# **Embedding Automated Emotional Analysis into Role-Playing Exercises: Benefits for Sales Education and Training**

By Ilona Pezenka and David Bourdin

Emotions play a key role in sales negotiations. Thus, sales representatives should be able to be aware and take advantage of their own emotional inventory on the one hand, and to accurately interpret customers' emotions to empathize with them on the other hand. However, it is still unclear how a salesperson's emotions can reinforce or inhibit the creation of a pleasant atmosphere in negotiations and, consequently, increase sales performance. Furthermore, it is even less clear how emotional intelligence can be implemented in sales training. We bridge this gap by introducing a new pedagogical method and reporting on its application in a university sales course. In particular, the proposed educational concept consists of sales negotiation role-plays that are recorded using a facial expression analysis software, putting students at the center and enabling feedback based on objective data. This paper provides support for the success of this interactive approach and discusses the challenges and opportunities with regard to its implementation.

### INTRODUCTION

Emotions play a crucial role in all kinds of social exchange, including personal selling and sales negotiations, and affect the dynamics of interpersonal interaction (Erevelles & Fukawa, 2013; Morris & Keltner, 2000; Ogilvie & Carsky, 2002; Van Kleef et al., 2004). Therefore, sales negotiations cannot be considered as strictly rational processes. Indeed, even considerably weak emotional reactions by one of the negotiators can lead to misunderstandings and, thus, may have a major impact on the negotiation context and process (Adler et al., 1998; Allred et al., 1997; Barry et al., 2004). Consequently, emotional intelligence (EI), which refers to the abilities that enable awareness of the emotional states of oneself and others, and thus, allows to regulate or use emotions to positively affect role performance (Mattingly & Kraiger, 2019), plays a key role in the negotiation process and should therefore be an essential component of sales education and training. Cron et al. (2005) argue that sales training must move beyond task-related knowledge, skills, and abilities and focus more on a wider range of competencies. Importantly, this includes gaining a

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thorough understanding of the occurrence and role of emotions in a negotiation situation (Kopelman et al., 2006). Managing personal emotions and empathizing with the other party help to resolve conflicts and build buyer trust in the salesperson (Ahearne et al., 2007). Thus, salespersons should be capable of managing and taking advantage of their emotional inventory as a tool for bargaining. Novice negotiators often assume good negotiations to be cool and unemotional. However, Ogilvie and Carsky (2002) emphasize that "the key to success is to be aware of the emotional components, to understand their role, and to manage them" (p. 382).

Research suggests that university sales education is a significant contributor to the future performance of sales representatives (Bolander et al., 2014). Organizations expect entry-level salespeople to be well-prepared to create value almost immediately upon hire (Dixon & Tanner, 2012). Therefore, it is critical for faculty to provide innovative methods to better prepare entry-level sales professionals. Of all the sales skills that can be taught, establishing rapport and creating a connection with customers as well as uncovering customer needs through effective communication appear to be among the most important tactics that can influence buying behaviors (McFarland et al., 2006). Bolander et al. (2014) state that the ability to create an emotional response is of utmost importance for future sales professionals.

However, it is still unclear how a salesperson's emotions displayed via facial expressions can reinforce

or inhibit the creation of a pleasant atmosphere in negotiations. Furthermore, it is even less clear how EI can be implemented in a sales training curriculum. We bridge this gap in the present paper by proposing a novel pedagogical method (for universities, sales training institutes, and firms) that fosters future sales representatives' awareness and control of emotions displayed in sales negotiations, which may influence buyers' perceptions of the seller's personality (Hall & Andrzejewski, 2011; Hareli et al., 2009) and consequently impact their behavior. Our approach addresses research calls to examine how empathetic behavior can be instilled through sales training in order to increase sales performance (e.g., Lassk et al., 2012). In the remainder of the paper, we will outline the theoretical background revolving around the covered key concepts, introduce our pedagogical method in detail, and discuss the relevant success criteria. In a final step, we will conclude with practical implications.

# THEORETICAL BACKGROUND - EMOTIONS IN SALES CONVERSATIONS

Emotions are inevitably part of many social exchange situations (Lawler, 2001). They significantly shape the initiation, the development, and the retention of relationships over time (Andersen & Kumar, 2006). Consequently, given the interactive nature of personal selling and sales management, many aspects of e.g. sales presentations or negotiations inherently have affective elements (Erevelles & Fukawa, 2013), and thus, affect and emotions play a crucial role during the entire sales process (Kidwell et al., 2007; Morris & Keltner, 2000; Van Kleef et al., 2004). Even subtle displays of emotions can potentially lead to wrong inferences regarding the exchange partner's intentions and, therefore, may have a major impact on the sales context and outcome (Adler et al., 1998; Allred et al., 1997; Barry et al., 2004). For instance, Verbeke and Bagozzi (2002) explore the role of shame and embarrassment and find that these feelings lead to protective reactions, which negatively influence performance, whereas George (1998) finds that the positive mood of salespeople potentially facilitates helping behaviors toward customers.

Furthermore, literature suggests that it is crucial for salespeople to understand the occurrence and role of emotions in sales situations (Kidwell et al., 2007;

Kopelman et al., 2006). Kidwell et al. (2007) state that the ability to appraise the emotions of others accurately has an impact on the performance of adaptive selling and customer-oriented selling. In this context, emotional intelligence (EI) plays an important role. Mayer et al. (2000) define EI as "the ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, and regulate emotion in the self and others" (p. 396). Research has found a positive association between EI and job performance in general (O'Boyle Jr. et al., 2011; Semadar et al., 2006), EI and leadership performance (Dulewicz et al., 2005), and EI and sales performance (Jennings & Palmer, 2007). However, a study by Wisker and Poulis (2015) found that EI is not directly related to sales performance, but that EI links to sales performance through adaptive selling behavior. Although the connection between EI and sales performance has not yet been clearly proven, the results of empirical studies indicate that at least individual components of EI, such as empathy (Anaza, Inyang, & Saavedra, 2018; Deeter-Schmelz & Sojka, 2003), have an impact on sales outcomes. It is therefore beyond discussion that it is an advantage if salespersons have an appropriate level of EI.

There is significant evidence that EI can be learned and that specific training increases EI (Hodzic et al., 2018; Mattingly & Kraiger, 2019; Schutte et al., 2013). EI training is meant to develop participants' sensitivity, and to bring them new understanding of the emotional dimension of personal interactions (Hodzic et al., 2018). Hodzic et al. (2018) find that perceiving and understanding emotions have a higher potential to be taught than facilitating thought and regulating emotions. In summary, it is important to train prospective salespersons to better understand and interpret their own and others' emotions in order to be more successful in their jobs.

However, emotional expressions are not only verbal. Indeed, non-verbal communication is as important as verbal communication as a tool in personal selling (Stewart et al., 1987). Thus, the display of emotions has a strong influence on the course and outcome of sales conversations and negotiations. Negotiation researchers have explored the effects of specific emotions on observed behavior during the negotiation process. A

literature review by Kopelman et al. (2006) reveals that positive emotion expression increases cooperative tactics and enhances the quality of agreements, whereas the display of negative emotions leads to worse outcomes in terms of achieving bargaining objectives. Researchers have argued that salespersons must be able to accurately recognize both verbal and nonverbal cues to be successful at their jobs (e.g., Byron et al., 2007). Likewise, Olekalns and Druckman (2014) postulate that negotiators should be able to strategically induce emotions in others through the expression of own emotions, as these expressions may convey useful information about dislike or malevolent intentions.

Among all non-verbal cues that are directly observable in sales negotiations, facial expressions are widely accepted as strong indicators for emotions (Ekman, 1993, Keltner & Ekman, 2000). For example, an upturned mouth and arched eyes indicate that a person feels happy, whereas a downturned mouth and slanted eyes suggest anger (Ekman, 1993). Since these facial expressions are allusions to emotional states, they contain highly relevant information about likely behavioral tendencies of another person.

# EXPERIENTIAL LEARNING IN SALES EDUCATION

In order to make students aware of the importance of emotions in personal selling interactions and to train them in dealing with sales conversations we chose roleplays as an educational setting based on theoretical frameworks in the existing literature. According to experiential learning theory (Kolb, 1984), practical teaching methods should be favored with regard to the achievement of learning outcomes. This particularly applies to personal selling and sales negotiations, as this discipline is strongly skill-based (Corbett et al., 2010). While traditional classroom approaches encourage the development of primarily abstract conceptual understanding, experiential learning theory provides guidance to support the development of practical skills. Universities are increasingly responding to industry demands and focusing more on active skills development and less on passive learning of theoretical ideas (Healy et al., 2011). More and more sales instructors rely on role-plays to assess students' ability to apply what they have learned in theory about sales.

Role-plays, as a method of experiential learning, are suggested by several authors to be particularly wellsuited for personal selling courses as they enable students to practice the skills necessary to succeed in sales (e.g., Castleberry, 1989; Inks & Avila, 2008; Moncrief, 1991). Indeed, according to Deeter-Schmelz and Kennedy (2011), 97% of pure sales courses and 58% of business schools with sales programs use roleplays. A more recent study by Spiller et al. (2020) reports that the most common teaching method used for professional selling courses was lecture (100%), followed by class discussions (91.7%), and role-plays (87.5%). Even 100% of advanced sales courses used role-plays (Spiller et al., 2020). A role-play assignment usually consists of providing short scenarios or roles, and students are then asked to portray their roles. There are a number of positive effects of role-plays, for instance, they help develop business communication skills and critical thinking abilities (Sojka & Fish, 2008). The classmates may observe the role-play or, alternatively, the role-play can be video recorded (e.g., Moncrief, 1991; McDonald, 2006) and subsequently discussed in class. As videotaping allows for viewing after the role-play exercise, the instructor can make comments without interrupting the flow of the role-play (McDonald, 2006).

#### METHODOLOGY AND IMPLEMENTATION

In order to teach EI in role-plays, appropriate technical equipment is needed. Recent developments in computer-based biometric research allow for new possibilities to integrate facial expression analysis in the classroom. Embedded in a role-play setting, facial recognition delivers valuable information on the occurrence and degree of an emotional response. This kind of analysis is best suited for simulated sales negotiations to prepare future sales representatives for different kinds of situations that can occur during a negotiation.

We propose a pedagogical exercise that teaches students how the expression of emotions influences sales conversations and how they should react to specific emotions. The educational setting was applied in a "Customer Management and Sales Negotiations" class at the bachelor's level. The course covered a wide range of content, such as contact planning, the opening of sales conversations, situation analysis,

customer needs assessment, offer preparation, price argumentation, dealing with objections, professional design of sales presentations, and after-sales support. This course has clearly defined learning objectives and theory content. The educational process was structured in such a way that the competences were built up step by step and practical examples were applied in simulated negotiations based on theory.

The class started with theoretical input, whereby the students were taught the most important points for conducting sales conversations and negotiations. The participants were then assigned to groups of two and instructed to hold a sales conversation about a product of their choice (to ensure product knowledge) in a B2B setting, whereby one student took the role of the salesperson and the other student the role of the customer. Students were enabled to consciously control the length, structure, and timing of the simulated sales conversations themselves, and they were free to choose the setting (e.g., tangible good or service, type of industry, business-to-business or business-to-customer negotiation, order volume, and customer status). We deliberately offered them such a high degree of customization and personalization options in order to support self-directed learning, which has been shown to positively impact long-term memory retention (Markant et al., 2014). The students had some time for preparation and afterwards two to three sales talks per appointment, depending on the time used for theory input, were held during the semester. This involves alternating phases of theory input, role-plays, and feedback. Teams were assigned 20-minute time slots, with 10 minutes to conduct the negotiation role-play, and 10 minutes reserved for discussion and feedback.

During the conversations, the face of the salesperson was recorded using *iMotions*, which is a software platform that integrates a number of biometric technologies. We employed automated facial expression analysis to identify emotions. The software immediately displays the nature and strength of the emotions and records the conversations as a video. The tool uses the AFFDEX algorithm by Affectiva Inc. (El Kaliouby & Robinson, 2005). The algorithm builds on the Emotional Facial Action Coding System (EMFACS) mappings developed by Ekman and colleagues (Ekman & Friesen, 2003;

Ekman & Rosenberg, 1997) and uses classified pictures as a training database. The *iMotions* software detects changes in key facial features (i.e., facial landmarks such as eyebrows, eyes, and lips) and calculates the likelihood of the seven basic emotions, namely joy, surprise, anger, sadness, disgust, fear, and contempt. Table 1 provides a definition of each emotion and an overview of typical facial expressions associated with each emotion. This theoretical content was briefly explained to students before the role-play exercise, although they were already familiar with it from a previous course on sales psychology.

While the students held their role-played sales conversations by taking turns in pairs, the frame-byframe emotional expression analysis of the seller's face (i.e., the magnitude of each of the seven basic emotions at any point in time) was projected to a large screen with a projector in real-time so that the observing students (i.e., those not involved in the role-play) could follow the occurrence and sequence of emotions during the conversation. In other words, all students were able to observe the role-played conversations and to see the emotional analysis in parallel (to allow for learning effects both through observation and through receiving feedback from peers). The simultaneous analysis of facial expressions had the advantage that the observers were provided with an objective measure of the emotions and could directly incorporate the results into their subsequent feedback. Furthermore, we recorded the role-plays to make it possible to review and discuss critical phases in detail. This also helped to illustrate the difference between the perception of others and the perception of oneself. The feedback round consisted of peer evaluations and personal reflection in three steps.

Immediately after the sales conversation, the buyer rated the seller's behavior during the conversation via an online questionnaire (see Appendix). The scales consisted of items that captured interpersonal skills, customer orientation, salesmanship skills, product knowledge, and other aspects. The items were based on the work of Saxe and Weitz (1982) and Rentz et al. (2002). In addition, the student in the role of the salesperson also evaluated the conversation by answering open-ended questions concerning the overall atmosphere ("How would you describe the overall

Table 1: Definitions and facial expressions of basic emotions

Basic emotion	Definition	<b>Mouth Expression</b>	Eye Expression	Eyebrow Expression
Anger	A feeling of extreme annoyance that arises when a person is blocked from pursuing a goal and/or treated unfairly.	Lips pressed tightly together.	Eyelids tightened, eyes opened wide and staring hard.	Eyebrows pulled down and together, vertical wrinkles may appear between them.
Contempt	A (not necessarily unpleasant) feeling of dislike for and superiority over another person, group of people, and/or their actions.	Tightened and raised lip corner on one side of the face.	N/A	N/A
Disgust	A feeling of sickened distaste and aversion towards something offensive. It can be triggered by something perceived with the physical senses, by the actions or appearances of people, and even by ideas.	Upper lip raised in an inverted "U", lower lip raised and slightly protruding, mouth corners pulled down.	Lowered upper eyelids, wrinkling on the side and bridge of the nose.	Lowered eyebrows.
Joy	A feeling of enjoyment, contentment, or happiness typically arising from connection or sensory pleasure.	Lips are raised and pulled back, teeth may be exposed in a smile, cheeks are raised.	Eyes are narrowed and there is some wrinkling around them.	Eyebrows slightly bent down.
Fear	A feeling of distress or alarm that arises with the threat of harm, either physical, emotional, or psychological, real or imagined.	Jaw dropped open, lips stretched horizontally backwards.	Raised upper eyelids, tensed lower eyelids.	Eyebrows raised and pulled together, wrinkles appear in the middle of the forehead.
Sadness	A feeling of grief or sorrow resulting from the loss of someone or something important.	Lip corners pulled downward, corner of the mouth may tremble.	Upper eyelids drooped and eyes looking down.	Inner corners of the eyebrows pulled up and together.
Surprise	A feeling of sudden amazement caused by unexpected sounds or movements.	Jaw dropped open, lips not stretched.	Upper eyelids raised, lower eyelids neutral.	Eyebrows raised but not drawn together.

Source: Paul Ekman Group, 2021

conversational climate?") and the negotiation outcome ("How satisfied are you with the outcome of the negotiation?"). The data collected is used for research purposes on the one hand (i.e. to reveal potentially interesting patterns and relationships with the emotions displayed during the role-plays), and to empirically support the theory input that the students receive on sales conversations on the other hand. Further, by answering these questions, students repeat what has been learned (for example, in the theory input it is discussed that for sales negotiations it is important to adequately respond to the counterpart, to use different questioning techniques and to argue the price well) and their awareness of these aspects is raised. To be able to incorporate the results in the feedback it is necessary to start the exercises early in the semester. Alternatively, to keep the process shorter and simpler, this step can also be omitted in the future and existing empirical results can be used.

In the last step, both negotiation partners received detailed feedback on their role play performance from the other students as well as the instructor. This step also includes the discussion of the recordings. Phases of high emotional activity, as well as their possible causes and consequences on the course of the conversation are analyzed together with the students. Additional individual written peer feedback with a higher level of detail and structure than the oral feedback was provided later in the course.

#### DISCUSSION AND EVIDENCE OF SUCCESS

The pedagogical approach for a practice-oriented sales management and personal selling class that we describe in the present paper has the aim to achieve this by combining and integrating phases of different settings in the classroom (lectures, analyses of role-plays using automated facial expression recognition, expert feedback by instructors, and peer feedback by other students) with phases of reflection outside the classroom (subsequent individual written peer feedback regarding the role-plays with a higher level of detail and structure than the oral feedback provided in class). We attached much importance to peer feedback and personal reflection, which occurred in three steps: (a) immediately after the sales conversation, the student in the role of the salesperson reflected on the atmosphere

of the conversation and the reaction of the buyer by answering open-ended questions; (b) at the same time. the buyer also answered an online questionnaire that assessed their perceptions of the overall atmosphere during the conversation and the salesperson's behavior and performance; and (c) both negotiation partners received detailed feedback from the other students as well as the instructor. This immediate feedback consisted of the instructor going through key scenes from the recorded role-plays with the students and looking at massive peaks in emotion scores. This helps students to learn and train emotional intelligence in terms of increasing their awareness of emotional states during sales conversations, recognizing distinctive emotional expressions and at the same time learning from the instructor what triggers these emotions and how to best respond to them. This approach ensured that students were able to compare their own impressions of the sales negotiations with those of the observers. The evaluation of the conversation through an online questionnaire shows that the students consistently assess their colleagues' overall performance very high (mean score of 3.99 on a scale from 1 = very bad to 5 =very good). No significant differences could be detected for different age groups and for gender.

The most important feature of our approach is that we employed automated facial recognition to capture emotions during the sales negotiation role-plays. In contrast to previous studies in a sales context, we did not rely on self-reported measures of emotions, which have inherent shortcomings (Poels & Dewitte, 2006). Furthermore, our educational concept focused on the impact of salespersons' emotions, different from prior focus on how sellers respond to customers' emotions. Since students were able to follow the results of the facial expression analysis in real-time on a monitor, this computer-aided method is well suited to make unconscious behavior and its consequences clear to the students in an objective way. This is not only an important contribution to the learning of EI, it also increases the students' acceptance of feedback by the instructor.

With regard to the relationship between emotions and buyer evaluations of the seller, our correlation analyses revealed some interesting findings. For example, we found that sellers expressing a greater proportion of fear were more likely to take notes during the conversation (r = .35). Previous research has shown that people with fearful facial expressions are generally perceived as introverted and shy (Knutson, 1996; Montepare & Dobish, 2003). Assuming that this is really the case, it seems plausible that sellers who feel more fearful tend to be more insecure and less dominant during negotiations, and thus prefer to take notes as a support for their argumentation. Furthermore, our analyses indicated that the more sellers display facial expressions associated with anger, the more successful they are at closing the sale in the eyes of the buyer (r = .33), which can be seen as a proxy for subjective sales performance. This might seem counterintuitive, but given that perceived sales closure was only assessed from the buyer's perspective, it needs to be noted that the definition of a "successful sale" may not necessarily be the same for a seller and a buyer. For example, agreeing on a high price discount after intense negotiations might constitute a satisfactory sales closure for the buyer while provoking feelings of annoyance and argumentativeness on the seller's side. We also found that the more joy the salesperson expressed, the more they were viewed as active by the buyer during the opening phase of the conversation (r= .30) and the more self-controlled they appeared (r =.40). This suggests that sellers who are self-confident are better able to express excitement and compassion, and know how to use these joyful displays of emotion to their advantage. This finding is also consistent with prior work showing that expressions of happiness fuel impressions that a person is assertive and confident (Montepare & Dobish, 2003). Finally, sellers who used their facial expressions strongly (overall engagement), appeared more convincing in their price argumentation (r = .34).

The results exemplarily show how emotions are reflected in behavior during a sales conversation (e.g., that salespeople who feel more fear also tend to take notes more often) as well as how expressing certain emotions affects buyer perceptions (e.g., the expressing joy during a sales negotiation has positive effects on the evaluations of the seller). These findings should be discussed with students as they can potentially help them increase their awareness of their emotional inventory and the job-related consequences of their facial expressions. These empirical results can be used to vividly depict what underlying psychological mechanisms these emotional expressions trigger on the buyer's side. Thus, when the recordings are analyzed for emotional peaks after the sales conversation in class, the lecturer can refer to these empirical results. By getting confronted with very tangible examples, the students learn how emotions can be recognized by interpreting gestures and facial expressions and how to react accordingly. The buyer's evaluation of the salesperson using the constructs in the Appendix can also be omitted for the sake of simplicity, but then we would recommend taking up the empirical results of this paper and discussing them with the students.

At the end of the course, we were able to assess students' satisfaction with this pedagogical approach through their course evaluations. In total, 51 students evaluated the course in 2019. They were asked to indicate the extent to which they agree or disagree with three statements relating to their overall satisfaction with the course, their perceived increase in competences, and the practical relevance of the course content. Results are shown in Table 2.

Table 2: Course evaluation results 2019 (N = 51)

Statement	Strongly agree	Agree	Disagree	Strongly disagree
Overall, I am satisfied with this course.	56.9%	35.3%	5.9%	2.0%
After completing this course, I was satisfied with my competence improvement.	62.7%	31.4%	3.9%	2.0%
The practical relevance of the course was appropriate for the objectives given.	68.6%	29.4%	2.0%	0.0%

Table 3 compares course evaluation results over time and clearly highlights the improvement in student satisfaction after newly implementing the automated facial expression analysis in 2018. Given that the university's course evaluation system only computes aggregate evaluation scores for the entire class, we were not able to test whether the differences between these means are statistically significant. Furthermore, even though essential characteristics of the sales course (e.g., lecturers, teaching units) remained constant over the years it cannot be guaranteed with certainty that the improvement of course evaluation scores can solely be attributed to the new course design described in this paper.

Table 3:	Course evaluation	results over	time	(means)	,

Statement	2019	2018	2017
Overall, I am satisfied with this	1.57	1.56	1.82
course.	110 /	1.00	1.02
After completing this course, I was satisfied with my competence improvement.	1.45	1.67	1.73
The practical relevance of the course was appropriate for the objectives given.	1.36	1.43	1.73

*Note:* The automated facial expression software was used in 2018 and 2019; Scale: 1 = strongly agree, 4 = strongly disagree

# MANAGERIAL IMPLICATIONS: CHALLENGES AND OPPORTUNITIES FOR IMPLEMENTATION

Mattingly and Kraiger (2019) performed a metaanalysis and found that EI can be trained through formal training. In a sales context, Gignac et al.'s (2012) empirical study revealed that EI increases through EI sales training which in turn has a positive effect on sales performance. However, Mattingly and Kraiger (2019) claim that EI training should be (a) active, i.e. allowing participants to practice diagnosing situations and to respond accordingly, and (b) include feedback. They conclude that there is "a need to individualize EI training and to provide accurate feedback on participants' skills" (Mattingly & Kraiger, 2019, p. 13). This paper presents a course design that meets these criteria. It allows participants to immediately apply what they have learned and to get both objective (face recognition) and subjective (colleagues and teachers) feedback.

However, on the basis of both oral and written student evaluations and the feedback of the lecturers, the following points can be identified. Firstly, the experience of the lecturers shows that the importance of facial expressions and emotions during a sales conversation is always underestimated by participants. The large proportion of course participants were surprised by the impact of facial expressions on the assessment of the sales performance, which is also reflected in the study results. For example, expressions of joy in the course of the conversations are shown to have a positive impact on the buyer assessment in terms of self-control and the dynamics of the conversation.

Secondly, although course evaluations indicate a high level of satisfaction with the new course design, it should be considered to teach theoretical foundations before the sales conversations in order to give all students the opportunity to apply what they have recently learned. Another way to improve the design would be to have students do the role-play twice. This way, the feedback can be directly implemented in the second round. However, it should be noted that the available time in university courses is limited. Therefore, this measure could be better implemented in professional sales training. Another improvement to the course design relates to the measurement of sales performance. For the further implementation of the course, it is planned

to let the students negotiate prices to make the results more tangible and to make the sales success measurable at this level as well.

Thirdly, some critical points should be considered when introducing experiential learning techniques such as video recorded role-plays in combination with facial expression analysis, whether for courses at universities or commercial sales training. First, participants should have sound theoretical foundations concerning emotions and EI. Emotions are very complex constructs and therefore, it is crucial to understand the underlying psychological concepts and the theories concerning the measurement of emotions. Thus, this aspect has to be kept in mind when planning the whole curriculum in order to cover these topics in the sales course or other classes, e.g., consumer behavior or marketing science.

Furthermore, logistical factors have to be considered. Due to budget limitations and the high cost of facial recognition software, there will be only limited access to computers with appropriate software. Hence, class sizes should be kept small by either splitting the class in different groups or by providing enough time for the course during the semester. Alternatively, additional equipment acquisition can be legitimated by stressing the benefit of this tool for other departments or programs. Facial expression analysis is a valuable approach for marketing and sales in general but can also enrich personnel management or social skills classes by, e.g., stimulating job interviews or presentations.

Due to the increasing demand by organizations for well-trained salespeople, sales programs worldwide are expanding. At the same time, industry is expecting higher levels of professionalism and a broad skillset from these salespeople. The empirical evidence that EI has an impact on sales performance (e.g., Gignac et al., 2012) should make it of greatest interest for companies to increase the EI of their employees through professional sales training. We are convinced that our proposed course design can also be applied outside of an academic environment, such as in professional sales training programs. The cost of the equipment could be covered more easily in a corporate setting and the groups could also be smaller, allowing more time for feedback and practice.

Although we are aware that empirical verification is needed to show that the proposed type of sales training is capable of increasing EI, we were able to show that students' awareness in the topic of emotions and EI increased due to our course design and the use of automated facial recognition. Direct comparison with previous years (in which the software was not yet used) is somewhat challenging, as we could only document satisfaction with the course. However, this paper provides evidence for the importance of emotions within the negotiation process and gives some ideas on how to implement facial recognition in sales management classes.

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# Appendix: Assessment of buyer-seller evaluations after the role-plays

# Sales performance components and corresponding items

### Product knowledge:

The seller was able to show their expertise.

The seller responded to objections well.

# Interpersonal skills:

The seller showed empathy.

The seller managed to create a positive atmosphere.

The seller showed enthusiasm in the conversation.

The seller took the initiative.

## Salesmanship skills:

The seller actively opened the conversation.

The seller used different questioning techniques.

The seller argued the price well.

The seller has successfully led the conversation to the conclusion of the sale.

The seller was very determined.

The seller acted in a goal-oriented way.

The seller actively opened the conversation.

The seller used different questioning techniques.

The seller argued the price well.

The seller has successfully led the conversation to the conclusion of the sale.

The seller was very determined.

The seller acted in a goal-oriented way.

#### Customer orientation:

The seller has conducted an extensive needs assessment.

The seller actively listened to me.

The seller asked a lot of questions.

The seller presented the product in a customer-friendly way.

The seller was flexible.

#### Other:

The seller took notes.

The seller paid attention to the time.

The seller had good self-control.

Source: Adapted from Saxe & Weitz, 1982 and Rentz et al., 2002.

*Note*: All items were measured on 5-point Likert scales.