## Understanding the Relationship between Emotional Intelligence, Job Meaningfulness, and Intragroup conflict: An exploratory, mixedmethod study on Agile Teams

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#### ABSTRACT

Agile development has increasingly become a common terminology within today's business world. Given the advantages it can bring to organizations in terms of flexibility, adaptability, and customer interactions, understanding how agile development can be optimized with regards to the complex social interactions within agile team members has become paramount. This can be particularly true in time-constrained situations or moments of high uncertainty in which emotions come to play a pivotal role. And still, the significant, yet unclear role that emotions have within such environments remains under-researched. Specifically, scholars suggest that Emotional Intelligence (EI) may carry much potential, being possibly positively correlated to Job Meaningfulness, and reduce aggression and stress levels in the workplace. Hence, through means of a mixed-method analysis and the combination of survey data and unique video observations of four Agile Teams, this thesis sheds light on the relationships between observed EI behaviors, Job Meaningfulness, and situations of conflict. Coding of videos through a newly developed coding scheme, followed by correlation analyses as well as deductive thematic analysis resulted in a weak, negative relationship between observed EI and Job Meaningfulness. This was surprising, given the strong positive relationship between survey-based EI and Job Meaningfulness in comparison. Further qualitative findings indicate a relationship between survey-based EI and the frequency and duration of intragroup conflict, so that teams with higher EI experienced less, shorter and less tense conflicting situations compared to teams with lower levels of EI. Results also show a connection between destructive feedback, observed EI behaviors and relationship conflict, which greatly depended on the level of threat associated with the feedback. In fact, whether EI behaviors were paired with negative feedback or not, seemed to determine whether a conflict escalated or not. This thesis is the first to explore EI in relation to job meaningfulness and conflicting situations in the under-researched environment of agile teams from an observational perspective implementing a newly developed verbal EI Codebook. The results underline the need for considering EI in recruitment practices and when issuing negative feedback.

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Keywords

Agile Teams, Emotional Intelligence, Intragroup Conflicts, Job Meaningfulness, Mix-method Study

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#### **1. INTRODUCTION**

With the trend of adopting agile methodologies gaining momentum in 2021, giving rise to shared leadership and decentralizing power, the importance of a highly satisfied and motivated workforce can no longer be overlooked.

More specifically, adopting agile ways of working has gained popularity among businesses operating in highly unpredictable environments. This is because agile methodology puts great emphasis on flexible team structures, customer interactions and utilizing uncertainty to its full potential (Serrador, 2015). Agile teams who are referred to as squads, work together for a given timeframe named a sprint, which is characterized by three meeting stages called: Planning, Refinement and Retrospective (Hoda et al., 2010). Hereby, all members of such teams are considered experts in their field of study. Therefore, implementing the agile way of working means providing such teams with enough responsibility and authority for them to achieve their goal independently (Moe et al, 2010). Individuals work in an environment of shared leadership, which is characterized by collaborative decision-making and shared accountability (Nicolaides et al., 2014). Research has shown that such leadership styles may increase the team's ability to be adaptable and flexible, so that its adoption in agile teams may boost job satisfaction as well as lower levels of absenteeism and labor turnover (Moe et al., 2010). Agile teams unique interdisciplinary and cross-functional nature can thus be seen as a perfect match for businesses requiring high levels of flexibility.

Given the advantages that agile development can bring to business, recent research has focused on achieving a greater understanding of the complex social interactions within agile teams, aspiring to create optimal managing strategies for such new team structures (Moe et al., 2010).

Achieving this is of particular interest, as organizing agile teams may be rather difficult. This can be particularly true in timeconstrained situations or moments of high uncertainty in which emotions play a pivotal role (Hoda, 2010; Harry, 2021). Emotions can particularly surface in the retrospective, the agile team's last meeting stage, in which members reflect on and discuss their achievements and difficult past moments of their sprint.

Literature suggests that the ability of utilizing EI by an individual may play a crucial role in highly emotional situations (Jordan et al., 2004). EI refers to the extent to which an individual can express, utilize, understand, and regulate emotions within a team setting. In fact, in his research conducted on call center agents' sense of meaningfulness and its impact on EI and exhaustion, Harry (2021) found that "managing others' emotions and perceptions of emotions can significantly lower levels of emotional exhaustion and increase professional efficacy" in the workplace (Harry, 2021, p. 8). Furthermore, various other researchers argue that EI behaviors allow for more effective communication and cooperation among team members (Stephens and Carmeli, 2016; Khosravi, 2016), and can even increase job meaningfulness (Thory, 2016).

In this regard, Thory (2016) suggested that since EI requires a sense of self-awareness and understanding, it can help employees to work with intention which may lead them to recognize a higher purpose in their work. Hence, job meaningfulness can be directly influenced by "worker engagement, attachment, motivation, productivity and satisfaction" (Thory, 2016, p. 1).

Besides the potential of boosting job meaningfulness, research on EI training has also argued that the utilization of such skills can decrease workplace aggression, which, in turn, can negatively influence job meaningfulness (Caillier, 2021). However, given the nascency of the agile way of working in the management literature, research on the complex emotional interactions within self-organizing teams remains in the early stages. Besides, studies have specifically called for better ways to assess both EI behaviors and connect it with under-researched job outcomes such as job meaningfulness (Thory, 2016; Caillier, 2021). This is especially relevant for EI behaviors, as observed measurements of this variable could provide a clearer understanding of novel nuances that are not grasped by more traditional survey-based research (Waller and Kaplan, 2018). Given the evident gap in agile literature and research based on these variables, this thesis answers the following overarching research question.

How can observed EI, particularly in situations of conflict, relate to job meaningfulness in retrospective meetings?

Followed by the sub-research questions:

## What EI behavioral dimensions are more related to Job Meaningfulness?

#### How does EI relate to situations of conflict?

Therefore, this thesis has two main objectives. The first aim is to investigate how both survey-based EI and observed EI behaviors relate to job meaningfulness during retrospective meetings of agile teams in a large Dutch financial organization. Observed EI is considered both as a whole construct as well as divided in its subdimensions to see whether there are any differences in the relationship of these components towards job meaningfulness.

The second aim of this paper is to offer a qualitative investigation of how the presence or absence of EI behaviors is associated with situations of conflict in agile teams and how this, in turn, may be related to job meaningfulness.

This thesis contributes to the EI literature by being the first to explore EI in relation to job meaningfulness from an observational perspective implementing a newly developed verbal EI Codebook. Additionally, this thesis further explores how EI relates to observed team conflict, thus contributing also to the literature on conflict dynamics. Since all these phenomena are explored within agile teams, this thesis also serves the purpose of filling the gap in the under-researched agile way of working (Fernandez, 2008). Hereby, it highlights the need for placing greater emphasis on an individuals' ability to utilize EI in practice, specifically in an agile environment.

#### 2. THEORETICAL FRAMEWORK

#### 2.1 Agile Teams

The concept of agile methods originally emerged in the IT sector and stemmed from a need to move to more flexible planning methods (Serrador, 2015). Essentially, it was important to move towards a planning process "that revolves around multiple iterations through the development cycle." (Serrador, 2015, p. 1041). The result of this trend was the creation of the "Agile Manifesto" in 2001, a model that lays the focus on close individual cooperation, customer collaboration, and flexibility (Moe et al, 2010). Thus, adopting agile ways of working is especially useful in environments of great uncertainty and complexity (Williams, 2005). Therefore, it comes of no surprise that more and more businesses outside of the IT sector have started working agile, relying on agile teams.

Agile teams, or squads, can be defined as teams in which "the members are jointly responsible for the end product and must develop shared mental models by negotiating shared understandings about both the teamwork and the task" (Moe et al, 2009, p. 481; Levesque, 2001). This means, that team members must work in an environment of shared leadership, which is characterized by collaborative decision-making and

shared accountability (Nicolaides et al., 2014). Therefore, agile teams are also a form of self-managing teams. Research suggests that "without formal supervision, members of self-managing teams are required to interact extensively with one another in order to perform critical team functions, such as directing and coordinating collective efforts, which typically generate highly intense emotions" (Paik et al. 2019, p. 236; Alper, Tjosvold, & Law, 2000; Katz & Kahn, 1978; Manz, 1992). The complex nature of such teams can result in a large amount of affective information, especially in situations of high uncertainty and time-pressure (Paik et al. 2019; Hoda, 2010).

During team processes referred to as scrums, individual experts in their field of study work together in the timeframe of four weeks called sprints to produce a final product or service (Rising & Janoff, 2000). To support the flow of communication and team cohesion, teams meet at three stages: Planning, Refinement, and Retrospective (Hoda et al., 2010). Hereby, the Planning stage is characterized by the short creation of an action plan. During the Refinement stage, the existing plans are updated. The Retrospective meeting is defined as: "a meeting for a development team to reflect on how the work method could be improved in future iterations" (Dingsoyr and Dyba, 2019, p. 35). During the retrospective agile teams reflect on critical aspects of their sprint, through which memories and past feelings surface and are discussed (Adriyani et al., 2017). Thus, adding to the time-constrained and uncertain situations in which team members operate, emotions can play a vital role in agile teams especially in this final stage, which is why for this thesis we will focus on retrospective meetings only.

#### 2.2 Emotional Intelligence

In relation to critical and highly emotional situations, a topic that has sparked great interest in the business community is EI. EI refers to the "subset of social intelligence that involves the ability to monitor one's own and other's feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (Salovey and Mayer, 1990, p. 189).

In the past years, the conceptualization of EI has changed quite drastically. Although Salovey and Mayer were the first to use the term EI in 1990, the idea of this construct dates back to the 1920s, where Thorndike was one of the first to propose that different intelligence domains exist (Wong and Law, 2002). What was then broadly referred to as social intelligence, is now recognized to have many branches, one of which was named Emotional Intelligence by Salovey and Mayer in 1990.

The EI concept is generally approached through two main directions. One approach views EI as a trait acquired at birth, also referred to as trait- based EI (Mayer et al., 2000). The second approach to EI that has gained significantly more recognition in the past, is ability- based EI (Mayer & Salovey, 1997). For the remainder of this thesis, we will use the ability-based take on EI. This is because the ability-based EI, as opposed to trait-based EI has gained significant validation backing by Van Rooy and Viswesvaran in 2004. Additionally, research suggests that ability-based definitions of EI tend to be more concise and detailed (Mayer et al., 2008).

Today, it is generally accepted that the EI construct can be split up into four sub-dimensions, in cascading order: perceiving expressed emotions, utilizing emotions, understanding emotions, and regulating emotions (Davies et al., 1998; Joseph and Newman, 2010). Whilst the order and labels of these four categories has changed ever since Salovey and Mayer (1990) introduced them, the general definitions of these sub-dimensions still hold. Expressing perceived emotion relates to the extent to which an individual can sense their own and others' emotions and the extent to which they can express these. Per Salovey and Mayers definition of 2016, utilizing emotion refers to the extent to which individuals "prioritize positive emotions and direct attention to tasks endangering positive emotions" (Van Gorp, 2018). Understanding emotions refers to the deep comprehension of emotions and how time will impact them (Van Gorp, 2018). Seen as the most advanced EI skill to possess, individuals make use of regulating emotions when being able to read emotions, understanding the relative nature of emotions and being able to moderate their own or others emotion (Van Gorp, 2018).

Although heavily discussed, past research has mainly measured EI on a survey-level, also referred to as self-rated or perceived EI. Whilst presenting a feasible option, survey based EI carries the disadvantage that it can be easily faked (Day & Carroll, 2007: Grubb & McDaniel, 2007) and that it requires a high level of selfreflection. Thus, self-rated EI is unlikely to give a good representation of true EI. Given these limitations, research has called for more reliable measurements of the EI construct (Davies, Stankov, & Roberts, 1998). The van Gorp (2018) scale provides a possible answer to this problem, providing a manner by which verbal behaviors can be analyzed by means such as video observations. Observing EI by video data may additionally enable researchers to come to more profound conclusions, as argued by Waller and Kaplan (2018). Therefore, this thesis predominantly focuses on measuring EI per video observations. Yet, as research investigating the reliability of observed EI remains in the early stages, it is important to explore its relation to survey based EI. Thus, the EI construct was measured using both survey items (Survey-based or self-rated EI) and video observations (Observed EI).

Nowadays, the impact of EI on several job outcomes can no overlooked. Albeit through longer be survey-based measurements, results suggests that EI can improve performance especially in situations which "(...) involve processing a heavy load of affective information" (Paik et al., 2019, p. 255), decrease relationship, task, and process type conflicts (Khosravi, 2020), and even increase job satisfaction and engagement (Yan et al., 2016: Brunetto et al., 2012). Recent research by Thory (2016), suggested that on the job EI training could also increase job meaningfulness since EI requires a sense of self-awareness and understanding of persuasion, which in turn can be linked to a sense of intrinsic motivation. This set of skills eventually helps employees to recognize a higher purpose in their work and thus to find meaning and value in their job.

#### 2.3 Job Meaningfulness

The amount of value attributed "to a work goal or purpose, judged in relation to an individual's ideals and standards" (May et al., 2004, p. 14) is defined as job meaningfulness, and has long been recognized to result in various positive contributions to employees and organizations (Vuori, 2012). When individuals connect a greater sense of meaningfulness to their work and their workplace enables employees to unfold their needs for personal growth, (Mulki and Lassk, 2019) organizations may experience increased levels of organizational commitment and individual intrinsic motivation (Vuori, 2012). Besides, attributing more purpose to one's job also significantly lowers individuals' stress levels and increases job satisfaction (Mulki and Lassk, 2016; Baumeister, 1991). Increasing job meaningfulness is thus not only in the interest of organizations, but also individual employees.

Surprisingly, whilst the means by which organizations can contribute to increased job meaningfulness for individuals have been researched quite thoroughly in the past, studies investigating the means by which employees can create meaning themselves remains scarce (Thory, 2016; Vuori, 2012; Csikszentmihalyi, 1990; Hackman and Oldham, 1980; Ryan and Deci, 2000). According to Vuori (2012), older models have tried to frame antecedents of job meaningfulness in a similar manner, stating that job meaningfulness tends to be influenced by external factors such as: "job characteristics, fair compensation, charity, performing well and being a part of a socially valued group" (Vuori, 2012, p.233). However, the result of Vuori's (2012) research showed that individuals have a concrete desire to actively create job meaningfulness themselves and are internally driven to do so. Hence, in this thesis, the focus is on job meaningfulness on an individual level.

#### 2.4 Emotional Intelligence and Job Meaningfulness

The relationship between EI and job meaningfulness seems to be particularly under-researched and scarce literature has clearly investigated the connection between the two (Harry, 2021; Theory, 2016). In her champion paper, Thory (2016) has shown that EI training could increase job meaningfulness. Hereby, she did not only qualitatively investigate the EI and job meaningfulness relationship, filling the gap in literature, but also provided an in-depth explanation of how the EI model and its sub-dimensions (perceiving, utilizing, understanding, and regulating emotions) can be linked to the Lips, Wiersma and Morris' model (2009), depicting four sources of job meaningfulness. More specifically, according to this model, job meaningfulness stems out of four antecedents, namely developing the inner self, expressing one's potential, unity with others, and serving others. Providing solid theoretical justifications on the links between these four antecedents and the four subdimensions of EI explained above, Thory's (2016) work thus suggests that EI can be related to job meaningfulness. Since this relationship was not quantitatively tested, even less by means of observed EI behaviors, following Thory's argument, the subsequent hypotheses are thus put forward:

H1a: Observed EI and survey-based EI are positively correlated

H1b: Survey-based EI is positively related to job meaningfulness

H2: Observed EI is positively related to job meaningfulness

**H3**: Expressing perceived emotions is positively correlated with job meaningfulness

**H4**: Utilizing emotions is positively correlated with job meaningfulness

**H5**: Understanding emotions is positively correlated to job meaningfulness

**H6**: Regulating emotions is positively correlated to job meaningfulness

#### 2.5 Situations of Conflict

In addition to the potential of enhancing job meaningfulness, research has shown that EI can ameliorate teams' aggressive behaviors and situations of conflict (Caillier, 2021). Conflicts have long been viewed as unavoidable aspects of team behavior, especially in long-term projects and diverse teams (Jehn, 1995; Khosravi, 2020). Whilst literates seem to be in dispute over whether conflicts are detrimental or beneficial to the success of an organization, research does agree that conflicts should not be ignored since they can negatively influence job performance and job meaningfulness (Khosravi, 2020; Caillier, 2021). This in turn, has been argued to be dependent upon the type and the duration of the conflict (Jehn, 1995; Paletz et al. 2011).

In literature, conflicts are generally split up into task conflict, relationship conflict and process conflict. Jehn (1995, p. 258), has defined task conflict as the "disagreement among group members about the content of the tasks being performed, including differences in viewpoints, ideas, and opinions." Jehn

(1995, p. 258) goes on to define relationship conflict as "the interpersonal incompatibility among members, which typically includes tension, animosity, and annovance among members within a group". Two years later, Jehn introduced the third type, process conflict, which she defined as "conflict about how task accomplishment should proceed in the work unit, who's responsible for what, and how things should be delegated" (Jehn, 1997, p. 540). When looking at conflicts in terms of their duration, conflicts are usually split up in Micro-, Meso-, and Macro-conflicts (Paletz et al. 2011). Hereby, "Micro-conflicts are fleeting, minute by-minute disagreements; meso-conflicts are more drawn out, taking place over hours or several times over the course of a day and macro-conflicts are long-standing disagreements, lasting over at least a couple of days" (Paletz et al. 2011, p. 315). Different researchers have tried to understand how conflicting situations arise. Hereby, it is generally accepted that conflicting interests, poor communication as well as cooperation, and differing opinions are the results of such (Wu et al, 2017; Liu et al. 2011). In their research, de Gregorio et al. (2012) even suggested that the "degree of centralization, formalization, internal volatility, and psychological distance are all positively related to level of destructive conflict" (de Gregorio et al. 2012, p. 19) Furthermore, it is also often argued that emotions not only play a significant role, but that conflicts occur when positive emotions are endangered through situations of negative relations (Jordan et al., 2004; Jehn, 1997). In this regard, very few studies have shown that EI can reduce workplace aggression (Caillier, 2021) as well as minimizing stress level and individuals' exhaustion (emotionally charged interactions) (Harry, 2021). Hence, EI seems to be able to lower possible workplace conflict especially at team level. Since research investigating the connection between verbal behaviors, conflict and observed EI is scarce, this thesis qualitatively explores such connection to shed light on the interplay of these crucial, yet neglected, concepts.

#### 3. RESEARCH METHODOLOGY

Building on previous pioneer studies conducted in the same Dutch financial institution as part of a larger research project conducted by the Change Management & Organizational Behavior (CMOB) group at the University of Twente, this thesis explores how EI is related to Job Meaningfulness as well as how observed EI behaviors relate to situations of conflict. Hereby, a mixed-method approach was adopted to allow for a deeper understanding of the data and better answer the research questions (Creswell, Clark & Garret, 2003).

Table 1: Choice of Teams and respective Labels

		-	
Average 1 (survey)	EI score	Team	EI highest vs. EI lowest (survey)
5,5		1	EI high
5,45		4	EI high
5,21		6	EI low
5,13		8	EI low

# **3.1 Data Collection and Sample Characteristics**

In total, four agile teams were selected based on their EI survey data, whose values can be seen in **Table 1**. The two highest and the two lowest results out of nine Agile teams were chosen, to be able to compare the teams at a later stage by means of a t-test. **Table 1** shows the average survey EI value per team.

As aforementioned, solely the retrospective meeting stage was considered of these four teams, due to the reflective nature of this meeting in which high levels of emotionality is predicted. Thus, the number of meetings is equal to the number of teams. As this thesis is explorative in nature and research on the relationship between EI and Job Meaningfulness remains scarce, the small sample size was deemed sufficient.

The four teams included 24 individuals of which one individual remained extremely quiet throughout the meeting, resulting in no behaviors being coded for this individual and the sample size being reduced to 23. The total duration of the recorded videos was equal to 170 minutes and 8 seconds. Hereby, each meeting ranged from being between 35 and 53 minutes long. The sample included 1 woman and 22 men, and had an age average of 37 years, ranging from 26 to 58 years. 57,8% of the individuals stated they were most fluent in Dutch, whilst other most fluent languages varied substantially. Besides, about 82,3% of the sample stated they had a university-level education or higher.

Data included transcribed videotapes and was collected prior to the start of this thesis by the CMOB group at the University of Twente. Videos included three camera perspectives and required the written consent of team members. To further ensure privacy, coders analyzing the videos signed a confidentiality agreement. For ease of coding, all meetings had previously been transcribed and individuals were given numbers for means of identification. Survey data was acquired by team members who voluntarily filled in a questionnaire after each meeting. Hereby, the concept of self-rated or perceived EI was questioned after the Kick-off meeting, whilst the concept of Job Meaningfulness appeared after the Retrospective meeting.

#### 3.2 Quantitative Research

The quantitative section of this thesis involved the coding of verbal EI behaviors of the retrospective meetings, followed by correlation analyses and hypothesis testing. Hereby, EI was seen as the independent variable, being measured through a questionnaire before Job Meaningfulness and then per coding. The dependent variable is Job Meaningfulness which was also measured via survey items.

#### 3.2.1 Observing Emotional Intelligence Behaviors

To code the meetings, the updated version of the van Gorp (2018) codebook and the software program Observer XT 15.0 were used. The van Gorp (2018) EI codebook captures four different subdimensions concerning observable, verbal EI behaviors of the general EI construct: Expressing emotions, Utilizing emotions, Understanding emotions and Regulating emotions. Expressing emotions hereby is characterized by frequently being used in the present tense. When an individual mention their own feelings towards others about anything related or unrelated, van Gorp speaks of an individual expressing their emotions. Examples include: "You look very happy today!" or "I am so sorry for you". According to van Gorp, someone is utilizing emotions once they generally make use of the past tense whilst expressing consideration about situations endangering positive emotions. Examples include: "I know it's hard, but let's keep calm" or "I remember when that happened, I did not feel good". If an individual uses "Understanding emotions", he shows a deep understanding of how emotions are interlinked and how they will change with time. Examples of this EI behavior include: "I am not angry, but disappointed." Or "It looks like you are a bit down today, can I help you?". The last EI subdimension, "Regulating emotions" is defined by individuals being able to fathom how emotions are influenced by one another and how they can be moderated. Examples include: "Don't worry about it!" or "I don't like the direction in which the conversation has drifted to".

To reduce the impact of the possible human error, two coders, who provided sufficient proficiency in Dutch and English, analyzed the four meetings independently. As this resulted in quite low kappa values on average (0,26) from reliability analysis, coders discussed disagreements and created a final file per coded meeting together.

After all videos were coded, data was moved to SPSS in which missing values assigned. Since the duration of videos and total frequencies of coded EI behaviors varied, the data was standardized by frequency and duration. It was standardized by frequency by dividing the frequency of observed EI per behavior by the total observed EI behaviors of the whole team. Data was standardized by duration by dividing the frequency of recorded behaviors per EI dimension by the total duration in minutes per team. Standardizing by two methods allows for greater accuracy when comparing the observed EI dimensions on a team- and individual basis. However, for ease of reading, the thesis focused on presenting results based on data standardized by frequency. Data standardized by duration did not vary greatly in comparison, and thus was moved into **Appendix A, E and F**.

#### 3.2.2 Survey constructs

Next, the survey data for perceived EI and Job Meaningfulness were considered to carry out correlation analysis for the hypothesis testing.

Self-rated, or perceived EI was measured via the Wong and Law's (2002) scale and appeared in the first survey after the Kick-Off meeting. The scale consists of 16 items and four dimensions and could be answered on a 7-point Likert scale. Some examples of items include: "I really understand what I feel", "I am a self-motivated person" and "I am a good observer of other's emotions". The constructs' internal consistency was validated by the Cronbach's alpha which was 0.83 for the whole construct. To ensure continuous responses, perceived EI items were mixed among other concepts.

Job Meaningfulness was measured by a three-item Likert- scale based on the well-established, five-item scale by Spreitzer (1995). The Cronbach's alpha of this variable was ... Items include: "the work I do is very important to me" "My job activities are personally meaningful to me" "The work I do is meaningful to me". The mean answer to these three questions will then form the results for job meaningfulness.

Next, the recorded data of observed EI behaviors was analyzed. Hereby, it was investigated whether Teams 1 and 4 that had achieved high results for survey based EI showed a significantly different observed EI behaviors when compared with Teams 6 and 8. Initially, a rule of thumb method was applied to check for an equal variance assumption. Approximate equal variance was assumed and followed up with an independent t-test if the ratio of the larger to the smaller variance was less than 4. Whenever this assumption was not met, a Welch test was carried out. This test thus compared the means of EI high and EI low teams per observed EI dimension. As the low sample size was predicted to be a limiting factor, the tests were also executed on an individual level, so that the sample size would increase from 4 teams to 23 individuals. The significance level was 0,05 and in given situations 0,1.

Correlation Analysis was then carried out between observed EI behaviors and Perceived EI from survey data, to see whether the outcomes for individuals would positively correlate as expected. Finally, the EI construct based on both observed and surveybased measurements was correlated against Job Meaningfulness to establish an understanding of the strength of the relationship between EI and Job Meaningfulness. Prior to carrying out Correlation analysis, the assumption of normality was checked through skewness and kurtosis values. As it appeared that most variables and subdimensions of the EI construct were not normally distributed, both a Pearson's R and Spearman's correlation were calculated and interpreted using Evan's (1996) thresholds. Hereby, a correlation of 0,80 or higher is considered very strong, 0,60 to 0,79 strong, 0,40 to 0,59 moderate, 0,20 to 0,39 weak, and any correlation lower than 0,2 being very weak.

#### 3.3 Qualitative Research

The qualitative section of this research involved exploring how the observed EI subdimensions were related to situations of conflict. Thematic analysis was chosen to interpret moments of conflicts since this type of analysis allows for a thorough and flexible exploration of the data (Braun and Clarke, 2006). In particular, a deductive approach was implemented since codes stemmed out of the literature on conflict level and type. Below a detailed explanation of the process of analysis.

#### 3.3.1 Data Analysis: Identifying Conflict

To identify situations of conflict, negative behavioral triggers that could spark conflicts were searched for in the previously transcribed meeting recordings. In this thesis, providing negative feedback, disagreeing, defending one's own position and directing/ correcting were the behaviors that were accounted as behavioral triggers. Indeed, according to Spencer- Oaty and Xing (2008), these behaviors can be seen as triggers to conflict, as they all critically question the identity of the receiving end. Additionally, in their pivotal paper, Hoogeboom et al. (2021) identified similar negative verbal behaviors and noted how they were also linked to negative emotions such as anger and anxiety (Hoogeboom et al. 2021). This relationship supports the need to understand how EI behaviors are displayed in these critical moments.

During the identification of the behavioral triggers, it was necessary to include observations of one minute before and after the coding to record any EI behaviors and identify situations of conflicts. Situations of conflict were then identified ultimately whenever a clear disagreement happened. (Paletz et al. 2011) To assess the level of conflict (i.e., micro-, meso- or macro-conflict), Paletz et al.'s (2011) coding scheme was used deductively. Hereby, the duration of the conflict establishes whether it is a micro-, meso- or macro-conflict. To evaluate the type of conflict (task-, relationship-, or process conflict), Jehn's (1997) definitions are adopted (see section 2.5).

Through a frequency analysis of behavioral triggers, conflicts and EI behaviors, comparing both teams of EI high and EI low, patterns in content were identified and potential differences and reoccurring behavioral themes recorded.

#### 4. RESULTS

This section will be split up into the Quantitative and the Qualitative analysis. The quantitative section will include some descriptive statistics. Data concerning observed EI behaviors was standardized by both frequency and duration. Yet, to enhance the clarity of this thesis, we will primarily focus on presenting results based on data standardized by frequency, especially as the results did not drastically differ. Results of data standardized by duration will be found in the **Appendix A, E and F**. By means of a t-test, it is identified whether there are significant differences between the results of the two groups of teams (EI high and EI low) both on a team and individual level. Next follows a section in which correlation analyses are carried out and hypotheses are tested. Finally follows the additional qualitative section.

#### 4.1 Quantitative Analysis

#### 4.1.1 Observed EI Behaviors

The coding of four videos of the retrospective meeting stage of four teams and 24 individuals resulted in the identification of 97 observed EI behaviors. One individual was excluded from the observed EI sample as no EI behaviors were shown by the individual despite being present. Thus, the sample size was equal to 23. **Appendix B** provides an overview of the dispersion, skewness, and kurtosis of the total number of EI behaviors, showing it is not normally distributed.

#### Team Level

The data was firstly analyzed on team level basis (N= 4). Team level data across all four teams was not normally distributed, with a skewness value of 1,54 (SE=1,01), and kurtosis of 2,37 (SE= 2,619). The mean (M) and standard deviation (SD) of the data standardized by frequency was M=0,25 and SD=0,12, respectively. Table 2 presents an overview of the recorded frequencies before and after standardization in terms of frequency of each observed EI dimension per team. Noticeably, Team 1, belonging to the EI high group, showed most behaviors in terms of Utilizing Emotions (,444) and Regulating Emotions (,388) in comparison to the other teams. Surprisingly, Team 6, belonging to group EI low, showed the most Regulating Emotions verbal behaviors (,4) compared to the others. Out of all teams, Team 8 appeared to show the most total EI behaviors (,422), whilst the least observed EI behaviors in total (,154) were recorded for Team 6. Appendix A shows the frequencies of data standardized by duration per dimension per team.

Addressing the seeming differences in behaviors across teams, either a t-test or Welch test was executed to investigate the significance of this difference between the two groups of teams: EI high (Team 1 and 4) and EI low (Team 6 and 8). An equal variance analysis revealed that a t-test could only be conducted for the variable utilizing emotions. As the two groups for the other observed EI sub-dimension did not show equal variances, a Welch test was applied. As can be seen in Appendix C, the tests showed that not one of these differences between EI high and EI low teams per observed EI sub-dimension were significant on a team level. This was true for both 0,05 and 0,1 alpha values. The low statistical power was most likely the result of the small sample size, which is why the same t-test was conducted for observed EI behavior scores on an individual level. This is because it would increase the sample size from four (teams) to 23 (individuals). Very similar results were achieved when standardizing results in terms of duration, as can be seen in Appendix E.

Table 2: Frequencies before and after standardization per team, per dimension (N= non-standardized values; f= standardized values)

				, , ,		
Behavi Team	or/	EI Total	EI (Exp.)	EI (Util.)	EI (Und.)	EI (Reg.)
1	Ν	18	1	8	2	7
	f	,185	,055	,444	,111	,388
4	Ν	23	8	6	3	6
	f	,237	,347	,26	,130	,26
6	Ν	15	4	2	6	3
	f	,154	,266	,133	,4	,2
8	Ν	41	14	13	4	10
	f	,422	,341	,317	,097	,243

		Observed	EI (Exp.)	EI (Util.)	EI (Und.)	EI (Reg.)	Survey - EI
	М	043	219	252	169	265	5 539
	SD	.034	,210	.298	.2.64	3509	.607
	Skewness	1,066	,505	,880	2,033	,5309	,102
	Kurtosis	,135	-,867	-,0120	4,069	-,397	-,427
Job	Pearson's R	-,183	,133	-,378*	,022	,22	,345**
Meaningfulness	Spearman's	-,005	,133	-,279**	-,013	,256	,424*

Table 3: Overview of Descriptive Statistics and Correlation Analyses from Individual data

\*Significant at the 0,05 alpha level

\*\*Significant at the 0,1 alpha level

#### Individual Level

Individual level data (N= 23) standardized by frequency had a mean of ,04, a skewness of 1,1 (SE=,481) and kurtosis of ,135 (SE=,935). The data can be said to be near-normally distributed. After checking the equal variance assumption, analysis revealed that Teams of high EI and low EI had equal variances for all observed EI subdimensions, as **Appendix D** shows. **Appendix D** also presents an overview of the t-test results between team members with high EI and low EI. Analysis shows that there is a significant difference (p=,084) between EI high ad EI low teams when it comes to the total observed EI behaviors at an alpha level of 0,1, standardized in terms of frequency.

T-tests for other EI dimensions showed no significant difference between EI high and EI low teams. Thus, on an individual level, teams in terms of EI high and EI low do seem to differ in terms of total observed behaviors. Very similar results were achieved when standardizing results in terms of duration, as can be seen in **Appendix E**.

#### 4.1.2 Hypotheses Testing

#### Survey Based EI vs. Observed EI

Survey-based or self-rated EI was measured in the first of three meetings, thus in the first survey. As this thesis focuses on the retrospective (third) meeting only, it was evident that two members present in the retrospective had not joined the first meeting. Thus, of all 23 members of the four teams, the answers of two individuals were missing concerning the survey based EI construct. The sample thus consisted of 21 individuals. The Mean value of this sample was 5,53. Due to skewness of ,102 (SE=,501), and kurtosis of -,427 (SE=,972), self-rated EI was near-normally distributed.

Survey based data was correlated to total Observed EI to establish an understanding of the connection between the two. A Pearson's r correlation relies on the assumptions that both variables are approximately normal correlated. As **Appendix B** shows the total observed EI behaviors was only borderline normally distributed on an individual level (skewness= 1,066, kurtosis= ,135), a Spearman's correlation would thus seem more fitting to apply. To offer a thorough analysis, both tests are undertaken. The result of the Pearson's r correlation being  $r_s(21) = -,269$ , with p=,119; and Spearman's correlation being  $r_s(21) = -,231$  with p=,157 observed EI seems to be weakly negatively correlated to survey based EI, but not significant. Therefore, *Hypothesis 1a* is **rejected**.

#### Survey Based EI and Job Meaningfulness

Job Meaningfulness was measured in the third survey after the retrospective meeting and was fully filled out by all individuals that were present. As we are comparing two survey-based construct, N=24. The mean value was 5,27 and the SD=1,04 for this sample. The distribution of Job Meaningfulness was near-normally distributed with a skewness of -,463 (SE=,472) and kurtosis of -,265 (SE=918).

Both survey-based EI and Job Meaningfulness were approximately normally distributed. **Table 3** captures the correlation analysis of survey based EI and Job Meaningfulness, showcasing a weak, positive correlation, with r(24)=,345 and p=,063. This result is significant at the 0,1 alpha level. Similarly, the Spearman's correlation indicated a moderate, positive correlation, with  $r_s(24)=,424$  and p=,028 that was significant at the 0,05 alpha level. Hence, *Hypothesis 1b* is **supported**.

#### *Correlation Analysis: Observed EI and Job Meaningfulness*

#### **Table 3** gives a clear overview of the various correlations between EI and Job Meaningfulness in terms of data that is standardized by frequency. **Appendix F** shows the similar results

that were achieved when standardizing data by duration.

Total Observed Emotional Intelligence: The Pearson's r coefficient between the total Observed EI behaviors and Job Meaningfulness was r(23)= -,183, p= ,202. The Spearman's correlation resulted in  $r_s(23)=$  -,005, p= ,492. Both results indicate that the relationship between Job Meaningfulness and Total Observed EI Behaviors is very weakly negatively correlated and not significant. Thus, we **reject** *Hypothesis 2*.

*Expressing Perceived Emotions:* In terms of Observed Expressing Perceived Emotions and Job Meaningfulness the Pearson's r test resulted in r(23)=,133, with p=,273 showing a very weak, positive correlation that is not significant. These results were the exact same for the Spearman's correlation. *Hypothesis 3* is **rejected**.

*Utilizing Emotions:* The correlation analysis of Observed Utilizing Emotions and Job Meaningfulness resulted in a weak negative Pearson's r correlation with r(23) = -,378 which was significant at the 0,05 level with p = ,038. A Spearman's correlation also revealed that  $r_s(23) = -,279$ , p = ,099, showing a significant, weak, and positive correlation. *Hypothesis 4* is thus **accepted**, whilst there is still no support for a positive relationship between Job meaningfulness and utilizing emotions.

Understanding Emotions: When correlating the Observed Understanding Emotions dimension and Job Meaningfulness a very weak positive correlation was noted with Pearson's r being equal to r(23) = ,022 and not being significant with p = ,461. A Spearman's correlation showed  $r_s(23) = -,013$  with p = ,477. We can therefore **reject** *Hypothesis 5*.

*Regulating Emotions:* Finally, the Pearson's r value for the correlation analysis of observed regulating emotions and Job Meaningfulness was equal to r(23)=,223, p=,153 showing a weak, positive correlation that is not significant at the p=0,05 value. A test for the Spearman's correlation revealed that  $r_s(23)=$ ,256 with p=,119. *Hypothesis 6* is thus **rejected**.

**Table 4: Frequencies of identified Behaviors and Conflicts** 

Team	1	4	Total EI High	6	8	Total EI Low
Negative Feedback	0	0	0	7	33	40
Defending own Position	4	0	4	0	25	25
Directing/ Correcting	0	1	1	0	2	2
Disagreeing	1	6	7	8	5	13
Task conflict	0	0	0	0	0	0
Relationship conflict	2	1	3	1	5	6
Process conflict	0	1	1	4	1	5
Micro conflict	2	1	3	0	2	2
Meso conflict	0	1	1	3	4	7
Macro conflict	0	0	0	0	0	0

#### 4.2 Qualitative Analysis

The following section involves the qualitative exploration of observed EI in relation to situations of conflict. Based on the aforementioned behavioral triggers (negative feedback, defending own position, directing/ correcting, and disagreeing) that had already been coded, potential situations conflicts were identified and defined in terms of conflict type and level. In total, 92 triggering behaviors were identified across the four meetings. This led to the interpretation of 15 situations of conflict in total, of which 9 were related to relationship conflict, 6 were related to process conflict and none were linked to task conflict. In total, 5 Micro conflicts, 8 Meso and no Macro conflicts were recorded. **Table 4** gives an overview of the frequencies of behavioral triggers and potential conflicts identified per team or meeting.

#### 4.2.1 Exploratory Thematic Findings

#### 4.2.1.1 EI vs. Behavioral triggers

Interestingly, teams related to high EI survey data (1 and 4) and low EI survey data (6 and 8) seemed to show different amounts of triggering conflict behaviors. As can be seen in Table 4, within the group of EI high a total of 12 triggering behaviors were identified, whilst a total of 80 triggering behaviors were identified for the group EI low. Similarly, of the 15 identified conflicts, 4 occurred in teams associated with high EI and 11 were coded in the low EI teams. As can be seen in Table 4, teams of EI high experienced shorter conflicts (1 Meso conflict) than EI low teams (7 Meso conflicts). Transcripts 1 and 2 from Appendix G show this drastic difference as well. Teams of EI high seemed to only have short misunderstandings that were solved within seconds, whilst experiencing a much more relaxing atmosphere. The below Transcript Example 1 is a perfect example for this. After a team member is corrected by another (F9), other team members not involved turn observant and quieter, yet do not stop interacting non-verbally. The involved team members shortly voice their differing opinions without becoming personal, after which the situation loosens up almost instantly after individual F9 redirects the attention away from his correction again. Throughout the whole situation, neither stiff nor alert body language was noticed, which is a good representation of the overall atmosphere of the meeting, calm and relaxed.

#### Transcript Example 1: Team of EI high, Micro conflict

#### F9: She said of hand (Directing, Correcting)

F5: It's in the off file. (Relationship Conflict start)

F6: This must put it on this writing hand <right handed>.

F1: <pause>why are we doing it now?

F6: <inaudible> Okay, this was my personal <inaudible>. Yeah that was my question also

#### F1: <inaudible>

F9: Okay it does not matter, It's not our problem-(**Regulating Emotions, Relationship Conflict end**)

This is very much in contrast to teams with low EI, as transcript 2 as seen in **Appendix G** illustrates. Here, a rather harsh correction led to a 2-minute-long rapid discussion between two members. The contrast is also highlighted by the individual's more stiff and alert body language, such as carefully observing another whilst arguing and not letting another finish sentences. Besides, negative feedback was issued multiple times in this situation. Thus, from a qualitative perspective, teams did differ in terms of behavioral triggers and conflicting situations when analyzed based on survey EI.

#### 4.2.1.2 EI vs. Negative Feedback

Teams associated with low EI often issued negative feedback in combination with EI behaviors. This seemed to be particularly true for situations in which negative feedback was paired with either Expressing or Utilizing emotions. In fact, negative feedback also often was issued through the first person, which usually led to sentences such as "I was a little bit disappointed when (...)" or "My big frustration with this is...". Hereby, situations in which negative feedback was issued in direct combination with EI behaviors generally did not escalate into a conflict, Transcript Example 2 below shows. Here, team members reflect on a very serious problem that occurred during the time they worked together. After some negative feedback is provided on this issue in combination with the expression of feelings by F4, coded as expressing perceived emotions, the receiving end (F7) simply voices his differing opinion whilst remaining calm. Without appearing to be threatened, F7 even suggests taking action on the issue himself. Essentially, no conflict occurred. A similar situation is provided in transcript 4 of Appendix G.

#### Transcript Example 2: Team of EI low, Micro Conflict

F4: I- I- believe this is a really serious one, if this- if they brought this to production in this way, then this is a really serious situation. (Negative feedback, Expressing Emotions)

F7: Yes, but on the other hand, acceptance is really badly to not at all monitored. So, it's only about production.

F4: Let's see, lets also-look at it today.

F7: I do want to really quickly look for another solution, so that we can make it a bit more stable than this, because this is not making me happy uh- (Negative feedback and Understanding Emotions)

This is in contrast with the below Transcript Example 3 in which negative feedback without the combination of EI behaviors results in a relationship conflict. After short and offensive negative feedback by F4 without any EI behaviors is provided, the receiving team member (F6) immediately defends his own position with both higher volume and visible unease. During a timespan of a few seconds, all team members turn quiet or move in discomfort in their seat. The short relationship conflict pushes F7 having to explain himself in a calming manner coded as regulating emotions.

#### Transcript Example 3: Team of EI low, Meso Conflict

F4: Yeah. But that is just a cheap excuse. (Negative feedback)  $\label{eq:F4}$ 

F6: No, I did not say that. Excuse me. I am not brushing anything off here- (**Defending own Position, Relationship conflict start**)

F4: No no no. But okay, I am getting the feeling that <name> is brushing it off, in the sense of we are not informing you, but we are going to start the old item again. (**Negative feedback, Regulating Emotions**)

#### (situation continues for 1 more minute)

Transcript Example 4 below also shows a similar situation in which negative feedback was issued without EI behaviors from the same team which then escalates into conflict.

#### 4.2.1.3 Process and Relationship Conflict

The majority of process type conflicts were recorded in Team 6 (low EI) and were of meso duration, lasting several minutes of discussion. Such situations would generally involve many behavioral triggers, yet very little EI behaviors as can be seen in the transcript 2 of **Appendix G**, which is also in line with the characteristics of this team. On the contrary, process conflicts tended to be Micro in duration in teams belonging to the EI high group.

Relationship conflicts tended to be micro conflicts regardless of the team being high or low in EI. Hereby, a reoccurring pattern was noticed. The main triggering behavior for a relationship conflict tended to be negative feedback. As aforementioned, depending on the harshness of the negative feedback, a relationship conflict would either occur or not. Particularly tense relationship conflicts tended to result in stiff body language initially and were followed up by regulating emotions. A good example is the above transcript example 3, as the harsh negative feedback results in a short relationship conflict that is resolved by a redirection of emotions with regulating emotions. Transcript Example 4 below shows a similar pattern. Here, harsh, negative feedback without the use of EI behaviors results in a short relationship conflict. Transcript Example 4 specifically shows a situation in which negative feedback was issued on a sensitive topic. This example showcases the tenseness of the moment, as it simply took a short question by F5 to trigger an impulsive reaction by F7. After a short moment of alert silence and little body movement, another team member successfully loosens up the situation with humor coded as regulating emotions.

#### **Transcript Example 4: Team of EI low, Micro Conflict**

F7: this one- this uh- these changes that we are not implementing are giving us more problems than that they are bringing us profit. Except <inaudible> for that one document the controller that we are receiving. But our whole dependence is just uh- (Negative feedback)

F3: yeah exactly.

F5: that incident <pause>. Can you be a bit more specific about that, so that I can write it down better?

F7: No. We are just going to promote it badly. Done deal. <pause> Incidents are from <inaudible>. Why do we always have to stop at this point? (Negative Feedback, Relationship Conflict start)

F4: hahaha. Okay, next point. Next point. (Regulating Emotions)

<everyone starts laughing> (Relationship Conflict end)

On the other hand, potential relationship conflicts that were less threatening were usually followed up by utilizing emotions to bring different viewpoints together. This is highlighted by transcript 1 in **Appendix G** of a Team with high EI, as team members here show mutual annoyance about a negative occurrence that had occurred during their sprint by voicing their feelings and reflecting on the situation. The relationship conflict hereby does not escalate and seemed to be resolved after each member contributed their share to the discussion.

The qualitative analysis thus showed that teams with high EI experienced less, shorter, and less tense conflicting situations when compared to teams of low EI. Besides, it revealed that negative feedback issued in combination with EI behaviors such as expressing perceived emotions or utilizing emotions did not result in conflicting situations in Teams of low EI. Yet, situations in which particularly harsh feedback was provided were usually followed up by tense relationship conflicts and the EI behavior regulating emotions.

#### 5. DISCUSSION

This thesis aimed to answer the following research question: *How can observed EI, particularly in situations of conflict, relate to job meaningfulness in retrospective meetings?* 

Followed by the sub-research questions:

What EI behavioral dimensions are more related to Job Meaningfulness?

#### How does EI relate to the nature (type) of conflict?

This was achieved by means of a mixed-method approach resulting in a quantitative and qualitative analysis. In the quantitative analysis a total of seven Hypotheses were tested by means of correlation analysis of observed EI dimensions and Job Meaningfulness. The qualitative section comprised of a more exploratory thematic analysis that constituted a shorter section of the results.

#### **5.1 Theoretical Implications**

The quantitative analysis showed that there was a significant difference in terms of total observed EI behaviors between agile teams with high average survey-based EI results and teams with low survey-based EI at an individual level. This implies that the individuals of the two groups did behave differently in terms of EI and generally confirms our theory that an individual's surveybased EI score relates to the amount of observed EI behaviors.

Furthermore, the results of this thesis underline the fact that the relationship of EI and Job Meaningfulness is far from being completely understood. Unsurprisingly, survey-based EI and Job Meaningfulness showed a weak, positive and significant correlation (r(21)=0,345), which goes in line with previous literature (Thory, 2016, Harry, 2021). On the other hand, almost all sub-dimensions including the total value for observed EI behaviors showed a negative and not significant correlation with Job Meaningfulness. This led to the rejection of 5 related Hypotheses in total, as our theory-based prediction led us to quite the adverse assumptions (Thory, 2016; Harry, 2021). And yet the most surprising finding of this thesis is the significant, weak, negative correlation between the subdimension of Utilizing Emotions and Job Meaningfulness. Whilst this result is very contradictory to our initial hypotheses, it could be that observed EI simply behaves very differently than self-rated EI. Indeed, it could be that significant correlations for all other subdimensions are a prerequisite to understanding how the observed EI construct as a whole truly interacts with Job meaningfulness. Thus, a possible explanation for this result could be that Job Meaningfulness is only negatively correlated to some of the subdimensions of the observed EI construct. When considering the cascading order of the subdimensions (Davies et al., 1998), it could be that individuals who connect less meaning to their job make use more of the lower levels of EI (expressing or utilizing emotions) in comparison to the higher subdimensions. This could imply that the correlation between Job meaningfulness increases with the complexity that is associated with a subdimension of the observed EI construct. Essentially, an individual that associates a lot of meaning to their job may also care and make the effort to try and use higher levels of EI such as humor to regulate emotions of others and attain his own goal. Reversely, a person who does not consider their job to be meaningful, would try to use more lower level EI behaviors in comparison. This could be particularly true for situations in which negative emotions are endangered such as conflicts. To give this theory more support beyond speculation, the relationship between observed EI and job meaningfulness needs further investigation.

Another explanation for our results could be that the observed EI values give a clearer representation of the true EI variable when compared to survey-based EI. This could be supported by Waller and Kaplan (2018) who argued that video data as compared to survey data can lead to more profound conclusions. More importantly, research undertaken on the reliability of surveybased EI showed that self-rated EI cannot only be faked, but also requires high levels of self-reflection (Day & Carroll, 2007; Grubb & McDaniel, 2007). This could imply that observational data sheds light on the fact that individuals perform poorly when assessing their own EI abilities. As our findings on this relationship contrast greatly with previous research (Thory, 2016; Harry 2021), this could also imply that Job Meaningfulness and EI are truly either negatively correlated or even unrelated all together. Thory (2016) argued that EI relates to Job Meaningfulness, as both concepts include a need for "selfactualization" or strive for success. Yet, from a more pessimist view, the same argument could be reversely true. Individuals' goal may not be to find or create more meaning in their work. Instead, they may use EI when wanting to achieve other types of goals such as wanting to climb the career ladder, having monetary rewards in mind instead. However, this theory is extremely contradictory to the findings of both papers (Thory, 2016; Harry, 2021) which suggest that a positive correlation between self-rated EI and Job Meaningfulness exists.

Finally, a final possible explanation arises; the possibility that measuring EI by observed methods has yet to be perfected. In fact, this thesis was the first to test the newly developed codebook by Van Gorp (2018) which could make this explanation likely. This is also underlined by the weak, negative correlation between survey-data of EI and observed EI. Nevertheless, the findings of this thesis should not be ignored, as they clearly contribute to the present knowledge and the scarce literature that has refrained from measuring observed EI (Thory, 2016; Harry, 2021; Caillier, 2021).

The results from the additional, qualitative deductive thematic analysis suggest that there may be more to the EI and Job Meaningfulness relationship by specifically looking at moments identified as conflicts. One example is the difference in frequency of identified behaviors between teams of group EI (1 and 4) high and EI low (6 and 8). T-tests and Welch tests carried out in the quantitative section only showed significant differences in total observed EI behaviors when these teams were compared, yet not in terms of subdimensions. Yet, when considering teams associated with low EI and teams with high EI in relation to the triggering behaviors used to identify conflicts, a much clearer differentiation between teams associated with high and low EI values seemed to be apparent. Teams with low levels of EI clearly showed more triggering behaviors, stiffer body language and more conflicting situations that also lasted longer. The adverse was true for teams associated with higher EI levels. This is particularly interesting because this goes in accordance with other research papers suggesting that EI can reduce the amount of negatively emotionally charged situations (Caillier, 2021; Harry, 2021). Harry's (2021) paper could specifically provide a possible explanation for this, having found that EI can reduce an individual's level of emotional exhaustion. Thus, it could be that teams with low EI were less in control of their emotions and thus showed more emotionally charged interactions.

The difference in survey based EI results for teams were also reflected in terms of conflict duration and body language. Teams with high EI predominantly had micro conflicts whilst staying very calm throughout the meeting. Within teams of low EI, seven meso conflicts were identified, in which stiff and threating body language was visible. As aforementioned, survey-based EI and Job Meaningfulness were weakly positively correlated. These findings support various other papers regarding the subject (Callier, 2021; Harry, 2021; Wu et al, 2017). This could be specifically explained through findings suggesting that EI cannot only enhance Job Meaningfulness, but also reduce workplace aggression and stress levels. (Callier, 2021; Harry, 2021) Thus, these results underline the possible connection between self-rated EI and the perceived intensity of conflicting behaviors.

Lastly, the qualitative analysis indicated that providing negative feedback, EI behaviors and relationship conflicts could be related. Specifically in teams related to low EI it was noted that negative feedback and lower level EI behaviors (expressing emotions, utilizing emotions) often co-occurred. Hereby, the amount of threat associated with the feedback seemed to play a crucial role on whether a conflict escalated or not. If paired with EI behaviors such as expressing perceived emotions or utilizing emotions providing negative feedback generally did not escalate into conflict. The adverse was true when particularly harsh negative feedback was issued without EI behaviors, in which situations usually escalated into relationship conflicts and were then resolved with regulating emotions such as humor. This interaction could be explained with the cascading model of the observed EI construct (Davies et al., 1998; Joseph and Newman, 2010). Negative feedback that is less threatening to an individual may require less complex EI behaviours. The general trend also goes in line with Voerman et. al (2014), whose research stressed the need for the inclusion of positive emotions when providing negative feedback to dim the level of the reaction of the receiving end. These findings indicate that, if done right, EI behaviors could potentially significantly influence the reactions of others when negative feedback is provided and even dim the resulting conflicts.

#### 5.2 Practical Recommendations

The findings of this thesis suggest that, when possible, EI should be considered by organizations as an important recruiting criterion. Indeed, whilst one should critically approach the results concerning self-rated EI, higher levels of self-rated EI can not only be associated with higher levels of Job Meaningfulness but also to fewer as well as shorter situations of conflict. These recommendations go hand in hand with those of Hendon et al. (2017), who accentuated the need for recruitment techniques focusing on EI and communication skills.

As research indicates that EI is a skill that can be trained (Thory, 2016; Hendon et al. 2017), it is also recommended that managers take an active stance in helping their employees to improve this ability. As suggested by Thory (2016) EI training can improve Job meaningfulness. Moreover, as this thesis stresses, teams with higher self-rated EI values also seemed to experience a calmer atmosphere as well as less conflicts. Hereby, EI training should

include workshops that elaborate on how negative feedback should be provided correctly to prevent the receiving end to feel threatened. Hereby, this thesis specifically highlights the importance of the skill to carefully provide negative feedback, as especially in teams associated with low self-rated EI, harsh negative feedback can create conflicts. As this thesis would suggest, specifically verbal EI behaviors could be used in combination with negative feedback to avoid relationship conflicts from escalating.

# 6. LIMITATIONS AND FUTURE RESEARCH

As all research, this thesis is not without limitations. One general limitation is that only one organization is analyzed that operates in a financial environment. The findings could vary if the same research was conducted in a completely different company that also operates agile. Thus, to get a better insight as to how agile teams make use of EI behaviors, future research could consider exploring more companies operating in different industries.

Whilst this thesis aimed to capture the EI construct by observable data, the low interrater-reliability kappa values show that how observed EI is measured has yet to be perfected. This problem could have multiple root causes. One cause could be a possible human bias not only because the audio quality of some meetings was sometimes poor, but also because some situations may have had different interpretations. Although two coders were used and question and answer sessions with supervisors were organized, in some cases background information was missing or facial expressions were unclear which could have made some situations easier to understand. This was especially true for situations of sarcasm and implicit verbal behaviors. Furthermore, the definitions of codes of the codebook were new and took some practice to understand and interpret correctly. Future research could focus on creating a EI codebook that either includes body language or possibly additional technical devices such as tracking facial expressions or microphones per individual.

The fact that only two hypotheses (Hypothesis 1b and 6) were supported also raises some questions regarding the sample size of this research. Although it was an exploratory study by nature, the limited sample of both teams and individuals could have significantly influenced the quantitative results in terms of their reliability and validity. This is underlined by the surprising difference in correlations of EI and Job Meaningfulness depending on how the EI construct was measured, especially since they are completely contrary to previous research (Thory, 2016). Hence, future work should consider conducting or extending the same research with a bigger sample size to allow statistical inferences.

The additional qualitative analysis should also be seen as an area for in depth, future research. Exploring the mere suggested links quantitatively could specifically help to understand the interplay of EI, Job Meaningfulness and Situation of Conflict further. Specifically, the interplay of Negative Feedback and observed EI behaviors as well as relationship conflicts in relation to EI behaviors could be further explored. Therefore, future studies could consider investigating these phenomena in depth including perhaps more teams and participants.

#### 7. CONCLUSION

This thesis used a mixed-method approach to investigate the relationship between EI, Job Meaningfulness and conflicting situations. The quantitative analysis through t-test and correlation analysis showed that observed and self-rated EI were weakly, negatively, and not significantly correlated. Further differences between the measurements of EI became evident through correlation analysis with Job Meaningfulness. As

expected, self-rated EI was positively correlated with Job Meaningfulness. On the contrary, almost all observed EI behaviors were negatively and not significantly correlated with Job Meaningfulness. These contrasting results are in line with the nascent and innovative way of measuring EI, i.e., via video observations, and call for more studies to finetune the coded behaviors. The qualitative analysis conducted via deductive thematic analysis resulted in the identification of three exploratory themes: the apparent connection between self-rated EI and frequency as well as length of conflicts, the continuous appearance of Negative Feedback behaviors in combination with verbal EI behavioral dimensions and the relation of negative feedback and relationship conflict. Future research should explore in more details these interesting, yet preliminary, results and potentially test them. Recommendations for practice include recruiting employees on the basis of self-rated EI skills and providing EI and negative feedback training to avoid relationship conflicts from escalating on a daily reoccurring basis.

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#### 9. REFERENCES

- Adriyani, Y., Hoda, R., Amor, R. (2017) "Reflection in Agile Retrospectives", International Conference on Agile Software Development, Lecture notes, pp. 3-19, in: Baumeister, H., Lichter, H., and Riebisch, M. Agile Process in Software Engineering and Extreme Programming, 18<sup>th</sup> International Conference XP 2017, Cologne, Germany, May 22-26, 2017, Proceedings.
- Alper, S., Tjosvold, D., & Law, K. S. (2000). Conflict management, efficacy, and performance in organizational teams. *Personnel Psychology*, 53, 625-642. doi:10.1111/j.1744-6570.2000. tb00216.x
- Baumeister, R. F. (1991), Meanings of Life (New York: The Guilford Press).
- Bradley, B. H., Postlethwaite, B. E., Klotz, A. C., Hamdani, M. R., & Brown, K. G. (2012). Reaping the benefits of task conflict in teams: The critical role of team psychological safety climate. *Journal of applied Psychology*, 97(1), 151.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi:10.1191/1478088706qp063oa
- Brunetto, Y., Teo, S. T. T., Shacklock, K., & amp; Farr-Wharton, R. (2012). Emotional intelligence, job satisfaction, wellbeing and engagement: explaining organisational commitment and turnover intentions in policing: emotional intelligence, well-being and engagement. Human Resource Management Journal, 22(4), 428–441. https://doi.org/10.1111/j.1748-8583.2012.00198.x
- Caillier, J. G. (2021). The impact of workplace aggression on employee satisfaction with job stress, meaningfulness of work, and turnover intentions. Public Personnel Management, 50(2), 159–182.

- Chen, X.H., Xu, X., Phillipps, P. (2018). Emotional Intelligence and conflict management styles. *International Journal of Organizational Analysis*. Vol. 27 No.3. pp.458-470. doi.org/10.1108/IJOA-11-2017-1272
- Creswell, J. W., Clark, V. P., & Garrett, A. L. (2003). Advanced Mixed Methods Research. In *Handbook of mixed methods in* social and behavioural research (pp. 209-240). Thousand Oaks, CA: Sage.
- Csikszentmihalyi, M. (1990), Flow. The Psychology of Optimal Experience, Harper Perennial, New York, NY.
- Davies, M., Stankov, L., & Roberts, R. D.(1998). Emotional intelligence: In search of an elusive construct. Journal of Personality and Social Psychology, 75(4), 989–1015.
- Day, Arla & Carroll, Sarah. (2008). Faking emotional intelligence (EI): Comparing response distortion on ability and trait-based EI measures. Journal of Organizational Behavior. 29(6). 761-784. <u>https://doi.org/10.1002/job.485</u>.
- de Gregorio, F., Cheong, Y., & Kim, K. (2012). Intraorganizational conflict within advertising agencies. Journal of Advertising, 41(3), 19–34. <u>https://doi.org/10.2753/JOA0091-3367410302</u>
- Dikert, K., Paasivaara, M., & Lassenius, C. (2016). Challenges and success factors for large-scale agile transformations: A systematic literature review. Journal of Systems and Software, 119, 87-108. doi:https://doi.org/10.1016/j.jss.2016.06.013
- Dingsoyr, T., Dyba, T., Gjertsen, M., Jacobsen, A. O., Mathisen, T.-E., Nordfjord, J. O., Roe, K., & Strand, K. (2019). Key lessons from tailoring agile methods for large-scale software development. *It Professional*, 21(1), 34–41. https://doi.org/10.1109/MITP.2018.2876984
- Evans, J.D. (1996) Straightforward Statistics for the Behavioral Sciences. Brooks/Cole Publishing, Pacific Grove
- Fernandez, D. J., Fernandez, J. D. (2008) Agile project management: Agilism versus traditional approaches, Journal of Computer Information Systems, 49(2), 10-17, https://doi.org/10.1080/08874417.2009.11646044.
- Goleman, D. (1995). Emotional intelligence. New York: Bantam Books.
- Grubb, W. L., & McDaniel, M. A. (2007). The fakability of Bar-On's emotional quotient inventory short form: Catch me if you can. Human Performance, 20(1), 43-59. <u>https://doi.org/10.1207/s15327043hup2001\_3</u>.
- Hackman, J.R. and Oldham, G.R. (1980), Work Redesign, Addison-Wesley, Reading, MA.
- Harry, N. (2021). Call centre agents' emotional intelligence as predicators of their exhaustion and professional efficacy: The moderating effect of meaningfulness. SA Journal of Industrial Psychology/SA Tydskrif vir Bedryfsielkunde, 47(0), a1819. https://doi.org/10.4102/sajip. v47i0.1819 Stephens and Carmeli 2016
- Hendon, M., Powell, L., & Wimmer, H. (2017). Emotional intelligence and communication levels in information technology professionals. Computers in Human Behavior, 71, 165–171. https://doi.org/10.1016/j.chb.2017.01.048.
- Hoda, R., Noble, J., Marshall, S. (2010). Organizing Self-Organizing Teams. Victoria University of Wellington.
- Hoogeboom, M. A. M. G., Saeed, A., Noordzij, M. L., & amp; Wilderom, C. P. M. (2021). Physiological arousal variability

accompanying relations-oriented behaviors of effective leaders: triangulating skin conductance, video-based behavior coding and perceived effectiveness. The Leadership Quarterly. https://doi.org/10.1016/j.leaqua.2020.101493

- Jaramillo, F., Mulki, J. P., & Boles, J. S. (2013). Bringing meaning to the sales job: The effect of ethical climate and customer demandingness. Journal of Business Research, 66(11), 2301–2307.ISSN 0148-2963, <u>https://doi.org/10.1016/j.jbusres.2012.03.013</u>. (https://www.sciencedirect.com/science/article/pii/S014829 6312000975)
- Jehn, K. A. (1995). A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative science quarterly*, 256-282.
- Jehn, K. A. (1997). A qualitative analysis of conflict types and dimensions in organizational groups. *Administrative science* quarterly, 42(3), 530-557. doi:10.2307/2393737
- Jordan, P. J., & Kamp; Troth, A. C. (2004). Managing emotions during team problem solving: emotional intelligence and conflict resolution. Human Performance, 17(2), 195–218.
- Joseph, D. L., & Newman, D. A. (2010). Emotional intelligence: An integrative metaanalysis and cascading model. Journal of Applied Psychology, 95(1), 54-78. <u>https://doi.org/10.1037/a0017286</u>
- Katz, D., & Kahn, R. L. (1978). The social psychology of organizations. New York, NY: Wiley.
- Khosravi, P., Rezvani, A., & Camp; Ashkanasy, N. M. (2020). Emotional intelligence: a preventive strategy to manage destructive influence of conflict in large scale projects. International Journal of Project Management, 38(1), 36–46. https://doi.org/10.1016/j.ijproman.2019.11.001
- Levesque, L. L., Wilson, J. M., & amp; Wholey, D. R. (2001). Cognitive divergence and shared mental models in software development project teams. Journal of Organizational Behavior, 22, 135–144.
- Lips-Wiersma, M. and Morris, L. (2009), 'Discriminating between "meaningful work" and the "management of meaning", Journal of Business Ethics, 88, 3, 491–511.
- Liu, J. Y. C., Chen, H. G., Chen, C. C., & Sheu, T. S. (2011). Relationships among interpersonal conflict, requirements uncertainty, and software project performance. International Journal of Project Management, 29(5), 547–556.
- Moe, N.b., Dingsøyr, T., Dybå, T.(2010) A teamwork model for understanding an agile team: A case study of a Scrum project. *Information and Software Technology*, 52, Issue 5, doi.org/10.1016/j.infsof.2009.11.004.
- Manz, C. C. (1992). Self-leading work teams: Moving beyond self-management myths. *Human Relations*, 45, 1119-1140. doi:10.1177/001872679204501101
- May, D. R., Gilson, R. L. and Harter, L. M. (2004), 'The psychological conditions of meaningfulness,
- safety and availability and the engagement of the human spirit at work', Journal of Occupational and Organizational Psychology, 77, 1, 11–37.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2000). Emotional intelligence as zeitgeist, as personality, and as a mental ability. In R. Bar-On, & J. Parker (Eds.), The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace (pp. 92–117). Jossey-Bass.

- Mayer, J. D., Salovey, P., & Caruso, D. R. (2008). Emotional intelligence: New ability or eclectic traits? American Psychologist, 63(6), 503- 517. <u>https://doi.org/10.1037/0003-055x.63.6.503</u>
- 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). Basic Books.
- Mulki J., Lassk, F.G, (2019). Joint impact of ethical climate and external work locus of control on job meaningfulness, Journal of Business Research, Volume 99, Pages 46-56, ISSN 0148-2963, https://doi.org/10.1016/j.jbusres.2019.02.007. (https://www.sciencedirect.com/science/article/pii/S014829 6319300967)
- Nicolaides, V. C.; LaPort, K. A.; Chen, T. R.; Tomassetti, A. J.; Weis, E. J.; Zaccaro, S. J.; Cortina, J. M. (2014). "The shared leadership of teams: A meta-analysis of proximal, distal, and moderating relationships". *The Leadership Quarterly*. **25** (5): 923–942.
- Paik, Y., Seo, M.-G., & Jin, S. (2019). Affective information processing in self-managing teams: the role of emotional intelligence. Journal of Applied Behavioral Science, 55(2), 235–267. <u>https://doi.org/10.1177/0021886319832013</u>
- Paletz, S. B. F., Schunn, C. D., & Kim, K. H. (2011). Intragroup conflict under the microscope: Micro-conflicts in naturalistic team discussions. *Negotiation and Conflict Management Research*, 4(4), 314-351.
- Rising, Linda & Janoff, N.S. (2000). The scrum software development process for small teams. IEEE Software. 17(4). 26-32. <u>https://doi.org/10.1109/52.854065</u>.
- Rogelberg, S. G., Leach, D. J., Warr, P. B., & Burnfield, J. L. (2006), ""Not another meeting!" Are meeting time demands related to employee well-being?" *Journal of Applied Psychology*, Vol. 91, No. 1, pp. 86-97.
- Ryan, R.M. and Deci, E.L. (2000), "Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being", American Psychologist, Vol. 55 No. 1, pp. 68-78.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. Imagination, Cognition and Personality, 9 (3), 185–211.
- Serrador, P., & amp; Pinto, J. K. (2015). Does agile work? a quantitative analysis of agile project success. International Journal of Project Management, 33(5), 1040–1051. https://doi.org/10.1016/j.ijproman.2015.01.006Hoda 2010
- Sleurink, C. (2020). Emotional Intelligence and Job Performance in Agile Teams. University of Twente.
- Spencer-Oatey, H., & Xing, J. (2008). Issues of face in a Chinese business visit to Britain. *Culturally speaking: Culture, communication and politeness theory*, 258-273.
- Stephens, J. P., & amp; Carmeli, A. (2016). The positive effect of expressing negative emotions on knowledge creation capability and performance of project teams. International Journal of Project Management, 34(5), 862–873. https://doi.org/10.1016/j.ijproman.2016.03.003
- Tekleab, A. G., Quigley, N. R., & Tesluk, P. E. (2009). A longitudinal study of team conflict, conflict management, cohesion, and team effectiveness. *Group & Organization Management*, 34(2), 170-205. doi:10.1177/1059601108331218

- Thompson, E.R. (2008). Development and validation of an internationally reliable short-form of the positive and negative affect schedule (PANAS). JOURNAL OF CROSS-CULTURAL PSYCHOLOGY, Vol. 38 No. 2, March 2007 227-242. DOI: 10.1177/0022022106297301
- Thory, K. (2016). Developing meaningfulness at work through emotional intelligence training. International Journal of Training and Development, 20(1), 58–77. Khosravi 2016
- Van Gorp, A., L. P. (2018). What are the verbal emotionally intelligent behaviors of highly effective leaders? University of Twente.
- Van Rooy, D. L., & Viswesvaran, C. (2004). Emotional intelligence: A meta-analytic investigation of predictive validity and nomological net. Journal of Vocational Behavior, 65(1), 71–95.
- Voerman, L., Korthagen, F. A. J., Meijer, P. C., & Kamp; Simons, R. J. (2014). Feedback revisited : adding perspectives based on positive psychology implications for theory and classroom practice. Teaching and Teacher Education, 43.
- Vuori, T., San, E., & Kira, M. (2012). Meaningfulnessmaking at work. Qualitative Research in Organizations and Management: An International Journal, 7(2), 231–248. https://doi.org/10.1108/17465641211253110
- Waller, M.J. & Kaplan, S. (2018). Systematic behavioral observation for emergent team phenomena: Key considerations for quantitative video-based approaches. Organizational Research Methods, 21, 500-515. https://doi.org/10.1177/1094428116647785.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.
- Wilderom, C., Carminati, L., van Dun, D. (2021) Draft socioemotional Behaviour Codebook. University of Twente.
- Williams, Terry. (2005). Assessing and moving on from the dominant project management discourse in the light of project Overruns. IEEE Transactions on Engineering Management, 52(4). 497 - 508. https://doi.org/10.1109/TEM.2005.856572.
- Wong C., Law, K.S. (2002). The Effects of leader and follower emotional intelligence on performance and attitude. *The Leadership Quarterly*, 13. 243-274
- Wu, G., Liu, C., Zhao, X., & Zuo, J. (2017). Investigating the relationship between communication-conflict interaction and project success among construction project teams. International Journal of Project Management, 35(8), 1466– 1482.
- Yan, X., Yang, K., Su, J., Luo, Z., & amp; Wen, Z. (2018). Mediating role of emotional intelligence on the associations between core self-evaluations and job satisfaction, work engagement as indices of work-related well-being. Current Psychology : A Journal for Diverse Perspectives on Diverse Psychological Issues, 37(3), 552–558. https://doi.org/10.1007/s12144-016-9531-2

### **10. APPENDIX**

			•		
Behavior/ Team	EI (Exp.)	EI (Util.)	EI (Und.)	EI (reg.)	EI total
	( <b>F</b> -)	(0.111)	(0111)	(8-)	
1	1	8	2	7	18
d	0,023	0,184	0,046	0,161	0,415
4	8	6	3	6	23
d	0,184	0,138	0,069	0,138	0,53
6	4	2	6	3	15
d	0,092	0,046	0,138	0,069	0,346
8	14	13	4	10	41
d	0,323	0,3	0,092	0,23	0,946

Appendix A: data standardized by duration

#### Appendix B: Descriptive Statistics of Variables

		Ν	Mean	SD	Skewi	ness	Kurto	osis
		Statistic	Statistic	Statistic	Statistic	Std.	Statistic	Std.
						Error		Error
	EI survey data	21	5,5398053	,607497	,102	,501	-,427	,972
			72954192	2580853				
				08				
	JM	24	5,2777777	1,04334	-,463	,472	-,265	,918
			77777778	4060076				
				666				
Team	Total Observed EI	4	,25000000	,120041	1,546	1,014	2,378	2,619
Level	behaviors		0000000	5015443				
	(frequency)			89				
	Total Observed EI	4	,55961538	,268708	1,546	1,014	2,378	2,619
	behaviors (duration)		4615385	2842262				
				86				
Individual	Total Observed EI	23	,04347826	,034746	1,066	,481	,135	,935
Level	behaviors		0869565	5257791				
	(frequency)			56				
	Total Observed EI	23	,09624501	,069023	,742	,481	-,569	,935
	behaviors (duration)		0896163	2310702				
				38				

	EI high vs EI low	Mean	Std. Deviation	Std. Error Mean	Equal Variance	p-value, 2-tailed (t-test)	p-value (Welch's test)
Expressing	EI low	,3040650406504	,05288928	,03739837	No	,679	,609
Perceived		07	7698506	3983740			
Emotions	EI high	,2016908212560	,20666647	,14613526			
		39	4694619	5700483			
Utilizing	EI low	,2252032520325	,12992368	,09186991	Yes	-,981	-
Emotions		20	4998504	8699187			
	EI high	,3526570048309	,12980704	,09178743			
		18	1956951	9613527			
Understand	EI low	,2487804878048	,21385668	,15121951	No	,845	,553
ing		78	5041785	2195122			
Emotions	EI high	,1207729468599	,01366389	,00966183			
		03	9153363	5748792			
Regulating	EI low	,2219512195121	,03104371	,02195121	No	-1,521	,335
Emotions		95	2344775	9512195			
	EI high	,3248792270531	,09052333	,06400966			
		40	1891031	1835749			
Total	EI low	,2886597938144	,18953377	,13402061	No	,567	,667
Observed		33	6400518	8556701			
EI	EI high	,2113402061855	,03644880	,02577319			
		67	3153946	5876289			

Appendix C: Group Statistics of Observed EI at Team level differentiated between EI high and EI low

\*Significant at the 0,05 alpha level \*\*Significant at the 0,1 alpha level

	EI high vs low	Mean	Std. Deviation	Std. Error Mean	Equal Variance	p-value, 2- tailed (t-test)
Expressing	EI high	,178632478632	,258217279326	,071616587755	Yes	,402
perceived		479	597	604		
emotions	EI low	,257272727272	,150816233110	,047692280475		
		727	957	753		
Utilizing	EI high	,301068376068	,337404799981	,093579254378	Yes	,385
emotions		376	169	444		
	EI low	,189090909090	,241814046866	,076468315832		
		909	414	057		
Understanding	EI high	,090811965811	,163021025333	,045213897370	Yes	,105
emotions		966	712	724		
	EI low	,271515151515	,338345241278	,106994159791		
		152	319	871		
Regulating	EI high	,429487179487	,366170993637	,101557561011	Yes	,330
emotions		179	121	249		
	EI low	,282121212121	,329724727738	,104268114053		
		212	204	162		
Total Observed	EI high	,032513877874	,027225785227	,007551074204	Yes	,084**
EI behaviors		703	774	116		
	EI low	,057731958762	,039541305467	,012504058693		
		887	058	237		

Appendix D: Grou	p Statistics of Observed	EI at Individual level	differentiated between	EI high and EI low
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\*Significant at the 0,05 alpha level \*\*Significant at the 0,1 alpha level

Team level	Behavior	Equal variance	p-value, 2-tailed (T-test)	p-value (Welch's test)
	Expressing Perceived Emotions	Yes	,538	-
	Utilizing Emotions	No	-	,937
	Understanding Emotions	No	-	,155
	Regulating Emotions	No	-	1
	Total Observed Emotions	No	-	,628
Individual level				
	Expressing Perceived Emotions	Yes	,121	-
	Utilizing Emotions	Yes	,835	-
	Understanding Emotions	Yes	,110	-
	Regulating Emotions	Yes	,835	-
	Total Observed Emotions	Yes	,183	-

### Appendix E: Statistical tests for differences between EI high and EI low standardized by Duration

\*Significant at the 0,05 alpha level \*\*Significant at the 0,1 alpha level

Appendix F: Over	view of Descrip	otive Statistics	and Correlatio	n Analyses from	m Individual dat	a standardized	by Duration
		Observed EI (Total)	EI (Exp.)	EI (Util.)	EI (Und.)	EI (Reg.)	Survey - EI
	М	,096	,026	,027	,016	,025	5,539
	SD	,069	,029	,035	,021	,025	,607
	Skewness	,742	,768	1,273	1,668	1,216	,102
	Kurtosis	-,569	-,433	,873	3,347	1,586	-,427
Job	Pearson's R	-,027	-,066	-,237	,159	,203	,345**
Meaningfulness	Spearman's	,084	,036	-,216	,065	,197	,424*

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\*Significant at the 0,05 alpha level \*\*Significant at the 0,1 alpha level

Appendix G: Transcript examples

Transcrip t example	EI group	Triggering Behavior	EI Behavior	Conflict Type	Transcript excerpt
1	EI high	Defending own	Utilizing emotions	Relationship, Micro	F5: Yeah, it's er, well, I already knew it er, in front, it wouldn't work. () (defending own position)
		position			F10: it's annoying. (Relationship conflict start)
					F5: It's annoying Yeah. () (Relationship conflict end)
					F7: Ja, I'm not sure But yeah. It was a little bit disappointing because that was also part of our er, () ( <b>Utilizing Emotions</b> )
2	EI low	Correcting, negative feedback (x2)	Understand ing emotions	Process conflict, Meso	F6: That is eh not correct ( <b>Correcting</b> ). But when we talk about the <delayed> time, we have to understand that if you do not see the full of the eh- <inaudible>, it is more difficult eh, to see it moving a little bit, but eh- and after you keep on- You keep on persisting the difficulty, to see and then all we know is that it is not-</inaudible></delayed>
					F5: Yes. But I am just asking, what is the negative for the negative in the checking process and the quality between the countries, so what is the negative? ( <b>Process conflict start</b> )
					F6: So I think focusing on one goal eh- for it and wait. Eh and- For example the thing with the law. The delay was developed into the goals <inaudible>. And then you need to continue to focus on closing <the condition="" wrong="">. Think about a condition when it goes <as it=""> assist, <inaudible> They are all saying this to protect and that was no the deal. <inaudible></inaudible></inaudible></as></the></inaudible>
				F4: That was something, that was agreed to get on by the ING. We were expected to <do it="" like="" this.=""></do>	
					F6: So, eh- I do not know where exactly. But I remember eh- to me eh- December, the beginning of December, they were talking about the <inaudible> then they do not consulate any-, they do everything. (<b>Negative feedback</b>)</inaudible>
					F1: Yes.
					F6: So, looking eh- <inaudible> It is better communicate with to the team issues that say something to <name>. Probably the similar blocks are not aware for both. That. (Negative feedback)</name></inaudible>
					F4: Just, I think this just eh about the division of the tasks, right? So, for example you have do get it with a fellow teammate and then you are going to regarding the responsibilities. And then a sort of like, calculating the <name> and eh calibrating the shows from the beginning onwards eh- We will create something that would still be a IC spot. Then you can move the focus on the more specific tasks like a combination <of entities="">. At the end of this, take a broad status within the process and I think this is exactly how we can do it by the moment now as well. It is nice to eh- to let it out eh- And maybe that information was not <stable> well enough to eh team as well. I think when we try to solve that now, you are also more relying our tasks eh- on <inaudible> (Process conflict end)</inaudible></stable></of></name>
3	EI low	Negative feedback	Utilizing emotions	-	F5: Uhm so I have incidents as positive as well as negative. There were strikingly many, but my feeling- my feeling is that- the users will feel this more. I was not too happy about that. ( <b>Negative feedback and Utilizing Emotions</b> ) I felt like we- that we actually handled it quite nicely. That we handle. That's why I placed it in the middle. I'm not sure if- a week ago? We also had such a general disturbance.

4	EI low	Negative	Expressing	F4: Well, here you have it.
		feedback x2	emotions	F6: Well you know, I am going to- I am going to take it with me to <name>, maybe it's good to specifically discuss this later again with <name>.</name></name>
				F4: Well, I feel like- I feel like it's very strange that its always us who experience such situations. (Negative feedback and Expressing emotions)
				F6: Yes, I also think it's weird. But- (Negative feedback)
				F4: According to me no one else experiences such situations and is busy with them.
				F3: I am also getting that idea.