negotiation performance. Under the assumption that variables in social sciences may not only be considered in an isolated way, interaction effects of IQ and EI with respect to negotiation outcomes should be discussed. The comparison of two different intelligence shows that IQ and EI are not opposite but rather separate competences (Block 1995). Akers and Porter (2003) even argue that there is zero correlation between the IQ of students and their success in professional carriers. IQ influence is at maximum 10-25% and the reminder depends on other factors which are at the most influenced by EI. If IQ and EI interplay in the provision of performance, the moderating effect of IQ on the EI-negotiation outcome might be established in a way that a lack of the former might be compensated by a stronger effect of the latter construct. Thus, we hypothesize:

*H3: IQ moderates the effect of EI on negotiation performance in a way that lower IQ increases the effect of EI on negotiation outcome.*

## **2.7 Job experience moderating the effect of EI on negotiation performance**

Jürgen Mittelstraß (2005) defines experience as an acquired capability and the familiarity of dealing with factual actions without referring to theoretical knowledge, but based on practical wisdom gained from what one has been observed, encountered, or undergone. Job experience is the proportion of experience which is associated with a person's professional activities (Quiñones et al. 1995). Sales experience refers to a sales person's gaining of

wisdom through sales encounters, discussion, and negotiations with different clients as well as the experience of success or failure of various sales strategies which accumulate over time (Singh und Das 2013). A positive relationship of job experience and performance can be deduced from various theoretical models. Weiss' (1990) learning theory assumes that learning is based on experience, and knowledge and skills cumulate through experience. Schmidt et al. (1986) states: 'experience provides the medium for learning' (p. 167). Within the contingency theory of performance, experience is one of the core elements of competency (Boyatzis 2008, S. 7). Becker's (1962) human capital theory posits that more experienced employees perform better than inexperienced ones. Experiential learning theory emphasizes the central role of experience learning and assumes a positive relationship of job experience and performance (Kolb et al. 2001). With respect to sales, Churchill et al. (1985) include sales experience as one determining factor to explain sales efficiency. Empirically, Fu (2009) found a positive relationship of sales experience and sales performance in an international construction company. Quinones et al. (1995) estimated the correlation of job experience and performance to be appx. 0.27. Dwyer et al.(2000) found a positive relationship of sales experience and performance in the insurance field. With respect to experience and EI, Cook et al. (2011) found a positive relationship of experience and emotional competences in an empirical investigation among students, stating that more job experience increases the level of emotional competences. Bartkus et al. (1989) distinguish between inexperienced and experienced sales people by stating: 'It is possible that inexperienced salespeople perform well by working harder while experienced salespeople perform well by working smarter' (p. 15). As such, it can be concluded that the more experienced a sales person is, the more can he/she exploit her emotional intelligence to even perform better. As such the following hypotheses are proposed:

*H4: Job experience moderates the effect of EI on negotiation performance in a way that the effect of EI on negotiation performance is stronger with experienced than with less experienced negotiators.*

## **2.8 The moderating role of gender**

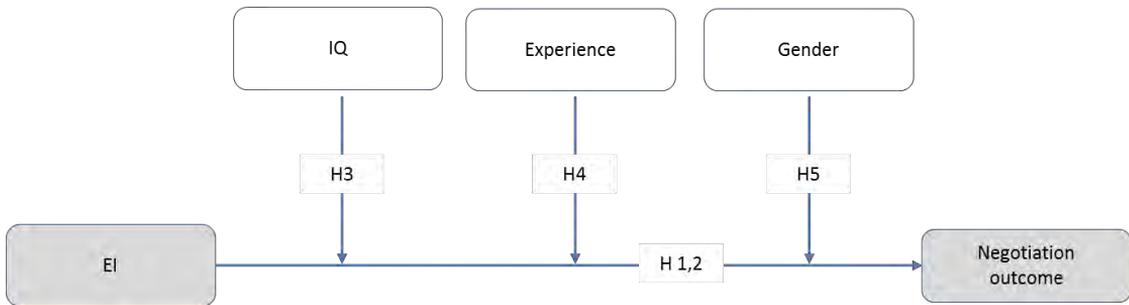
Gender differences in the context of negotiations have been a hot topic over the past years (Stuhlmacher und Walters 1999). The findings, however, are controversial. It was suggested that in the course of negotiations men tend to rely more on logic and behave rationally, while women rely on intuition and emotions. In addition, men are expected to emphasize objective facts and apply objective reasoning, while women focus mainly on relationships (Gilligan 1982). Craver (2002), however, argues that there is no significant difference among men and women with respect to performance on the negotiation exercises. Given this ambiguity, and following common sense, that women are better able to rely on intuition and emotions anyway, the effect of measured emotional intelligence would be affecting negotiation outcomes more for male negotiators. Thus, we propose the following hypothesis:

*H5: Gender moderates the effect of EI on negotiation performance in a way that the effect of EI on negotiation performance is stronger with male than with female negotiators.*

## **2.9 Research model**

Summarized, figure 1 shows the conceptual model that has been developed for this study. Direct effects of EI and interactions with IQ, Experience, and Gender will be analyzed subsequently.

**Figure 1.** Hypothesized Relationships between Variables



### 3 RESEARCH DESIGN AND MEASURES

Ever since Neumann and Morgenstern (1944) formalized game theory, it started to be applied in marketing science, especially in areas of competitive behavior and negotiations. It was argued that bargaining games that require participants to argue regarding one particular issue are simplistic and solved easily through basic calculations from both sides (Chatterjee und Ulvila 1982). Bargaining games with multiple factors of consideration, however, require more efforts and calculations and thereby are riskier regarding wrong assumptions. Distributive bargaining games have been selected as a means to analyse the relationship of EI and negotiation performance. Bargaining games permit control over the content and environmental aspects of the negotiation. Negotiations can be easily compared as the basic conditions can be kept the same. Data have been collected from students of the University of Applied Sciences Upper Austria. Students were informed about the experiment in advance and participation was on volunteer basis. The data was gathered through the experiment, followed by questionnaires.

The participants were 107 graduate business students from an international marketing and sales degree programme in Austria. Of those students, 61 were female, 46 were male. Mean experience was 2,8 years.

Two games were designed, out of which one was a sales task concerning a business product (a welding aggregate) and the other one comprised a business service (a sales training). Both games included similar variables to negotiate about. In the welding aggregate game those were: the price, shipment (either seller or buyer needs to take care), an adjustment to customize the product (which could be either provided and paid by the seller or the buyer), and a service contract (which could be included or not, thus producing cost on either the buyer's or the seller's side). In the sales training game, similarly, the price had to be agreed upon, secondly the meal and accommodation (taken care of either by the seller or the buyer), travel expenses (either seller or buyer), and post-training evaluations (included or not, as such producing cost for either buyer or seller).

Negotiation performance was measured through experimental distributive negotiations. Each student was engaged two times, one time as a seller, and one time as a buyer. Performance was computed by comparing the negotiated price and three additional bargaining variables (that could be negotiated either to be provided at the buyer's or at the seller's cost) with the maximum possible gain, both for buyer and seller in both games. The average of both games was computed per participant. The following example serves to illustrate the performance

calculation: The participants negotiated about a welding apparatus, one participant was in the seller's, the other one in the buyer's role. The price of the apparatus stretched from max. EUR 270 (maximum gain for Seller) to min. EUR 180 (maximum gain for the buyer), thus the bargaining zone was EUR 90. Participants could negotiate in steps of 10 EUR. Additionally, delivery could be negotiated: if the seller has to take the shipping cost (free buyer's address), he has to bear cost of EUR 35. If the seller agrees to pick up the apparatus from the seller's premises, this would induce cost of EUR 15 to the buyer. Secondly, the parties could bargain about a converter which is needed to operate and which is not included in the base price. If the seller has to mount this converter, this would mean additional EUR 70 cost for the seller. If the buyer mounts the converter on his own, he has to expect cost of EUR 60. Thirdly, a service agreement has to be negotiated. If the seller agrees to include service in the negotiated price, this will cost him EUR 25. If the buyer accepts to service the apparatus on his own, this will cost EUR 55. Table 1 shows the combinations that can occur:

**Table 1.** Combinations of Buyer/Seller Cost and Gain

	Buyer	Seller	Buyer max	Max/min gain for Buyer/Seller		
				Buyer min	Seller max	Seller min
Price range	180	270	180	270	270	180
Shipping cost	15	35	0	15	0	-35
Converter cost	60	70	0	60	0	-70
Service cost	55	25	0	55	0	-25
			<b>180</b>	400	<b>270</b>	50

The achieved negotiation performance for the buyer was calculated as a percentage of his maximum gain = minimum cost (i.e. EUR 180). For the seller, the achieved negotiation performance, respectively, was calculated as a percentage of his maximum gain, i.e. EUR 270.

Cognitive intelligence was assessed by using the students' scores of their study entrance test, which is measured by the INSBAT Test (Arendasy et al. 2012). This test measures intelligence levels and intelligence structure according to the Cattell-Horn-Carroll model (CHC-model), and includes six abilities (fluid intelligence, crystalline intelligence, quantitative reasoning, short-term and long-term memory and visual processing). The "fluid" intelligence component was selected as the measure for this study.

Emotional intelligence was assessed with the trait emotional intelligence questionnaire (TEIQUe) in its short version (30 items). The Trait Emotional Intelligence theory provides a self-report measure of emotional self-efficacy (Petrides et al. 2007), thus it measures the perception of an individual concerning their own emotional capabilities (Petrides 2011, p. 660). As such the instrument does not provide „right“ or „wrong“ answers and therefore is applicable in multiple contextual settings. This is important because „For example, being reserved and non - supportive is not a mark of emotional dimness, but is a personality trait that happens to be more adaptive than sociability and emotional expression in, say, research contexts“ (Petrides 2011, p. 660–661). Different job profiles require different emotional profiles (Pervin 1968). Bandura (1977) in his self-efficacy theory posits that a person's „Überzeugung“ to have sufficient skills for performing a desired goal helps to achieve this goal. Hence, the self-perception of having emotional skills and competencies leads to better

performance. Trait EI has been operationalized and applied in numerous publications in psychology as well as in social sciences and provides solid psychometric properties across different translations and adaptations of its measurement instruments (Telle et al. 2011; López-Pina et al. 2010; Shipley et al. 2010; Andrei et al. 2016).

*Gender* was assessed categorically within the EI questionnaire, and the same was true for *job experience* in years and month which was also provided by the students.

#### 4 DATA ANALYSIS

To reveal the hypothesized relationships, multiple regression analyses were performed. As the measurement of the variables was performed at different scale levels, all variables were mean-centered before analysis.

To test the first set of hypotheses (H1 and H2), negotiation outcome as dependent variable and EI as well as the squared term of EI were entered into the regression equation. Gender, job experience and IQ were entered as control variables.

**Table 2.** Linear and Quadratic Regression of EI on Performance

Model		Coefficients <sup>a</sup>				Sig.
		Unstandardized Coefficients		Standardized Coefficients	t	
		B	Std. Error	Beta		
1	(Constant)	.109	.277		.393	.695
	Gender	-.008	.177	-.004	-.045	.964
	Job_Experience	-.142	.094	-.143	-1.512	.134
	IQ	-.033	.089	-.033	-.376	.708
	EI	.580	.096	.557	6.059	.000
	EI_SQUR	-.081	.090	-.084	-.901	.370

a. Dependent Variable: Negotiation\_Outcome ( $R^2 = .285$ )

As can be seen from table 2, there is a significant linear effect of EI on negotiation outcome ( $\beta = 0.557$ ;  $t = 6.059$ ;  $p = .000$ ) when controlled for gender, job experience, and IQ. Thus, H1 can be confirmed. H2, proposing a curvilinear effect, was analyzed by including a quadratic term of EI (EI\_SQUR) into the regression equation. The effect is, as expected negative, but next to nil, and insignificant. Hence, H2 has to be rejected.

To investigate the moderating influence of IQ on the relationship of EI and negotiation outcome, the dataset was split into two groups (IQ LOW and IQ HIGH) with respect to IQ based on equal percentiles.

**Table 3.** Linear and Quadratic Regression of EI on Performance, Groups of low and high IQ

Model		Coefficients <sup>a</sup>			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
IQ	(Constant)	-.070	.306		-.230	.820
LOW	Gender	.124	.217	.068	.571	.571
	Job_Experience	-.358	.101	-.436	-3.562	.001
	EI_SQUR	-.015	.115	-.017	-.134	.894
	EI	.579	.108	.623	5.353	.000
IQ	(Constant)	.339	.455		.745	.460
HIGH	Gender	-.106	.275	-.049	-.384	.703
	Job_Experience	.154	.163	.124	.942	.351
	EI_SQUR	-.140	.138	-.141	-1.020	.313
	EI	.569	.160	.498	3.551	.001

a. Dependent Variable: Negotiation\_Outcome (R<sup>2</sup> IQ LOW = .471; IQ HIGH = .263)

H3 predicted that lower IQ increases the effect of EI on negotiation outcome. The regression results show that with a lower level of IQ, EI explains a larger proportion of the variance of negotiation outcome ( $\beta = 0.623$ ;  $t = 5.353$ ;  $p = .000$ ) than the group with higher levels of IQ ( $\beta = 0.498$ ;  $t = 3.551$ ;  $p = .001$ ). The difference between the groups is  $\beta = .165$ . As such, H3 can be confirmed. The effects are linear, the quadratic term did not show significant results.

To investigate the interaction effect of job experience on the EI-negotiation outcome relationship, we split the dataset into two groups again. Based on equal percentiles, we defined a LOW and a HIGH EXP group and ran regression analyses on both groups, controlling for gender, and IQ and including TEI and its squared term TEI\_SQURD into the regressions. Table 3 shows the regression results.

**Table 4.** Linear and Quadratic Regression of EI on Performance, Groups of low and high Experience

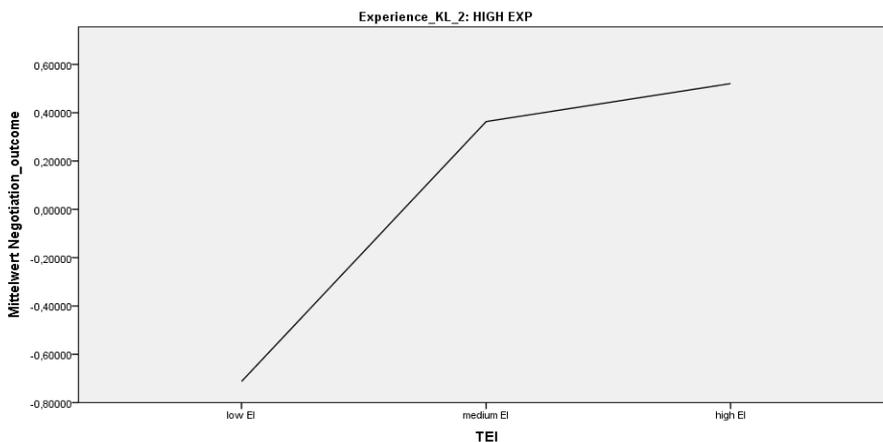
Coefficients<sup>a</sup>

Experience	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
LOW EXP	(Constant)	.371	.452		.821	.416
	Gender	-.221	.300	-.097	-.736	.465
	IQ	-.048	.136	-.047	-.354	.725
	EI	.614	.166	.484	3.688	.001
	EI_SQUR	.041	.133	.040	.306	.761
HIGH EXP	(Constant)	-.067	.325		-.207	.837
	Gender	.225	.197	.132	1.142	.260
	IQ	.054	.110	.057	.485	.630
	EI	.553	.100	.676	5.534	.000
	EI_SQUR	-.272	.109	-.306	-2.490	.017

a. Dependent Variable: Negotiation\_outcome (R<sup>2</sup> LOW EXP = .255; HIGH EXP = .419)

H4 stated that higher job experience increases the effect of EI on negotiation outcome. The regression results (see table 4) show that with a higher level of job experience, EI explains a larger proportion of the variance of negation outcome ( $\beta = 0.676$ ;  $t = 5.534$ ;  $p = .000$ ) than the group with higher levels of IQ ( $\beta = 0.484$ ;  $t = 3.688$ ;  $p = .001$ ). The difference between the groups is  $\beta = .192$ . As such, H4 is confirmed. Interestingly, and not hypothesized, there is also a significant effect of the squared term of EI in the group with high job experience ( $\beta = -0.306$ ;  $t = -2.490$ ;  $p = .017$ ). The  $\beta$  coefficient is negative which indicates that with increasing EI beyond a certain level, the negotiation outcome does not increase at the same level. Figure 2 presents this effect at three different levels of EI. However, this finding has to be interpreted with maximum caution, as the sample size for the subgroups of LOW EI ( $n=21$ ), MEDIUM EI ( $n=13$ ), and HIGH EI ( $n = 18$ ) are very low.

**Figure 2.** Negotiation Outcome at Three Levels of EI for Respondents with high job Experience  
 In H5, we assumed that gender moderates the effect of EI on negotiation outcome in a way that the effect of EI on negotiation is stronger with male than with female negotiators. Table 5 shows the computed regression results.



**Table 5.** Linear and quadratic regression of EI on Performance, Groups of Female and Male Negotiators

Coefficients<sup>a</sup>

Gender	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
female	(Constant)	.138	.164		.843	.403
	Job_experience	-.192	.129	-.193	-1.488	.143
	IQ	-.033	.125	-.033	-.261	.795
	EI	.517	.147	.480	3.516	.001
	EI_SQUR	-.115	.132	-.123	-.869	.389
male	(Constant)	-.034	.189		-.181	.858
	Job_experience	-.107	.147	-.107	-.730	.470
	IQ	.054	.141	.054	.383	.704
	EI	.674	.141	.672	4.788	.000
	EI_SQUR	.047	.143	.046	.326	.746

a. Dependent Variable: Negotiation\_outcome (R<sup>2</sup> female = .225; R<sup>2</sup> male = .393)

Regression results show that for male ( $\beta = .672$ ;  $t = 7.788$ ;  $p = .000$ ) the effect of EI on negotiation outcome is stronger ( $\beta: +0.192$ ) than for female negotiators ( $\beta = .480$ ;  $t = 3.516$ ;  $p = .001$ ). H5 predicting this result is therefore confirmed.

## 5 DISCUSSION

In our study, we discussed direct effects of trait emotional intelligence on negotiation performance as well as interaction effects with IQ, gender, and job experience. Our research revealed that there is a relationship between EI and negotiation outcome and this relationship is rather linear than curvilinear. Higher levels of emotional intelligence lead to better negotiation results. This is in line with research conducted e.g. by Kidwell (2011) in a marketing exchange setting. When IQ as a moderating variable is introduced, it is found that at lower levels of IQ the effect of EI becomes stronger. We might assume that there is a compensation effect of deficiencies of the former with an increase of the latter, which, to the best knowledge of the authors, has not been revealed so far in other studies. As for the moderating influence of job experience, two findings are interesting: first, job experience reinforces the effect of EI on negotiation outcome. May be because more experienced people can better exploit their emotional competencies to reach their achieved goals. Secondly, we found that this relationship – with higher experienced people – is not linear, but decreasing at higher levels of EI, which is in line with e.g. Spearman's (1927) law of 'diminishing returns of intelligence' which implies that with higher levels of intelligence its contribution to performance decreases. Finally, and with respect to the moderating effect of gender on the EI – negotiation outcome relationship, it was found that, with male negotiators, EI explains a larger proportion of the variance of negotiation outcomes than with female test persons. One might conclude, and this is also confirmed by gender studies (e.g. Gilligan 1982), that women

do naturally possess higher levels of emotional competencies, as such an increase of those does lead to better outcomes than with men.

## 6 CONCLUSIONS

The findings shed light on the shape of the relationship between EI and negotiation performance as well as interaction effects with several variables. The scientific contribution comprises a step towards a better understanding of the disputed relationship between EI, IQ and negotiation performance and the role that EI plays among other variables to explain performance. We showed that negotiation outcomes are triggered by EI, but several interaction effects have to be considered. Our approach to select three different data sources (test data, self-report questionnaires, and objective negotiation results) may help to secure the findings also beyond frequently suspected common method variance issues that are a frequent criticism in social sciences, especially in fields where personality related variables are inspected.

For business practitioners, the findings may help to better grasp the value of EI for negotiators in different constellation and to critically reflect recruitment and training policies, respectively. As literature suggests, HR managers should put more emphasis on the construct of EI in their selection procedures, selection and training of sales staff.

## 7 LIMITATION AND AVENUES FOR FUTURE RESEARCH

This study has of course several limitations. First, the research environment was more a “lab setting” than a “real-life constellation”. However, we tried to provide games that are as realistic as possible and the involved students tried hard to reach their desired goals. Future research might replicate the study in an even more realistic setting, and might invite sales people to participate. Secondly, we had students of different cultural backgrounds involved which we did not control for. Future research should definitely compare different cultural settings. Thirdly, the sample size was, with respect to analyzing subgroups, relatively small, and as such, some interesting combinations of interaction effects were not analyzed. Larger sample sizes might allow doing so in future. Fourthly, there are clearly more negotiation outcomes than only those monetary results which we have analyzed. Future research could enrich the set of dependent variables by behavioral outcomes, relationship oriented outcomes, or strategic outcomes. Finally, there was no distinction between the buyer and the seller role in our study. It would be of utmost interest to investigate into dyads of negotiators, e.g. how lower EI of a buyer interacts with higher EI of a seller, or vice versa, with respect to negotiation performance.

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