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Emotional intelligence in sports and physical activity: An intervention focus

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Abstract

The aim of this chapter is twofold: 1) to introduce the reader to the role of emotional intelligence in sports and physical activity, and 2) to have an intervention focus achieved through applied activities enabling the development of the different dimensions of emotional intelligence. The chapter begins with an introduction to the theory that underpins emotional intelligence in sports, the tripartite model – knowledge, ability, and trait. Subsequently measurement issues will be addressed in regards to instruments measuring the ability and trait aspects of emotional intelligence. In continuation, the role of emotional intelligence is discussed within the sport performance domain specifically in athletes, coaches, and officials, as well as its role in physical activity. Finally an applied perspective of emotional intelligence training in sports performance is presented, along with emotional intelligence training through sports and physical activity. Thirteen emotional intelligence training activities are suggested that are based on the tripartite model and where the five main dimensions of emotional intelligence are addressed (i.e., identification, expression, understanding, regulating, using). Such activities aim to contribute to the dissemination of emotional intelligence training at school, which may have an important impact further on performance, society and health policies.

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1 Introduction

During the semi-finals of the US Open tennis championship 2011, Novak Djokovic faced Roger Federer, players who are both considered masters of the physical and technical aspects of tennis. After approximately three and a half hours Federer had two match points, just like the previous year, and was therefore close to reaching the finals and perhaps winning his sixth US Open title. In this stressful situation, they were obviously both under enormous pressure and what happened next in this crucial moment was quite a shock. Djokovic was able to regulate and use his emotions better than Federer, he saved the two match points, qualified for the final, and went on to win the US Open title.

In this kind of stressful situation, emotional intelligence (EI) can make the difference between winning or losing a sport event, illustrating its domineering influence on sport performance. EI refers to the individual responses to intrapersonal or interpersonal emotional information and encompasses the identification, expression, understanding, regulation and use of personal or other's emotions (Mayer & Salovey, 1997; Petrides & Furnham, 2003). Given the prevalence of such pressure situations in sports, it seems necessary to seek a better understanding of the role played by EI in this domain.

In order to give an overarching impression regarding the importance of EI in sports, we divided the different categories of sports into three sections: 1) individual sports without a direct opponent, 2) individual sports with a direct opponent, and 3) team sports:

- Individual sports without a direct opponent: examples of sports fitting this category would be track and field, gymnastics or swimming. Here EI is particularly relevant to perceive one's own emotions, like fear or anxiety, and to regulate and use them where necessary to perform at one's best.
- Individual sports with a direct opponent: examples of sports fitting this category would be tennis, boxing and table tennis. In addition to the elements mentioned previously, having a direct opponent it is advantageous to be able to perceive, regulate and use the opponent's emotions as well as one's own emotions. For example, the boxer Muhammad Ali said he talked endlessly to his opponents and provoked them to encourage mistakes.

• Team sports: finally in team sports like basketball, soccer or handball, it is particularly relevant for success to not only focus on one's emotions and the opponent's emotions but also to perceive, regulate and use the emotions of the teammates. If for example a teammate had recognized Zinedine Zidane getting angry because of being provoked by Materazzi, he might have been able to prevent Zidane's infamous headbutt, which led him to being sent off in the finals of the FIFA soccer world cup in 2006.

Hence, the aim of this chapter will be twofold: first, to review the way EI can influence sport performance, and then how sport participation could contribute to EI training.

The structure of this chapter will be as follows: firstly we give a short introduction to why and how EI is important for peak performance in sports in regards to theoretical perspective. Following this, we present the different perspectives on EI and their measurement, before introducing a model integrating the different EI perspectives, the tripartite model of EI. Having established these foundations we then describe the importance of EI for individuals involved in sport and physical activity. The final section will demonstrate how EI training can be used to improve sport performance and conclude with an original perspective on how EI training could be realized through sport participation.

1 Underpinning Theory: Tripartite Model

The tripartite model (Mikolajczak, 2009) consists of the three following levels - knowledge, trait and ability (see Figure 1).

The **knowledge level** refers to knowing techniques that help focus on the task and to regulate one's own emotions, but does not necessarily mean that one is able to put this knowledge into practice.

The **ability level** refers to the fact an athlete is able to perform a certain emotion regulation strategy when he is explicitly prompted to do so, however it does not mean that he can do so frequently nor in every situation.

The **trait level** of the tripartite model refers to what people usually do when dealing with emotional situations.

We are now going to illustrate those three levels, their limitations and potential connections when considering sports performers.

- **Knowledge level:** imagine an athlete facing a stressful situation during a competition, like shooting a penalty in the last minute of a soccer match that makes the difference between winning 1:0 or a draw. He might know techniques that help him focus on the task and regulate his emotions, but wouldn't be able to use this knowledge and therefore couldn't perform at his peak.
- Ability level: Consider the same soccer player who might be able to focus his attention when shooting a penalty at training, by using a specific routine when instructed to do so by his coach, but might not be using this technique on a regular basis, let alone during competition.
- **Trait level:** considering a specific emotion regulation technique that might help the soccer player to handle the pressure surrounding the penalty shooting. Not only does he know how to apply it but he is able to perform it when prompted to do so and he is also able to use it regularly when required.

One advantage this model offers, if understood properly, is the connection between the three levels (Figure 1), which might be helpful for sport psychologists as well as for coaches and athletes, paving the way to EI training, which forms the focus of the last part of this chapter. Furthermore the tripartite model enables encapsulation of the previously opposing perspectives, namely EI as an ability vs. EI as a trait (Mikolajczak, 2009). Going beyond this opposition proves to be beneficial for sports performance, since both levels are important for success in sports (Laborde, Dosseville, & Allen, 2015).

Trait

Ability

Knowledge

Usual handling of one's and others' emotions

Capability to use a technique to regulate emotions to a certain degree when prompted to do so

Awareness of helpful techniques to regulate emotions without necessarily being able to perform them

Figure 1. The three levels of the tripartite model

2 Measurement

In this section we review the measurement and assessment for the ability level and the trait level of EI. Regarding sports performance, it is usually acknowledged that ability EI predicts shortterm performance while trait EI is crucial for the long term (Laborde, Dosseville, et al., 2015).

3.1 Ability Emotional Intelligence - Maximal Performance

EI as an ability can be measured with the Mayer-Salovey-Caruso emotional intelligence test (MSCEIT; Mayer, Salovey, & Caruso, 2002). This test measures one's ability to perceive, use, understand, and regulate emotions by performing tasks typical to everyday life. It uses different tasks to measure a person's capacity for reasoning with emotional information by directly testing one's ability, and is usually performed with a computer. Therefore, the MSCEIT is ideal for situations where respondents may want to create a positive impression by pretending to be more emotionally intelligent than they actually are, such as for a job interview. Such manipulation of EI ability is possible in a self-report questionnaire but is less likely to happen within a task that measures actual performance. The MSCEIT is suitable for all kinds of corporate, educational, research, and therapeutic settings, and has

been first considered as the most suitable to the sport domain, because of the common focus on performance (Meyer & Zizzi, 2007).

3.2 Trait Emotional Intelligence - Self-report questionnaires

EI at the trait level is usually assessed by self-report questionnaires. Since trait EI is measured by questionnaires, it is easier to administer than ability EI that requires performance testing via a computer. Hence it is much more widely researched in sport and multiple questionnaires exist to measure trait EI (for an overview, see Laborde, Dosseville, et al., 2015). In this chapter we focus on two questionnaires, the trait emotional intelligence questionnaire (TEIQue) and the profile of emotional competence (PEC).

3.2.1 Trait Emotional Intelligence Questionnaire - TEIQue

The first self-report questionnaire we present is the TEIQue, because it is the only EI scale without psychometric shortcomings (Petrides, 2009a, 2009b) and it has been validated for sports (Laborde, Dosseville, Guillén, & Chávez, 2014). Its sampling domain has a better coverage and it has the strongest theoretical foundation compared to other measures, like the Bar-On emotional quotient inventory, the Schutte emotional intelligence scale, or the trait meta-mood-scale (Petrides, 2009a). The TEIQue exists in a long version consisting of 153 items and a short version consisting of 30 items (Petrides, 2009b). While the short version measures only the four key factors (Siegling, Vesely, Petrides, & Saklofske, 2015), the long version measures thirteen facets on which the four key factors are based (see Table 1), and two auxiliary facets. The four key factors are the following: well-being ("Most days, I feel great to be alive"), sociability ("I would describe myself as a good negotiator"), emotionality ("I would describe myself as a calm person") and self-control ("I know how to snap out of my negative moods"). Two auxiliary facets (adaptability and self-motivation) are independent of the others, however, they still contribute significantly to understand how we deal with other people and our emotional environment (Petrides, 2009b). Participants rate these items on a scale of 1 *(completely disagree)*.

Table 1 - Signification of the scales, based on the Trait Emotional Intelligence Questionnaire manual (Petrides, 2009b)

| | Optimism | Confidence and likelihood to focus on the positive | | | | | |
|--------------|----------------------|--|--|--|--|--|--|
| Well-Being | | | | | | | |
| | | Positive mental attitude, pleasant emotional states, | | | | | |
| | Happiness | primarily directed towards the present moment rather | | | | | |
| | | than the past or the future. | | | | | |
| | Self Esteem | Self-confidence and faith in one's abilities | | | | | |
| | Emotion Management | Ability to influence other people's feelings | | | | | |
| Sociability | Assertivoness | Courageous, forthright, frank and willing to stand up | | | | | |
| Sociability | Assertiveness | for one's views and opinions. | | | | | |
| | Social Awareness | Social skills and ability to network | | | | | |
| | | Acknowledging and taking in someone else's | | | | | |
| | Empathy | perspective | | | | | |
| | | To see things from another person's point of view | | | | | |
| Emotionality | Emotional Perception | Insightful and clear about personal feelings and the | | | | | |
| | | feelings of others | | | | | |
| | Emotional Expression | Communication of one's feelings to others | | | | | |
| | Relationships | Capability to have fulfilling personal relationships | | | | | |
| | Emotion Regulation | Short, medium and long term control of one's own | | | | | |
| | | feelings and emotional states | | | | | |
| Self-Control | Impulsiveness | How reflective and how likely one gives in to urges | | | | | |
| | Stress Management | Capability to cope with and perception of stressful | | | | | |
| | Stress munugement | situations | | | | | |
| Auxiliary | Adaptability | Flexibility and willingness to adapt to new conditions | | | | | |
| Facets | Self-Motivation | Drive and persistence in the face of adversity | | | | | |

3.2.2 The Profile of Emotional Competence - PEC

The second self-report questionnaire we introduce is the PEC, a relatively new instrument to measure trait EI (Brasseur, Grégoire, Bourdu, & Mikolajczak, 2013). The PEC consists of 50 questions which aim to measure individual differences in the identification ("When I am touched by something, I immediately know what I feel"), understanding ("I don't always understand why I am stressed"), expression ("I am good at describing my feelings"), regulation ("When I'm sad I find it easy to cheer myself up") and use ("I can easily get what I want from others") the emotions of oneself and others (Brasseur et al., 2013). Although the PEC has not yet been used in the sports settings, we use the PEC's five dimensions as a basis for our suggestions for the training of EI through sport for several reasons. First and foremost, the PEC is the only questionnaire able to measure each of the five core emotional competencies (i.e., identification, understanding, expression, regulation, and use), separately for one's own as well as for other's emotions (Brasseur et al., 2013). Furthermore, by measuring these five core emotional competencies, the PEC represents an added value when the objective is to obtain a detailed profile of emotional competencies for research and/or clinical purposes. Thus the PEC allows for the adjustment of interventions to specific profiles, because it offers the necessary information to effectively identify an individual's trait EI profile. Finally, only the PEC measures the intrapersonal understanding of emotions. According to Mikolajczak, Brasseur, and Fantini-Hauwel (2014), out of the ten dimensions recorded by the PEC, the ability to understand one's emotions has the highest power regarding physical health outcomes. Thus this particular dimension is of relevance for sports, on the one hand training the understanding of one's emotions through sport might be beneficial for athletes, for example, who want to perform better under pressure or athletes undergoing rehabilitation who want to recover from an injury. On the other hand it might be advantageous for prevention of choking under pressure, and prevention of injuries and diseases.

4 Role of Emotional Intelligence in Sports and Physical Activity

4.1 Sports

Jack Johnson, the first black heavy weight world champion in boxing, used to provoke some of his opponents to find out how they reacted when they were angry. Being underprivileged, he could not afford a coach, so he participated in as many fights as possible. Although he could have knocked out a lot of his opponents in early rounds, he drew out the fights until the 20th round. During the fights, he closely observed and studied his opponents, especially their reactions to his provocations. This way he was not only able to find out their style, but he could also sense their emotional weaknesses and seemed to be always a step ahead.

It is now well acknowledged that EI influences sport performance (Laborde, Dosseville, et al., 2015). As mentioned in the introduction, we use the definition of EI by Mayer and Salovey (1997) and Petrides and Furnham (2003). According to their definition, EI describes how one reacts to intrapersonal or interpersonal information about emotions. Since EI was first discovered in the early 1990s, EI has been well established as an important factor in educational and work related performance. However, it took several years until a connection between EI and sport was made. Now the existing evidence is growing steadily and continuingly underpins the importance of EI in sport performance (Laborde, Dosseville, et al., 2015). Obviously, the requirements for excellent performance in sports are diverse and challenging. To compete on a professional level, athletes have to motivate themselves on a regular basis to achieve their long-term goals which are a product of punishing training and continual skill improvement. Furthermore, coping with the stress and pressure from their high standards and by others in training, competition and unavoidable failures along the journey are further challenges an athlete has to live up to. As Michael Jordan said, "I have failed over, and over, and over again - that is why I succeed"¹. And lastly, during a competition the athlete needs to deal with their own emotions as well as with the emotions of teammates, coaches, referees, spectators and opponents (Laborde, Dosseville, et al., 2015). As a result the athlete has to comprehend many

¹ Interview retrieved on the 3rd of February, 2016 -

http://www.youtube.com/watch?v=JA7G7AV-LT8

emotions, not just their own and this is the same for many individuals involved in sporting performance. In the next section we review how EI influences performance for different sporting individuals including: athletes, coaches, spectators and referees, and how it plays a role in physical activity.

4.1.1 Athletes

4.1.1.1 Performance and Emotional Intelligence

In the introduction we already demonstrated how EI plays a role in a copious range of sports. In general research shows, for both female and male athletes, that athletes who score higher on EI tests (ability and trait) are more likely to be successful than athletes who score lower (Laborde, Dosseville, et al., 2015). At a subjective level, athletes with higher EI score show higher performance satisfaction (Laborde, Dosseville, et al., 2014). With objective performance parameters, trait EI was related to better whole season performance (Perlini & Halverson, 2006; Zizzi, Deaner, & Hirschhorn, 2003). Furthermore, Tok, Binboğa, Guven, Çatıkkas, and Dane (2013) were able to find a positive relation between trait EI and isometric maximal voluntary contractions, with or without a mental stressor. Regarding emotions, the current literature offers evidence of an important connection between EI and the emotions athletes perceive before and during a competition: high EI is connected to a greater experience of pleasant emotions (Lane & Wilson, 2011) and to a lower anxiety level prior to competition (Lu, Li, Hsu, & Williams, 2010).

4.1.1.2 Neurophysiological Factors and Emotional Intelligence

The relationship between EI and an athlete's neurophysiological stress response and performance has also shown encouraging results. The two biomarkers we focus on are the heart rate variability - depicting vagal activity, a resource that one has to face stress situations (Thayer, Hansen, Saus-Rose, & Johnsen, 2009), and the stress hormone cortisol. Previous research has already established a link regarding the relationship between these neurophysiological responses of an athlete's to stress and trait EI (Laborde, Brüll, Weber, & Anders, 2011; Laborde, Lautenbach, & Allen, 2015; Laborde, Lautenbach, Allen, Herbert, & Achtzehn, 2014). The results that have been found in the different studies give initial evidence for a positive relation between trait EI (well-being factor) and

resting vagal tone as well as trait EI (emotionality factor) and vagal tone during a task (Laborde, Lautenbach, et al., 2015). This suggests that athletes with higher EI have better physiological resources to cope with competitive stress. Regarding the relation between cortisol and EI, Laborde, Lautenbach, et al. (2014) found that athletes with higher trait EI had a lower cortisol response after exposure to the stressor in comparison to athletes with a lower EI score. Thus demonstrating the capability of trait EI to act as a protective shield against stress, which can be seen here at the hormonal level.

4.1.1.3 Psychological Skills and Emotional Intelligence

In addition to an athlete's neurophysiological stress responses, EI has also been investigated in relation to coping strategies. Coping refers to the athlete's constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the athlete's resources (Lazarus & Folkman, 1984). Overall, higher trait EI appears to be linked to more frequent use of psychological skills such as: activation and relaxation techniques, emotional control, goal setting, imagery, and self-talk, during competition and practice (Lane, Thelwell, Lowther, & Devonport, 2009). One important aspect might be the relationship between high levels of trait EI and task-oriented coping strategies (Laborde, Dosseville, et al., 2014; Laborde, You, Dosseville, & Salinas, 2012), which often are identified as the most effective way to approach stress when people perceive to have some control over the situation (Nicholls & Polman, 2007).

4.1.1.4 Individual vs. Team Sport

Regarding the differences between athletes from team sports and athletes from individual sports, no differences emerged yet in the literature (Kajbafnezhad, Ahadi, Heidarie, Askari, & Enayati, 2011; Laborde, Dosseville, et al., 2014). While the main focus is usually on EI at the individual level, a novel perspective taken by Crombie, Lombard, and Noakes (2009), showed that the average ability EI of six national level cricket teams predicted objective team performance parameters (i.e., the final log points standing for the team at the end of a competition). These findings confirm the assumption we made in the introduction, that EI is important both in individual as well as team sports.

4.1.2 Coaches

Given its role in relationships and dealing with one's and others' emotions, EI is also extremely relevant in coaches. Pep Guardiola, the coach of the German soccer club FC Bayern Munich from 2013 to 2016, once talked about how important it is for a coach not to treat every player the same, but to find out how each individual player needs to be approached in order to achieve peak performance. While the one player might perform better after being criticized in front of the whole team, another might prefer being corrected in private. EI, therefore, is vitally important for a coach to be able to discover the appropriate way to emotionally manage each player. It seems obvious that empathy and emotional contagion are assumed to be essential in coaching (O'Neil, 2011). O'Neil (2011) further judged a coach's ability to create a positive and challenging emotional climate as a major part of relationships between athletes and coaches scoring higher in trait EI showed more confidence in their leadership capabilities (Magyar et al., 2007) and that high levels of trait EI has been related to higher coaching efficacy (Hwang, Feltz, & Lee, 2013; Thelwell, Lane, Weston, & Greenlees, 2008).

4.1.3 Officials

Apart from athletes and coaches, EI might also be necessary for optimal performance of officials in sports. When we give reference to "officials" in the sporting context, we refer to umpires, referees and judges. Especially in team sports like soccer, american football, basketball etc. the referees are in contact with the players and need the ability to keep calm in stressful situations. They also have to deal with the constant criticism of spectators, players, coaches and in some cases the media: therefore their way of communicating is of critical importance (Dosseville, Laborde, & Bernier, 2014). When considering the role of EI on decision making (Laborde, Dosseville, & Scelles, 2010) and interpersonal relationships, it can be expected that EI is essential in order to become successful official in sport. However, research to date surrounding the EI of sport officials has not been investigated (Laborde, Dosseville, et al., 2015).

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4.2 **Physical Activity**

EI plays also a role in physical activity adherence (Solanki & Lane, 2010). Firstly, being able to motivate oneself may be even more important in leisure-time physical activity than it is for competitive sport. An athlete, training in a team and/or with a professional coach, is potentially more likely to go to training and exercise when they do not feel like it. Physical activity, however, often relies on one's own ability to motivate oneself to exercise. Furthermore physical activity during leisure-time, with a training partner, may be an opportunity that can be used to deal with one's own emotions or improve and build relationships. By talking about experiences and emotions with a training partner, one is able to gain a deeper understanding of the partner's feelings and the subsequent actions that are caused by those feelings. In conclusion, EI arguably plays a significant role in both organized sports and physical activity (Laborde, Dosseville, et al., 2015).

5 Applied

Now that we have established the importance of EI in sports and physical activity, two questions remain. Firstly, can EI be trained in the sport context and if so, how? Secondly, can EI be increased through sports participation?

5.1 Emotional Intelligence Training in Sports

In this section we focus on how EI can be enhanced in sports through specific interventions. For example, a sport psychologist might work with a soccer player who has a tendency to beat himself up when he misses a clear shot on goal and thus aim to develop their capability to regulate emotions, and focuses on positive behaviors. To date only three studies regarding this topic exist, all of which were able to successfully increase EI in athletes. Crombie, Lombard, and Noakes (2011) evaluated the ability EI of 24 cricketers who were divided into a control and experimental groups. The latter received ten 3h sessions, targeting the four branches of Mayer and Salovey's EI model (emotion perception, facilitation, understanding and managing), which led to greater increases in their ability EI compared to the control group. Another intervention based study (Barlow & Banks, 2014) was able to significantly increase self-efficacy and reduce anxiety in netballers by a single 30 minute one-to-one coaching session. Both the control group and the experimental group completed measures of anxiety, self-efficacy and team identification, while the experimental group received in addition an intervention. This intervention consisted of an EI individual feedback session regarding the scores of the trait EI test that was taken previously. Finally, the third study (Campo, Laborde, & Mosley, in press) investigated the trait EI in 67 rugby players. In a similar fashion to the other two studies the athletes were divided into an experimental (n=31) and a control group (n= 36). The control group received the task of video analyses of games between the pre and the post-test while the experimental group participated in four one-to-one sessions throughout the season. The 45-90 minutes long sessions took place every 5 weeks and consisted of special tools and exercises for rugby players. Between the sessions the athletes were instructed to do further assignments such as homework as well as follow-up procedures. Comparing the results of the pre-test and the post-test revealed that the intervention was able to increase specific aspects of trait EI significantly (i.e. social competence, emotion management & perception). However, global trait EI was not improved (Campo et al., in press).

5.2 Enhancing emotional intelligence through sport and physical activity

In this part of the chapter we make suggestions on how EI might be trained through sport and physical activity. It is already noteworthy the sports participation is associated to a higher trait EI (Laborde, Guillen, Dosseville, & Allen, 2015), although so far no causal link has been established. As mentioned previously, the basis for these suggestions are the five dimensions of the PEC and the tripartite model with the underlying idea that training the knowledge and ability level will improve the trait level (Figure 2).



Figure 2. Connection between the three EI levels to serve as a basis for EI training

Training the knowledge level might consist of providing information about techniques that enhance EI, for example: certain coping-strategies, improving communication skills, meditation techniques etc. The next step, training the ability level, would be practicing these techniques or skills and learning to implement them in particular situations. Finally, when using the technique has been established as a habit and the athlete is able to use it appropriately on a regular basis, it can then be referred to as a trait. For example, a sport psychologist who works with an athlete that regularly loses his temper during competitions or even during practice, might implement a technique to regulate emotions. Firstly, he would tell him about the technique and how it works (knowledge level). Secondly, he would put the athlete under pressure and in stressful situations in training, in order for the athlete to practice the particular technique. After a period of time the athlete should be able to use it consciously during competitions (ability level). Lastly, the athlete regulates his emotions automatically and without effort with the learned technique (trait level).

In the following section we will present techniques that help improving the different aspects of EI defined by the PEC.

5.2.1 The 5 dimensions

5.2.1.1 Identification

Identification, according to Brasseur et al. (2013), refers to "being able to perceive an emotion [in oneself and others] when it appears and identify it." Developing this skill is particularly important; on the one hand because awareness of the emotions one feels might be the basis for being able to express, understand and regulate them. On the other hand, because the subscales "identification" and "using the emotions of others" were most predictive of work performance, according to Brasseur et al. (2013).

5.2.1.2 Expression

Expressing emotions deals with "being able to express emotions in a socially accepted manner" (Brasseur et al., 2013). This includes effectively telling other people how one feels and being able to listen and understand how to deal with situations in which other people talk about their emotions. In the latter part of the subscale, empathy plays a huge role, which might be of greater importance in team sports than in individual sports.

5.2.1.3 Understanding

Brasseur et al. (2013) define understanding as the ability "to understand the causes and consequences of emotions, and to distinguish triggering factors from causes". While a triggering factor of an emotion can be any kind of situation, thing or person, the cause of the particular emotion is the interpretation of the situation, thing or person based on previous experiences. In other words, the same situation can evoke completely different emotions in different people depending on their past experience e.g. educational background.

5.2.1.4 Regulating

Regulation refers to "being able to regulate stress or emotions when they are not appropriate to the context" (Brasseur et al., 2013). This applies to calming down as well as pumping up oneself or others for example a teammate.

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5.2.1.5 Using

According to Brasseur et al. (2013), using emotions refers to "being able to use emotions to improve reflection, decisions and actions". It reflects the fact of knowing when to generate the appropriate emotions to achieve a desired outcome in the most effective way.

5.2.2 Activities

In the following, we propose a catalogue of activities aimed to develop emotional intelligence through sports participation. For each of these activities, we mention which EI dimension is the focus, for the type of sports and for which age it is suited. Table 2 gives an overview of the following activities and the targeted EI dimensions.

| T11 A E / 1 | · · / 11· | 1 | 1 | 1 1 | 11 | . 1 | |
|---------------------|--------------|------------|---------|-----------|-------|------------|------------|
| Lanie / Emotional | intelligence | dimensions | trained | through 1 | the i | narticular | activities |
| 1 uole 2. Emotional | membenee | unnensions | uumuu | unough | une | purticului | uctivities |

| Activity | Identification | | Expression | | Understanding | | Regulating | | Using | |
|----------|----------------|-------|------------|-------|---------------|-------|------------|-------|-------|-------|
| | Self | Other | Self | Other | Self | Other | Self | Other | Self | Other |
| 1 | | | Х | | | | | | | |
| 2 | | Х | Х | | | | Х | | | |
| 3 | | | Х | Х | Х | Х | | | | |
| 4 | Х | | | | | | | | | |
| 5 | Х | | | | | | | | | |
| 6 | | Х | Х | (X) | | | | | | |
| 7 | | X | | | | | | | | |
| 8 | | | | | | | Х | Х | | |
| 9 | | | | | | | Х | X | | |
| 10 | | | | | Х | | | | | |
| 11 | | | | | | | | | Х | |
| 12 | | | | | | | Х | | Х | |
| 13 | | | | | | | | Х | | Х |

5.2.2.1 Exercise 1: "Emotional Faces in Movement"

- Trained Dimensions: Expression (self)
- Type of sports: Individual and Team
- Suited for: <10 years old children

Goal of the activity: The aim of this exercise is to practice expressing various emotions fitting the story-telling activity whilst moving.

Description: The activity is inspired on the role play training to express emotions used in Nelis et al. (2011). It might be advantageous to check the children's knowledge of emotions beforehand: Do they know the meaning of the different words? Do they know how to express the various emotions? If necessary, show them pictures or display the emotions beforehand. The children are divided into two or more teams, depending on the size of the group. The teams, called The Smith Family", consist of 4-6 children, so every child runs relatively often and doesn't have to wait too long until it's his or her turn again. Each child takes over a role in the Smith family (e.g., father, mother, daughter, son, grandma, grandpa). Both families stand in a line behind their mark; approximately 15m away from the turning point (see Figure 3). The coach now tells a story. Whenever the children's role is mentioned in the story, they run to the turning point and back to their spot on the bench. On their way they can solve any kind of task, like transporting a balloon, dribbling a soccer or basketball, run through a coordination ladder, etc. Whenever the role is mentioned in combination with an emotion, the children have to start to run toward the turning point and express this emotion on their way. For example, if family Smith is visiting the zoo one part might sound as follows:

When they arrived at the tiger cage, father Smith looked amazed at the majestic animals ("Father Smith" would run towards the turning point expressing his amazement). But daughter Smith seemed scared and quickly hid behind her mother, when one of the tigers made a sudden movement in her direction ("Daughter Smith" expresses fear). So they went on to the next cage. Since it was a really hot day in the middle of summer and the whole family Smith felt exhausted (all children get up and express exhaustion while they run towards the turning point), they decided to take a break in the shadow of a large oak and happily eat a picnic they brought from home (all children run again expressing happiness).



Figure 3: Description of "Emotional Faces in Movement"

Success criteria: The exercise is accomplished successfully, when the children are able to express the emotions in the story that allows a spectator, who is not able to hear the story, to identify the targeted emotions.

5.2.2.2 Activity 2: "Fire, Water, Lightning"

- Trained Dimensions: Identification (other)
- Type of sports: Individual and Team
- Suited for: <10 years old children

Goal of the activity: The aim of this exercise is to practice one's ability to identify emotions in others by observing their body language or facial expressions.

Description: This activity is inspired from different emotion recognition training protocols (e.g., Elfenbein, 2006; Williams, Gray, & Tonge, 2012). Similar to activity 1, it might be advantageous to check the children's knowledge of emotions: Do they know the meaning of the different words? Do they know how to express the various emotions? If necessary, show them pictures or demonstrate the emotions. The coach prepares three sheets of paper with pictures of different emotional facial expressions on each of them (Figure 4a-f). Whenever the coach holds up one of the papers the children have to show the emotion and execute a particular task announced by the coach:

these tasks can be anything, such as standing on one leg, sprinting to a corner of the field, doing pushups, throwing a ball against the wall etc. It is important, however, to link the same task to the same emotion in every lesson (happiness \rightarrow push-up; fear \rightarrow forming a line behind the coach; anger \rightarrow swapping balls with another child), so the children have some security and routine. Also, once they are familiar with the first three emotions, further emotions can be introduced and linked to new tasks.

Insert Figure 4 (a-f) here

Success Criteria: The exercise is considered a success when most of, or to the best of their ability, all the children are able to identify the emotions correctly. Subsequently, they perform the correct task by knowing what to do, not by imitating what the other children are doing.

Possible variations:

- This game is a great way to practice "power poses" (see activity 9). Following a signal by the coach (or another sign), the children perform their favorite power pose in which they remain for a few seconds until the coach gives the command to move again.
- In an advanced team, that is, the children already know what the different emotions look like the child can take charge and express the particular emotions to the rest of the group.
- Instead of showing pictures, the coach could also shout the emotions and have the children express them.
- Two to four children are given a ball which they pass on to their teammates. The child who throws (or shoots) the ball says an emotion that the child who receives the pass has to express.

5.2.2.3 Activity 3: Communication - Exercise

- Trained Dimensions: Expression (self & other), Understanding (self & other)
- Type of sports: Individual and Team
- Suited for: >10 years old athletes

Goal of the activity: The goal of this activity is twofold. On the one hand it aims to improve one's ability to express and gain a deeper understanding of one's own emotions. This is achieved by talking for a couple of minutes without interruption which create a much deeper topic base than usual conversation. On the other hand it is to improve one's ability to listen and therefore to improve the recognition of emotions expressed by other people. This also aims to improve one's understanding of the other person's emotions and their values and the reasons for behaving in a certain way. Overall, this might lead to a better climate between individual players and across the whole team.

Description: This listening and talking dyad activity was inspired from Mesibov (1984). This is a partner activity that can be utilized in organized sport as well as in recreational activities (see Figure 5), during a break or at the end of training for example. Firstly athlete A talks for a predetermined period of time, then both athletes A and B are quiet to reflect on what has been said. After that, athlete B expresses his/her thoughts and finally they both remain silent again. This is especially useful when the team spends a lot of time together for example in pre-season training camps, the players have the chance to get to know themselves and each other better. Another opportunity to use this technique might be during the warm up before training, but also during training to elucidate a misunderstanding between two players in order to avoid a larger argument.



Figure 5

Depending on the time that is available, the activity can be shortened or prolonged as required. An example of time duration would be in the warm up each of the four phases might be three minutes long. It may be that the athletes are instructed to combine it with a long distance run or a biking tour, each of the four phases could be extended to 20 or 30 minutes or even longer. Evidently, the activity becomes more demanding the longer the four phases are, however, the rewards in terms of understanding the emotions of oneself and the teammate increase accordingly.

Success criteria: This activity is a success when the two athletes manage to keep silent and listen attentively while their teammate is talking, and to talk about whatever comes to mind regarding the particular subject. Obviously, talking about personal topics, e.g. what was one of the most shaping experiences in your childhood? What is your major purpose in life right now? What really scares you? What are typical situations that make you angry and how do you usually deal with them? These types of questions require a certain amount of trust and hence it is advantageous to suggest these kind of topics after athletes know each other well. Athletes that do not know each other as well may start with more superficial topics to help increase cohesion e.g. what do you do for fun? Why do you participate in this kind of sport? What was the funniest thing you have experienced today?

5.2.2.4 Activity 4: Sporting mindfulness

- Trained Dimensions: Identification (self & other), Expressing (other) Understanding (self & other), Regulating (self & other)
- Type of sports: Individual and Team
- Suited for: Any age

Goal of the activity: The goal of this activity is to increase one's emotional self-awareness.

Description: Emotional awareness constitutes the basis of most of the five dimensions of EI. In other words, without awareness of the present moment an athlete cannot possibly identify, express, understand, regulate or use emotions effectively. If one is unaware of the things that happen around or inside oneself, it is impossible to perceive and subsequently identify the current emotion which may lead to a lack of understanding why they feel this way. Subsequently they may not be able to regulate this particular emotion. It is a hard task for an athlete that is preoccupied with task irrelevant thoughts to identify, express, understand, regulate or use emotions in others.

Mindfulness can be defined as moment to moment awareness that arises "through paying attention in a particular way: on purpose, in the present moment, and non-judgmentally" (Kabat- Zinn,

2013, p. xxvii). In other words, mindfulness means perceiving everything the way it is in every moment without interpretation. Often one is so preoccupied with one's own thoughts that there is no room for anything that is actually happening. Mindfulness keeps one's awareness on the task at hand, notices when the mind wanders and brings it back to focus again. This can be used in many sporting contexts and can already be trained in children. A coach might start with simple exercises during training, maybe as a routine at the beginning and/or the end; or as a recovery break. An example of this is described by Daniel Goleman (2014) where the children lay down on their back for a couple of minutes, place a ball on their belly and watch it move up and down with their breath. Whenever they notice their mind wandering, they bring their attention back to their breath. More experienced athletes could use the same technique, focusing on their breathing during jogging, swimming, riding a bike or performing a closed skill i.e. a basketball free throw.

Success criteria: The important part of this exercise is not to try not to think at all, but to be aware and notice whenever the mind starts to wander. A wandering mind is whenever irrelevant thoughts "pop up" and the athlete needs to be able to bring the focus of attention back to the specific aspect of emphasis. Examples of foci could be one's breath, the action of planting the right on the ground while jogging or the movement of the left arm during front crawl. If an athlete is able to do this, even if it is only for a couple of seconds at a time, the activity can be considered a success. This then leads to a further goal to increase the length of this mindfulness time for the next attempt.

5.2.2.5 Activity 5: Body scan

- Trained Dimensions: Identification (self)
- Type of sports: Individual and Team
- Suited for: >10 years old athletes

Goal of the activity: This activity aims to increase one's ability to sense any signals sent by one's body and to improve one's self-awareness. Practicing sensing bodily signals in a relaxed environment makes it easier to be aware of them in more demanding and stressful situations. This in turn makes it easier to identify, regulate and use emotions inside confines oneself. For example, if an athlete is able to sense that his heart rate and his muscle tone increase because an opponent insulted

him, he might identify his present state as anger and can subsequently implement relaxation techniques, to lower his muscle tone and heart rate and avoid any kind of irritated reaction.

Description: The body scan meditation is used in the program of the stress reduction clinic at the medical Centre of the University of Massachusetts (Kabat- Zinn, 2013). It is a great way to recover and cool down after an intensive training or exhausting competition, or to relax before an event. It is also a chance to improve one's body perception. The following script (Kabat- Zinn, 2013) can be used as a guide on how to execute the body scan².

"Lie down on your back in a comfortable place, such as your bed, the floor, a foam mat or pad. Ensure that you are in a warm, protected place where you won't be interrupted, while feeling safe and secure.

To begin, gently close your eyes. If you start falling asleep feel free to open your eyes and continue with them open. Now bring your attention to the movement of your breathing. Let your attention settle on your abdomen, feeling the rising and falling of your belly with each in-breath and each out-breath. Take a few moments to feel your body as a whole, from head to toe, the sensations associated with the contact of the floor or bed. Next, bring your attention to your left foot and toes. As you direct your attention to them, see if you can direct your breathing to them as well, so that it feels as if you are breathing into your toes and out from your toes. It may help to imagine your breath traveling down the body from your nose into the lungs and continuing through the torso and down the left leg all the way to the toes, and then back again and out through your nose. Allow yourself to feel all sensations from your toes. If you don't feel anything at the moment, that is fine too. Just allow yourself to feel "not feeling anything". If you feel ready, "leave" the toes and move on to the sole of the foot, the heel, the top of the foot, and the ankle, continuing to breathe in to and out from each region as you observe the sensations that you are experiencing, and then "letting go" of that region and

² Alternatively, a video by John Kabat-Zinn can be found on YouTube (Retrieved on December 26th, 2015), in which the listener is lead through the meditation (https://www.youtube.com/watch?v=daU-xneLA0g).

moving on. In this way, as described, continue moving slowly up your left leg and through the rest of your body (right leg, back, chest, arms, head, face, etc.). As you maintain the focus on the breath and on the sensation within the individual regions as you come to them, breathe with them, and let go of them."

Success criteria: This activity is successfully implemented when the athlete reaches a deeply relaxed state and focuses completely with full awareness on the particular body part he is "scanning".

5.2.2.6 Activity 6: Emotion Odyssey

- Trained Dimensions: Identification (other)
- Type of sports: Individual and Team
- Suited for: any age group

Goal of the activity: This activity aims to introduce different emotions to help enable the children to identify what it looks like when other people feel a certain way and how the particular emotion is called.

Description: This activity is inspired from the different emotion recognition training protocols (e.g., Elfenbein, 2006; Williams et al., 2012). This exercise is a great way to prepare the players (especially when they are young children) for exercise 7, hence it is explained for children. The children jog around a set area and in every corner is a card with a picture of an emotion (either facial expression (see Figures 4a-f) or body language, (see Figures 6a-f). Whenever the coach shouts the emotion, the children run towards the particular corner (see Figure 7).

Insert Figure 6 (a-f) here



Figure 7: The emotion odyssey

Success criteria: The activity is a success when the children are able to identify the emotions correctly, that is, if the coach says "anger", they run to the picture of an angry person. Furthermore, they should be able to judge the emotion in the picture and decide whether the feeling is good or bad.

Possible Variations (to extend to different age groups):

- Switch the cards around so the children always need to scan and recognize the particular emotion.
- Switch the pictures of the same emotion (facial expression vs. body language).
- Add further pictures of emotions on the sides of the area.
- Do not shout the emotion but hold up a picture of it. This is advantageous especially if the children have to maintain another task such as dribble a ball. On the one hand it is very loud and they might not even hear the coach, on the other hand they must learn to control the ball without keeping their eyes on it.
- Have each child pick a partner and tell each other a story about the particular emotion. "When did you last feel this way?", "What made you feel this way?", "How did you change the way you feel?" (if it's a negative feeling), "What could you do to feel this way more often?" (if it's a positive feeling), "How could you use this?" etc.

5.2.2.7 Activity 7: Emotion Memory

- Trained Dimensions: Identification (other), Expression (self)
- Type of sports: Individual and Team
- Suited for: any age group

Goal of the activity: The aim of this activity is to increase the player's ability to identify emotions – also under pressure - by looking at the body language or the facial expression. Additionally, one of the variations targets their ability to express emotions effectively.

Description: This activity was inspired from a part of the EI training that was used in a sport context by Campo et al. (in press). The players are divided into two teams and stand in the center of the area. In each corner are cards put upside down (see Figure 8). These cards picture emotions a) in written form, b) as facial expression (see Figures 4a-f), c) expressed through body language (see Figures 6a-f). The coach then tells the teams which emotions to look for and the players perform a relay in order to find the particular cards and return them to the center. For example player A starts, runs towards one of the corners, picks a card and takes it with him if it is one of the emotions the team is instructed to collect or turns it back over if it is not. He returns to his teammates and gives player B a high five who is then allowed to run. The team collecting the most correct emotions wins, thus it is important to prepare an uneven amount of emotion pairs. While team 1 might still search for the facial expression of happiness, team 2 is already looking for the three cards of the second emotion. Depending on the variation, this activity can be used as an exercise on its own or integrated as a part of the warm up.

Success criteria: The activity has been successful when the players are able to identify the emotions correctly, for example, they don't collect a happiness-card when their task is to look for the anger-cards. A further success criterion for one of the variations is the player's ability to express the particular emotion so that the others are able to identify it correctly.

Possible Variations:

Add more/different emotions

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- Have the players perform tasks on their way to the cards and/or back to the team, e.g. Acting out the emotion on the card they turned around; the rest of the team has to guess the emotion.
- Any kind of game specific physical tasks, such as coordination, strength or technical exercises. Different obstacles could be introduced on the way to the different corners to enforce different movement patterns (e.g. 1. Coordination ladder, 2. Cones to perform angular sprints, 3. Hurdles, 4. One-on-one battle against a player of the opposite team; only if the player gets past him, is he allowed to take a card)



Figure 8: Emotion memory

- Game specific exercises for injury prevention
- Both players run towards the same corner but only the one who arrives first gets to turn a card around.

5.2.2.8 Activity 8: Impulse control

- Trained Dimensions: Regulation (self and others)
- Type of sports: Individual and Team
- Suited for: any age group

Goal of the activity: The goal of this activity is for the athletes to be able to effectively

regulate their emotions using the traffic light system.

Description: The basis of this exercise from Daniel Goleman's book Emotional Intelligence (1995) is a traffic light system and improves a child's ability to deal with situations in which he/she feels treated unfair, is angry or frustrated. Especially in team sports like soccer, there may be many situations in almost every match. Therefore, not being able to regulate one's emotions can easily lead to a decrease in performance due to a dispute with teammates or, in the worst case, being sent off the pitch. Below are the instructions for each traffic light signal (Goleman, 1995, p. 317):

- Red light: Stop, calm down and think before you act
- Yellow light: Say the problem and how you feel, set a positive goal, think of solutions, think ahead about the consequences
- Green light: Go ahead and try the best plan

In this exercise coaches might be well advised to follow the tripartite model of EI:

<u>Knowledge level</u>: At first the technique is introduced. It is best to show a picture of a traffic light so the athlete immediately has an image they can link to the technique and each of the three steps.

Ability level: To test whether or not the children really understood the steps, organizing a role play, because it is much easier for the coach to intervene in the process if necessary. Furthermore, during the role play the children's focus is only on this technique, which makes it easier for them to learn it. Once they understand the three steps, it is time to test their ability to use the technique in the training setting i.e. During any kind of competitive game. For example, dividing the children into two teams and giving them the task to perform ten passes without losing the ball typically provides more than enough opportunities to practice this emotion regulating technique. Whenever a child successfully implements one or even all of the three steps, be it after their own mistake, the mistake or negative comment of a teammate or a disagreement with an opponent, the child should be praised and encouraged to keep practicing the technique. Trait level: Finally, once the children are used to the technique, they will be able to recognize when they get a red light. Subsequently they will automatically start the process through step of yellow light to find a solution until they reach the green light.

Success criteria: This exercise has been a success, when the athletes are able to calm themselves down in frustrating situations instead of exploding in anger. In the best case athletes are able to control themselves automatically, although this takes time and practice. A success in team sports would be an athlete that is able to use the technique on a teammate by (verbally or physically) stopping him from behaving irrationally and considering various options to help him to select the best one.

5.2.2.9 Activity 9: Power Poses

- Trained Dimensions: Regulation (self)
- Type of sports: Individual and Team
- Suited for: any age group

Background: Our body language affects our physiology as well as our performance. Carney, Cuddy, and Yap (2010) found that performing high power poses for two minutes (see Figures 9a-c) led to increased testosterone and decreased cortisol levels. They also found it increased tolerance of risk and feelings of power when compared to low power poses which are characterized by a more closed body position. Additionally, Cuddy, Wilmuth, Yap, and Carney (2015) found high power posing before an interview helped to increase performance during, in comparison to low power posing. This was solely due to different nonverbal behavior during the interview. Furthermore, they found that the high power posers not only projected more confidence, but also seemed to better maintain their composure than the low power posers did. In the sport context, the capability to hide one's fear or excitement and express confidence and self-assurance in critical situations is critical. Much like Djokovic did when Federer had two match points during the semi-finals of the US Open 2011 where Djokovic was able to remain calm in highly stressful situations. Zinedine Zidane's foul against Materazzi during the finals of the World Championship in 2006 would be an example for the latter

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proposition. These results have yet to be validated in the sport context; however, power posing is a technique that is already used successfully by sport psychologists working with athletes.

In application, power posing can be integrated to the warm up as a routine, either openly on the field, or privately in the locker room/toilets. It could also be performed whenever there is a break in play and in stressful situations, like preparing for a penalty kick.

Goal of the activity: The goal of the activity is on the one hand to introduce and practice different high power poses. Best practice would be that the athletes perform them automatically during the match. On the other hand, athletes are made aware of low power poses and encouraged to change their body language.

Description: The group is divided into two teams and instructed to achieve ten passes in a row without losing possession of ball. When a player does not have the ball, he should adopt a high power pose and the pass only counts if the player receives the ball while doing a high power pose. The team gets a point if the players achieve ten passes. After the 10 passes the players have to perform a celebratory behavior such as lifting a player on their shoulders. The game ends after a specific duration or after a set number of points. In addition, during the game the athletes are instructed to perform a high power pose whenever the game is interrupted e.g. because the ball is out of play or the coach gives tactical instructions. Close attention needs to be paid to how they behave after making a mistake. If the players are in a low power pose they should change into a high power pose. If a player remains in a low power pose for more than five seconds the team loses a point.

Success criteria: The exercise is considered successful when the athletes are aware of the power poses and the differences between them. In addition they should be able to recognize if they are in a low power pose and change their body language to a high power pose.

5.2.2.10 Activity 10: Debriefing Sheet

- Trained Dimensions: Understanding (self)
- Type of sports: Individual and Team
- Suited for: any age group

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Goal of the activity: The goal of the debriefing sheet is to encourage the athlete to reflect on particular situations during a competition or training session. Reflections may include, how they handled a situation, the emotions the athlete felt in that specific moment and most importantly why he/she felt that way. The idea is that the athlete must learn to recognize helpful emotions and effective coping strategies, deal with hindering emotions and highlight ineffective coping strategies.

Description: This activity is based on the need to become aware of the interplay between stress, emotions, and coping, in order to make the process more effective (Hanin, 2000; Laborde, Raab, & Dosseville, 2013; Lazarus, 2000). After the competition, the athlete mentally reflects on their performance and completes their debriefing sheet (see Table 3). They should list; what happened, which emotion(s) they experienced, how intense these emotions were, how much control they had, whether the emotions were helpful or harmful, which coping strategy they used and how effective this strategy was. Using this debriefing sheet the athlete can increase awareness of which coping strategies work for him/her according to specific situations. In the case the athletes find themselves overwhelmed by harmful emotions and ineffective coping strategies, the debriefing sheet should act as a trigger to find the appropriate way to deal and react to the stressor.

Insert Table 3 here

Another use of the debriefing sheet might be to form an action plan for how to react in the future when a similar situation occurs. This forward planning helps to reinforce positive coping behaviors and allows for coping development.

Success criteria: The success of this activity depends on the athletes' capability to identify and to express their emotions as well as their awareness in the respective situation. They must be able to identify which emotions they experience and to be able to express these emotions in words and write them down.

5.2.2.11 Activity 11: One Shot Training

- Trained dimensions: Regulating (Self), Using (self)
- Type of sports: Individual and Team
- Suited for: Advanced athletes

Goal of the activity: The goal of this activity is to simulate the pressure of a situation of a real competition within a training session. This is to recreate the impulsive feelings that usually only occur in competitions, because if something does not work in training, the athlete, usually, can try again without any consequences (Eberspächer, 2012). Given there is only "one shot" the athlete has to handle the different emotions that accompany their own expectations, potential pressure the coach puts on them and the consequences for his teammates. In addition to the emotions he/she deals with prior to the task, he/she subsequently has to live with the result and all the emotions going along with that.

Description Based on Eberspächer (2012), as the name implies, the athlete is only given one chance to succeed. If they fail, they cannot try again during the same training session. To be able to implement this activity, the athlete must be able to perform the required technique successfully i.e. a handstand. For example, it makes no sense to give an athlete one chance to perform a handstand on the beam if she still struggles to perform a handstand on the floor. The instructions for the activity are as follows:

- The coach (or the athlete himself/herself in case the athlete trains without a coach) determines when the athlete has to perform the respective task. That the point of time is not determined by the athlete himself/herself, but from someone else, is an important aspect of the one shot training, because this directly reflects the nature of competition.
- The athlete then has to mentally prepare for their one shot attempt and cope with the emotions emerging as the event draws closer.
- The athlete is then given one chance to perform the task, and check whether the output matches the goal set by himself/herself or by the coach.
- 4) The athlete has to handle the emotional consequences following success or failure.Depending on the time in the training session the consequences can vary:
 - If the one shot task is at the end of the training, the athlete has to live with the emotional consequences until the next training session.

- It is also possible to make the end of the training dependent on the athletes success. For example the training ends immediately in case of failure.
- Another variant could be to establish some kind of punishment either individual or collective. Individual punishment would mean the athlete has to perform any additional physical tasks if they fail (e.g., push-ups or shuttle runs). Collective (inclusive) punishment would mean that if the athlete fails the whole team is punished, including the athlete. Collective (exclusive) punishment would mean that the whole team, except the responsible athlete, will be punished. Different forms of punishment should add pressure when performing the one shot task, forcing him to deal with emotions they usually encounter during competition.

Finally, we suggest that the athlete could reflect on the experience using the debriefing sheet from activity 10.

Success criteria: Succeeding at the one shot task. If the athlete fails they have to effectively cope with the emotions experienced until the next training session.

Possible variation: Instead of telling the athlete about his upcoming challenge immediately in advance, that is, the athlete has about 30 seconds to prepare, the prediction can be made 10, 20 or 30 minutes prior to the performance. It seems the longer the period of time until the performance, the harder it is to perform successfully, given the more time the athlete has to deal with the emotions associated to the upcoming one shot task.

5.2.2.12 Activity 12: Emotions in Music

- Trained dimensions: Regulating (self)
- Type of sports: Individual and Team
- Suited for: any age group

Goal of the activity: The goal of this activity is for an athlete is to adjust movements according to the type of music which will influence their emotional state.

Description: This activity is based on the effects of music on emotions, particularly in the sporting context (Karageorghis & Priest, 2012a, 2012b). An opportunity to implement this activity is during the warm-up. The coach instructs the athletes to move in a certain way (e.g. high knees, jumping, swinging one or both arms etc.) in accordance to the type of music i.e. fast and arousing or slow and relaxing. The task for the athletes is it to perform the different movements fitting to the style of music. At the same time, athletes have to be aware of how movement changes affect their emotions. The athlete can then implement this technique to regulate emotions depending on the particular requirements of a competition.

Success criteria: This activity is implemented successfully if the athlete is able to move in accordance with the music i.e. Performing slow moves with slow music and fast moves with fast music.

5.2.2.13 Activity 13: Positive body feedback

- Trained dimensions: Regulating (other), Using (other)
- Type of sports: Individual and Team
- Suited for: any age group

Goal of the activity: This activity aims to increase the ability of an athlete to influence his/her teammate emotional state through a simple gestural praise. This also aims to influence their teammate's ability to use emotions to improve reflections, decisions, and actions. The idea behind this activity is to reinforce positive behavior through gestural praise and to use the emotions triggered in others to foster learning, self-confidence, motivation, and feelings of social support.

Description: This activity is inspired from Morris and Zentall (2014), who showed that gestural praise such as high-five is more motivational than verbal praise. It can be included in any kind of exercise within a training session. Whenever a teammate performs successfully, his teammate(s) reward them through physical gestures i.e. a thumbs up, a high five or hugging. Automatizing this gestural praise behaviour may help create a more positive global emotional climate within the team.

Success criteria: This activity is a success when the coach notices that the athletes systematically praise each other after every achievement (defined within the sporting activity).

6 Conclusion

In this chapter, we presented an overview of the role EI plays in sports and physical activity. Going beyond the influence of EI on sport performance and on adherence to physical activity, we offer a range of activities aimed at increasing EI through sport participation. These target the five main dimensions as identified by the PEC: identification, expression, understanding, regulating, and using emotions. Considering each of these dimensions, in relation to the self and others, we endeavored to inspire researchers and practitioners to integrate sport and physical activity to develop EI, considering different age and expertise target groups, in order to broaden the positive impact of emotional intelligence training in our societies.

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| 1) Event/ potential stressor | 2) Emotion intensity | 3) Perceived control over the situation | 4) Emotions labeling | 5) Emotion functionality: helpful (+) or hindering (-) for performance (impact on decisions) | 6) Coping strategy | 7) Coping efficacy |
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Note: Use of the debriefing sheet. The anchors of the Likert-scales go from 1 (not at all) to 5 (very much). 1) Event/potential stressor: the athlete has to write down the event/stressor he/she encountered during the game. 2) Emotion intensity: The athlete has to indicate the emotional intensity felt in regard to the stressor. 3) Then he has to indicate the degree of the perceived control he/she felt to have on the situation (Perceived control over the situation). 4) The athlete has to label

the emotion felt, and potentially the thoughts associated to this emotion. 5) The athlete has to indicate whether the emotion was helpful or hindering for the performance, with a + or a - . 6) The athlete has to indicate the coping strategy he/she used to face the situation (e.g., focusing on the task, breathing deeply, and shouting). And finally 7) the athlete has to judge the effectiveness of this coping strategy in addressing the stressor

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