"Catching" emotions: Emotion regulation in sport dyads


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**ABSTRACT**

The purpose of the present research programme was to inform the development and subsequent delivery of an intervention to enhance interpersonal emotion regulation. Although emotion regulation has been emphasised due to its importance in explaining performance and well-being, the focus of research has predominantly been on intrapersonal emotion regulation. The present study addressed the dual-gap in research by extending research in interpersonal emotion regulation in general and developing and testing theory-led interventions for use in sport. A three-stage programme of research was set up with stage one reviewing the extant literature before proposing a social-functional approach to emotions, and in particular the Emotions As Social Information (EASI) model, as possible theoretical frameworks for use in sport. Qualitative methods were emphasised as these are particularly useful in studies seeking to identify mechanisms underlying the effectiveness of interventions.

Stage two began with a narrative analysis to outline the potential social functions and consequences of emotional expressions, verbalisations, and actions in ice hockey. Two ice hockey players, each captain of their respective team, participated in semi-structured interviews. Participants described how emotions informed them of important circumstances in their environment that required attention and prepared them for such challenges at the individual level. At a dyadic level, emotions helped participants understand the emotional states and intentions of their teammates contributing toward an assessment of the extent to which they were prepared to face their challenges. At a group level, emotions helped participants lead their teammates in meeting team goals. Finally, at the cultural[1] level, emotions helped participants maintain culture-related identities.

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[1] While "culture" might be used to reference any type of collective identity (e.g., nationality, sexuality, gender, ethnicity, time and space) the word "culture" is predominantly used in this manuscript either broadly (where no distinction is necessary) or in reference to sport sub-cultures (e.g., ice hockey culture). Whenever "culture" is not used in this manner, the appropriate usage is explicitly stated (e.g., "Canadian culture").

Stage two continued with examining the processes, strategies used, and potential moderating factors in interpersonal emotion regulation among 16 ice hockey players from an English professional league. An inductive and deductive analysis revealed 22 distinct strategies used to regulate teammates' emotions. These were distinguished between strategies that were verbal or behavioural in nature. They were further distinguished between strategies employed to initiate interpersonal emotion regulation through affective and cognitive channels. Moderating factors in the interpersonal emotion regulation process were consistent with the EASI model.

Stage three involved the development, delivery and assessment of the intervention. A British ice hockey team was recruited and the intervention was delivered over the course of three competitive seasons. The primary intervention goal was to improve interpersonal emotion regulation as evidenced by being able to accurately identify when an emotion regulation strategy was needed, and select and use a strategy that changed emotions in the direction and strength intended (Webb, Miles, & Sheeran, 2012). Given the link between emotion and performance, it was expected that the intervention would bring about improvements in individual and team performance. Techniques to bring about change comprised of brief contact interventions, dressing room debriefs, feedback from emotional intelligence assessments, and the practitioner managing himself as an intervention tool. The merit of the intervention was judged through practitioner reflections, social validity assessments, pre- and post-intervention measures of emotional intelligence and performance.

Collectively, the present research programme contributes to the emotion regulation literature not only in sport, but also in psychology in general. A key achievement of the programme has been the development of a theoretically sound but ecologically valid intervention designed to improve the interpersonal emotion regulation skills of athletes. Although the intervention primarily catered to the needs of the current team and utilised the

professional philosophy of the researcher-practitioner, the intervention provides support for enhanced performance derived from theory explaining a social-functional account of emotions. Future research might use the theory and approach to testing the theory in different sports to examine the role of each sport sub-culture on interpersonal emotion regulation.

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I would like to dedicate this work to the memory of Albert K. Friesen who will forever be a reminder of the time away from loved ones sacrificed in this achievement.

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Friesen, A., Devonport, T. J., Sellars, C. N., & Lane, A. M. (2013c). A narrative account of decision-making and interpersonal emotion regulation using a social-functional approach to emotions. *International Journal of Sport & Exercise Psychology* doi:10.1080/1612197X.2013.773664

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**PRESENTATION OF PHD RESEARCH PROGRAMME**

The approach to completing the present PhD was to publish four studies in sequence. To date, two of the four studies have been published with the other two papers currently submitted and under review. All studies in the PhD programme have been presented at academic conferences. In addition to the programme of studies, the PhD draws on work that was conducted by the emotion regulation group both at the University of Wolverhampton and as part of the Emotion Regulation of Others and Self (www.erosresearch.org) research network. Two subsequent substantial pieces of work were published, one explored emotion regulation among runners using a qualitative approach (Stanley, Lane, Beedie, Friesen, & Devonport, 2012). A second is a book chapter that reviews a theoretical question on emotions and performance (Lane et al., in press). Both of the above pieces of work focus on intrapersonal emotion regulation. Additionally, five conference papers have originated from the current research programme detailing interpersonal emotion regulation. The present PhD programme draws from each of the publications highlighted in the list of publications.

The structure of the current research programme is a compilation of articles that have either been published or submitted for review. These are presented as chapters. Clearly, each article is presented as a stand-alone piece of work. Therefore the reader will notice some repetition in each article's introduction. However, the decision was made to leave these sections as published as they each make a concise yet comprehensive case for doing each study focusing on different aspects of the research programme. An exception to this formatting is that one encompassing reference list appears at the end of the research programme instead of after each individual article. The work is sequential and this sequence was planned from the outset. However, the route map to the PhD was open in that it was possible to choose a different direction at a number of stages.

This PhD dissertation begins with an introduction to the topic of interpersonal emotion regulation in sport (Chapter 1), leading to the aims of the research programme. The following four chapters represent the four articles published or submitted for review. These chapters include an extended review of literature (Chapter 2), two studies emanating from qualitative interviews that situate data within the theoretical frameworks of the research programme (Chapters 3 & 4) and the delivery of an intervention (Chapter 5). The final chapter of the PhD is a General Discussion (Chapter 6). In this section I attempt to draw the work together and importantly, outline the theoretical contribution the PhD makes to the field. As the research programme details an applied intervention, the General Discussion also includes a discussion on applied implications in sport psychology. The novelty of the research areas lends itself to using qualitative methods in order to ensure the key aspects are studied. As these concepts become known, researchers will almost inevitably begin to test relationships between variables. I argue that researchers should hold onto the notion of conducting highly-ecologically valid research. The PhD concludes by offering suggestions for future research and practice.

# CHAPTER 1: INTRODUCTION

## 1.1 Statement of the Problem

*Few would argue that sport is one of the most emotional fields in life. The roles that passion and emotion play in individual and team sport are formidable. With team sport, however, the effects of emotion are exponentially expanded. The interactive emotional dynamics between teammates and opponents make for powerful drama and tremendous tests of emotional readiness, team solidarity, and commitment* (Botterill & Patrick, 2003, p. 115).

Emotions are pervasive within sports. Managing emotions effectively is arguably one of the most essential skills that athletes can develop to aid them in their quests for excellence and victory. An example can be found in ice hockey when the Edmonton Oilers defeated the Los Angeles Kings on January 24, 2013. The Kings held a 1-0 lead heading into the final minutes of the third and final period. With a little over a minute left in the game, Ryan Nugent-Hopkins of the Oilers appeared to score a game-tying goal on Kings goaltender Jonathan Quick. However, moments before the puck had entered the net, Quick and Oiler forward Sam Gagne appeared to have entangled their equipment preventing Quick from properly defending the shot from Nugent-Hopkins. The referees asked for a video review to determine the legitimacy of the goal. The review showed that Kings defenseman Rob Scuderi had pushed Gagne into Quick who had then intentionally prolonged the struggle with Gagne who was trying to exit the crease area. Nevertheless, the referees ruled that the goal would be disallowed. The crowd protested the call by littering the ice with refuse. In a post-game interview, Gagne shared his feelings and how the team reacted to the disallowed goal, "It's obviously a tough feeling to be the one responsible for [the disallowed goal] but the guys rallied and gave me a tap on the pads and that helps to put it behind you" ("Post-Game Raw," 2013).

As play again began, the action led once more into Los Angeles' end of the ice. The Oilers held puck possession and with 4.7 seconds remaining, Russian rookie Nail Yakupov scored the game-tying goal. The arena erupted with elation and Yakupov, rather than celebrate with his line-mates with typical stoicism, streaked to centre ice in jubilation and celebration.

Yakupov's exuberant celebration took him to centre ice where he dropped to his knees and slid into Edmonton's defensive zone, screaming, as the 16,839 fans at Rexall Place cheered on. "The fans was [*sic*] crazy," said Yakupov. "It was probably my greatest feeling. We showed our heart. It was the best night in the world. I've never seen anything like this" (The Canadian Press, 2013, para. 3).

The excitement of Yakupov's celebration transferred to his teammates. Gagne explained after the game, "The passion and excitement he plays with is unbelievable...It gets his teammates and the fans going. I think it's great" (Dittrick, 2013, para. 10). Regulation time ended and with an extra point in the standings awarded to the victorious team, the Oilers had to down regulate their excitement and refocus on scoring a game-winning goal in overtime. Oilers captain Shawn Horcoff, in a post-game interview commented, "After all that excitement, we had to tell each other that we hadn't won anything yet, calm down, and get the job done" (Dittrick, 2013, para. 12).

During overtime, the Kings took an undisciplined penalty for having too many men on the ice. With the man-advantage, the Oilers executed their tactics and were once again in possession of the puck in the Kings' zone. With just under two minutes remaining in overtime, Gagne who had been the cause of the disallowed goal, shot the puck past Quick securing victory for the Oilers. The crowd once again erupted with joy and the Oilers celebrated an emotional victory. Oilers coach Ralph Krueger commented, "The persistence at

the end of the game showed truly the character of this group. To finish it off in overtime was a very mature step in a very difficult situation emotionally" (The Canadian Press, 2013).

Experiences such as this illustrate the pervasiveness of emotion in sport. Beliefs about how emotions might help and hinder performance set the foundation for the use of strategies to regulate emotions. In a social context such as sport, emotion regulation strategies become interpersonal as numerous individuals attempt to manage not only their own emotions, but others' emotions as well. This research programme is dedicated to the enhancement of interpersonal emotion regulation. To help situate this research programme within the sport and psychology literature, some key points concerning emotion, emotion regulation, and applied sport psychology research methodology should be addressed.

## 1.2 Emotion Regulation in Sport and Performance

A useful starting point is to ask, "Why emotions need to be regulated in sport?" A number of meta-analytic studies have illustrated the influential effects emotions have on sporting performance (Beedie, Terry, & Lane, 2000; Craft, Magyar, Becker, & Feltz, 2003; Jokela & Hanin, 1999). Emotions have been identified as serving a number of useful performance functions. These include improving maximal strength (Perkins, Wilson, & Kerr, 2001), influencing weight loss processes (Hall & Lane, 2001), reducing the risk of losing self-control (Beedie & Lane, 2012; Hagger, Wood, Stiff, & Chatzisarantis, 2010), and reducing the risk of injury (Devonport, Lane, & Hanin, 2005). Emotional responses might also improve relationships between key individuals in the sporting environment, such as coaches, athletes, teammates, and officials (e.g., Jowett, 2003; Wickwire, Bloom, & Loughead, 2004; Sève, Ria, Poizat, Saury, & Durand, 2007). In a review of literature, Jones (2003) also highlighted that emotions will influence the motivation for action responses, physical functioning through heightened arousal, and cognitive functioning through working memory, long-term recall, perceptuo-motor speed, attentional focus, and reduction of

cognitive resources. However, despite past research attention directed at exploring the effects of emotion in sport, such work has largely focused on the antecedents, characteristics, and consequences of emotions, neglecting regulatory processes (Lane, Beedie, Jones, Uphill, & Devonport, 2012).

## 1.3 Defining Emotion

The words of Beverly Fehr and James Russell (1984) have almost become a mantra for emotion researchers: "Everyone knows what an emotion is, until asked to give a definition. Then, it seems no one knows" (p. 464). Izard (2010) noted that despite decades of research interest, there remains a lack of consensus for the definition of "emotion." A significant challenge to emotion research is that the definition of emotion is a continually evolving endeavour. This lack of consensus represents a threat to validity in emotion research as not only are researchers scrutinized based on their research methods, but on their conceptualization of the topic in question. Campos, Walle, Dahl, and Main (2011) noted that "many textbook definitions of emotion are concatenations of the phenomena of feeling, physiology, and expression in a single proposition" (p. 26). In an attempt to highlight the many meanings ascribed to the term emotion, Izard surveyed 35 distinguished emotion researchers and scientists to delineate their understandings of the important aspects that serve to define emotion as a construct. The resultant description of emotion was a blend of the more commonly shared structures and functions of emotion offered by the participants in Izard's study:

> Emotion consists of neural circuits (that are at least partially dedicated), response systems, and a feeling state/process that motivates and organizes cognition and action. Emotion also provides information to the person experiencing it, and may include antecedent cognitive appraisals and ongoing cognition including an interpretation of its feeling state, expressions or social-communicative signals, and may motivate

approach or avoidant behaviour, exercise control/regulation of response, and be social or relational in nature (p. 367).

Each aspect of emotion presented in the above definition could potentially spawn expansive research programmes in every sub-discipline of psychology. For the purposes of the current research programme, the primary (though not exclusive) aspects that will be manifested throughout this dissertation are: (a) emotions organize behaviour; and (b) emotions are social or relational in nature. These two aspects of emotion feature prominently in a social-functional approach to emotions.

### 1.4 A Social-functional Approach to Emotions

As an alternative to theorising the structure of emotions or *what* they are, functional accounts of emotions address *why* humans have emotions and what their purpose is in daily living (Averill, 1992). Furthermore, theories that propose emotions as being inherently social or interpersonal are gaining momentum (Campos et al., 2011; Fischer & Van Kleef, 2010; Manstead, 1991; Parkinson, 1996; 2011a; Van Kleef, Van Doorn, Heerdink, & Koning, 2011). Consequently, social-functional approaches to emotions have begun to emerge. Social-functional approaches to emotions posit that emotions help coordinate the behaviour of individuals to meet the shared challenges in the environment. That is, emotions communicate particular information about an individual's attitudes, goals, and intentions to others (Côté & Hideg, 2011; Fischer & Manstead, 2008; Frijda & Mesquita, 1994; Keltner & Haidt, 1999; Van Kleef, 2009). For example, in bargaining and conflict negotiation, a social-functional analysis of emotions would suggest that two bargaining individuals will attend to each others' emotions because doing so might provide crucial information about what behaviour they can expect from their opponent (Van Dijk, Van Kleef, Steinel, & Beest, 2008). Van Dijk and colleagues through a series of experiments in negotiation demonstrated that bargainers will use their opponents' expressions of anger to gauge how close their

opponent is to conceding. Similar studies from social psychology have illustrated the social-functional effects of disappointment (Wubben, De Cremer, & Van Kijk, 2009), worry, guilt and regret (Van Kleef, De Dreu, & Manstead, 2006), disgust and contempt (Hutchenson & Gross, 2011), enthusiasm, amusement, love and awe (Griskevicius, Shiota, & Neufeld, 2010), happiness, pride and contentment (Griskevicius, Shiota, & Nowlis, 2010; Williams & DeSteno, 2008), fear (Marsh, Ambady, & Kleck, 2005), sadness (Hasson, 2009), and embarrassment (Keltner, Young & Buswell, 1997) among others (see Shariff & Tracy, 2011).

A social-functional approach to emotions incorporates perspectives from both evolutionary psychology and social constructionism (Keltner & Gross, 1999). To paraphrase from Balish, Eys, and Schulte-Hostedde (2012), evolutionary psychology offers the opportunity to explain how emotions interact with the environment to produce behaviour by explaining why emotions evolved to a particular design. That is, evolutionary psychology stipulates that emotions evolved to help individuals respond effectively to the environment around them (Keltner, Haidt, & Shiota, 2006). Like all psychological processes, had emotions not had functional value for humanity, they likely would have been phased out of humanity's evolution (Baumeister, Vohs, DeWall, & Zhang, 2007). Consider the classic example of our typical ancestor being confronted with a poisonous snake. The fear that our ancestor felt likely served to trigger a flight response thereby extending his chances for survival and ensuring that fear was passed on to future generations.

However, much of humanity does not face the same challenges as our ancestors and so the functions of emotions have perhaps changed. This is when evolutionary psychology can benefit with adopting social constructionist perspectives that focus on how emotions are constructed according to social, structural, and moral-ideological forces that define culture and social context (Keltner & Gross, 1999). We experience emotions not exclusively in relation to survival and reproductive fitness, but also in relation to cultural institutions that

are strongly meaningful. The social context in which this research programme is situated is sport which has been suggested to be very meaningful for certain individuals (Hanin, 2007).

## 1.5 Researcher Epistemology

Similarly, it is an appropriate and necessary procedure to make the researcher's ontological paradigm explicit because it illuminates the epistemological perspectives of the researcher to the reader's audience. Furthermore, the research paradigm also directs the methodological procedures utilised throughout the research programme (Guba & Lincoln, 1998) as will be discussed in section 1.6. Consistent with social-functional approaches to emotions which incorporates constructionist perspectives, my role as researcher was to help participants share their unique interpretations of events and circumstances that led to their evoked emotions (and perceptions of needed regulation of their own and others' emotions). These interpretations are naturally subjective and individualised based on the past experiences of each participant. The results presented in this research programme are manifestations of multiple forms of constructed realities as to what it means to regulate a teammate's emotional state. Additionally, it was through my subjective interpretations as the researcher that created a representation of interpersonal emotion regulation. Guba and Lincoln have asserted that a relativist ontology with a subjective epistemology denotes a constructionist paradigm to research.

## 1.6 Qualitative Methodology in Sport Research

Consistent with constructionist approaches, this research programme will predominantly utilise qualitative research methods (Denzin & Lincoln, 1994). This will permit the opportunity to study interpersonal emotion regulation from the perspective of participants by capturing rich detailed descriptions of their experiences. Indeed, the conscious aspects of emotion regulation (e.g., feeling states, appraisals, intentions, meta-emotion beliefs) are salient and important (Gross, Richards, & John, 2006). Smith (2008) has noted

that there is a shift in psychological research from an emphasis on quantitative methods to qualitative. The value of qualitative research includes the opportunity to "illuminate the previously unknown or tenuously known, provide familiarity through rich descriptions, and explode faulty understandings" (Strean, 1998, p. 334). Strean (1998) provided four particular contributions of qualitative research to knowledge generation in the field of sport psychology. The first contribution of qualitative research comes in the form of description. Specifically, qualitative methods provide the basis for people to share how they make sense of their world and the context in which they interact. Strean noted that the descriptions of psychological processes are well-suited for qualitative research. For example, Uphill and Jones (2007) examined the association between athletes' cognitive appraisals and subsequent emotions in illustrating Lazarus' (1991) cognitive motivational relational theory. Qualitative research is also useful for describing how people's current context affects their actions. For example, qualitative interviews have been used to document the psychological effects of poor coaching (Gearity & Murray, 2011) and coaching uncooperative athletes (Cope, Eys, Schinke, & Bosselut, 2010).

The second advantage of qualitative research noted by Strean (1998) is interpretation. Specifically qualitative research can help develop testable hypotheses for future quantitative research. That is, qualitative research provides the opportunity to build and develop theory-driven research by potentially exposing previously unconsidered factors (Smith 2008; Smith & Osborn, 2008). For example, Hanton and Jones (1999b) tested changes in cognitive and somatic anxiety through an intervention facilitated by qualitative data derived for semi-structured interviewed analysed in Hanton and Jones (1999a).

Strean's (1998) third proposed advantage for qualitative research includes ideographically verifying nomothetic principles. That is, qualitative methods offer the opportunity to verify the extent to which generalized theory or principles apply to specific

individuals. For example, Thatcher and Day (2008) examined whether the properties of stressful experiences according to Lazarus and Folkman's (1984) transactional approach to stress and coping, applied to athletes. Through qualitative interviews, Thatcher and Day identified all properties of stress within the experiences of national calibre trampolinists.

Finally, Strean (1998) proposed that qualitative methods offer the opportunity to evaluate applied interventions that are carried out in ecologically valid settings. For example Dunn and Holt (2003) asked athletes who had participated in an applied intervention to share their perceptions of the delivery of the intervention. Their responses highlighted important factors related to both the style of intervention delivery and the consultant who delivered it. Other qualitative research has utilised reflective methods from the perspective of the consultants who delivered the intervention (e.g., Cropley, Miles, Hanton, & Niven, 2007; Devonport & Lane, 2009; Hill, Hanton, Matthews, & Fleming, 2011).

### 1.7 Applying Theory to Applied Sport Psychology Research

A lack of applied research that strives to bridge the gap between theory and practice has been a criticism of sport and exercise psychology research voiced by academics and sports personnel (Lane & Terry, 2000; Lazarus, 2000). Kerr (1993) noted that although sport psychologists use numerous intervention techniques, the selection of these techniques has, typically, not been grounded in any theoretical model. Infused within Strean's (1998) proposed advantages to qualitative research are potential benefits of theory-driven research as outlined by Crocker and Graham (1995). For example, while qualitative research can help describe participant experiences in relation to how they view their world, established theories can provide conceptual frameworks which help create meaningful associations between participant experiences. Furthermore, theory also provides the opportunity to delimit the field of research which helps prevent the research from being overwhelmed by the complexity of the issue. This is especially pertinent as emotion and emotion regulation have been studied

from a variety of different sub-discipline perspectives in psychology (Gross, 2010) and outside of psychology.

## 1.8 Conceptual Framework and Influential Literature

The current research programme utilises the Emotions As Social Information (EASI) model (Van Kleef, 2009; 2010) as a conceptual framework for interpersonal emotion regulation. The EASI model, although still in its relative infancy, has been developed and refined through numerous experimental studies (e.g., Van Doorn, Heerdink, & Van Kleef, 2012; Van Kleef, Homan, Beersma, & van Knippenberg, 2010; Van Kleef, Homan, Beersma, Van Knippenberg, Van Knippenberg, & Damen, 2009). Originating from negotiation and conflict resolution settings, the EASI model proposes that social influence (including interpersonal emotion) occurs via two processes: affective reactions and inferential processing. The extent to which interpersonal emotion regulation occurs via either of these two channels is theorised to be moderated by the inferential processing motivation of the target and social-relational factors. An expanded justification for using the EASI model is provided in Chapter 2 of this research programme.

## 1.9 Aims of Research Programme

Gross (2010) has highlighted that emotion regulation has evolved as a research topic across multiple sub-disciplines of psychology. Whilst this represents an incredible opportunity for researchers to borrow theory and evidence-based practice from areas that offer new perspectives and directions, due diligence must be taken to ensure that ideas developed in one area are indeed transferable to others. Consequently, the first objective of this research programme was to review available theory and research on interpersonal emotion regulation garnered from the vast array of social psychology sub-disciplines and examine the extent to which potential theory can be applicable in sport settings. To this end, a

critical review of interpersonal emotion regulation literature is presented to help identify the role sport psychology might have in advancing emotion theory and research (See Figure 1.1).

A second objective of this research programme was to examine the interpersonal emotion regulation experiences from the perspective of ice hockey players. To that end, members of a British ice hockey team from a professional league were interviewed. Narrative and content analyses were conducted on their interview data with the intent to illuminate the social functions emotions have in ice hockey performance and common strategies players use to manage their teammates' emotions and what perceptively influences the effectiveness of strategies.

The exploration of the players' experiences sets the foundation for an intervention to enhance the interpersonal emotion regulation within the team over the period of an entire hockey season. The foundation for the intervention is a culmination of relevant emotion regulation literature, the athletes' past experiences, and the professional philosophy of sport psychology practitioner (myself). The intervention is documented through the use of the practitioner's reflections, social validity interviews with the athletes, pre- and post-intervention assessments of emotional intelligence, and finally changes to overall team performance.

**Stage One**

**Aim:** To provide an overview of research and theory from general psychology on interpersonal emotion regulation and highlight that which might inform research in sport.

**Methods:** Critical review of literature

**Duration:** 12 months

**Stage Two**

**Aim:** To examine ice hockey players' experiences with interpersonal emotion regulation to glean the social functions of emotions in a hockey environment and common strategies used to regulate teammates' emotions as well as what factors are potentially influential.

**Methods:** Narrative and content analyses on interview data

**Duration:** 12 months

**Stage Three**

**Aim:** To implement an intervention to improve the interpersonal emotion regulation within a professional ice hockey team.

**Methods:** Case study of an applied intervention

**Duration:** 12 months

*Figure 1.1* Stages of the PhD Programme

# INTRODUCTION TO REVIEW OF LITERATURE

A goal of the PhD research programme was to publish articles throughout the writing process. As such, the review of literature (see Stage One in Figure 1.1) is presented as an article published in its entirety by the *International Review of Sport and Exercise Psychology* (Friesen et al., 2013). While it is published as a six-authored article, I claim authorship of every section while additional authors contributed by reviewing the manuscript and engaging in discussions that helped refine ideas. It is subdivided into four main sections. After an introduction, the topic of emotion regulation is presented and considered from the perspective of evolutionary psychology. It is argued that emotions are regulated in sport for instrumental purposes. That is, emotions help prepare athletes for the performance challenges they face by priming cognitive, physiological, or behavioural resources. These preparations are grounded in specific meta-emotional beliefs that athletes have about emotions and performance.

The second section considers the regulation of interpersonal emotions. Similar to intrapersonal emotion regulation, it is suggested that interpersonal regulation is functionally-driven in the sport environment. Specifically, a social-functional approach to emotions as delineated by Keltner and Haidt (1999) is presented. The approach explains that the functions of emotions will vary depending upon what level of analysis is utilized.

The third section of the review presents the Emotions As Social Information (EASI) model from Van Kleef (2009). An explanation of how interpersonal emotion regulation theoretically occurs according to the EASI model is presented and supporting literature from sport and general psychology research is provided. This is followed by a critique of the utility of the EASI model for sport contexts.

The final section of the review presents avenues for potential research stemming from the preceding arguments. Specifically, the call for an exploration of interpersonal emotion regulation in sport is made beginning with finding support for the social-functional approach

to emotions and possible evidence for emotions to be regulated in accordance with the processes depicted in the EASI model.

# CHAPTER 2: EMOTION IN SPORT: CONSIDERING INTERPERSONAL EMOTION REGULATION STRATEGIES

## 2.1 Abstract

Research into emotion regulation in sport has predominantly focused on intrapersonal regulation of emotion response systems (i.e., subjective experience, cognitions, behaviours or physiological responses). However, researchers in social psychology have suggested that the emotion regulation process is inherently social and interpersonal (e.g., Niven, Totterdell, & Holman, 2009; Parkinson, Fischer, & Manstead, 2005). This shift represents a significant change in how emotion regulation is conceptualized and, given the intensity of emotions experienced in sport, represents a potentially productive line of enquiry. This review addresses interpersonal emotion regulation in sport, and draws attention to work in social psychology that might inform future sports research. Specifically, the utility of social-functional approaches will be considered.

## 2.2 Introduction

Research into emotion in sport and exercise psychology is gaining momentum. A SportDiscus search for the word 'emotion' in the title from January 2000 to July 2012 produced 187 results, more than the combined previous two decades (164 results from January 1980 to December 1999). Such interest likely stems from the proposed link between emotions and sport performance. Meta-analytic studies have highlighted the link between performance and emotions measured by the Profile of Mood States (Beedie et al., 2000), the Competitive State Anxiety Inventory-2 (Craft et al., 2003), and the Individualized Zone of Optimal Functioning (IZOF) model (Jokela & Hanin, 1999). Frijda (1986) believed the function of emotions was to signal the meaningfulness of events and situations, to help prioritize goals, and to generate a state of readiness that assists individuals in meeting the challenges in their environment. In sport, strategies to regulate emotions for instrumental

purposes have become fundamental components of applied sport psychology interventions (Botterill & Brown, 2002; Jones, 2003). These strategies are learned and practiced by athletes in order to help regulate emotions experienced pre, during, and post competition as well as through periods of training and injury rehabilitation (Gould & Maynard, 2009; Mankad, Gordon, & Wallman, 2009; Robazza, Pellizzari, & Hanin, 2004; Tenenbaum, Edmonds, & Eccles, 2008).

Eisenberg, Fabes, Guthrie, and Reiser (2000) defined emotion regulation as "the process of initiating, maintaining, modulating, or changing the occurrence, intensity, or duration of internal feeling states and emotion-related physiological processes, often in the service of accomplishing one's goals" (p. 137). Campos et al. (2011) observed that psychology[1] has predominantly focused on how individuals regulate their own emotions ('intrapersonal emotion regulation'). Researchers are however increasingly recognising that the emotion process is inherently social and interpersonal (Niven et al., 2009; Parkinson et al., 2005; Rimé, 2006; Van Kleef, 2009). Therefore, increased attention is being given to interpersonal emotion regulation, which represents deliberate attempts to influence the emotions of another person (Niven, Totterdell, & Holman, 2007). Sport is fundamentally a social activity as athletes interact with teammates, coaching staff, opponents, officials, family, fans, and sport administrators. In this context, the social functions and interpersonal regulation of emotions need to be considered when addressing emotions in sport.

The purpose of this review is to investigate interpersonal emotion regulation in sport and draw attention to theory that might advance future research. Gross (2010) outlined that research in emotion and emotion regulation has advanced in many applications of

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[1] We use the term psychology to cover all of the core areas of psychology (i.e., biological, social, clinical, cognitive, personality, developmental) as well as areas of application such as sport, occupational, education, etc. We use the term psychology to refer to the study of psychology as an academic subject. This is often referred to as "mainstream psychology" although we chose not to use this term as it implies that sport and others areas of application are on the periphery.

psychology. Therefore, a priority for this article is to integrate research from applications of psychology other than sport. In this regard, the utility of social-functional approaches will be considered. It is hoped that this review will promote the need for developing strategies and interventions that facilitate interpersonal emotion regulation in much the same way as strategies and interventions to enhance intrapersonal emotion regulation have been developed. Suggestions for future research are subsequently presented.

## 2.3 Emotion Regulation

The concept of emotion regulation has been addressed from a number of different angles, each representing differing perspectives with distinctive points of emphasis (Eisenberg et al., 2000; Gross, 1998; Koole, 2009; Larsen, 2000). Thompson (1994) emphasized that emotion regulation should be regarded functionally and is especially pertinent for research in sport in that it addresses the motivation for an athlete or coach to regulate their emotions. Emotions influence behaviour and will likely have pervasive effects in all domains of human functioning, including sport (Baumeister et al., 2007). Some theorists have argued that from an evolutionary psychology perspective, emotions are modes of functioning that coordinate physiological, cognitive, motivational, behavioural, and subjective responses in patterns that increase the ability to meet the adaptive challenges of situations that have recurred over evolutionary time (Nesse & Ellsworth, 2009). Similar to the pain response or perspiration, emotions remain latent until an evolved mechanism detects cues within the situation that indicate an emotional response would be beneficial. Evolutionary psychologists try to emphasize the functionality of all emotions. As such describing emotions using terms such as 'positive', 'negative', 'pleasant', 'unpleasant', 'helpful', 'unhelpful', 'functional' and 'dysfunctional' are deemed inappropriate (Nesse & Ellsworth, 2009). The notion that an emotion such as depression or anxiety is consciously experienced as unpleasant, and is therefore 'negative', 'unhelpful' or 'dysfunctional', is

questionable because each emotion may signal valuable information to the individual. Consider perspiration—it is a functional physiological response that prevents potentially fatal over-heating. However, in social settings perspiring is seen as undesirable, yet sweating itself is not necessarily a 'negative' bodily response. Similarly, emotions are adaptations that are useful only in certain situations and identifying person-situation transactions is complex. For example, anxiety might be hedonically unpleasant but serves an important function to inform the individual of the meaningfulness of the activity (among other functions).

Tamir and colleagues (e.g., Tamir, 2008; Tamir, Chiu, & Gross, 2007; Tamir, Mitchell, & Gross, 2008) have researched emotion regulation and its role in achieving functional goals. Their studies have shown that individuals will choose to experience hedonically unpleasant emotions such as anger and fear, or deny the opportunity to increase hedonically pleasant emotions such as happiness in order to accomplish meaningful goals (Tamir, 2011). For example, Tamir et al. (2008) studied 82 undergraduate students as they prepared to play either confrontational or non-confrontational video games. They found that when participants prepared to play confrontational video games, they preferred to engage in activities that increased their anger levels (e.g., listening to anger-inducing music and recalling past anger-evoking events) thereby decreasing pleasant feelings in order to feel an emotion perceived to be more beneficial to their goal. This suggests that the emotions were regulated for functional purposes. In a similar study, Tamir and Ford (2009) also reported that participants chose to engage in activities that stimulated fear (i.e., another hedonically unpleasant emotion) if they believed it would help them achieve avoidance goals.

Although, it is commonly suggested that enjoyment is a fundamental participation motivation in sport (Scanlan, Carpenter, Schmidt, Simons, & Keeler, 1993), it has been suggested that athletes intentionally place themselves in hedonically unpleasant emotional states if they perceive these states will bring about ideal cognitive, physiological, or

behavioural consequences (e.g., Robazza et al., 2004). This suggests that athletes hold meta-emotional beliefs about how their emotions influence their performance. For example, one wrestler might believe he performs best when angry while another wrestler believes she performs best when calm. Such meta-emotional beliefs have been a feature of the research of Hanin and colleagues (e.g., Robazza, Bortoli, & Hanin, 2006; Robazza et al., 2004) and the IZOF model (Hanin, 2000). In fact, research using the IZOF approach has suggested a multifaceted and highly personalized nature of the relationship between emotions and sport performance. These meta-emotion beliefs therefore represent an important line of enquiry for future emotion regulation research as such studies could potentially validate the utility of hedonically unpleasant emotions in sport.

Intrapersonal emotion regulation in sport has received considerable research attention. Studies have documented numerous skills and strategies used to regulate emotions (Cohen, Tenenbaum, & English, 2006; Hanton & Jones, 1999b; Robazza et al., 2004; Thelwell, Greenlees, & Weston, 2006; Thelwell & Greenlees, 2003). For example, in a study that examined how athletes self-regulate their mood Stevens and Lane (2001) found that listening to music, seeking social support and reappraising the situation were popular strategies during competition. It should be noted that training also provides an opportunity to practice emotion regulation strategies (Thomas, Murphy, & Hardy, 1999). Additionally, researchers have suggested methods by which emotion regulation might be incorporated into sport psychology interventions in order to enhance performance (Botterill & Brown, 2002; Jones, 2003). The effectiveness of different strategies must also be considered as different strategies have been shown to have varying effects on emotion regulation (Webb et al., 2012).

Various attempts have been made in psychology to classify emotion regulation strategies. Koole (2009) noted that finding an underlying order by which to classify such strategies becomes a formidable scientific challenge given the substantial number of reported

emotion regulation strategies. Gross (1998) developed a process model that classifies emotion regulation strategies into five categories based on the moment at which they impact the emotion generation phase: situation selection, situation modification, attentional deployment, cognitive change, and response modulation. By contrast, Koole (2009) categorized emotion regulation strategies based on which emotion response system they affect, namely: attentional, knowledge, and bodily response systems. Parkinson and Totterdell (1999) offered a classification placing each emotion regulation strategy into one of four categories depending on whether they are cognitive or behavioural, and whether they encourage the individual to approach or avoid the cause of the emotion. The multitude of emotion regulation strategy classifications highlights the complexity of researching emotions and the opportunity to approach emotion regulation from many different perspectives.

## 2.4 Interpersonal Emotion Regulation

Parkinson (1996) theorized that emotions are inherently a social process in that the causes, consequences, and functions of emotional episodes are often situated within interactions with other people. Specifically, Parkinson proposed that the primary purpose of expressing emotion is to achieve indirect interpersonal effects and thereby mediate the social interaction between individuals. That is, people express their emotions not as a result of their emotional experience, but rather to convey some type of communicative message to an audience (real or imagined) about the meaning they derive from their current situation or environment. For example, Parkinson theorized that facial expressions depend more on communicative functions than on expressive functions. Consider a coach shouting at her players in order to 'fire them up' and perform better. The coach is not only feeling angry, but also expressing her appraisal of the situation in order to facilitate behaviour changes in her players.

Keltner and Haidt (1999) further expanded upon Parkinson's (1996) social-functional perspective of emotion. They proposed that a social-functional account of emotion should consider the social implications of emotions whether the emotional experience occurs within the context of an individual, dyad, group, or culture. At an individual level, Keltner and Haidt suggested emotions serve to inform the individual about specific social events or conditions in which action is needed—that is, what is important in a social situation. For example, Uphill and Jones (2007) confirmed how appraisals of information from the environment (e.g., that one is on course to reach one's goals) led to specific emotional responses in athletes (e.g., happiness). Furthermore, emotions also serve to prepare the individual (physiologically and cognitively) to respond to problems or opportunities that arise within social interactions.

At a dyadic level, Keltner and Haidt (1999) proposed that emotions organize the interactions of the two individuals. Specifically, emotional expressions help individuals know others' emotions, beliefs, and intentions which help to co-ordinate social interactions. Additionally, emotional communication may evoke complementary and reciprocal emotions in others that help individuals respond to significant social events. Thirdly, emotions serve as incentives or deterrents for other individuals' social behaviour. For example Sève et al. (2006) reported that the exchange of emotion expressions between opposing table tennis players was deliberately managed to manipulate levels of confidence in each other.

At the group level, researchers have claimed that emotions help individuals define group boundaries and identify group members. Keltner and Haidt (1999) proposed that emotions help collections of interacting individuals who share common identities and goals in meeting their shared goals, or the superordinate goals of the group. The differential experience and display of emotion might help individuals define and negotiate group-related roles and statuses. For example Dunn and Holt (2004) documented the effects of a mutual disclosure team-building exercise. Members of a Canadian ice hockey team shared personal

stories in an attempt to enhance team unity and encourage members to emotionally prepare for an upcoming tournament. The players reported the exercise to be emotionally intense, prompting a deeper understanding of self and others and resulting in enhanced feelings of closeness and confidence in their team.

A social-functional perspective of emotion generates numerous opportunities for future research in sport. For example, at the individual level of analysis, researching the effects of social interaction on an athlete's physiology could give insight into how the presence and actions of opponents influence an athlete's performance. This could be especially relevant in fine motor sports such as archery or golf where subtle changes in heart rate or breathing have the potential to significantly influence performance. Alternatively, at the dyadic level of analysis, naturalistic studies examining how emotional expressions are detected, interpreted and subsequently utilized could help articulate how athletes interact with others in their environment. These studies could lead to tangible benefits such as enhanced cohesion between teammates in competition, enhanced communication between coach and athlete during training sessions and the development of strategies to capitalize on emotional outbursts against opponents. At the group level of analysis, research into collective emotion and role-related emotion could lead to effective management of team dynamics. However, subsequent studies would benefit from first having a theoretical model of interpersonal emotion regulation from which to draw testable hypotheses and contextualize results.

### 2.5 Emotions As Social Information (EASI) Model

Van Kleef (2009, 2010) recently proposed the Emotions As Social Information (EASI) model. The EASI model (see Figure 2.1) is situated within a social-functional approach to emotions in that the expressions of one person provide information to observers which might influence the behaviour of another person. The influence occurs through two channels: affective reactions and inferential processes. For example, consider a swimmer who

is late in arriving for training, which naturally upsets her coach, who verbally expresses her disappointment and anger (expression). The swimmer might infer that her tardiness is a violation of the swim team's code of conduct and is inappropriate considering her coach made the effort to arrive on time (a series of inferences), which might in turn lead her to ensure she is punctual for the next practice (behaviour). Conversely, the coach's anger might upset the swimmer, leading her to dislike the coach (affective reactions) which possibly causes her to seek out a new coach (behaviour). The extent to which either process occurs is moderated by such variables as the other's information processing motivation or abilities and by social-relational factors. To continue the above example, if the swimmer has lost her passion for swimming (signifying a low information processing motivation) or if their relationship is already strained (signifying social-relational factors), these might also influence the subsequent behaviours.
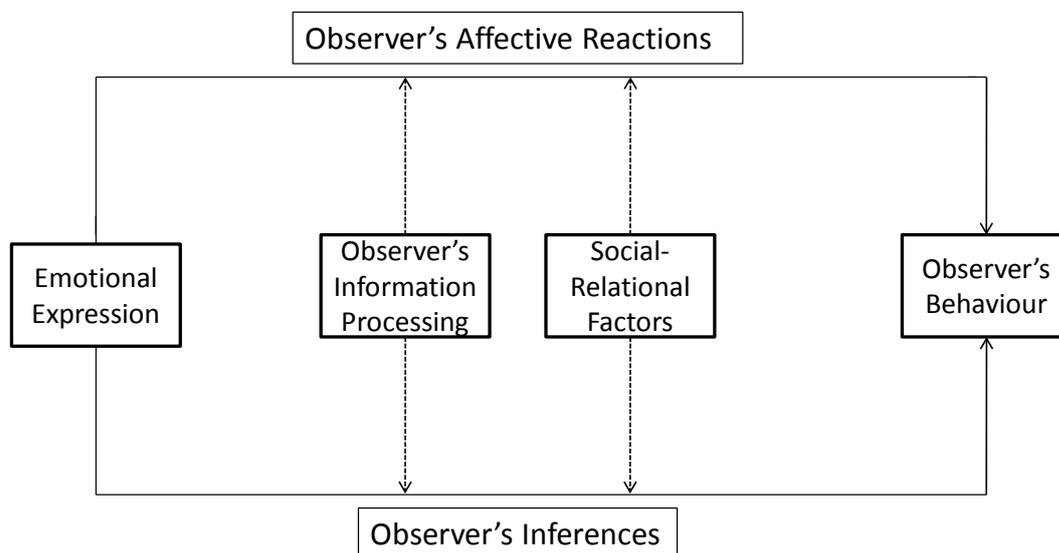


*Figure 2.1: Van Kleef's Emotions As Social Information Model. Used with permission.*

**2.5.1 Observers' Affective Reactions**

The first channel by which emotion information travels from sender to observer is by affective reactions. Van Kleef (2010) offered two types of relevant affective responses: emotion contagion and interpersonal liking. Emotional contagion is defined as a "process in which a person or group influences the emotions or behaviour of another person or group through the conscious or unconscious induction of emotion states and behavioural attitudes" (Schoenewolf, 1990, p. 50). It occurs when individuals mimic the expressions and postures of those in their immediate group. These expressions then lead to afferent feedback which begins to bring the observer's emotional state in line with those of the observed (Hatfield, Cacioppo, & Rapson, 1994). Interpersonal liking typically reflects the notion that expressions of happy and pleasant emotions encourage attraction and relationship satisfaction whereas expressions of anger deter attraction and decrease relationship satisfaction (Van Kleef, De Dreu, & Manstead, 2004a, 2004b).

A number of studies have examined the process of emotion contagion. Barsade (2002) split participants into groups which included either a happy or angry confederate. Self-report measures of their emotions were taken before and after a negotiation exercise in which the confederate displayed either hedonically pleasant or unpleasant expressions. Ratings of emotion from participants and outside observers indicated that participants indeed 'caught' the emotional state of the confederate. As a result of mood linkage, those with a pleasant confederate were rated higher in cooperative behaviours, lower in conflict and superior in performance than those with an unpleasant confederate. Additional evidence was provided by Sy, Côté, and Saavedra (2005) who induced a specific mood within one participant who then served as a leader to other participants in a group exercise. Sy and colleagues found that groups with a leader in a positive mood evidenced improved mood as well as superior

performance on their task. Conversely, those with a leader in a negative mood also developed a negative mood and performed poorly on their task.

Emotion contagion has received attention in the sport psychology literature. For example, Totterdell (2000) studied emotion contagion within a cricket team. While having players record their emotional states throughout a match, Totterdell explained how the mood of an individual player was linked to the collective mood of the team. Furthermore, O'Neill (2008) proposed that emotion contagion mechanisms may be responsible for decreased performances by alpine skiers after witnessing a teammate's injury. Emotion contagion has also been theorized to be an important factor in the association between celebratory responses to a goal and team performance in soccer (Moll, Jordet, & Pepping, 2010). Specifically, Moll and colleagues noted that celebratory expressions in one team led to a negative effect on the opposing team. This type of counter-empathetic emotional response was also illustrated by Lanzetta and Englis (1989) who found that in competitive situations, participants smiled in response to their opponent's grimace. Similarly, Ronglan (2007) reported that players deliberately expressed excessive joy and enthusiasm after successful performances in order to increase opponents' feelings of defeat. Additional studies examining intimidation in football and ice hockey have highlighted the intention in athletes to induce unpleasant feeling states in their counterparts (Kerr & Grange, 2009; Shapcott, Bloom, & Loughead, 2007).

## 2.5.2 Observers' Inferential Processing

The second pathway by which interpersonal emotion regulation is carried out according to Van Kleef's (2009) EASI model is through inferential processing. This route involves the observer making a series of inferences or appraisals about the information expressed through the emotions of another person. Citing appraisal theories such as that of Lazarus (1991), Van Kleef explained that the basic informational value of discrete emotions is consistent throughout varying contexts. Therefore, observers are able to infer information

about the feelings, attitudes, relational orientations and behavioural intentions of another person through their emotional expressions (Keltner & Haidt, 1999).

Research supports this proposed inferential processing pathway in interpersonal emotion regulation. For example, Van Kleef et al. (2004a) reported that during negotiation tactics, negotiators paired with an angry partner conceded much more than negotiators paired with happy partners. The negotiators inferred that angry partners were unlikely to concede their ambitions whilst happy partners were perceived to be more lenient in negotiating. Along similar lines, Van Kleef et al. (2009) reported that work teams use the emotional expressions of their group leaders to infer the quality of their performance. Leaders were directed to provide identical verbal feedback to different groups, but to vary their emotional expressions. When the leader displayed anger, the group reported their performance to be poor. When the leader displayed happiness, the group reported their performance to be good.

Research in sport psychology has also suggested that inferential processing influences the emotions and behaviours of others. For example, Vargas-Tonsing, Myers, and Feltz (2004) found that when coaches acted confidently themselves, their athletes experienced increased self-efficacy, because an athlete observing a confident coach appraised their chances for success as good. Other studies have shown that coaches who share their appraisals of performance and give feedback with high informational value enhance the confidence and self-efficacy of their athletes (Amorose & Weiss, 1998; Vargas-Tonsing, 2009). This might be attributed to the coaches giving their athletes more opportunity to process their appraisals of the situation and bring their own emotions in line.

The effects of inferential processing can also be witnessed in studies examining competitive opponents. For example, Buscombe, Greenlees, Holder, Thelwell, and Rimmer (2006) revealed that the inferences tennis players made about their opponents' body language and clothing influenced their perceptions of the dispositional traits of their opponent and their

perceived anticipated match outcome. Specifically, when opponents displayed confident body language, tennis players felt less likely to succeed against them and inferred that their opponents' confidence was due to their anticipation of victory.

## 2.6 Moderating Variables within the EASI Model

According to Van Kleef (2009), affective reactions and inferential processing may result in either motivating similar or opposing behaviour. The extent to which this occurs is determined by two moderating factors: the observer's information processing ability and motivation, and social-relational factors. Specifically, "the more thorough the information processing, the stronger the predictive power of inferences; the shallower the informational processing, the strong the predictive power of affective reactions" (p. 186).

### 2.6.1 Information Processing Motivation and Abilities of Observer

Van Kleef (2009) proposed that the information processing abilities and motivation of the observer moderate the extent to which emotion is transferred to the observer. The stronger the motivation and ability to decipher the information transmitted through emotional expressions, the more likely the observer will be influenced by inferential processing. Van Kleef et al. (2004b) revealed that negotiators conceded more to angry opponents than to happy ones when their motivation to process the information from their opponent's emotional expressions was high. That is, when they had a low need for cognitive closure, when there was no time pressure, and if they held a position of weakness. This was not the case when motivation to process information was low (i.e., high need for cognitive closure, under a time limit, and they held a position of power). Conceivably then, when athletes are not motivated to understand the emotional message behind their coach's expressions, they are unlikely to be influenced.

Hawk, Van Kleef, Fischer, and Van Der Schalk (2009) reported that participants were able to identify emotions in other people from speech-embedded vocal prosody (e.g., volume,

pitch, rate of speech). However, they also found that people are much better able to identify others' emotions via facial expressions and affect vocalizations (such as laughter or screams). This puts many athletes at a disadvantage because the nature of many sports precludes athletes from visibly seeing the facial expressions of their coaches and teammates. Hanin (2003) demonstrated that ice hockey coaches were able to describe the behavioural cues that indicated the emotional state of their hockey players. Yet despite such observations, Hanin (2007) proposed that research on interpersonal behavioural indicators within sport is rare. Therefore there is a need to develop an ecologically valid methodology measuring the extent to which athletes are able to discern the emotions of their teammates or coaches.

**2.6.2 Social-Relational Factors**

Social-relational factors represent the second moderating factor determining the extent to which emotions are interpersonally regulated via affective responses or inferential processing. One such factor is the nature of the relationship (Van Kleef, 2010). For example, Van Kleef et al. (2004b) demonstrated that the effects of affective reactions such as emotion contagion are more prominent in cooperative situations, as opposed to competitive ones, in which it was more common to see inferential processing between opponents (see also Bourgeois & Hess, 2008; Van Der Schalk et al., 2011). Similarly, Gross et al. (2006) suggested that the type of emotion regulation strategy chosen will often influence the strength of the dyadic relationship.

Other important social-relational factors determining the extent to which interpersonal emotion regulation occurs via affective responses or inferential processing include cultural norms and display rules (Van Kleef, 2009). In a study by Van Kleef and Côté (2007) participants negotiated with an opponent who either followed or disregarded an explicit bargaining "display rule" that prohibited the use of intimidation strategies and hostile emotions. Expressed anger in the absence of the rule was perceived as appropriate and

elicited cooperation. Conversely, expressed anger when the rule prohibiting emotion was endorsed was perceived as inappropriate and resulted in increased competition. Cultural norms distinct to each sport have surfaced in both research and applied contexts. Gallmeier (1987) highlighted how teammates, fans, and coaches influenced the emotions of ice hockey players, who then altered their expressions and behaviours to respond in appropriate accordance with the expected norms of hockey culture. Galvan and Ward (1998) described an intervention intended to change the aggressive behaviours of players that were perceived to be in violation of tennis display rules by posting descriptions of the athletes' outbursts for the public to see.

Research has also demonstrated the importance of expressing emotion in an appropriate manner in order to achieve desired effects. Breakey, Jones, Cunningham, and Holt (2009) examined female ice hockey players' perceptions of their coach's mid-game speeches. They found that the amount of emotion the coach himself exuded, the length and content of his speeches (i.e., whether they were short and meaningful, and referenced team values), the timing of his speech, whether or not his perceptions agreed with the athletes', and whether he left out expected pieces of information, were perceived as the determining factors as to whether or not the speech was positively or negatively received. Similarly, Boardley, Kavussanu, and Ring (2008) found that athletes' perceptions of their coach's ability to motivate them were linked to the coach's emotional expressions of effort, commitment, and enjoyment. Together, this suggests that the outcomes of interpersonal emotion regulation strategies rely not only on the strategies themselves but also the manner in which they are delivered. Similar research has reported that the competitive situation will also affect how receptive athletes are to the emotional content of their coaches' speeches. For example, Vargas-Tonsing and Guan (2007) reported that athletes had a desire to hear greater amounts of emotional content as opposed to informative content specifically before a championship

game, when the team was considered an underdog and when competing against an opponent ranked higher in the standings.

## 2.7 Competition, Camaraderie or Contentment?

If the EASI model is applied to sport, interpersonal emotion regulation is initiated in order to evoke a specific behavioural reaction from another person believed to be beneficial for sport performance. This belief may originate from the expresser (e.g., from a coach trying to make an athlete anxious so that the athlete increases training preparations) or from the observer (e.g., an athlete may believe they perform better when angry and will thus ask the coach to remind him of past transgressions against him). This instrumental goal focus is why the EASI model is particularly applicable to sport, because individuals are frequently looking to regulate each other's emotions because of their consequences for performance. For example, a football coach will increase his team's excitement in order to increase energetic play; an opponent might make a spiteful remark to an archer to agitate him; a synchronized swimmer might over-exaggerate her happiness in order to evoke a favourable response from her judges. Contrasting theories of interpersonal emotion regulation, however, differ in their explanation as to why emotions are regulated. Specifically, these theories posit that emotions are regulated in order to strengthen social bonds or for hedonic purposes (Niven et al., 2009; Rimé, 2009). Athletes have cited social and hedonic reasons for participating in sport (Gould, Feltz, & Weiss, 1985; Scanlan et al., 1993) and thus it would be remiss not to include brief descriptions of these contrasting theories.

Rimé's (2009) theory of interpersonal emotion regulation stipulates that its primary function is to strengthen the social bond between the two individuals thereby enhancing social integration. Rimé proposed that any emotion experience initiates the sharing of that emotion with another individual. Specifically, social sharing occurs when "individuals communicate openly with one or more persons about the circumstances to the emotion-

eliciting event and about their own feelings and emotional reactions" (p. 65). As a result of social sharing, the listener empathizes with the communicator and the emotion is then transferred to the listener resulting in an enhanced affection for the communicator (Rimé, 2006).

An additional conceptualization of interpersonal emotion regulation was presented by Niven et al. (2009). At the centre of their theory was that emotions are regulated for hedonic purposes. Niven et al. compiled a list of interpersonal affect regulation strategies which spanned the fields of healthcare, business, and education. In an attempt to categorize the various types of strategies, Niven et al. proposed a classification scheme. Starting with Parkinson and Totterdell's (1999) classification of intrapersonal emotion regulation strategies as a theoretical foundation by which to structure their taxonomy of interpersonal affect regulation strategies, Niven et al. subjected their existing categories to further scrutiny by having student participants engage in a card sort exercise of nearly 400 interpersonal strategies. Their final classification of controlled interpersonal affect regulation strategies distinguished between strategies intended to improve and worsen another's affect as well as strategies intended to engage the other in their task or situation, and strategies intended to focus on the nature of the relationship between target and agent. The 2 x 2 classification matrix resulted in four categories which Niven et al. labelled: positive engagement (engagement strategies to improve affect), negative engagement (engagement strategies to worsen affect), acceptance (relationship-orientated strategies to improve affect), and finally rejection (relationship-orientated strategies to worsen affect).

The above two theories testify to the complexity of interpersonal emotion regulation. Because the reasons as to why interpersonal emotion regulation occurs are as varied as the strategies available, delimitations are necessary. An aim of this article was to highlight a theory of interpersonal emotion regulation that could move research into emotions in sport

and exercise forward. In accordance with a social-functional perspective, emotions are regulated interpersonally because the expresser wishes to evoke an emotional response in the observer, resulting in changed behaviour. Therefore, while the theories presented by Rimé (2009) and Niven et al. (2009) represent viable frameworks for the process of interpersonal emotion regulation, their implications fall short of addressing the immediate purpose of regulating emotions for functional behaviour in sport—specifically, performance.

## 2.8 Further Strengths and Weaknesses of the EASI Model

The argument to use the EASI model as a guiding theoretical framework for research on interpersonal emotion regulation processes has been made by highlighting sport psychology research that supports the compositional concepts of the EASI model. This has been balanced with the delimitation that the EASI model is best suited for competitive sport endeavours more than recreational or development sport because of its emphasis on resultant behaviour (i.e., performance) change. However, because of the infancy of the EASI model, a more thorough critique is warranted. One of the founding assumptions of the EASI model was that people have limited access to another person's feelings, goals, needs, desires, and intentions making social situations difficult to coordinate (Van Kleef, 2010). Within sport teams it has been shown that high task cohesion is strongly linked with performance (Carron, Colman, Wheeler, & Stevens, 2002) and therefore the goals and intentions of teammates in sport are often clear and assumed. However, simply because clearly shared goals are prevalent in highly cohesive teams does not imply that this is the norm for all sport teams. Consider a football team that has been mathematically eliminated from playoff contention but still has four games remaining in their regular season. In this common scenario, it would be likely for the goals of individual players to become increasingly centred on personal statistics, job security, upcoming contract negotiations, personal health, or numerous other goals that are not necessarily shared among the group. For the coaching staff, coordinating a group

effort into winning the remaining four games becomes a difficult task as the intentions of the personal members of the team (as well as potentially their own) are ambiguous.

A limitation of the EASI model is its focus on deliberate emotion regulation. Not all interpersonal emotion regulation occurs via conscious deliberation (Gross, 1998). For example, Totterdell, Kellett, Teuchmann, and Briner (1998) examined the unconscious emotional influence which occurs within nursing staff and accountants. Furthermore, instances of emotion regulation could simultaneously be intra- and interpersonal (Little, Kluemper, Nelson, & Gooty, 2011). For example, a team athlete who selects a certain song to play in the dressing room might be attempting to regulate their own emotions as much as the team's emotions. Both the topics of controlled versus automatic processes and differentiating intra- from inter-personal emotion regulation have been used to delimit emotion regulation theory before (e.g., Gross, 1998; Niven et al., 2009) and apply to consideration of the EASI model as well.

A potential cause for concern in adopting the model uncritically is the relative infancy of the EASI model. The model was developed from research in negotiation and conflict resolution (e.g., Van Beest, Van Kleef & Van Dijk, 2008; Van Kleef et al., 2004a; 2004b; 2006). Although both sport and negotiation are competitive and goal orientated settings, there might be certain situational circumstances that interfere with applying the model to sport. However, considering the advancement of emotion regulation research in other applications of psychology (Gross, 2010), it would benefit sport psychology researchers to draw from and potentially adapt the theory and research from these other psychology applications. Furthermore, by incorporating theory from other applications of psychology into naturalistic research studies, sport researchers have the opportunity to address the concern of poor ecological validity which has been raised in emotion regulation research in psychology (Campos et al., 2011). Indeed the majority of research supporting the EASI model has been

conducted in experimental laboratory settings. Researching participants as they experience genuine emotions in response to meaningful sporting events allows sport psychology research to fill a niche within broader psychology research. Lastly, beyond the context in which the research is situated, it is noteworthy that the EASI model has been primarily examined within the Netherlands. Therefore, any analysis by research groups from different nationalities might provide the opportunity to refine the model to account for potential cultural biases. This is an important step considering the proposed influence of cultural display rules to interpersonal emotion regulation as depicted in the EASI model.

## 2.9 Future Directions and Conclusion

Van Kleef (2010) proposed that sport psychology represents a viable area of application of the EASI model. Therefore, using the EASI model as a theoretical foundation to interpersonal emotion regulation, research in sport could contribute to the emotion regulation database in psychology. Specific research questions include how individual differences in emotion expression and recognition influence interpersonal emotion regulation? Furthermore, to what extent does the role of a sport's culture influence athletes' affective responses and inferential processing? Given that each sport theoretically provides a unique culture containing norms and expectations of emotional expression, comparing interpersonal emotion regulation across different sports provides an additional avenue for future research. Finally, attention might be given to the moral implications of interpersonal emotion regulation. For example, is it morally justifiable to make your teammates feel angry or anxious if you believe it will improve their performance?

The purpose of this review was to investigate interpersonal emotion regulation in sport. By drawing on theory and literature from applications of psychology beyond sport, this article provided Van Kleef's (2009) EASI model with supporting research and helped establish compositional topics within the sport psychology literature. Of particular

importance was the model's consideration of an instrumental purpose to emotion regulation that resonates with the emotion-performance relationship often researched in sport psychology. The next step will be to apply this theoretical framework as a foundation by which to design and assess the effectiveness of applied interventions intended to enhance the interpersonal emotion regulation abilities of sport participants.

**INTRODUCTION TO CHAPTER 3**

The purpose of the preceding review of literature was to investigate interpersonal emotion regulation in sport. It was published in the *International Review of Sport and Exercise Psychology* (Friesen et al., 2013). For the purposes of the present research programme, the preceding paper highlighted a theoretical framework (i.e., social-functional approach to emotions, Keltner & Haidt, 1999) and subsequent model of interpersonal emotion regulation (i.e., EASI model, Van Kleef, 2009). While these frameworks are supported by theory and research in social psychology, an exploration of their potential applicability in sport settings was needed based on data extracted from sport participants detailing their experiences with interpersonal emotion regulation.

Consequently, the following study was conducted to help establish support for a social-functional approach to emotions in sport (see Stage Two in Figure 1.1). Two ice hockey captains were interviewed about past decisions to regulate teammates' emotions. A narrative analysis of their semi-structured interviews provided support for a social-functional approach to emotions. Although the emotions evoked, the strategies used, and the social environments were constantly changing, the narratives illustrated the underlying social functions of emotions within each social context (i.e., individual, dyadic, group, and culture). The proceeding study was subsequently published in the *International Journal of Sport and Exercise Psychology* (Friesen, Devonport, Sellars, & Lane, 2013c). While it is a four-authored article, I claim authorship of each section and was the sole data collector. Additional authors contributed in the form of facilitating data analysis, engaging in discussion that helped refine ideas, and providing revisions. Supplemental material in the form of the consent form (Appendix A) and interview guide (Appendix B) are presented at the conclusion of the research programme.

# CHAPTER 3: A NARRATIVE ACCOUNT OF DECISION-MAKING AND INTERPERSONAL EMOTION REGULATION USING A SOCIAL-FUNCTIONAL APPROACH TO EMOTIONS

## 3.1 Abstract

Social psychology researchers have proposed a social-functional approach to emotions whereby emotions coordinate people's behaviour to meet the shared challenges in their environment (Keltner et al., 2006). Despite the social nature of sport, a social-functional approach to emotions has yet to be studied in this context. The purpose of the present study was to explore how the social functions of emotions might inform two ice hockey captains' decisions to regulate teammates' emotions. A narrative analysis revealed how the athletes' decisions if, when or how to regulate their teammates' emotions might be situated within a social-functional approach to emotions. Although the emotions evoked, the strategies used, and the social environments were constantly changing, the narratives illustrated the underlying social functions of emotions within each social context (Keltner & Haidt, 1999). Specifically, at the individual level, participants described how emotions informed them of important circumstances in their environment that required attention and helped prepared them for such challenges. At a dyadic level, emotions helped participants gauge the emotional states and intentions of their teammates contributing toward an assessment of the extent to which they were prepared to face their challenges. At a group level, emotions helped participants lead their teammates in meeting shared goals. Finally, at a cultural level, emotions helped participants maintain culture-related identities. Findings illustrated the social functions naturally served by emotions.

## 3.2 Introduction

In a literature review on team contact sports, Campo, Mellalieu, Ferrand, Martinent, and Rosnet (2012) suggested that there is a need for research to consider others' influence on

a player's emotion regulation. Interpersonal emotion regulation has been defined as deliberate attempts by one social entity known as the 'agent' to change the emotions or moods of another social entity known as the 'target' (Gross &Thompson, 2007). However, the parameters of this process are vague and imprecise. Consider that even a universally accepted definition of emotion has yet to be established (Izard, 2010) as has its distinctiveness from similar affect-related phenomena (e.g., Russell, 2003). Similarly, intrapersonal emotion regulation has also faced boundary ambiguities pertaining to timing, its distinctiveness from emotion generation or expression, and the extent to which it is a deliberate or unconscious process (Gross, 1999; Koole, 2009). The regulation of others' emotions has been conceptualized from a number of different perspectives. Niven et al. (2009) offered that interpersonal emotion regulation occurs via strategies distinguished by whether they aim to improve or worsen emotion and whether strategy use was task or relationship focused. Rimé (2009) proposed that emotional expressions automatically elicit the sharing of these emotions with others bringing about possible empathy, contagion of the emotion and increased affection for the agent. Whereas Van Kleef (2009) proposed that the emotional expressions of one individual influences the behaviour of another individual through affective reactions and inferential processing. Although sharing some similarities these divergent theories attest to the complexity in conceptualizing interpersonal emotion regulation.

Working on the premise that emotions are inherently social (Parkinson, 1996), applied social psychologists have offered a social-functional approach to emotions whereby emotions are theorised to help coordinate the behaviour of individuals to meet shared challenges in their environment (Fischer & Manstead, 2008; Frijda & Mesquita, 1994; Keltner & Haidt, 1999; Van Kleef, 2009). Given the above description, it is conceivable how a social-functional approach to emotions might be situated in sport given that the aim of team (and arguably individual) sports is to coordinate team members' performance in ways that elicit

the greatest likelihood of success. However, Friesen et al. (2013) explained that few studies have examined the social functions and performance consequences of emotions in sport representing a gap in the literature which the present study seeks to address. The purpose of the present study is to explore how the social functions of emotions might inform athletes' decisions to regulate teammates' emotions.

### 3.3 Method

Keltner and Haidt (1999) explained that the functions of emotion in social endeavours (i.e., sport) will differ depending upon the social dynamics of the situation. That is, the functions of emotions change when they are analysed at the individual, dyadic, group, or cultural level. Given the complexity of social situations, qualitative methods are common in studying interpersonal emotion regulation (Keltner & Haidt, 1999). Lazarus and Lazarus (2006) encouraged researchers to use methods that illustrate the conditions that generate emotions and the concurrent meanings of emotions. Emotion meaning is relational to the context, constraints, demands, and resources set against an individual's goals and dispositions. Accordingly, there is a great deal of evidence supporting the value of a qualitative exploration of emotion experiences (e.g., Hanin, 2003; Nieuwenhuys, Vos, Pijpstra, & Bakker, 2011; Sève, Ria, Poizat, Saury, & Durand, 2007). Furthermore, the use of narratives has been suggested to be a useful method to explore emotion experiences in sport psychology (Hanin, 2003; 2007; Sparkes, & Partington, 2003). Specifically, narrative analyses are particularly beneficial for highlighting the personal and social meanings people attach to their experiences and behaviour (Smith & Sparkes, 2009). Therefore, this study is presented as a narrative analysis providing the opportunity to explore the complexity of human behaviour and the associated meanings stemming from athletes' social experiences. Given that the majority of research examining social-functional approaches to emotions has utilised experimental methods (e.g., Hutcherson & Gross, 2011; Wubben et al., 2009), this

study offers an opportunity to explore how the social functions of emotions might inform athletes' decisions to regulate teammates' emotions using a novel methodology.

### 3.3.1 Participants

The participants for this study were two ice hockey captains (pseudonyms Maggie and Peter). Both participants were recruited through purposeful sampling. Captains were specifically recruited because of the interpersonal emotion regulation duties expected within their role (Dupuis, Bloom, & Loughead, 2006; Holmes, McNeil, & Adorna, 2010). The selection criteria included having international experience, and had played ice hockey for at least 10 years. Maggie is 26 years old, and has spent more than 10 years playing for her current club. She reported spending approximately 30 minutes per week training with her teammates over one practice session. Competitive matches are played approximately once or twice a week during the season. Peter is 28 years old and has spent two seasons with his current club. He reported spending approximately six hours per week training with teammates over two sessions in addition to two competitive games played per week. Peter plays in a competitive semi-professional league where players are compensated financially for their play. Maggie's league is deemed recreational in that the players pay for the opportunity to play on the team.

### 3.3.2 Context for the Present Study

The interviewer (first author) was working with Peter's team in both a researcher and applied sport psychology role. At the time of the interviews, the interviewer had been working with Peter's team for approximately three months. The interviewer was trained in qualitative methodology and is of Canadian decent. Given the centrality of ice hockey in the Canadian culture (Allain, 2011) the interviewer's cultural background was perceived to be useful in helping to establish rapport and provide empathy with the participants' experiences.

Participants reported that having an interviewer familiar with ice hockey helped them share their experiences.

From the point of view of a practitioner, being Canadian offered both opportunities and challenges to working in a sport that is ingrained in Canadian culture yet might be more appropriately considered an unconventional sport in the UK. There was evidence that many of the players held the stereotype that Canadians must be good at ice hockey as players were quite welcoming and inquisitive about my past. Most players had spent time throughout their careers at various development camps or leagues in Canada which provided a point of discussion that facilitated introductions. This was valuable as ice hockey dressing rooms can be difficult environments for sport psychology practitioners to gain entry in a manner that facilitates meaningful interaction with players (Halliwell, 1990). However, being able to relate to the participants' stories about interpersonal emotion regulation might have occasionally resulted in an empathy that precluded me as the interviewer to ask participants to describe their experiences in more detail. An interviewer not as familiar with ice hockey culture might have encouraged participants to be more explicit in their stories. This necessitated having co-researchers challenge my interpretations as to justify my results. This process is explained in section 3.3.5.

### 3.3.3 Procedure

Ethical approval was granted by the authors' university ethics board. Participants were informed of the purpose of the study, their role as potential participants, and were debriefed on confidentiality and anonymity. After agreeing to the study, participants completed informed consent and demographic forms. Interviews were scheduled to accommodate the participants' schedules and completed in their homes. The interviews were completed shortly after their respective competitive seasons had ended. The interviews were semi-structured whereby participants were encouraged to share instances of trying to regulate

teammates' emotions and instances when they recalled being regulated themselves by teammates or coaches. Peter's interview lasted 75 minutes whereas Maggie's interview was 80 minutes. Interviews were then transcribed verbatim. All names are pseudonyms to protect identity.

### 3.3.4 Instrumentation

An interview guide was created to help evoke stories of emotion regulation within ice hockey. Introductory questions asked participants how they first started playing ice hockey and to recall especially memorable games. Memorable games have the tendency of being highly meaningful and were thus targeted as these games would have emotional incidents and opportunities for interpersonal emotion regulation (Hanin, 2007). In discussing memorable games, participants were asked to recall intentional instances (Niven et al., 2009) where emotions were regulated during these games and the surrounding circumstances. Sample questions includes, "Can you recall a time where emotions were running high and you felt the need to manage how your teammates were feeling? How did you try to change how your teammates were feeling? Why was it important to manage their emotions? Was it effective? How did you judge your method to be successful or not? What influenced whether or not your strategy worked?"

### 3.3.5 Data Analysis

The analysis of data follows the procedural guidelines laid out for a holistic-content narrative analysis (Lieblich, Tuval-Mashiach, & Zilber, 1998). The researchers read the transcripts so as to immerse themselves within the data. Commentaries were recorded of repeating patterns which emerged throughout the interviews specific to instances of emotion regulation during practices and competitive matches. Discussion around these developed themes ensued with special attention given to extenuating circumstances that evoked emotion regulation, the processes and strategies that were elicited, rationale for why they were

elicited, and the resultant behaviour or outcome to the emotion regulation. The first author, as interviewer, had an intimate knowledge of the stories being shared. Therefore, the first author adopted the role of story analyst (Smith & Sparkes, 2006) linking the participants' stories with theoretical constructs. The role of the accompanying authors included challenging the assumptions and interpretations the first author expressed in the narrative analysis until a shared understanding was established.

### 3.3.6 Trustworthiness

Common with qualitative analysis, alternative interpretations of data are always possible (Freeman, deMarrais, Preissle, Roulston, & St. Pierre, 2007). The authors acknowledge that a goal of the present research was analyze the data deductively as to situate the data within a specific theoretical framework; that is, a social-functional approach to emotions. In order to reduce the potential for researcher biases, summaries of the narratives and authors' interpretations were presented to the participants. The purpose was not to establish an objective reality (Smith & Sparkes, 2009), but rather to ensure that the participants' experiences were appropriately represented. The participants were given frequent opportunity to correct the authors' interpretations throughout the presentation dialogue. The process did not result in any significant changes.

### 3.4 Results

The results are presented through both narration and citations from the participants' transcripts. A deductive analysis revealed how the social-functional nature of emotions at each level of analysis might inform whether or not, why and how the captains attempted to regulate the emotions of their teammates.

### 3.4.1 Emotions at the Individual Level of Analysis

According to a social-functional approach to emotions, a conscious awareness of emotional feelings is believed to inform the individual about specific social circumstances,

particularly those that need to be acted upon (Keltner & Haidt, 1999). Furthermore, emotions also help prepare the individual to respond to problems that arise in social situations. The participants shared stories of how their own emotional states served as triggers for when to regulate others' emotions. In the following example, Maggie described an occasion when two teammates started fighting with each other on the ice during a game which caused her to feel embarrassed resulting in her decision to regulate her teammates' emotions.

> She starts shouting back and the game's going on around them and I'm on the bench wanting the ground to open up and swallow us all. That was quite hard to deal with because they got over it quicker than I did. So they had their little spat and then came off the ice onto the bench and they were pals again. And for them, that was it…They were mates again and it didn't matter. For me, I'm like, 'You've humiliated the rest of the team by shouting at each other'… So that was quite hard to deal with and I kinda had a bit of a go in the changing room and said, 'You're just embarrassing and I'm not having it.'... But because they both got over it, they didn't see why I had an issue... So it was quite hard to make a deal outta it. And I think in the end, I just pulled rank and said, 'Whether you think it's acceptable or not, I don't. And neither does the rest of the team. So it's the last time you do it otherwise you go play somewhere else.' 'Cause I got to the point where I didn't really care whether they were bothered by it or not anymore—I was bothered by the fact that it had happened and had embarrassed everyone else.

From this excerpt, Maggie's own emotional state could have been the initiating factor as to whether or not she was going to regulate her teammates' emotions. She repeatedly referenced her own embarrassment and explained how her teammates' emotions had actually subsided after the incident. Her embarrassment informed her that she needed to intervene because her teammates' behaviour was perceived as unacceptable. In this way, Maggie's

regulation of her teammates' emotions was aimed at influencing their future behaviours and reducing the likelihood of her experiencing future embarrassment.

Peter also illustrated how his own emotional state might inform a decision to regulate his teammates' emotions. Peter was asked if he could recall a time when he regulated the emotions of one of his teammates. An excerpt from one story he recalled illustrated how his personal history afforded him the experience and empathy to know how to respond to a young teammate who was feeling frustrated with adjusting to the standards and expectations of the senior league.

> Because it's from previous experience like when I was younger it happened to me as well—I had a coach who was constantly yelling at me all the time because I wasn't doing this or that. And one of the older guys, he just came to me and put his arm around me and talked, 'You can't take this so serious, everyone can have a bad day and he's picking on you because you're the youngest one and probably you're the easiest target for him.' So I feel I wanna help him out in the same way—he helped me a lot—he made me realise that ... you kinda fall down and stuff, but it's important to pick yourself up and play again.

Peter's story suggests that previous experiences with interpersonal emotion regulation might inform current regulation attempts. Seeing a teammate similarly struggle with challenges he had encountered triggered emotional empathy in Peter. He recalled the value of the support from one of his teammates when his coach was yelling at him. Peter perceived his current teammate would benefit from emotion regulation intended to raise pleasant emotions and decrease the intensity of unpleasant ones. Having experienced what he perceived was effective interpersonal emotion regulation from a past teammate, Peter felt better prepared to try to reappraise his current teammate's perspective and manage his emotions using a similar approach.

**3.4.2 Emotions at the Dyadic Level of Analysis**

At a dyadic level of analysis, emotional expressions theoretically function to help individuals know others' emotions, beliefs, and intentions in order to rapidly coordinate their efforts (Keltner & Haidt, 1999). Therefore, a teammate's emotional state and beliefs about their ability to self-regulate their emotions might inform the decision to regulate interpersonal emotions. In the following story, Maggie recalled how she removed a teammate from an anger-provoking situation in order to keep the team from being further penalised thus jeopardizing opportunity for success.

[Samantha] has anger management issues. She's quite open about it—very acknowledging of it. She has issues where she just loses her temper and does things that she shouldn't do. Quarter of an hour later, she's sorry for it but she can't stop it happening. And we played a game… she had a collision with another girl and they both got put in the bin for two minutes. Anybody else would have just let it go... both girls were in the box so it wasn't like we were even shorthanded...but she doesn't have that rational thought and she absolutely lost it. Right from the minute [the ref] blew the whistle, I could see that she was going to lose her temper and she started shouting at the ref and I went over and stood between the two of them and I said, 'You can't speak to him like that. You can't speak to him at all or you're going to get more. You need to let me go and speak to him because he'll speak to me.' She said, 'Yeah yeah, go and tell him then. Sort it out.'... I thought if I could at least get her in the box and away from him for long enough to calm down, all she was going to come out with was a two [minute penalty]. But she just flipped out, started screaming, shouting, swearing. So he gave her a ten minute [penalty].

A key factor influencing Maggie's decision to regulate Samantha's emotions was her appraisal of Samantha's poor self-regulatory abilities. Maggie justified her attentiveness to

Samantha's emotions by acknowledging Samantha's "anger management issues." Consequently, Maggie tried to manage Samantha's emotions initially by separating Samantha from the source of her anger, the referee. She then tried to calm Samantha down by reassuring Samantha that she would attempt to sort things out herself with the referee. Despite these attempts proving unsuccessful, the story illustrates how Samantha's emotional state and perceived inability to self-regulate her emotions informed Maggie's decision to engage in interpersonal emotion regulation.

For Peter, his decision to regulate his teammates' emotions or not can depend on a teammate's emotional expressions compared against past emotional expressions in similar situations. Each athlete might have their own emotional preferences regarding performance. Some athletes might prefer to remain calm shortly before a game while others might prefer to be excited. Thus, Peter's decision to regulate his teammate's emotions could depend on whether he perceives that teammate expressing his emotions consistently with his typical emotional expressions.

Some guys I hang out with more so it's easier to approach them. Because not everyone wants to talk about emotions—it's pretty hard for some guys, especially in hockey. They feel that if they're tough enough then they don't have emotions, you know. But...I observe a lot, you can see the way they behave in the dressing rooms—especially a guy who is happy all the time and telling jokes and just contributes a lot in funny ways and then the next day he comes in and he's got his head down and he's quiet and not talking or anything, he's just in the corner...so that for me signals that maybe he needs a little talk or it might be helpful for me to go over and try to cheer him up in some way or just try to approach him in a nice way like with nothing to do with hockey...And basically it's from their behaviour—I'm just comparing how they were before and the way they are now.

Peter's disposition to observe and monitor others has contributed to him believing he has effective observation skills. With those skills, he monitors his teammates' expressions and apparently will attempt to regulate their emotions if he perceives intervention is needed. Like Maggie, Peter considers his teammates' potential to self-regulate before deciding to intervene. Specifically, Peter mentioned that some players deny the effect of emotions on their performance in order to appear tough. This could explain why an athlete might rely on their own emotional state as a trigger for interpersonal emotion regulation as suggested above. That is, if a teammate denies or tries to conceal the need for regulation, the athlete might have to rely more on their own instincts and emotional empathy when deciding to regulate their teammate's emotions.

### 3.4.3 Emotions at the Group Level of Analysis

At a group level of analysis, a social-functional approach to emotions suggests that emotions help collections of interacting individuals meet the shared goals of the group (Keltner & Haidt, 1999). As illustrated in Maggie's story, the meaning of the game has a significant effect on which emotions are evoked and the need for subsequent regulation. Maggie described how the meaning of a recreational tournament, initially entered for fun, changed after the potential for victory became more likely. This shift in the team's goal was accompanied by subsequent new emotions and emotion regulation to ensure players were ready to perform optimally as a team.

It changed very much from the start of the game to literally 20 minutes after the first half had finished. We went into the game thinking, 'We probably don't stand a shot' but halfway through we're up and our goalie is playing out of her skin. So it got a little bit more intense. The whole weekend was about "Let's just go there and have fun and enjoy it, there's no pressure, there's no intensity, we don't have to win this, let's just enjoy being together and playing the game." And it was like that all the way through

and then the final turned up and we started sitting there going, "Actually maybe we could win." And then the first period finishes and we're ahead and it starts to get a lot more intense. I had intentionally not done any of the geeing people up, motivating people, getting people up... intentionally not done it all weekend because that's what I do in our league games that really matter and are really important and keep us in the top flight of women's hockey... But at the break I found myself launching into it again 'cause we were effectively 10 minutes away from a cup that we should have never gotten close to.

When the situation changed from playing-for-fun to playing-to-win, the team's collective emotional state became "a lot more intense." Maggie noted how she re-evaluated whether her teammates' current emotional state was going to help or hinder their chances of reaching their new goal of winning. These intensified emotions influenced Maggie's decision to start her regular tactics of motivation, encouragement and interpersonal emotion regulation.

A social-functional approach to emotions also posits emotions as functioning to define group-related roles and statuses (Keltner & Haidt, 1999). Peter recalls an instance of a teammate with an apparent need to regulate unpleasant emotions. However, the teammate holds an informal role of being the team's 'enforcer' where unpleasant emotions such as anger, are often perceived to enhance performance. Therefore, because of situational timing Peter considers that regulating his teammate's unpleasant emotions might prove detrimental to team performance. Consequently Peter decides to partially regulate his teammate's emotion by trying to persuade him to "keep some tension" inside of him. In this way, Peter tries to regulate his teammate's emotions to become more consistent with his 'enforcer' role.

We had this massive guy, he was 6'5 or something, he was a tough guy but in the same way he was very soft... I could see he was pale in the face and when he tried to tape his

stick, he dropped everything and he'd kick everything around and he couldn't get into the right place...I talked to him a little bit about different stuff, like talking to him about his family... I was kinda surprised. He opened up more and talked about things that I wouldn't want him to talk about. And he opened up big time to me and I was like, 'Keep those emotions for you—you don't have to tell me all this now...' I'm not saying it's not important...like it's good for you to let it out but keep something inside to keep some tension and keep you focused. And maybe if you keep some things inside, it can make you feel angry when you need it—not angry in a bad way but angry when you need to push hard or in a fight for example where you need to get a little more angry.

### 3.4.4 Emotions at the Cultural Level of Analysis

At a cultural level of analysis, Keltner and Haidt (1999) proposed that emotions help individuals maintain cultural identities in that the emotions embedded within conflict help in learning the norms and values of the culture. They function to solidify cultural ideologies. The following story from Maggie illustrates how she decided to regulate her teammates' emotions after they performed at a standard below her expectations of what was acceptable as hockey players.

The first period was a nightmare, I think we went down 0-4 in the first period… people didn't know who was going on next, we were having line changes where people were getting off but not getting on and it just all fell apart...At the end of the first period, I just let loose: 'It's not good enough. We're falling apart. We're all adults, we're all sensible enough, we know how many players we've got to get on the ice, how can we not have five players on the ice at the right time? Half of you are skating around moaning because other people aren't doing their jobs in which case you're not doing your jobs. If your teammate makes a mistake, you help them make up for it—you don't bullock them in the middle of the ice and act like idiots.' I just let loose and gave them

quite a talking to.  I think in the end we lost 2-6 so we matched them for the rest of the

game... And it worked. I like to think that it worked.

Athletes frequently talk about the importance of establishing certain cultural values,

mentalities or ideologies within a team, often related to winning, positivity, or productivity.

Despite not knowing what specific cultural mentality Maggie had envisioned her team to

personify, she believed that the team's "falling apart" and struggling with line changes had

threatened this cultural mentality. Maggie therefore tried to regulate her teammates' emotions

with a speech that was likely intended to evoke feelings of guilt, embarrassment or anger that

might motivate her teammates to adjust their performance to re-establish the cultural

mentality.

Emotions are also proposed to indicate the extent to which an individual is rooted in a

culture or following the culture's ideologies (Keltner & Haidt, 1999). Ice hockey, like all

sports, is a culture unto itself (Botterill, 2004) and player identities can revolve around being

part of that ice hockey culture. Regulating emotions at the cultural level could therefore

threaten players' sense of belongingness to the hockey culture. Peter described how he used

fear to threaten the cultural identities of his teammates in order to bring about improved

performance.

We hadn't won for a long time and we were playing one of the teams that we could beat

and should beat and we were playing just awfully and everybody was somewhere else

and I thought if I frighten them a little bit it might help...So I told them 'If we don't win

any games, there will be no funds, if there are no funds, there's no money, if there's no

money then there's no hockey. And you might not be able to stick around this league.

There will probably be very few of you guys that will be picked up by other teams. Most

of you will go back to [a lower-tiered league] or you might not be playing hockey at all

and you go back to work or do something else.' And at that point, I got everyone's

attention. I think they realised that it's pretty serious.

### 3.5 Discussion

Emotions are proposed to serve different functions at different social levels (Keltner

et al., 2006). The current study explored how these social functions of emotions might inform

athletes' decisions to regulate teammates' emotions. Two ice hockey captains described their

experiences and analysis revealed the functional nature of emotions embedded at the

individual, dyadic, group, and cultural levels. These functions informed the decision if, when,

or how to regulate their teammates' emotions. Although the emotions evoked, the strategies

used, and social environment was constantly changing, the narratives illustrated the social

functions of emotions within each social context. Specifically, Maggie and Peter described

how emotions informed them of important circumstances in their environment that needed to

be acted upon and prepared them for such challenges at the individual level. At a dyadic

level, emotions helped Peter and Maggie gauge the emotional states and intentions of their

teammates in assessing to what extent they were prepared to face their challenges. At a group

level, emotions helped Peter and Maggie lead their teammates in meeting their shared goals.

Finally, at the cultural level, emotions helped Peter and Maggie maintain culture-related

identities. In a variety of circumstances, Peter and Maggie described how they were able to

navigate social situations and integrate the information from emotional expressions (though

often perhaps at an implicit level) into their decision to regulate the emotions of their

teammates.

Consistent with narrative analyses (Smith & Sparkes, 2009), this study provided the

opportunity to illuminate temporal and contextually based accounts of athletes' perceptions

of emotions and decision making regarding interpersonal regulation. This study has attempted

to extend explanations of the emotion regulation process beyond a description and

categorisation of certain strategies (e.g., Niven, et al., 2009) providing a real world application of salient theory. For example, Van Kleef (2009) proposed that two types of moderating variables influence the extent to which emotion regulation occurs via affective reactions or through inferential processes: the inferential processing motivation and abilities of the observer, and socio-relational factors. Frequently, the participants' stories revealed potentially moderating factors to their decision to regulate their teammates' emotions. For example, Peter alluded to instances where he chose not to try to regulate his teammates' emotions because the teammates wanted to portray a macho facade that denied the influence of emotions to their performance. Similarly, Van Kleef explained that when the target's motivation to share in the appraisal of the situation is low, for example, because of attempts to exude a macho façade, interpersonal emotion regulation is less likely to occur via inferential processes. Future research might then examine the effect of changing beliefs about the prominence and utility of emotions on performance and subsequent effectiveness of interpersonal emotion regulation.

The methods used in the present study facilitated an exploration of the extent to which existing theory is situated within the data. Specifically, the participants' narratives revealed the importance of their own emotional state and meta-emotion beliefs to their decision to regulate teammates' emotions. Carver (2004) suggested that emotion regulation is initiated when the individual observes a discrepancy between observed and desired emotional states; that is there is a standard against which current emotions are compared, and the size of the difference helps determine whether emotion regulation is needed. Conceivably then, athletes might decide to engage in interpersonal emotion regulation if they perceive their teammate to be far from his or her ideal state. The intricacies of this decision are complex. The individual might not accurately identify someone else's emotional state and therefore believe someone is anxious when in fact they are not. Equally, the person will need to know whether the

individual will want to amplify or dampen the intensity of a certain emotion. Hanin (2010) has demonstrated that individuals have different zones of optimal functioning. Therefore high anxiety might be functional for some athletes and dysfunctional for others. In the present study, whilst perceptions regarding the targets emotions were demonstrated to some extent, Maggie and Peter also described incidents where their own emotional states initiated or conflicted with the interpersonal emotion regulation. Additionally, the participants' narrative also illustrated their perceived meta-emotion beliefs and how these were manifested in their decision to regulate their teammates' emotions. For example, upon perceiving that his "tough guy" teammate had reached an emotional state detrimental to performance, Peter encouraged him to store up some emotional intensity and not waste it off the ice. However, while these meta-emotion beliefs have been theorised to be central to intrapersonal emotion regulation processes (e.g., Hanin, 2010), such beliefs have largely been overlooked in interpersonal emotion regulation theories in sport. However, research in social psychology has highlighted the potential influence of individual differences in interpersonal emotion regulation processes (Niven, Totterdell, Stride, & Holman, 2011). Therefore, of particular value for future research might be studying individual differences in meta-emotion beliefs and how they influence emotion regulation between athletes and subsequent performance.

Additionally, this study has the opportunity to facilitate applied sport psychology work with athletes. Gardner and Moore (2006) noted that practitioners are challenged with the task of reconciling athletes' thinking patterns, beliefs systems, emotional responses, and behavioural choices in a manner that is most conducive to prompting peak performance. However, as indicated within the narratives, these pieces of information can often conflict with each other. For example, Maggie's first narrative illustrated the conflict between her own emotional state (embarrassment) and her teammates' emotions that she speculated had already been processed by her teammates. This might suggest a hierarchy exists in that

intrapersonal emotion regulation has priority over interpersonal regulation and reflects the subtle nuances of the situation which potentially confound the effectiveness of interpersonal emotion regulation. Therefore, a lesson for an applied sport psychologist in this case might be to appreciate the interactive nature of emotion between each social level.

A potential conceptual limitation to the present study resides in the ambiguity of defining the parameters of interpersonal emotion regulation. Indeed without documenting the experiences of the target individual, some of the instances of interpersonal emotion regulation presented in this study might have been demonstrations of poor intrapersonal regulation or performance management. For example, Maggie's frustration at her team's poor performance and subsequent shouting at them might merely have been a result of her inability to manage her frustration. Additionally, when Maggie removed her angry teammate from the proximity of the referee, this could have been just as much for the benefit of the team's performance as it was to decrease the teammate's anger. An additional unsportsmanlike penalty against the team would have been detrimental to their chances of winning and so removing the teammate might have been an act of performance regulation.

Methodological limitations to the present study are also identified. As was mentioned, the first author was working with Peter's team as a sport psychology consultant. This role enabled the researcher to have an established rapport with Peter and first-hand knowledge of some of the experiences Peter shared. However, the researcher did not have a commensurate opportunity with Maggie. Having this unequal exposure to both participants might have influenced the analysis of the data. Furthermore, it is also noted that these interviews did not occur during the season. Future research may utilise video recall procedures such as those exemplified in Lorimer and Jowett (2009) to give the opportunity to prompt participants to identify instances of interpersonal emotion regulation and discuss additional factors that influence the decision to regulate teammates' emotions. Specifically, video recall procedures

might highlight the interaction between teammates during instances of emotion regulation (Poizat, Bourbousson, Saury, & Sève, 2012).

### 3.6 Conclusion

The athletes' narratives in this article illustrated the dynamic nature of emotion regulation within social situations. The purpose of the present study was to explore how the social functions of emotions might inform athletes' decisions to regulate teammates' emotions. An analysis of narratives highlighted factors embedded within the individual, dyadic, group, and cultural levels in which they perform. The rich stories provided by the participants should prove useful for sport psychologists working within ice hockey as well within team sports in general and help athletes reflect on their own experiences of deciding whether or not to regulate the emotions of their teammates.

### INTRODUCTION TO CHAPTER 4

The purpose of the preceding study was to explore how the social functions of emotions might inform athletes' decisions to regulate teammates' emotions. A narrative analysis of the interviews from two ice hockey captains (Maggie and Peter) helped outline the potential social functions and consequences of emotional expressions, verbalisations, and actions in ice hockey. Therefore, it was concluded that the data provided encouraging support for the utilisation of social-functional approaches to emotions (Keltner & Haidt, 1999) in sport settings. This study was published in the *International Journal of Sport and Exercise Psychology* (Friesen et al., 2013c).

Looking forward at current research programme's agenda, a number of potential applied lessons can be extracted from the preceding paper which might be useful in the development and delivery of the intervention:

- A player's own emotional state can trigger the regulation of others' emotions.

- How others have regulated our emotions in the past will influence how they regulate others' emotions in the future.

- Awareness for others' emotional states (i.e., empathic accuracy) is important in the interpersonal emotion regulation process.

- Familiarity with teammates' dispositions helps gauge the timing of when to regulate their emotions.

- Meaningfulness of the situation influences which emotions are evoked (and subsequent need for possible regulation).

- Emotions in sport are regulated for instrumental purposes according to expectant roles and meta-emotion beliefs.

- Emotions maintain team values that players will use to guide behaviour.

- Emotions maintain the ice hockey sub-culture.

The preceding paper helped support the use of a social-functional approach to emotions in sport. This approach was a foundational theory for the development of the EASI model (Van Kleef, 2009). With support for the underlying theory established, the next step in the current research programme was to investigate the possible applicability of the EASI model based on participant data (see Stage Two in Figure 1.1). This included examining what interpersonal emotion regulation strategies are common in ice hockey and what potentially moderates their effectiveness. It was submitted for peer-reviewed publication to *Psychology of Sport and Exercise*. While it was submitted as a four-authored article, I claim authorship of each section and was the sole data collector. Additional authors contributed in the form of facilitating data analysis, engaging in discussion that helped refine ideas, and providing revisions.

# CHAPTER 4: AN EXAMINATION OF THE STRATEGIES, PROCESSES, AND MODERATING FACTORS TO REGULATING TEAMMATES' EMOTIONS IN ICE HOCKEY

## 4.1 Abstract

Despite a growing body of literature exploring the social nature of emotion and the interpersonal regulation of emotions in psychology (e.g., Totterdell, Niven, & Holman, 2010), research exploring emotion regulation in sport continues to focus predominantly on intrapersonal strategies. The present study investigated interpersonal emotion regulation in ice hockey. Specifically, the following research questions were examined: (a) what strategies are used in ice hockey to regulate teammates' emotions? (b) What factors potentially moderate interpersonal emotion regulation? (c) What is revealed about the process of interpersonal emotion regulation when these strategies and moderating factors are manifested in sport? Participants were 16 ice hockey teammates from a professional British ice hockey team. Interpersonal regulation strategies comprised of verbal and behavioural strategies, each including strategies in which agents attempted to manage teammates' emotions through inferential processing and affective reactions pathways. Consistent with the Emotions As Social Information EASI model (Van Kleef, 2009), moderating factors were situated within the inferential processing motivation and abilities of the target individual as well as social-relational factors. Detailed description of interpersonal emotion regulation processes highlighted the meta-emotion beliefs held by participants as well as resultant behaviour change in the form of performance management. The results offer insight into the interpersonal emotion regulation strategies and processes that might need to be appreciated in subsequent applied interventions delivered in ecologically valid settings.

Keywords: psychological skills; emotional contagion; team dynamics; social influence

**4.2 Introduction**

A fly on the wall in any team dressing room could overhear common phrases such as, "Show some heart," "Take a deep breath and calm down," "You're doing well, keep it up," "That was an embarrassing effort out there!" Sport performance can be highly significant for athletes and consequently intense emotions are often evoked (Lazarus, 2000). Numerous meta-analyses (e.g., Beedie et al., 2000; Craft et al., 2003; Jokela & Hanin, 1999) demonstrate significant relationships between emotions and performance. Subsequently, skills and strategies to manage emotions have become fundamental components of applied sport psychology interventions (e.g., Botterill & Brown, 2002; Jones, 2003). Eisenberg et al. (2000) defined emotion regulation as "the process of initiating, maintaining, modulating, or changing the occurrence, intensity, or duration of internal feeling states and emotion-related physiological processes, often in the service of accomplishing one's goals" (p. 137).

However, as sports are played in a social setting, athletes' emotions could emanate from teammates, coaches, opponents, officials, sport science staff, or fans. For example, Totterdell (2000) showed how the mood states of cricket players might be collectively linked. That is, one cricket player's mood was significantly associated with his teammates' average moods. This link was further associated with subjective perceptions of performance. Additionally, athletes undergoing long-term injury rehabilitation in a study by Mankad et al. (2009) explained how they tried to maintain a hedonically pleasant emotional climate for their team through surface acting or carefully managing their emotional expressions and suppressing their own unpleasant emotions thereby influencing the collective emotional state of their teammates. Moll et al. (2003) showed how soccer players' celebratory emotional expressions during penalty goals resulted in not only beneficial performance in teammates, but also reciprocal counter-performance in opposing players. However, these studies represent only the beginning of what is a necessary line of research inquiry in sport.

Psychology researchers are increasingly recognising that the emotion process is inherently social and interpersonal (Campos et al., 2011; Niven et al., 2009; Parkinson et al., 2005; Rimé, 2009; Van Kleef, 2009). Consequently, increased attention is being given to interpersonal emotion regulation defined as deliberate attempts by one social entity known as the "agent" to change the emotions or moods of another social entity known as the "target" (Gross & Thompson, 2007). Identifying why individuals might want to regulate the emotions of others is complex. Keltner et al. (2006) proposed that the functions of emotions can differ depending on whether they are analysed at an individual, dyadic, group, or cultural level. Following Keltner and colleagues' social-functional account of emotions, Friesen et al. (2013c) presented a narrative analysis illustrating how the functions of emotions in ice hockey changed depending on the social context. Specifically, players described how emotions informed them of important circumstances in their environment that required attention and prepared them for such challenges at the individual level. At a dyadic level, one's own emotions helped players understand the emotional states and intentions of their teammates contributing toward an assessment of the extent to which they were prepared to face their challenges. At a group level, emotions helped players lead their teammates to achieve shared goals. Finally, at the cultural level, emotions helped players maintain culture-related identities.

Using a social-functional approach to emotions as a theoretical background, Van Kleef (2009; 2010) presented the Emotions As Social Information (EASI) model to explain how emotional expressions from one individual can influence others' emotions (see Figure 1 for an illustration of this model). According to the EASI model, interpersonal emotion regulation occurs through affective reactions (such as emotion contagion and interpersonal liking) and inferential processing (whereby the appraisals of the situation are communicated to the target individual who subsequently aligns their own emotional responses with the agent

individual). In a review of theory and research, Friesen et al. (2013) proposed the EASI

model could have utility for studying interpersonal emotion regulation in sport. Therefore,

studies that seek to investigate this model should be encouraged.
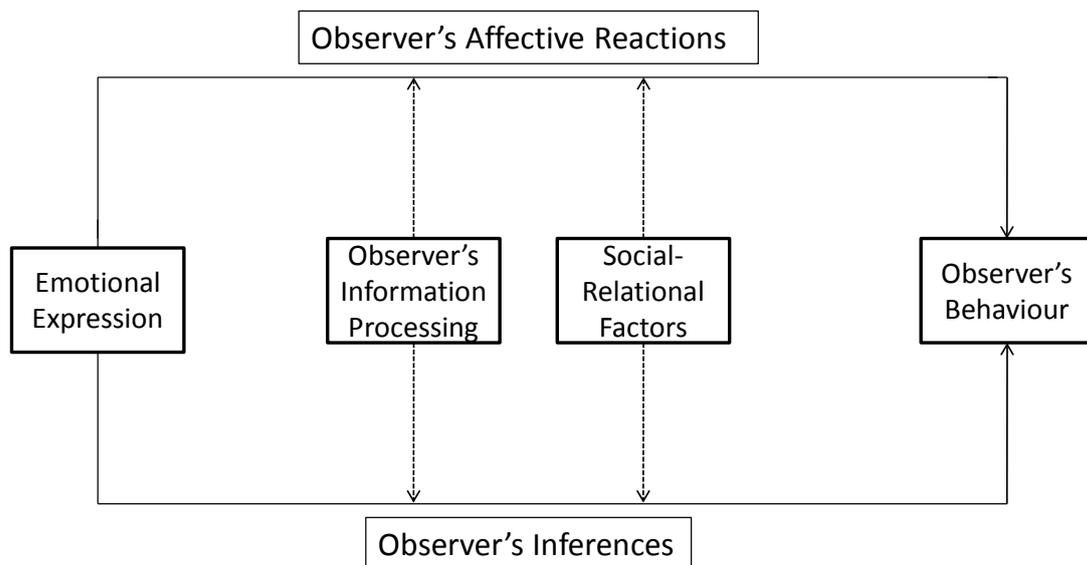


*Figure 4.1: Van Kleef's Emotions As Social Information Model. Used with permission.*

There is considerable research potential on interpersonal emotion regulation strategies

as Niven et al., (2009) presented a classification scheme categorizing nearly 400 distinct

strategies. Their final classification of interpersonal affect[1] regulation strategies distinguished

between strategies intended to improve and worsen another's affect as well as strategies

intended to engage the other in their task or situation and strategies intended to focus on the

nature of the relationship between target and agent. A limitation recognised by Niven et al.

(2009) was that the context in which their strategies were situated spanned across nearly

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[1] Distinctions between the related constructs of emotion, mood and affect have been a feature of debate for many years (see Beedie, Terry, & Lane, 2005). As no universally accepted criterion to distinguish between these constructs has been proposed, and given that the term "emotion" is arguably most frequently used, in the present manuscript we use the word "emotion" as equivalent to "mood, affect, or feelings."

every conceivable social setting. Niven and colleagues suggested that within a specific context other classifications might prove more relevant. Given that sport (Dosil, 2006) and in particular, ice hockey (e.g., Botterill, 2004) represent unique sub-cultures, research documenting how sub-cultural nuances are manifested in emotion regulation becomes an important line of inquiry for the sporting community.

According to the EASI model, the inferential processing and affective reactions pathways can bring about comparable or opposing effects (Van Kleef, 2010). Van Kleef et al. (2011) explained how interpersonal emotion regulation can be moderated by the inferential motivations and abilities of the target and social-relational factors. These moderators further exemplify the complexity of interpersonal emotion regulation as one regulation strategy might bring about intended effects in one person and opposite effects in another person. For example, a coach might chastise a pair of teammates for missing a defensive assignment. One player might respond by resolving to be more attentive to her defensive duties. Conversely, the second player might take offense to the chastising and lose motivation to attend to her defensive duties. In a meta-analysis of emotion regulation strategy effectiveness, Augustine and Hemenover (2008) postulated that gender, the length of the regulation attempt, and the intensity and valence of the emotion might all influence strategy effectiveness. A further example of influential factors from the sport research literature is provided by Breakey et al. (2009) who interviewed 20 members of an ice hockey team to identify positive and negative perceptions of their coach's pre-game and intermission speeches. They found that preferred speeches included those that: (a) displayed genuine emotion, (b) were short and meaningful and (c) addressed team values. Negatively received speeches were characterised as: (a) long and poorly timed, (b) when athletes disagreed with the coach's message, and (c) including unexpected information.

In order to develop a more thorough understanding of interpersonal emotion regulation in sport, and elucidate common strategies and influential factors, the present study employs content analyses and thick descriptive narratives. This reflects the encouraged use of qualitative methods set in ecologically valid contexts in order to enhance current understanding of interpersonal emotion regulation (Hanin, 2010; Lazarus, 2000, 2006). This study is also situated within a social-functional approach to emotions (Keltner & Haidt, 1999) and seeks to locate data within the EASI model of interpersonal emotion regulation (Van Kleef, 2009). Past research has advocated for the combination of qualitative methodologies and established theoretical frameworks (e.g., Males, Kerr, Thatcher, & Bellew, 2006). The benefit is manifested in data that is richly detailed and in-depth, yet supported by empirically-derived theory. Furthermore, given the relative infancy of the EASI model and its development within conflict resolution and negotiation, using qualitative methods provides an opportunity to identify the variables that will have the greatest relevance in sport. Thus, the purpose of the current study is to investigate interpersonal emotion regulation within ice hockey. Specifically, the following research questions were addressed: (a) what strategies are used in ice hockey to regulate teammates' emotions? (b) What factors potentially moderate the interpersonal emotion regulation process? (c) What is revealed about the process of interpersonal emotion regulation when these strategies and moderating factors are manifested in sport?

## 4.3 Methods

### 4.3.1 Participants

Participants for this study were 16 members of a male professional ice hockey team competing in a top tier league in Britain (mean age = 23.5 years, $SD$ = 5.1 years). The sample included four goaltenders, four defensemen, and eight forwards with the majority of them having at least 10 years of playing experience. Two players had been on the team for 6

months. Eleven players had been on the team for 8-12 months. The remaining three players had been on the team for over 5 years. Many of the participants expressed their desire to play professional ice hockey either in Europe or North America. The meaningfulness of their immediate circumstances helps ensure genuine emotions are evoked in response to their own performance and team results. This was an important consideration as Gross (2010) has criticised emotion researchers, suggesting that studies often attempt to evoke participants' emotions through tasks that hold little relevance for the participants, for example, evoking sadness by watching a sad movie. Competitive sport however provides the opportunity to study participants during meaningful events which help generate genuine emotional reactions (Lazarus, 2000). All participants have been assigned pseudonyms.

### 4.3.2 Procedure and Interview Guide

Data were collected using semi-structured interviews. Interviews began with asking participants to recall a particularly significant game in recent memory. Often these included games in which participants represented their country at international competitions as well as games during or leading up to playoff competitions. Interviews lasted between 35 and 85 minutes and were conducted in either the team's arena or in the participants' homes.

### 4.3.3 Context for the Present Study

The interviewer (first author) had begun working with the team in an applied context approximately one month before interviews began. The interviewer was trained in qualitative methodology and is of Canadian decent. Given the centrality of ice hockey in the Canadian culture (Allain, 2011) the interviewer's cultural background was expected to be useful in establishing rapport and empathising with participant experiences. Indeed, participants reported that having an interviewer familiar with ice hockey was beneficial to the interview process. All stories about interpersonal emotion regulation that participants shared were of

events that occurred prior to the researcher's involvement with the team. This helped to limit the possibility for primed stories of interpersonal emotion regulation.

**4.3.4 Data Analysis**

Interviews conducted in the present study were transcribed resulting in 133,176 words of text. Data analysis was assisted using NVivo 9 software. In reference to the first two research questions examining interpersonal emotion regulation strategies used and perceived moderating factors, an inductive analysis was initially conducted. This was a necessary step in the data analysis process given the relevant infancy of the EASI model, the lack of inductively analysed research supporting the EASI model, and the novelty of the EASI model to describe interpersonal emotion regulation in sport contexts. Once these strategies and moderating factors were identified, they were subjected to a deductive hierarchical content analysis (Hsieh & Shannon, 2005). Thematic categories were based on the EASI model (Van Kleef, 2009) and operational definitions were borrowed from EASI literature (i.e., inferential processing and affective reactions to describe emotion regulation strategy use).

In reference to the third research question, data was subjected to a narrative analysis to exemplify interpersonal emotion regulation processes. Initially, a categorical content analysis (Lieblich et al. 1998) was performed whereby selections of text were separated and categorised to find shared components between stories. These components were deductively extracted from the EASI model. Specifically, the emotion-stimulating event, emotion, meta-emotion belief, interpersonal emotion regulation strategy, process, moderator, and resultant behaviour were categorised (see Table 4.3). Once components were identified, the original stories were then reassembled as to be presented intact as a whole with each applicable component labelled. Following this, stories of interpersonal emotion regulation were subjected to a holistic content analysis (Lieblich et al. 1998) whereby stories were analysed as whole entities in which to extract meaning from. The depth of information afforded by a

narrative approach helps to illustrate how regulation strategies and moderating factors are manifested in actual ice hockey situations thereby presenting the opportunity to appreciate the complexity of interpersonal emotion regulation processes (Hanin, 2003). The presented narratives were selected from a collection of potential examples of the interpersonal emotion regulation process. They were selected based on their clarity and rich description of each component of the regulation process as described in the Results section. Additional examples are available from the author upon request.

**4.3.5 Trustworthiness**

As part of establishing the trustworthiness of the study, a number of protocols were followed. Initially, the interviewer debriefed with the participants his interpretations and conclusions stemming from their interviews. This form of member checking helps ensure that the meanings within the participants' messages are being accurately portrayed. Subsequent clarifications were incorporated into the analysis. Furthermore, two experts independent to the research team (a sport psychologist with over 20 years experience in ice hockey and an ice hockey coach from an American university) were presented with the analysis and given the opportunity to challenge the interviewer's interpretations. Triangulation was achieved by having the authors read over the interview transcripts and assess to what extent they agreed with the proposed themes. Frequently, one author would act as a "devil's advocate" to challenge the collective interpretations (Marshall & Rossman, 1995). Further triangulation was attempted by presenting narratives from divergent participant perspectives. That is, the current study includes narratives of the same event or individual told from multiple participants. This form of participant triangulation reinforces the accuracy of the events portrayed. Trustworthiness can also be enhanced by prolonged engagement and persistent observation of participants (Lincoln & Guba, 1985). Following data collection, the lead author spent parts of three seasons with the team attending practices, home and away games,

and team social functions which afforded the opportunity to probe into both characteristic and uncharacteristic instances of interpersonal emotion regulation.

## 4.4 Results

### 4.4.1 Interpersonal Emotion Regulation Strategies Used in Ice Hockey

Analysis of the data resulted in 22 distinct interpersonal emotion regulation strategies used by members of the focal ice hockey team. As shown in Table 4.1, these strategies can be classified as being either verbal or behavioural in nature. Using the EASI model as a conceptual framework, strategies were further classified as those where the agent's intention was to initiate inferential processing in the target and those intended to initiate affective reactions in the target. This is not to say that interpersonal emotion regulation was successfully achieved as potential moderating factors (addressed later) will be influential. Illustrative strategies from each category are presented.

Table 4.1

*Interpersonal Emotion Regulation Strategies*

| Higher Order | Second Order | Strategy | Example |
|---|---|---|---|
| Verbal | Inferential processing | Deception | I told him that there were NHL scouts at the game. He completely bought it. Stuart |
| | | Calling out teammates | 'Greg, you're playing like s**t—you're a big guy, start making some hits.' Gerald |
| | | Discrete talk off to the side | 'You wanna speak about anything? From the weekend, you've had issues, is everything alright?' Victor |
| | | Distraction | I was just trying to talk to him a little bit about different stuff, like talking to him about his family a little bit. Peter |
| | | Goal setting | I talk about the basics and then try to give them little goals that we can achieve. Peter |
| | | Positive appraisals | 'Look you're playing great, no one ever expected you to win this game, try to keep the score as low as possible.' Stan |
| | | Praise | 'Great play Jacko' or whoever it is, then the next time he'll think, 'Yeah, I'll do it again.' Ben |
| | | Rewards | Sometimes I'll put up a tenner for the next goal or 20 quid or a case of beer for something. Dale |
| | | Threats | If we don't win games, there will be no funds, then there's no hockey. Some of you might stay, but many of you will get sent down.' Peter |
| | Affective reactions | Humour | I enjoy trying to lift people up. In the changing room, I'm always loud, always joking, always the character. Stan |
| | | Hockey chatter | 'C'mon boys, we gotta win this game, 100% all the way. We need to win this game, it's a big game.' Richard |
| | | The silent treatment | It crossed my mind a few times whether I should stay out of the dressing room and just not even go in. Jerry |

| Behavioural | Inferential processing | Benching/line juggling | We were losing and my line got benched. All of it. It really annoyed me. Steven |
|---|---|---|---|
| | | Pulling the goalie | 'You guys have played like s**t and now the goalie's gotta come out so start playing well.' Gerald |
| | | Tap on the pads | If someone is giving you just a little tap on the pads, a little encouragement, it can go a long with some people. Aaron |
| | Affective reactions | Fighting | I jumped off the bench and had a scrap just to show them, 'Hey, if he's doing it, perhaps we should be doing it too.' Jerry |
| | | Fun activities | There were a few times when we'd do team outings when I noticed that I played pretty well next game. Gerald |
| | | Hitting opponents/physical play | I dumped the puck in and when their biggest player went into the corner, I skated as hard as I could and just hit him as hard as I could. Steven |
| | | Music | It's surprising how much music can fire up a team. We'd get in a huddle and do this bouncing dance and just lift the moral up. Jeremy |
| | | Pre-game quiet time | Coach would make us sit down and be quiet for about five minutes before the game, just to like focus on the game. Sean |
| | | Spatial manipulation | I had to come and physically remove him from the referee 'cause he was out of control. Aidan |
| | | Time-outs | That really did calm us down—that time-out. Cause for the last three minutes, we didn't have any penalties at all. Louis |

### 4.4.1.1 Verbal strategies to initiate inferential processing.

This category represents verbal interpersonal emotion regulation strategies whereby the agent is attempting to manage the internal appraisals of the target individual. For example, by using deception as an interpersonal emotion regulation strategy, the agent presents an appraisal of an event or circumstance that is not accurate but expected to bring about specific emotional effects in the agent. Similarly, when calling out a teammate's poor performance, the agent is attempting to evoke feelings of guilt, anger, or anxiety by expressing his own appraisal of the target's performance in order for the target to adopt that appraisal, those emotions, and consequently regulate performance.

### 4.4.1.2 Verbal strategies to initiate affective reactions.

This category is typified by strategies whereby the agent verbally attempts to establish or exemplify an emotional demeanour hoping the target begins to mimic those emotional expressions. Consequently, the target begins to feel those emotions. For example, when a teammate is feeling disappointed about their performance, a player might use humour to cheer the teammate up. The player is not necessarily attempting to change his teammate's appraisal of his performance, but merely trying to evoke a more pleasant emotional state. Similarly, the participants explained that with typical ice hockey chatter (e.g., "Let's give 110%, Chin up lads, All the way"), the actual meanings of the phrases are insignificant relative to the emotional atmosphere they create.

### 4.4.1.3 Behavioural strategies to initiate inferential processing.

These strategies include behavioural attempts to regulate others' emotions by managing the appraisals of the target player. For example, a coach might substitute a goaltender or bench a forward to convey a message that poor effort will result in limited playing time. If this appraisal is adopted by the team, the coach is likely to have increased their fear of being benched. Similarly, players spoke about appraisals associated with giving

each other a tap on the pads with their stick. Specifically, a tap on the pads conveyed the message that they were playing well and a sign of encouragement. Conversely, choosing not to tap a teammate's pads was often done to convey the message of disappointment or hopelessness in their performance.

### 4.4.1.4 Behavioural strategies to initiate affective reactions.

This category included strategies whereby players attempt to change teammates' emotions through their own behaviour. For example, participants discussed fighting and hitting opponents as a way to increase high arousal emotions like excitement or anger in their teammates, hoping they would emulate the physical play. Similarly, players described attempts to establish a specific emotional atmosphere in the dressing by their choice of music to play on a stereo. The music not only regulates the agent's own emotions, but potentially all players in the dressing room.

When describing the above interpersonal emotion regulation strategies, the participants related experiences where strategies had the potential for unintended emotional effects. For example, a coach might "juggle the lines[4]" in order to evoke anger in a player who would consequently receive less playing time. The intention is that the benched player would respond by improving his effort and fight to retain his line position. However, despite the coach's intention to evoke anger, the player might instead feel disappointment and hopelessness. His resultant performance would then likely worsen as a result of the line juggling. Therefore, the emotion evoked will depend on the interaction of numerous moderating factors.

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[4] The tactic of changing which teammates play together

1 **4.4.2 Moderating the Effectiveness of Interpersonal Emotion Regulation**

2       Participants described moderating variables which influenced the predictive strength of affective reactions and inferential processing. As

3 shown in Table 4.2, analysis revealed moderating variables consistent with those offered in the EASI model.

Table 4.2

*Moderating Variables of Interpersonal Emotion Regulation*

| Higher Order Themes | Moderators | Example |
|---|---|---|
| Inferential processing ability and motivation | Understanding agent's appraisals | There's been times where I've thought we've played badly and the coach would say that the team has done alright and I would think, 'Hold on a minute...' Victor |
| | Personality | He doesn't listen—he's just one personality who's just very much about himself. No matter what we told him, he wasn't interested. Ben |
| | Situational meaning | If I go in there shouting at guys, how much are you going to get out of them because it's only pre-season? So that factors into guys' responses. Sean |
| | Being confronted with poor performance | One of the players was struggling and I said to him, 'You're not expected to be a top guy on this team this year.' The second half of the season he played fantastic. Gerald |
| | Performance regulation precedence over emotion regulation | If I stayed out, they'd get the message that it's not good enough. But there were game tactics that needed to be changed. Jerry |
| | Perceived status of agent | I'm never going to argue back.I mean they have more experience than me compared to most players here. Victor |
| | Timing | So if they do it at just the right time, it can spur the team on to do better. Gerald |

| Social-relational factors | Relationship dynamics | He was trying to get under my skin...probably not the best thing you should be doing before the game but he's my best friend and it's just what friends do. Jerry |
| --- | --- | --- |
| | Appropriateness of strategy | So when I'd speak to him about it, he was always direct and he wasn't condescending, he was very helpful when he did it. Alex |
| | Appropriateness of evoked emotion | The coach came and said, 'I'm going to get you so angry out there.' I said to him, 'Look that's not how I work, if you get me pissed off or angry, I'll play worse.' Ross |
| | Emotion regulation by role | It's my responsibility as a captain to help him out. Peter |
| | Professionalism | I regret both the message and how I said it because it's not professional. Ben |

**4.4.2.1 Inferential processing ability and motivation.**

According to the EASI model, the target's epistemic motivation to understand the agent's appraisals moderates the extent to which interpersonal emotion regulation occurs via inferential processing. In addition, personality factors, empathic accuracy, the situational meaning of the context, and the timing of strategy usage can influence emotions evoked in others. Participants recalled how difficult regulating teammates' emotions became when the team had been eliminated from playoff contention. At this point, the likelihood of evoking intense emotions in teammates is minimized because any resultant performance will still not bring them closer to their goal of winning a championship. Conversely, in highly competitive scenarios, participants reported they were more susceptible to emotion regulation. The perceived status of the agent is also taken into consideration. That is, when targets perceive the agent to be experienced and worthy of respect, they implicitly become more accommodating to interpersonal emotion regulation strategies.

**4.4.2.2 Social-relational factors.**

Data supported the notion that interpersonal emotion regulation can be moderated by social-relational factors as well. In addition to relationship dynamics, the extent to which both agent and target perceived the strategy and intended evoked emotion as appropriate to their circumstances moderated the interpersonal emotion regulation process. For example, one participant relayed the story of how a coach tried to get him angry in order to play a "fiercer" style of hockey. However, the participant had to convey to the coach that he actually plays best when relaxed and so being angry would undermine his performance. These perceptions highlight meta-emotion beliefs and demonstrate that they do not always align between target and agent. Furthermore, participants explained that certain expectations for interpersonal emotion regulation exist based on position and informal roles. For example, in the present study goaltenders were rarely agents or targets for interpersonal emotion regulation on this team. The players reported that the task demands of goaltenders require them to maintain a narrow external focus and as such this prevents them from focussing attention on others' emotional states. Conversely, a central feature of "energy-line[5]" players is the expectation that their style of play generates high arousal emotions in their teammates to emulate.

Four types of interpersonal emotion regulation strategies evidenced among the participant sample of ice hockey players have been presented. Additionally, consistent with the EASI model, data has supported the prevalence of moderators to the emotion regulation process in the form of inferential processing abilities and motivation as well social-relational factors. The following four narratives are presented to illustrate how these strategies and moderators are manifested within the actual experiences of teammates regulating each others' emotions.

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[5] In ice hockey, the informal role of 'energy-line' players is to create excitement for the rest of team (usually through physical play) as opposed to concentrating on offense or defence responsibilities.

**4.4.3 The Process of Interpersonal Emotion Regulation**

In order to isolate the interacting components of interpersonal emotion regulation, the narratives are presented with symbols indicating the presence of components deductively extracted from the EASI model. These components are presented in Table 4.3.

Table 4.3
*Interpersonal Emotion Regulation Legend*

| Symbol | Component | Description |
| --- | --- | --- |
| EV | Event | Emotion-eliciting circumstances |
| E | Emotion | The emotional state evoked by teammate(s) |
| MB | Meta-emotion belief | The perceived effects of emotional experience on performance (Hanin, 2007) |
| S | Strategy | The emotional expression, behaviour, or verbalization used to change the emotional state |
| P | Process | The pathway of interpersonal emotion regulation (Van Kleef, 2009) |
| M | Moderators | Factors that determine which pathway interpersonal emotion regulation proceeds, if at all (Van Kleef, 2009) |
| B | Behaviour | The resultant change to performance |

The first illustrative narrative of interpersonal emotion regulation comes from Victor who described the way in which he used deception to regulate his teammate's anger.

*[EV]* I remember a player (Wilson)...he was having a bad game. *[M]* He took a dislike to this one player. *[S]* I went up to him and said, "Is he seeing your sister?" [Wilson responded,] "What?" [I said,] "Is he seeing your sister?" [Wilson responded,] "What the f**k you mean?" *[P]* [I said] "I saw him talking to your sister. I saw them talking in between periods and before the game as if...you know." [Wilson responded] "I don't believe you, I don't believe you." And I said...there were three of us there and I said, "Didn't you see him with his sister?" And the third guy replied, "Yeah, yeah." *[B]* And then Wilson went f**king mental. Not mental in a way that he was smashing things but on the ice he had the best two periods of the year. He just went out and hit everything including this lad who he didn't like.

Victor attempted to increase Wilson's anger by deceptively implying that a relationship existed between Wilson's sister and a disliked, rival opponent. The fact that Wilson disliked the opponent moderated the strategy and increased Wilson's epistemic motivation to act upon Victor's misdirection. Victor's story further illustrates the meta-emotion belief that Wilson needed to increase his anger to play better thus rationalising the strategy. The corroboration by a third teammate suggests the meta-emotion belief was likely shared by others on the team which could have further justified the use of deception to regulate Wilson's emotion.

In the second narrative Steven described the use of benching as a strategy for interpersonal emotion regulation.

*[EV]* We were losing 0-1. *[S]* I was shouting at a lot of the players and *[S²]* the coach just thought it would be right to bench me for about four minutes because I wasn't being motivating at all. *[P]* I guess I was putting people down a little bit, pointing out where people had gone wrong and making them feel worse than they already did. *[E]* I guess I was angry at losing; angry at not playing to our ability. I guess I was angry at myself more because *[EV]* I couldn't score that game. I was trying everything and I just couldn't score, couldn't string passes together, and it just wasn't going well. *[P]* I guess that was why I started shouting at other players and started taking my aggression out on other people. *[M]* I think they reacted to me getting benched because I was meant to be the captain of the team. *[B]* I guess they got a little boost out of it because they started working harder. *[P]* Likely they had a general fear of getting benched themselves. *[B]* There wasn't any more shouting really, they just started playing better. *[P]* I think coach was trying to send a message *[EV]* 'cause no-one was really motivated that game. Everyone was shouting at each other. *[P]* And he was just trying to send a message to the rest of the team saying, "It doesn't matter who you are, you could still

be benched." And I guess he was sort of saying it to me to get my act together. Start playing well and just starting motivating the team. *[B]* I think we came out of that game 2-1. I came out, I was on the ice for I think 1:30 and we scored within that 1:30. So it had to have motivated me. I wanted to do well. I didn't want to get benched again.

Steven's story illustrates interpersonal emotion regulation from two sources: Steven and the coach. Steven was shouting at his teammates and pointing out their mistakes, in a speculative attempt to increase their guilt in order to improve performance. However, the coach, sensing the ineffectiveness of this strategy (i.e., Steven was actually making his teammates play worse), benched Steven. The coach's benching strategy had two potential interpersonal emotion regulation effects. The first effect was to decrease Steven's anger and aggression. The second effect was to increase fear in the rest of team. By benching the captain of the team, the coach conveyed his appraisal of the situation in that, if the captain can be benched, so too can anyone else. Punished and threatened with reduced playing time, both Steven and the team responded by playing better throughout the remainder of the game.

In the third narrative Ben and Jerry (the coach) offered their accounts of interpersonal regulatory efforts with a player described by them as the "cancer" of the team (Charlie).

*[EV]* We had a guy this year, [Charlie] and he was just very selfish and not playing a team game… *[E]* He really pissed us off… *[MB]* You want people that are here for the team and not guys that are just willing to do what's right for them. We want a team that works hard for each other and moves the puck, plays smart, and he just wasn't willing to do that. *[E]* It gets you very, very frustrated... *[S]* Me and Jerry had words with him but Charlie didn't listen… Unfortunately, that was one case where talking to someone didn't work. *[M]* It must be a personality characteristic…No matter what we told him, he wasn't interested *[B]* and he kept doing the same mistakes and it cost him a contract because he won't be back next year…*[E]* It was very frustrating and

disheartening…*[P]* Everyone grew to dislike him. No one wanted to play with him, which again affects the team, affects the attitude of the team, the atmosphere in the changing room as well. It was that bad. He was a bit of a cancer… When Jerry was reading out the lines, you could see the facial expressions change when he read out who was playing with Charlie. He was just a pain. And it does affect the atmosphere. It does affect the way guys are thinking before the game. No matter what people say, it does affect you. Even if it's just in a small way, it affects how you think about things and ultimately it affects how you play… *[B]* You can see it. Cause if Charlie has the puck and he tries to pull an extra move and doesn't pass it, his line-mate gets pissed off. And then the other guy on the line gets hacked off because of the other two. That's pretty much a whole line written out of the game. They're not going to score because their heads aren't in it. There's a pretty good chance they'll concede a goal because they're too busy worrying about what Charlie's going to do and not focusing on their defensive responsibilities… *[S$^1$]* Coach benched him a few times so that was one way of getting around it…*[S$^2$]* We had to think, "If he gives up three goals, we have to score four." You know that was the attitude going on then. Which isn't very good but what can you do?

Ben's story illustrates how the team tried to counteract the damaging influence of Charlie, a player whose selfish style of play influenced his teammates' emotional state, thoughts, and actual performance. Using the term cancer to describe Charlie's effect on the team illustrated the damaging and contagious social influence Charlie had on the team. Hoping to counteract Charlie's emotional effect on the team, the participant reported a number of strategies he and Jerry used (i.e., talking to him, benching him, reappraisal). However, attributing Charlie's personality as a moderator, these strategies failed to change Charlie's behaviour and neutralize the emotional effects on the team. The final strategy Ben

reported was not renewing Charlie's contract, effectively separating him and his emotional effects from the team.

Support for Ben's contention of Charlie's undesired emotional effects on the team, came independently from Coach Jerry.

*[S]* I should have just cut him. That would have just been a lot easier for me... *[P]* I genuinely disliked him as a person. *[M]* But the reason I disliked him was because I thought he was very selfish. *[MB]* He wasn't a good part of this team, he was a selfish person within the team and that doesn't create the right environment… *[P]* It frustrated the guys he played with. *[EV]* Charlie was always playing for him, not passing pucks and just wants to show what he can do all the time instead of showing what he can do for the team. *[B]* I had guys come to me complaining saying, "I just can't play with him." So then you're screwed 'cause I can't find anyone who can play with him effectively or would want to play with him. *[EV]* If we weren't short of guys, I would've gotten rid of him a lot sooner…*[S]* Initially you tell his teammates to bear with it and that I'll sit down and talk to him and say, *[P]* "Listen, you're not creating a good working place—you know, you're making it difficult for guys to play with you—they don't want to play with you." Now, if someone were to come to me and say "I don't want to play with you," and someone comes up to me again and says, "Somebody else doesn't want to either," I'd be like, "S**t, what am I doing here? Something's not right with myself."

The coach explained how Charlie was having a negative effect on the team in that his teammates did not want to play on the same line as him. The coach's excerpt highlights the effect of emotion contagion through interpersonal disliking in that people tend to conspire against those that they dislike (Clark, Pataki, & Carver, 1996). Furthermore, the coach described how he tried to align Charlie's appraisal of the situation with his own. However,

similarly to Ben, the coach attributed Charlie's selfish personality as a barrier to regulating his emotions.

## 4.5 Discussion

This study explored interpersonal emotion regulation within ice hockey. Specifically, the following research questions were examined: (a) what strategies are used in ice hockey to regulate teammates' emotions? (b) What factors potentially moderate interpersonal emotion regulation? (c) What is revealed about the process of interpersonal emotion regulation when these strategies and moderating factors are manifested in sport? Data from the present study provided the opportunity to examine how the EASI model of interpersonal emotion regulation can be located in ice hockey.

### 4.5.1 Interpersonal Emotion Regulation Strategies Used in Ice Hockey

As previous researchers have testified, categorising emotion regulation strategies presents a formidable scientific challenge due to the sheer volume of possible regulation strategies (Koole, 2009). Skinner, Edge, Altman, and Sherman (2003) reported in the case of coping; considered to share many conceptual similarities with emotion regulation, that over 100 classification schemes have been proposed, with no two schemes represented by the exact same categories. Similarly, a variety of theories have been proposed concerning how emotion regulation strategies might be categorized. For example, Gross (1998) developed a process model that classifies emotion regulation strategies into five categories based on the moment in which they impact the emotion generation phase: situation selection, situation modification, attentional deployment, cognitive change, and response modulation. Contrastingly, Koole (2009) categorized emotion regulation strategies based on which emotion response system they affect, namely: attentional, knowledge, and bodily response systems. Parkinson and Totterdell (1999) also offered a classification system that locates emotion regulation strategies into one of four categories depending on whether they are

cognitive or behavioural and whether they encourage the individual to approach or avoid the cause of the emotion. The current study has provided a classification that is both rooted in a theoretical framework and situation specific to the experiences of ice hockey. Specifically, four types of strategies emerged that distinguished between verbal and behavioural strategies as well as strategies that initiate interpersonal regulation through cognitive (inferential processing) and affective (affective reactions) pathways. This supports Niven et al. (2009) who proposed that specific contexts might result in new classification schemes emerging that match the unique nature of the situation.

Results from the current study generate discussion into strategy effectiveness and preferences (cf. Aldao, Nolen-Hoeksema, & Schweizer, 2010). Augustine and Hemenover (2008) reported in a meta-analysis of strategy effectiveness, behavioural strategies to be most effective in regulating intrapersonal emotions. They reasoned that behavioural strategies are easy to implement and often require less skill and resource than cognitive strategies. Although the current study categorised strategies according to verbal and behavioural strategies, the authors propose that intrapersonal cognitive strategies are similar to interpersonal verbal strategies because both are manifested in efforts to change appraisals. This is represented in the EASI model as interpersonal emotion regulation through inferential processing. However, that is not to imply that inferential processing does not also occur via behavioural strategies as evidenced from the results of this study. In team sports such as ice hockey the authors propose that following the trend, behavioural strategies could be more prevalent and effective in regulating others' emotions. This is because many of the behavioural strategies revealed in the data could also be utilised as performance enhancing strategies. For example, benching players, calling time-outs, and substituting goaltenders can be implemented just as readily for performance enhancement as for possible emotion regulation. This would contrast with Campen and Roberts' (2001) assertion that athletes

might not be able to distinguish between emotions and performance regulation strategies. Yet, Webb, Gallo, Miles, Gollwitzer, and Sheeran (2012) recently noted the overlap between emotion and behaviour regulation in their research exploring intrapersonal emotion regulation. They explained that emotion regulation falls within the broader scope of self-control, and as such shares many similarities with other forms of self-regulation (Koole, Van Dillen, & Sheppes, 2010; Tice & Bratslavsky, 2000). The results from this study suggest that these similarities extend to interpersonal emotion regulation as well. The opportunity to manage both team performance and emotions with one strategy makes for an efficient operation. This could be useful among coaches and players in fast-paced sports where efficiency is valued.

Furthermore, the opportunity for verbal strategies that rely on changing agents' cognitions or appraisals might be minimal or hindered in sport. For example, in ice hockey, players typically sit with their line-mates on the bench and so the opportunity to regulate the emotions of a player on a different line is minimized because of the spatial separation. Equipment can also impede verbal strategies as facemasks and mouth-guards potentially hinder communication. Behavioural strategies however, offer the opportunity to regulate emotions through actions which sometimes proverbially "speak louder than words." For example, a well-timed hit of an opponent can excite teammates and provide a shift in momentum. In contrast, individual sport athletes might rely more on cognitive strategies to regulate own and others' emotions as was found in runners by Stanley et al. (2012).

### 4.5.2 Moderating the Effectiveness of Interpersonal Emotion Regulation

As illustrated in the presented narratives detailing instances of interpersonal emotion regulation, many moderating factors contributed to the extent to which the targets' emotions were regulated. Consistent with the EASI model, moderating factors were situated within the inferential processing motivation and abilities of the target individual as well as social-

relational factors. Emotion theories have emphasized the importance of similar moderating factors that influence the generation or regulation of emotions (e.g., Baumeister et al., 2007). Lazarus (2006) proposed that personality characteristics consisting of the individuals' goals, goal hierarchies, beliefs about self and world (including what they have learned to expect from each other), and personal resources in the form of intelligence, social and work skills, health and energy, education, wealth, supportive family and friends, and physical and social attractiveness might all factor into the effectiveness of interpersonal emotion regulation.

Ice hockey is a sport that spans multiple developmental stages which also might influence the type of strategies used. For example, coping research has highlighted that younger individuals are more likely to use behavioural strategies than cognitive ones (Holt, Hoar, & Fraser, 2005). The average age of the participants in the study was 23.5 years old and the majority of them had over 10 years playing experience. This age and experience might have afforded participants frequent opportunities to develop their inferential processing abilities and therefore it was unsurprising to see a nearly equal number of verbal (i.e., cognitive) strategies as behavioural strategies. However, given that behavioural strategies potentially serve the dual role as performance regulation strategies, as discussed above, it is unlikely that players would reach a point where they rely predominantly on verbal strategies to regulate their teammates' emotions. However, factors that moderate the selection and application of regulation strategies represent a possible avenue for future research.

**4.5.3 The Process of Interpersonal Emotion Regulation**

In accordance with the EASI model, narratives highlighted interpersonal emotion regulation through channels that utilised affective reactions and inferential processing. Often there were clear pathways that began with the emotional expressions or behaviour of the agent, followed by interpersonal emotion regulation through either affective reactions or inferential processing. Providing the accommodation of relevant moderating factors, the

process then resulted in changed emotional states and subsequent changes to performance. The resultant change to behaviour in the form of performance management makes the EASI model particularly attractive to explaining interpersonal emotion regulation within ice hockey.

Detailed description of interpersonal emotion regulation processes highlighted meta-emotional beliefs the participants followed as well as resultant behaviour (performance) change. For example, the first narrative detailing the use of deception illustrated the meta-emotional belief Victor and the third teammate shared for Wilson. That is, they believed Wilson performed best when angry because it seemingly increased his physicality on the ice. Meta-emotional beliefs or experiences link perceived performance effects to individual emotional states (Hanin, 2007). While meta-emotional beliefs have already been presented as a valuable research topic (e.g., Nieuwenhuys et al., 2011), results from the current study suggest that researching how these meta-emotional beliefs are developed, exchanged, and acted upon in an interpersonal dynamic represents an important avenue for future research.

The results of the current study set the stage for the development and delivery of a sport psychology intervention to develop interpersonal emotion regulation skills used to regulate others and one's own emotions within ice hockey contexts. Commentaries on applied sport psychology research has advocated for the incorporation of both theory and research into applied interventions (Lane & Terry, 2000). The results from the current study has provided support for the inclusion of the EASI model (Van Kleef, 2009) into sport contexts to explain interpersonal emotion regulation. Furthermore, this study has outlined common strategies used to regulate teammates' emotions as well as potential moderating factions that influence how or if regulation is achieved. By doing so, this study has addressed *how* interpersonal emotion regulation occurs, *what* strategies initiate this process, and *why* such attempts might or might not be successful.

Despite the wealth of information gleaned from this study, there are a few limitations. Specifically, any study that relies on self-reported data is prone to bias as there will be opportunity for responses to be influenced by the participants' personality, perspectives, and social desirability. The authors attempted to counter these potential effects by including incidents that were retold by multiple participants. A further limitation includes asking participants to retrospectively analyze affective reactions. That is, when discussing emotion contagion, a participant effectively provides an appraisal, making the strategy become conceptually similar to inferential processing. Therefore, asking participant to appraise the effectiveness or process of affective reactions influences the recall of them. An additional limitation is that the participants are from one team within one country. Because the participants played together, there is the possibility that interpersonal emotion regulation processes are a product of the team values more so than representative of hockey in general. For example, the coach in this study was very receptive to having his team participate in a study about interpersonal emotion regulation. As such, a wide array of strategies arose from participant interviews. However, another coach may be more reserved about the discussion of emotion and the application of interpersonal emotion regulation strategies on his team. This suppression may result in different or modified strategies being utilized which have not been documented in this current study. Furthermore, as ice hockey is played in countries world-wide, potential cultural differences in emotion expression or regulation are also unaccounted for. Additionally, although the study provided triangulation by having multiple participants recall an instance of trying to regulate a teammate's emotions, the data predominantly included stories recalled from only one perspective. That is, the data utilized "reverse appraisals" (Hareli & Hess, 2010) whereby participants relied on their own emotion knowledge to infer what happened to their teammate or coach. Having both the agent and

target discuss the same instance of interpersonal emotion regulation would be an avenue for future research.

## 4.6 Conclusion

The regulation of interpersonal emotions is an important element in sport team dynamics. This study has explored the strategies commonly used in ice hockey and the moderating factors that influence the extent to which they are perceived to be successful. Illustrated by a number of detailed narratives, this study has shown the complexity of emotion regulation within social settings. Nevertheless, the information gathered from these athletes' experiences can initiate the development of an intervention to improve team emotion regulation.

# INTRODUCTION TO CHAPTER 5

The purpose of the preceding study was to investigate interpersonal emotion regulation in ice hockey by examining common strategies and moderating factors that potentially influence their effectiveness. A deductively analysed content analysis provided support for the applicability of the EASI model (Van Kleef, 2009) in sport settings. Furthermore, the preceding study helped illuminate many of the strategies and moderating factors common to the ice hockey sub-culture that could prove useful in an intervention. Based on the preceding two articles, I felt encouraged to proceed with the intervention to improve interpersonal emotion regulation grounded in the presented theoretical frameworks.

The final step in the current research programme was to develop and deliver an intervention to improve the interpersonal emotion regulation within an ice hockey team (see Stage Three in Figure 1.1). This intervention drew upon the theoretical frameworks and empirical data obtained by the previous studies. It was submitted for peer-reviewed publication to the *Journal of Applied Sport Psychology*. While it was submitted as a four-authored article, I claim authorship of each section and was the sole data collector. I was also the sole sport psychology practitioner who delivered the intervention. Additional authors contributed in the form of facilitating data analysis, engaging in discussion that helped refine ideas, and providing revisions.

# CHAPTER 5: AN APPLIED INTERVENTION TO IMPROVE THE INTERPERSONAL EMOTION REGULATION WITHIN AN ICE HOCKEY TEAM.

## 5.1 Abstract

A case study is presented of a longitudinal applied sport psychology intervention focused on developing interpersonal emotion regulation among members of a British professional ice hockey team. The intervention is informed by a social-functional approach to emotions (Keltner et al., 2006) and utilized the Emotions As Social Information (EASI) model (Van Kleef, 2009). The primary intervention goal was to improve interpersonal emotion regulation as evidenced by being able to accurately identify when an emotion regulation strategy was needed, and select and use a strategy that changed emotions in the direction and strength intended (Webb et al., 2012). Intervention techniques included the sport psychologist managing himself as an intervention tool, brief contact interventions, emotional intelligence assessment and feedback, and dressing room discussion debriefs. Results of the intervention are presented in the form of practitioner reflections, pre- and post-intervention measures of emotional intelligence, social validity contributions, and performance measures. Although the effectiveness of each single intervention is difficult to gauge, the triangulation of data lends support for players achieving improved interpersonal emotion regulation.

Key words: psychological skills, group-dynamics, emotional intelligence, reflective practice

## 5.2 Introduction

Intense emotions can be central to the sport experience. This is reflected in sport psychology research as a SportDiscus search of "sport" and "emotion" yielded over 2,800 articles. This research interest likely stems from the influence of emotions on performance evidenced from a number of meta-analyses (e.g., Craft et al., 2003; Jokela & Hanin, 1999) and narrative reviews (Hanin, 2010; Lane et al., 2012). Consequently, studies presenting

diverse methods of managing own emotions are plentiful (e.g., Botterill & Brown, 2002; Robazza et al., 2004). However, success in sport is often the result of teamwork and cooperation. Therefore in order to help accomplish team success, athletes might consider learning skills pertaining to the interpersonal regulation of emotions defined as deliberate attempts by one social entity known as the "agent" to change the emotions or moods of another social entity known as the "target" (Gross & Thompson, 2007).

The current study is situated within a social-functional approach to emotions (e.g., Côté , 2005; Friesen et al., 2013c; Fischer & Manstead, 2008; Keltner & Haidt, 1999; Parkinson,1996; Van Kleef, 2009). A social-functional approach proposes that emotions evolved into efficient, coordinated responses helping organisms coordinate their efforts to cope with the challenges in their environment (Keltner, et al., 2006). Stemming from a social-functional approach to emotions, Van Kleef (2009) introduced the Emotions As Social Information (EASI) model whereby subsequent emotion and behaviour of a target individual is regulated through affective channels and inferential processing (See Figure 5.1). This process is moderated by potential social-relational factors as well as the inferential processing abilities and motivation of the target individual. Friesen, Devonport, Lane and Sellars (2013b) examined interpersonal emotion regulation in ice hockey and found that players frequently used verbal or expressional strategies as well as behavioural strategies to change their teammates' emotions. These strategies were employed to initiate cognitive and affective processes similar to those described in the EASI model.
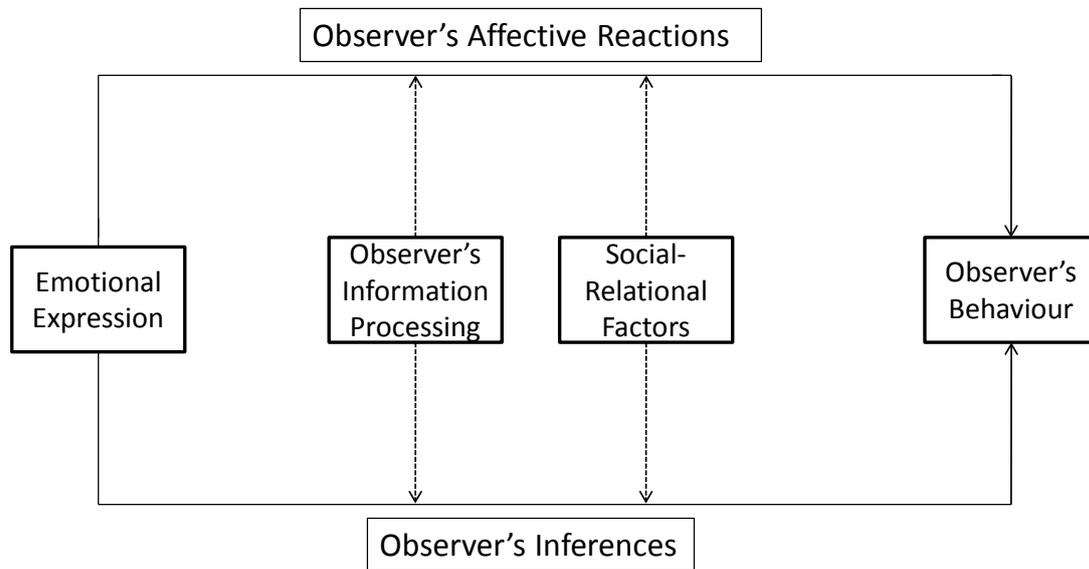
*Figure 5.1: Van Kleef's (2009) Emotions As Social Information (EASI) Model.*

Presented is a case study of a sport psychology intervention to improve the interpersonal emotion regulation of a British ice hockey team. It is a continuation of the research agenda established by Friesen et al. (2013b). With the elucidation of common strategies and moderating factors in ice hockey as well as demonstrated support for the use of the EASI model, Friesen et al., proposed that an intervention aimed at improving interpersonal emotion regulation was an appropriate line of future inquiry. The rationale behind the present study is further supported by three additional gaps evidenced in existing literature which this study seeks to address. The first is that there have been no studies in psychology that document an intervention extended from theoretical implications of social-functional approaches to emotions. Theoretical papers (e.g., Keltner et al., 2006; Van Kleef et al., 2011) and experiments (e.g., Griskevicius et al., 2010; Hutcherson & Gross, 2011) have

established social-functional approaches to emotions to be a growing field of interest. More specifically, experiments situated within the EASI model have also burgeoned recently (e.g., Van Beest et al., 2008; Van Kleef et al., 2004b). Given support for the central tenets of the EASI model, it is suggested that the next step in the research process is to explore the use of the model in ecologically valid settings.

The second gap in the literature providing rationale for the current study stems from an oversight of interpersonal emotion regulation as a research topic in sport. Despite a growing interest in emotional regulation and performance consequences in sport, studies remain focused on intrapersonal processes. Woodcock, Cumming, Duda, and Sharp (2012) presented an intervention guided by Hanin's (2000) Individual Zone of Optimal Functioning (IZOF) theoretical model. Utilizing sport psychology practitioner reflections and social validation interviews, Woodcock et al. showed support for their intervention in developing emotion regulation skills. Similarly, using workshops and one-to-one counselling, Wagstaff, Hanton, and Fletcher (2013) sought to develop and improve emotion regulation abilities and strategies used by those in various sport organizational positions. Documenting the intervention with self-report psychometrics, participant diaries, practitioner reflections, and social validity interviews, their intervention produced evidence of improved emotion regulation strategy usage, perceptions of relationship quality and closeness.

While these interventions focused predominantly on intrapersonal rather than interpersonal regulation, the studies represent valuable contributions to the research literature illustrating an incorporation of theory and promotion of novel methods by which to evaluate intervention effectiveness. As such, they also address the third rationale for the current study which stems from an increased need to establish the criteria for evaluating intervention effectiveness in sport psychology research. Poczwardowski, Sherman, and Henschen (1998) offered that evaluation is an essential element to applied research as it expands theoretical

and practical knowledge of what really works, with whom and under what circumstances. Interventions delivered in ecologically valid settings enable practitioners to document the processes and factors that influence the effectiveness or lack thereof of an intervention (Anderson, Knowles, & Gilbourne, 2004). Therefore, in line with past research (e.g., Anderson, et al., 2004; Martindale & Collins, 2007; Poczwardowski & Sherman, 2011; Sharp & Hodge, 2011), the authors suggest intervention evaluation should have broad parameters that appreciate the many possible mechanisms through which athletes and their support personnel might benefit from sport psychology services.

In order to address these gaps in the literature, a case study is presented of a sport psychology intervention to improve the interpersonal emotion regulation of a British ice hockey team. In this way, we address comments by Barker, Mellalieu, McCarthy, Jones, and Moran (2013) who argued that there is a particular dearth of single case studies on professional teams and that follow more than five athletes.

### 5.3 Methods

#### 5.3.1 Participants

Although all sports provide potential opportunity to study the interpersonal regulation of emotions (see Campo et al., 2012 for a review of emotions in contact team sports), anecdotal reports from applied practitioners (e.g., Botterill, 2004; Halliwell, 2004) and past research (e.g., Hanin & Syrjä, 1995; Lauer & Paiement, 2009) have observed ice hockey players experience intense and sometimes unwanted emotions. The intervention was performed with a male semi-professional British ice hockey team that competed in a top-tier league. Player turnover is typically high in the league and throughout three seasons, as many as 66 players were at one point registered on a game roster. However, it would be more appropriate to consider the number of participants to be 23 as this represents the number of core players who had the longest and most consistent engagement with the intervention.

**5.3.2 The Practitioner-Researcher**

Following examples such as Cropley et al. (2007), Devonport and Lane (2009), Dunn and Holt (2001), and Gilbourne and Richardson (2006), this study utilises personal reflective accounts in which I (first author) implemented a sport psychology intervention with a British ice hockey team over the course of three competitive seasons. In order to help contextualize my personal applied style within the narrative and to help outline pertinent information which helped guide the intervention, I present a condensed account of my professional philosophy highlighting those aspects that were most relevant to the current intervention. The professional philosophy of the practitioner is regarded to be the driving force behind the technical aspects of applied service delivery (Poczwardowski et al., 1998). Consistent with studies such as Friesen and Orlick (2010), a brief explanation of key professional philosophy principles (Poczwardowski, Sherman & Ravizza, 2004) is presented.

**5.3.2.1 Practitioner beliefs.**

Three beliefs were fundamental to the design and delivery of this intervention. The first is that all emotions were viable targets of regulation. Research has found that laypeople and academics alike can verbalise emotional experiences (Beedie et al., 2005). Research in sport psychology has used an array of techniques to identify how athletes describe emotional experiences including use of metaphors. Athletes can describe emotional experiences but also have the tendency to include appraisals, and pseudo-emotional states in their descriptions of emotions. The second belief was that emotions serve specific social functions (Keltner & Haidt, 1999). Following the conclusions from Friesen et al. (2013c), emotions have specific social functions in ice hockey. Specifically, emotions potentially inform players of important circumstances in their environment that require attention and prepare them for such challenges. For example, players' own feelings of embarrassment after a poorly executed shift can lead them to try to increase anger in their teammates to communicate the message

that they are not on track to reach their goals. Additionally, players' own emotions can help them understand the emotional states and intentions of their teammates contributing toward an assessment of the extent to which they are prepared to face their challenges. For example, seeing a teammate with more anxiety than what is perceived to be useful can trigger a player to help calm the teammate down. Emotions can also help players lead their teammates to meet shared goals. For example, being a captain is often associated with portraying a calm demeanour in order to help teammates also maintain consistent emotional intensity levels. Finally, emotions can help players maintain culture-related identities. For example, upon seeing teammates playing poorly, a player might try to increase shame in the teammates in order to communicate the message that they are not playing according to ice hockey sub-cultural expectations. These functions were observed and acted upon as the motivation to regulate emotions.

Thirdly, central to the delivery of the applied intervention was the notion that athletes can develop their emotion regulation abilities within a holistic form of sport psychology (Friesen & Orlick, 2010). Specifically, Friesen and Orlick suggested that practicing holistic sport psychology can include an appreciation for the interaction between a player's cognitions, emotions, physiology, and behaviour thereby representing the athlete's whole being. This was manifested in applied practice by using interpersonal emotion regulation strategies that were cognitive in nature, as well as behavioural and physiological. For example, an athlete telling a teammate to calm down because he's in danger of being penalised and being a detriment to the team could be a cognitive strategy as it attempts to change the teammate's appraisal. Whereas instructing a teammate to calm down by taking some deep breaths might be an example of a physiological strategy. Thus, by practicing holistic sport psychology, an appreciation for the emotional effects from cognitive, behavioural, and physiological strategies was employed.

### 5.3.2.2 Practitioner values.

Three practitioner values also directed the present intervention. They were flexibility, openness, and authenticity which have been reported to be important values in ice-hockey settings (Botterill, 2004). I practiced flexibility by being available at numerous opportunities throughout the season. I would typically attend one practice per week, travel to away games with the team and come to home games. Typically, I would arrive at these events an hour early and leave with the last member of the team as to enable the opportunity for possible teachable moments. I also made myself available for possible email exchanges or telephone conversations. Openness was practiced by verbalising situational circumstances that I would rather not be present but tried to appreciate and accommodate. For example, it was common for fans to travel with the team on the bus to away games. While the fans often remained to themselves, a number of players spoke about the unwanted emotional effects of having them onboard. I expressed this to Coach who explained that it was a viable way to generate revenue for the club and that it was not likely to change. Finally, I practiced authenticity by being very forth coming about who I am and tried to practice within myself by not overextending my scope of practice. Much of my early contact with the team was simply spending time informally with the players and getting to know each other. Together, these three values moved me towards immersing myself within the team which has been suggested to be a central aspect of effective sport psychology practice (Poczwardowski & Sherman, 2011).

### 5.3.2.3 Theoretical orientation.

I am influenced by existential and humanistic orientations. Specifically, the players' experiences predominantly guided the content of the intervention. Therefore, my role was to facilitate the learning that occurred from the athletes' own experiences with interpersonal emotion regulation. This was manifested in using the athletes' own language and perceptions

to enhance their awareness of their own and others' emotions and regulation strategies. This has been suggested to be a useful approach in emotion regulation interventions (Robazza et al., 2004; Uphill et al., 2009). Furthermore, in line with humanistic approaches, establishing a positive practitioner-athlete relationship was given high priority (Petitpas, Giges, & Danish, 1999). This was attempted by keeping a constant vigilance of my own approachability, authenticity, unconditional acceptance of players, and professionalism in the form of maintaining confidentiality. Practicing these attributes has been suggested to facilitate the relationship between ice hockey players and sport psychologists (Dunn & Holt, 2003; Botterill, 2004).

### 5.3.2.4 Model of practice.

I utilised the Emotions As Social Information (EASI) model (Van Kleef, 2009; 2010) as a guiding educational model. The EASI model arose from negotiation and conflict resolution research but has been presented as a potentially useful model for sport (Friesen et al., 2013). To date, there have been no applied studies in sport that use the EASI model as a guiding theoretical model therefore this study represents a novel approach to the interpersonal regulation of emotions in sport.

### 5.3.2.5 Intervention goals.

There were two primary goals of the intervention as agreed upon in preliminary discussions between myself, Coach, and players in the leadership role. The first intervention goal was to improve the interpersonal emotion regulation between team members. This would evidenced by being able to accurately identify when an emotion regulation strategy was needed, and select and use a strategy that changed emotions in the direction and strength intended (Webb et al., 2012). The second goal of the intervention was to improve the overall performance of the team. This could be evidenced by changes in major team performance markers: winning percentage, goals scored, and goals allowed. These were discussed and

agreed upon with the head coach at the outset of the intervention (Martindale & Collins, 2007). Measuring the effectiveness of these intervention goals can be difficult due to the intangible nature of emotions and the multitude of possible ways emotion regulation can be manifested within performance benefits and consequential results. Anderson, Miles, Mahoney, and Robinson (2002) recommended using a number of indicators in triangulation to show support for the effectiveness of an intervention in sport psychology. Following their recommendations, this study will present reflections on quality of support, pre- and post-intervention changes in emotion intelligence and performance, as well as athlete responses to support. These are described in greater detail in the procedure.

**5.3.2.6 Intervention techniques.**

The intervention for this study predominantly consisted of four intervention techniques: dressing room debriefings, emotional intelligence assessments, brief contact interventions, and managing myself as an intervention tool. The intervention began with an assessment of emotional intelligence as recorded by the Brief Emotional Intelligence Scale (BEIS-10, Davies, Lane, Devonport, & Scott, 2010). Emotional intelligence is a term used to describe adaptive interpersonal and intrapersonal emotional functioning (Kirk, Schutte, & Hine, 2008). The BEIS-10 established a baseline measure of emotional intelligence as well as a tool for applied work. The opportunity to administer the questionnaire presented a teachable moment with the team to discuss the concept of emotional intelligence, the regulation of others' emotions, and how emotions potentially help or hinder performance.

Much of my work with the team was manifested in brief contact interventions defined by Giges and Petitpas (2000) as "unplanned interactions that take place between clients and practitioners that involve 'teachable moments' where clients are able to gain new perspectives on their present situations" (p. 177). Often, these interactions were brief and the emphasis was placed on providing short meaningful messages or reflections. As explained by Giges

and Petitpas, brief contact interventions might revolve around asking questions such as: "What are you willing to change today?" Many of the conversations resembled "emotion inoculation" (Botterill, 2004) or "if-then" planning (Gollwitzer & Sheeran, 2006). For example, "If I see my teammate getting angry, then I will remind him that any retaliation against an opponent will result in being penalized!" Being present at practices afforded me the opportunity to "hang out in the shadows" (Halliwell, Orlick, Ravizza, & Rotella, 2003) and be available for the athletes if ever they felt like talking for a few moments before, after, or during practice. Travelling with the team to away games provided additional opportunity to discuss performance and emotions. Botterill (1990) has stated that players can be more receptive to working on their mental game on the road as it coincides with being away from friends, family and the distractions at home. I also engaged with performance and emotion regulation debriefs with players periodically throughout the season. Often these would occur in email exchanges throughout the week.

The intervention also included debriefs with Coach about his pre-game, post-game, and intermission speeches. Coach's speeches were perhaps the most prominent instances of collective team emotion regulation and their potential for emotion regulation has already received research attention (e.g., Vargos-Tonsing, 2009). Part of my role was to debrief these speeches with Coach afterward and discuss their intended purposes in terms of emotion regulation, the appropriateness of the messages given the situation, and the perceived effectiveness of their transmission. These discussions occurred immediately following the speech, on the bus ride home from away games, or in follow up email exchanges throughout the week.

Lastly, I used myself as an intervention tool throughout my time with the team. Poczwardowski and Sherman (2011) offered that the delivery of sport psychology services is in itself, a performance. This presents the opportunity to model the skills we try to teach our

athletes (Poczwardowski et al., 1998). Very few studies in sport psychology have presented the practitioner as a primary intervention tool, choosing instead to focus on specific techniques (Barker et al., 2013). Therefore whenever possible I tried to exhibit effective interpersonal emotion regulation while interacting with teammates, coaches, and managers. The interpersonal emotion regulation skills I modelled were often those depicted in Friesen et al. (2013b).

**5.3.3 Procedure**

After ethical permission was granted by my university ethics board, I contacted the coach of a professional ice hockey team midway through the 2010-2011 season. I explained the purpose of my research and inquired about his willingness to participate in an intervention to improve the interpersonal emotion regulation abilities of his players. I explained how it would be embedded within a broader applied sport psychology intervention whereby any mental performance needs of the players could be addressed.

I spent the remainder of the 2010-2011 season with the team building rapport and helping athletes talk through issues relating to their performance psychology. Team and individual performance statistics were recorded as a pre-intervention baseline. Emotional intelligence scores were then recorded near the beginning of the 2011-2012 season. Throughout the 2011-2012 season, I attended regular home practices and games and travelled with the team to away games working as an applied practitioner. At the end of the season, performance and emotional intelligence scores were again recorded and social validity interviews were conducted. During the 2012-2013 season, I remained in contact with the team, primarily through email to discuss developments in their mental games. However, my role was not as intensive as the previous season.

**5.3.4 Data Collection**

The intervention is evaluated using practitioner reflections, social validation interviews, emotional intelligence scores (pre- and post-intervention) and performance markers.

**5.3.4.1 Practitioner reflections.**

Anderson et al. (2004) suggested that reflective practice is particularly appropriate for interventions where the practitioner is the main instrument of the intervention. Therefore the results are presented in part as reflective narratives completed throughout the three seasons using Gibbs' (1988) model of reflection (see Figure 5.2).
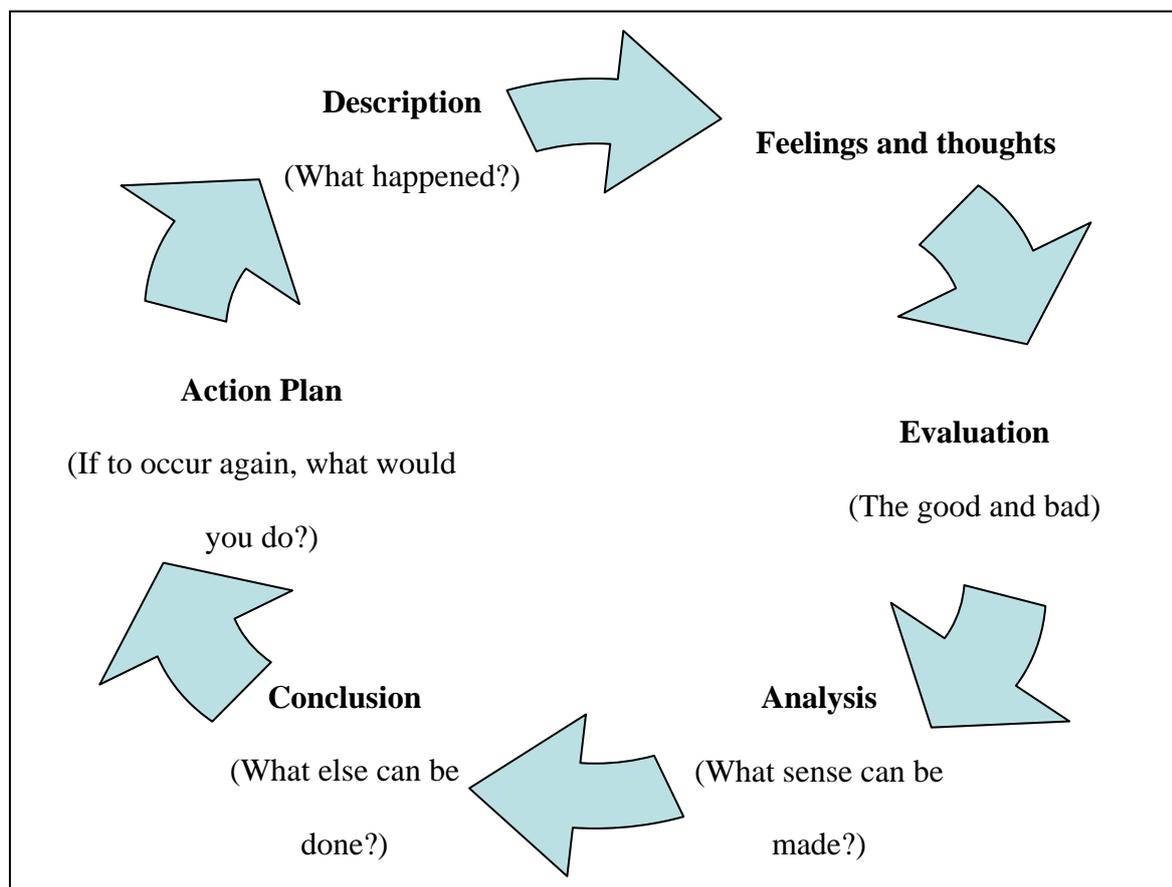


*Figure 5.2 Gibbs' (1988) Model of Reflection*

**5.3.4.2 Social validation.**

Coupled with these reflections are inserts from athlete social validation interviews. Kazdin (1982) described social validity as the "consideration of criteria for evaluating the

focus of treatment, the procedures that are used and the effects that they have" (p. 479). Social validation checks are often, though not universally, used in sport psychology intervention research. In a recent synthesis of single-case interventions, Barker et al. (2012) reported that 34 of the 66 studies included in their review used some derivative of social validation methods. Page and Thelwell (2012) explained that three key areas require attention when asking athletes the extent to which an intervention was effective: (a) the social significance of intervention goals or the extent to which the intervention goals are important to the athletes; (b) the social appropriateness of procedures or the extent to which athletes perceive the intervention strategies to be pertinent; and (c) the social importance of effects or the extent to which athletes are happy with the intervention results. I asked for feedback on these three areas from players throughout and at the completion of the season. In order to provide context to their comments, select social validity interview excerpts are presented with reference to the critical incidents I reflect upon.

**5.3.4.3 BEIS-10.**

The current intervention measured pre- and post-intervention scores of emotional intelligence using the BEIS-10 (Davies et al., 2010) to monitor emotion regulation skill usage. Five factors of emotional intelligence are measured in the BEIS-10: (a) appraisal of own emotions, (b) appraisal of others' emotions, (c) regulation of own emotions, (d) regulation of others' emotions, and (e) utilisation of emotions.

**5.3.4.4 Performance.**

"The effectiveness of applied sport psychology is ultimately judged by performance improvements" (Anderson et al., 2002, p. 443). As such, the current intervention was also measured against various performance markers (i.e., win percentage, average goals scored per game, and average goals allowed per game). The inclusion of individual statistics was

considered. However, it was perceived that such inclusion might jeopardise confidentiality by making each participant easier to identify.

**5.3.5 Trustworthiness**

Tracy (2010) proposed eight criteria for judging the quality of qualitative research. While an attempt has been made to address most of these in the review of literature and procedure (i.e., worthiness of topic, rich rigorousness, sincerity, significant contributions, ethicality, and meaningful coherence), two more criteria deserve further attention. This study has attempted to establish credibility through thick descriptions of select intervention techniques which were employed in order to potentially enhance the interpersonal emotion regulation within participants. Furthermore, data in the form of practitioner reflections, social validity interview excerpts, psychometrics and performance changes are presented in triangulation to document the potential manifestation of intervention effects. Secondly, although we recognise that longitudinal sport psychology interventions will also be influenced by the unique professional philosophies of each practitioner, we have presented a detailed description of the guiding theory (i.e., EASI model) which served as a theoretical framework for the current intervention. This theory allows for potential replication or transferability to different settings.

<div align="center">

**5.4 Results**

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**5.4.1 Practitioner Reflections**

The intervention consisted of four components: dressing room debriefings, emotional intelligence assessment and feedback, using myself as an intervention tool, and brief contact interventions. The following reflections exemplify each component and are coupled with inserts from social validity interviews.

### 5.4.1.1 Dressing room debriefs.

*Description.* During the last game of the season, Coach gave Ethan some on-ice instructions. Ethan retorted with, "Why don't you mind your own game?" At the intermission in the dressing room, before Coach began the period debrief, he approached where Ethan was sitting, bent down to reach his eye-line, and shouted, "If I f\*\*king talk to you, and you backtalk me again, I'll f\*\*king knock you out! Right? I'm the f\*\*king coach of my team; don't tell me to mind my own business! F\*\*king bullshit Ethan...f\*\*king bullshit!" Coach then tried to regain his composure and follow up with the team period debrief. Once he finished, he walked out of the dressing room. I followed after him. He looked at me and asked if he had handled that properly.

*Thoughts and feelings.* The first impression I shared was that Ethan had certainly violated a cultural norm talking back to Coach in a disrespectful manner. This is usually perceived as unacceptable behaviour in ice hockey and warranted some sort of reprimand. The second impression I shared was in considering the likely immediate emotional effects on Ethan and the team. I considered how I would have felt in that situation and how that might or might not have changed given Ethan's personality. He was typically not the kind of player to display disrespectful behaviour towards Coach. I thought that Ethan was likely going to feel ashamed for his actions, anxious about upsetting the coach, and embarrassed that he was singled out for his poor attitude in front of the entire team. All of these would likely result in Ethan deciding not to backtalk Coach again. As for team effects, considering it was the last game of the season, I rationalized that Coach's outburst conveyed the message that it was still a meaningful game and poor performance or disrespect within the ranks was as unacceptable.

*Evaluation.* Debriefing Coach's intermission talks became a regular tool to help enhance his interpersonal emotion regulation. I was particularly encouraged when he began conferring with me before talking to the team to get my perspective on the team's collective

emotional state and by making sure I had a seat next to him on the bus rides to and from games. These gestures reinforced to me that Coach perceived I was useful to the team.

*Analysis.* Given what I perceived to be the likely emotional effects on Ethan and the team, I told Coach that his emotional outburst was justified and likely would be effective in bringing about beneficial emotional and subsequent performance effects. Both instances of interpersonal emotion regulation can be situated within the EASI model. Between Coach and Ethan, I believed that the affective reactions and inferential processing that occurred would likely result in comparable behaviour. That is, Ethan would feel complementary emotions to Coach's anger in the form of embarrassment or shame (affective reactions) and understand Coach's perspective (inferential processing) and modify his performance appropriately. However, I was concerned that Ethan might have unintentional affective reactions to Coach's rebuke and be resentful towards him. That is, if Ethan felt Coach's outburst was inappropriate, Ethan would likely feel reciprocal emotions towards Coach and would cause him to feel resentful (Van Kleef et al., 2011). Therefore, Ethan's belief as to the appropriateness of Coach's outburst might be a potential modifier to the interpersonal emotion regulation. If that were the case then, as the EASI model describes, the affective reactions and inferential processing that took place would result in opposing behaviour and the situation could potential result in a damaged relationship.

Between Coach and the rest of the team, I believed that Coach's outburst would regulate the team's collective emotion primarily through inferential processing because the outburst was not directed at them. Research has shown that individuals respond to anger with increased coordination if the anger is directed at their actions rather than themselves (Steinel et al., 2008). Therefore, their epistemic motivation was likely to remain high ensuring emotion regulation through adopting Coach's appraisal of Ethan's behaviour.

*Conclusion.* I continued waiting outside the dressing room as I anticipated Ethan would be one of the first players out to wait for the next period to start in the hallway. Sure enough, he came out first and we had a 30 second brief contact intervention where I could assess whether or not he shared Coach's appraisal of his behaviour thus suggesting effective interpersonal emotion regulation. I made the comment that there "Appeared to be as much action off the ice as on it this game." "Seems so," he replied. I asked what he thought of what happened in the dressing room. "I shouldn't have talked back like I did," was his reply. If Coach's rebuke was going to be unsuccessful in bringing about the desired behaviour from Ethan, I would have expected Ethan to make some sort of derivative statement about Coach. Instead, I was content enough by his response because he seemed to have adopted Coach's appraisal of his behaviour and did not harbour any obvious signs of resentment towards Coach.

To comment on the general effectiveness of dressing room debriefs, I asked Coach to comment on the value (if any) of these types of debriefing sessions. His response was,

I really appreciated the input you've provided throughout the season. You always make things sound so simple. It's been great having someone to bounce ideas off while the game was going on. Sometimes we've had a shit period, I know the guys are down, and am not sure what to say or whatever. Our conversations have made me feel more confident in what I have to say [when talking to the team] as well as to try some new things out. Yeah, you've given me great insight and a lot to think about through the course of the season.

*Action Plan.* Although rebuking a player in front of the team might seem harsh and generate unpleasant emotions in players, it can be an effective interpersonal emotion regulation strategy provided that there is a general appreciation on the team for cultural norms; specifically, for not talking back to Coach in a disrespectful manner. Had the

circumstances been such that Coach had "lost the dressing room," which occurs when the team has lost respect for coach, I believe Coach's emotional expression would have resulted in ineffective emotion regulation as interpersonal emotion regulation from low-status individuals tend to be ineffective (Porath, Overbeck, & Pearson, 2008).

### 5.4.1.2 Emotional intelligence assessment and observation feedback.

*Description.* The players completed the BEIS-10 as part of the intervention. Using these as well as early observations, I provided reflective feedback for each player. In the following example, the feedback for Lewis is provided in Appendix A. The BEIS-10 scores for Lewis are presented in Appendix B. The corresponding observation notes (edited for the immediate topics) are presented in Appendix C.

*Thoughts and feelings.* Lewis is a very emotionally expressive individual. As well, he holds the role of assistant captain. Both of these might suggest that Lewis is in a position to initiate much of the emotional contagion that occurs on the team. As such, my assessment included sharing this observation and providing caution that he should be mindful of his emotional effects on the team.

*Evaluation.* Doing an assessment of the players using the BEIS-10 seemed to be beneficial and well received by the players. It allowed me to give personalized feedback to each of the players which was useful in that there were some players at this point who I felt still were somewhat suspicious of me and had not welcomed me into the dressing room yet. The feedback allowed me to demonstrate that I had useful knowledge to offer the players without being overbearing in my delivery. At the very least, I thought it would also give the players some reading material to pass the long hours spent travelling on the coach to away games.

*Analysis.* Lewis was an appreciated player in the dressing room because of his work ethic. He was also popular because of his attitude and furthermore, was respected as an

assistant captain. The cumulative liking for Lewis, according to the EASI model, would have made Lewis very emotionally influential through affective reactions. That is, there is a tendency to help those we have an affinity for (Clark et al., 1996). Therefore, I thought it was important that he take care to manage his emotional expressions such that they serve to benefit (and not hinder) team performance. Specifically, Lewis had a tendency to play with much expressive anger. An expressively angry leader has been shown to have dynamic emotional effects on team members (Van Kleef & Côté, 2007). In my feedback, I warned Lewis against possible unwanted emotional effects. For example, results from Van Kleef et al. (2009) suggest that teams with an angry leader only perform better when they demonstrated high epistemic motivation. I shared with Lewis that because teammates might not always know the source of his anger, they might respond unfavourably to his emotional outbursts.

*Conclusion.* Lewis replied in an email, "I'd like to thank you for what was a remarkable insight. It makes me smile to read so many positive things being said about me. Thanks for your observations. It's been great having you around the team to provide these insights. It's been a tough season but you've helped everyone learn a bit more about themselves."

*Action plan.* Psychometric assessments have received some criticism in the applied literature citing that the measurements do not attach scores to real-world behaviours (Andersen, McCullagh & Wilson, 2007). However, in this particular instance, I found the BEIS-10 to be a quick and easy way to demonstrate to the team that I had some valuable knowledge to share. It was also a way to connect with players that I would not have otherwise had the opportunity to connect with. The BEIS-10 also was useful disseminating information that was grounded both in theory and in my observations of their lived experiences.

### 5.4.1.3 Myself as emotion regulator.

*Description.* Occasionally, the team would have an away game where the equipment manger was not able to attend. This left players in charge of their own equipment before, during, and after games. During one such game in the midst of a losing streak, I stepped in and took on the role of equipment manager. These duties included everything from unloading equipment from the bus, prepping the sticks and bench, filling water bottles, managing the glove dryer, getting towels, cleaning up the dressing room, and stowing wedding rings and jewellery. While performing these duties, I made the conscious effort to do so with the same effort and energy at the end of the game as at the beginning, and more importantly, without complaining.

*Thoughts and feelings.* There were two potential benefits to my adoption of the equipment manager role. The first benefit is that it allowed me to become a source of interpersonal emotion regulation myself that the players could model. In individual interviews, demonstrating a strong work ethic was reported as a common interpersonal emotion regulation strategy (Friesen et al., 2013b). I thought that if I demonstrated a positive work ethic, the players would infer that they should themselves, and begin to feel energized themselves. In this manner, I became a model of interpersonal emotion regulation for the team (Poczwardowski et al., 1998). The second benefit was that it helped me become a member of team. I was conscious that if I wanted the players to "buy in" to what I had to offer them, I had to earn their respect. Dunn and Holt (2003) discussed how players favourably regard consultants who fulfil multiple roles on the team. Specifically, they advocated for displaying a strong work ethic that matches their efforts on the ice.

*Evaluation.* The team itself unfortunately had a rough game and eventually lost. At the time, I was unsure whether I had any emotional effects on the team. During that time, I did not have the opportunity to observe potential interpersonal emotion regulation as I was

trying to be attentive to my equipment manager duties. However, in retrospect, I believe I achieved the two outcomes of becoming an appreciated member of the team and demonstrating effective interpersonal emotion regulation strategies as will be explained below.

*Analysis.* As equipment manager, I had the opportunity to demonstrate interpersonal emotion regulation in action. Situated within the EASI model, it was my intention to regulate others' emotions by utilizing both inferential processing and affective reactions. The team was in the midst of a losing streak and the team collectively felt frustrated and hopeless. This was beginning to manifest in their performance as the team was consistently falling behind on the scoreboard resulting in nearly insurmountable deficits. By demonstrating a strong work ethic, I was hoping the team would react and emotionally "catch" my high arousal and determination (affective reactions). Emotion contagion of pleasant emotions has been demonstrated to improve group cooperation, decrease conflict, and increase task performance in laboratory settings (Barsade, 2002). I was hoping to reproduce similar results in the dressing room. Additionally, I was also hoping my determined work ethic in the face of losing circumstances communicated the message, "That despite the score, I am not going to let circumstances dictate how we feel and perform" such that the players would adopt the appraisal as their own and respond accordingly (inferential processing).

*Conclusion.* Fulfilling the equipment manager role helped establish myself as a member of the team. After the game, I received many acknowledgements and words of appreciation by the team including players who had not been too forthcoming beforehand. On the coach ride home, three players who had not shown particular interest in participating in individual interviews asked if they could schedule one in within the next week. In talking to players later, many of them acknowledged the effect it had: Lewis recalled how "there's nothing better than seeing someone working his bag off to help the team. It definitely gives

guys a lift. You create something positive. I wish some of our players had the commitment that you did." Additionally, Ross mentioned, "all the work you've done helping us out when we were short [of an equipment manager] didn't go unnoticed. I appreciated it."

*Action plan.* A number of anecdotal reports of applied practice have highlighted the value in performing the odd jobs that earn respect from the team (Dunn & Holt, 2003; Friesen & Orlick, 2011). Bourgeois and Hess (2008) demonstrated that the level of emotion contagion can vary depending upon whether initiated by an in- or out-group member. By working my way into the team, I was in a position to be a more powerful influence and source of interpersonal emotion regulation for players to model.

### 5.4.1.4 Brief contact interventions.

*Description.* During one game, our team was playing poorly and found ourselves down 1-7. After a particularly poor shift by our players where there were blown defensive assignments and poor effort which resulted in a goal against, Coach made the decision to substitute our goaltender. I got the feeling this was an act of mercy so our goaltender's statistics would be minimally damaged. Our backup goaltender began to prepare himself but as he skated onto the ice, the starting goaltender waved him off and refused to leave the net. Our backup subsequently returned and took his seat on the bench. When other players asked the backup why he did not come into the game, the backup responded with, "I guess he doesn't want me in." After the game before he entered the dressing room, I had a brief moment with our starting goaltender and asked why he waved off the backup. "I wanted to show the guys I hadn't given up on the game" was his response. I quickly considered the contrast between his message and the message that the backup had apparently received. Fearing a possible misinterpretation of actions and subsequent emotional effects, I encouraged our goaltender to share with the team what his reasoning in for waving off the backup goaltender.

***Thoughts and feelings.*** I admired our goaltender for remaining dedicated to his position in a game that was out of reach. I thought he had a powerful message to share that could increase some arousal and pride in his teammates and stimulate them to play better. However, at hearing the backup goaltender's appraisal of the situation, I feared that the message might be lost, jeopardising our goaltender's interpersonal emotion regulation strategy.

***Evaluation.*** Many applied sport psychology practitioners have advocated for the value of brief contact interventions (e.g., Gould, 2001; Hodge & Hermansson, 2007; McCann, 2000). In this instance, the player had already selected an interpersonal emotion regulation strategy to use on his teammates. My role then, was to provide a quick debrief with him to ensure that the message being effectively communicated.

***Analysis.*** Our starting goaltender had attempted to regulate the teams' emotions through inferential processing. That is, he wanted them to adopt his appraisal that the team had to finish what they started in an attempt to increase their arousal and lead them to play better by choosing to stay in his position after the decision had been made to replace him. This could have been a violation of cultural norms because rarely in ice hockey does the goaltender take it into his own power to determine when he is, and is not, substituted. According to EASI model principles, violating this norm would increase the epistemic motivation of his teammates, heightening their motivation to try and understand our goaltender's appraisal. However, Van Kleef et al. (2011) suggested that heightening the epistemic motivation of others might trigger unwanted affective reactions (cf. Bartholow, Fabiani, Gratton, & Bettencourt, 2001). Because of the backup goaltender's reaction to being waved back, I thought it would be appropriate for our starting goaltender to share his appraisal explicitly as to not incur misunderstandings that might lead to possible resentment from the backup goaltender.

***Conclusion.*** We joined the team in the locker room. Before Coach could begin his post-game debrief (which was bound to include some "fire and brimstone" emotion regulation because of how poorly we played that game), our starting goaltender asked to address the team. To paraphrase, he said he wanted to apologise to our backup goaltender and assured everyone that he meant no disrespect. His actions were instead intended to show that he had not given up on the game and he wanted to set an example that we should finish what we start. During a follow-up interview, our starting goaltender expressed,

> By the way, I would like to thank you for the feedback you provided [during this game]. I think you were 100% right in what you were saying. I greatly appreciated having you around for our pre/post game chats that always seem to keep me relaxed and open-minded about the mental aspect of the game.

***Action plan.*** Brief contact interventions are a very important aspect of my professional philosophy because you engage with an athlete in a way that cannot be achieved through team workshops or presentations. In that brief moment is an opportunity to provide some meaningful reflections based on the current needs of the athlete. Interpersonal emotion regulation is a cycle that rotates through the agent's emotional expression, the target's reaction, the agent's reaction to the target, the target's reaction to agent and so on (Hareli & Rafaeli, 2008). Because of the prominence of emotions in our interactions, nearly every expression, action, and message can have emotional connotations. Brief contact interventions can be used to monitor players and their choice of regulation strategy and whether or not it had the intended effect.

**5.4.2 Emotion Intelligence**

Results from the BEIS-10 show a significant improvement in overall emotional intelligence for the 15 players that completed pre- and post-intervention assessments ($\chi^2 = 66.625$, $df = 48$; $p = .046$). The majority of the players increased in overall emotional

intelligence. Five players showed a slight decrease. Emotional intelligence scores are presented in Table 5.2. Each score represents a participant. For example, one participant scored 36 at pre-intervention and 39 at post-intervention; whereas two participants scored 42 at pre-intervention and 44 at post-intervention.

Table 5.2

*Emotional intelligence Pre- and post-test scores*

| Pre-intervention scores | Post-intervention scores | | | | | | |
|---|---|---|---|---|---|---|---|
| | 34 | 36 | 37 | 39 | 42 | 43 | 44 |
| 34 | 1 | | | | | | |
| 36 | | | | 1 | | | |
| 37 | | | | | 1 | 1 | |
| 38 | | | 2 | 2 | | | |
| 39 | | 1 | | | | | |
| 40 | | | | 1 | 1 | | |
| 41 | | | | | | | 1 |
| 42 | | | | | | | 2 |
| 47 | | | | | | 1 | |

Of the five emotional intelligence subscales measured in the BEIS-10, two address interpersonal emotion regulation. There was a significant change in the players' abilities to appraise their teammates' emotional states ($\chi^2 = 20.357$, $df = 12$; $p = .03$). However, the change in the ability to regulate others' emotional states was positive, though not significant ($\chi^2 = 16.625$, $df = 16$; $p = .20$).

**5.4.3 Performance**

Performance markers for the team (i.e., win percentage, average goals scored per game, and average goals allowed per game) are presented for the 2010-11 season (representing pre-intervention baseline) and the 2011-12 season (representing post-intervention) in Table 5.3. There was an increase in win percentage from 19% to 24%, and decreases in average goals scored (from 3.02 to 2.33) and average goals allowed (from 5.52 to 5.13). The respective differences in win percentage and average goals against suggest beneficial intervention effects. Whereas the decrease in average goals scored suggests a detrimental intervention effect.

Table 5.3

*Pre- and Post-Intervention Performance*

|                            | 2010/2011 | 2011/2012 |
|----------------------------|-----------|-----------|
| Wins                       | 10        | 13        |
| Losses                     | 44        | 41        |
| Winning percentage         | 0.19      | 0.24      |
| Goals scored               | 168       | 138       |
| Goals scored/game          | 3.02      | 2.33      |
| Goals scored against       | 298       | 277       |
| Goals scored against/game  | 5.52      | 5.13      |

**5.5 Discussion**

The current case study detailed an applied sport psychology intervention focused on the enhancement of interpersonal emotion regulation. The intervention was carried out with 23 members of a professional British ice hockey team over the course of three seasons. The intervention was informed by a social-functional approach to emotion (Keltner et al., 2006)

and utilised the Emotions As Social Information (EASI) model (Van Kleef, 2009). These theoretical frameworks were incorporated into the professional philosophy of the practitioner which further guided the intervention. Predominant intervention techniques included emotional intelligence assessments and feedback, brief contact interventions, dressing room debriefings, and managing myself as an intervention tool. Results were reported in the form of practitioner reflections supplemented with social validity interview excerpts, and pre- and post-intervention measures of emotional intelligence and performance.

**5.5.1 Reflecting on Service Delivery**

There has been a growing body of literature that articulates various mechanisms of service delivery that influence the extent to which sport psychologists can be successful in helping athletes improve their mental abilities. These have been derived from anecdotal reports of sport psychologists (e.g., Haberl & McCann, 2012; Fifer, Henschen, Gould, & Ravizza, 2008), responses from athletes (e.g., Anderson, Miles, Mahoney, & Robinson, 2004; Dunn & Holt, 2003) and coaches (e.g., Gould, Murphy, Tammen, & May, 1991; Partington & Orlick, 1987). Upon reflection, there were many aspects of my service delivery that potentially influenced my effectiveness as a practitioner. I will highlight a few of the more pertinent ones.

Dunn and Holt (2003) presented perceived aspects of intervention effectiveness from the perceptions of a collegiate ice hockey team. Among many factors, their athlete participants appreciated the consultant who was an effective communicator. Uphill et al. (2009) suggested that it is the appraisal of the situation, rather than the situation per se, that influences the intensity of the emotional response. Therefore, interventions should target athletes' appraisal of situations or events. For example, results illustrated how during a brief contact intervention, I explained to our goaltender that he might need to be more explicit in explaining why he refused to exit the net after the decision had been made to substitute him.

Therefore, consistent with the EASI model, an important role as the sport psychologist enhancing interpersonal emotion regulation on the team was to provide opportunity for the correct appraisals of the situation to be communicated.

**5.5.2 Evaluation of Intervention**

Results from psychometric assessments suggest a significant improvement in emotional intelligence. Specifically, there was an overall improvement in emotional intelligence however many of the emotional intelligence factors showed only non-significant improvements. A potential explanation for the only non-significant increases might have been an overestimation of emotional intelligence at the outset of the intervention. A critique of self-report data has been for the opportunity for results to be biased for social desirability. Indeed, ice hockey culture is subjected to machismo facades and the perception of being low in emotional intelligence might be perceived as being mentally weak (Friesen et al., 2013c). For example, the average pre-intervention score on the item: "I know why my emotions change" from the BEIS-10 was 4.25 indicating that most of the players reported a score of 4 or 5 out of a possible score of 5. An average response of 4.25 out of 5 suggests there is a possible ceiling effect that is occurring. Because the players started with such a high average score on the item pre-intervention, there might have been little opportunity to show a significant post-intervention score (4.27).

Another possible explanation is that players might simply be unaware of the extent of how emotionally unintelligent they were at the start of the intervention. It is possible to conceive that a player who rated his ability to perceive others' emotions as very good might, through the course of the intervention, come to realise that his emotion regulation skills were actually much worse than what he initially believed. This could account for various emotional intelligence scores that decreased throughout the course of the intervention. Therefore, it might have been appropriate to deliver an educational workshop prior to the intervention.

This workshop could have provided an opportunity for group discussion into what emotion regulation means, how it might be performed, and when it could be best be implemented.

Another explanation for limited intervention effects might be due to the team's standing in relation to the league. As evidence by the performance statistics, the team had a poor winning percentage. Match outcomes can have a significant effect on moods (Polman, Nicholls, Cohen, & Borkoles, 2007). As a result, the team was mathematically eliminated from playoff contention already near the midpoint of the intervention. When a team is eliminated from playoff contention, the possibility exists that the remaining games become less meaningful, thereby eliciting less intense emotions (Lazarus, 1991). Gaudreau, Amiot, and Vallerand (2009) demonstrated that hockey players' affective states will follow specific trajectories throughout the season. Although their analysis revolved around team selection, based on the current results, it would be a worthwhile avenue to investigate the emotional effects of being eliminated from playoff contention. As a result, emotional experiences might be diminished because emotions are so closely linked to appraisals of meaningfulness (Lazarus, 2000). Gino, Brooks, and Schweitzer (2012) stated that an individual's emotional state will affect the extent to which they heed advice. Therefore, if we speculate the players' emotional state after being eliminated from playoff contention included anxiety, hopelessness, or sadness, they might have become less receptive to incorporating any techniques to enhance interpersonal emotion regulation.

Social validity data suggested that the intervention was indeed helpful in enhancing interpersonal emotion regulation for the players. For example, many of the players reported an increased awareness of others' emotional states as well as for when and how to initiate interpersonal regulation strategies and with which emotional states their teammates best competed in. Furthermore, since the completion of the intervention, I have maintained contact with the coach and some players as they have continued to ask questions about their

performance and management of emotions. Ongoing discussions and contact with athletes has been presented as an indicator that athletes and coaches indeed benefit from the provision of sport psychology services (Friesen & Orlick, 2010; Poczwardowski & Sherman, 2011)

**5.5.3 Contribution to Theory**

This study is the first intervention to be situated in the EASI model of interpersonal emotion influence and regulation representing a particular contribution to the social psychology literature. Consistent with research that emotions have social-functional value and elicit general patterns of social behaviour (Van Kleef et al., 2004b; 2006), discussions about the instrumental functions of emotions frequently occurred. For example, the incident between Coach and Ethan provided an opportunity to explain how Coach's anger expressions served to remind players that maximum effort is still expected even in perceivably hopeless circumstances and that insubordinate behaviour (i.e., Ethan's actions) will not be tolerated. However, in line with the contributions of social constructionism to a social-functional approach to emotions, these social functions were influenced by the unique meta-emotions held by the agent individual. The EASI model focuses substantially on the interpersonal process and moderating factors rooted within the situation or the target individual (Van Kleef et al., 2011). However, results from this study suggest that characteristics embedded within the agent individual are equally important.

As illustrated in the results, a strategy to enhance the interpersonal emotion regulation within the team included using myself as a model by which team members could emulate. The intent was to not only regulate the appraisals of the team, but also to act as a potential source for emotion contagion. Van der Shalk et al. (2011) tested the assumption that emotion contagion is moderated by group membership. Their results demonstrated that anger and fear are more likely to be mimicked by in-group members than out-group members. Although I had performed the role of equipment manager which athletes have reported helps earn respect

for the practitioner (Dunn & Holt, 2003), I was mindful that I was still likely to be considered an out-group member. That is, I was not a player and despite my efforts, I had not endeared myself to some members of the team. Therefore, my own emotion regulation was centred at presenting calm and energising expressions even when there were moments when I believed an expression of anger might have been more facilitative. How sport psychologists regulate their own emotions as a management of others' emotions would represent a line of future inquiry that could compliment past research on emotional labour (cf. Pugh, 2001; Van Kleef & Côté, 2007).

The current study could have been strengthened by the incorporation of additional assessment measures. For example, research in interpersonal emotion regulation has led to the development of the Emotion Regulation of Self and Others scale (Niven et al., 2011) which has been subsequently studied in the context of athletics (Lane, Beedie, Stanley, & Devonport, 2011). Although the use of BEIS-10 contains factors that measure the extent to which athletes are aware and able to regulate others' emotions, new research has proposed that new abilities to (a) decide which emotional display with have a desired impact and (b) effectively elicit these displays during interpersonal interactions be incorporated into models of emotional intelligence (Côté & Hideg, 2011). Furthermore, the current study might have benefitted from more specific performance markers to chronicle behavioural effects of interpersonal emotion regulation. Incorporating measures that document subjective (e.g., Woodcock et al., 2012) or objective (Nadeau, Godbout, & Richard, 2008) performance would be useful in future research on intervention effectiveness.

### 5.6 Appendix A Lewis' Assessment and Observation Feedback

Lewis, it was an absolute pleasure being able to watch you play hockey and interact with you in the locker room this season. I wanted to share some of my reflections about what I've observed in your mental/emotional game. You're obviously very passionate about hockey Lewis, and it shows through your commitment, sacrifice and work ethic. Numerous times you've been knocked down and out (literally) only to come back and lead the team by your determination.

The emotional intelligence assessment revealed that you have a high ability to manage your teammates' emotions. No doubt this is why you're assistant captain and why the team looks to you for energy and guidance. You took ownership of that role to help your teammates get into the right state of mind and I would encourage you to look to fulfil that role in every team you play for until the end of your career. The assessment also indicated however that you're not always sure what emotions your teammates are feeling. As you said in your interview and have come up in our conversations, you wear your emotions on your sleeve-and indeed that's a strength for you. However, because you're so expressive, there's the possibility that you might miss what emotions your teammates are feeling because they're not as expressive as you are.

I had the opportunity to observe you while both playing and in more of a coaching role this year. There were a few games when you were behind/beside the bench in a coaching role due to injuries. I noticed an interesting contrast between how you manage your teammates while playing and how you manage them while coaching. When playing, you have a tendency to express quite a bit of anger usually resulting from a missed scoring opportunity. Numerous times I watched you shout out in frustration when coming off the ice. That's all fine and part of the game, but there is a danger that if your teammates see you so angry, they may wrongly guess what you're angry about and think that you're mad at them

(which I happen to know was sometimes the case). When I compare that to what I saw when you were injured and behind the bench, it was a much different Lewis. You were a lot more encouraging with the guys and there was a lot more productive talk about tactics and strategy. That weekend when the team won back-to-back games, in both games, you spent some time behind the bench, and I don't see it as a coincidence that we won those games. How you managed and encouraged your teammates brought out the best in them! And that is a very special (and rare) talent Lewis-to bring out the best in your teammates. Crosby does it. Lemieux and Gretzky did it too. I'd encourage you to act how you did when you were behind the bench when you're on the ice more often. I know you can get frustrated because you're such a passionate player. And this isn't about attitude because you and I both know you have a good attitude. But if you were to express less anger coming off a shift, I think the next line on would have more positive energy to build off of.

I hope these words of reflection help, Lewis. If you'd like to talk about the season some more, I'd be happy to chat.

Andrew

## 5.7 Appendix B BEIS-10 Scores for Lewis

Table 5.1
*BEIS-10 Scores: Lewis*

| | | |
|---|---|---|
| Appraisal of own emotions | I know why my emotions change | 4 |
| | I easily recognize my emotions as I experience them | 4 |
| Appraisal of others' emotions | I can tell how people are feeling by listening to the tone of their voice | 4 |
| | By looking at their facial expressions, I recognize the emotions people are experiencing | 3 |
| Regulation | I seek out activities that make me happy | 5 |
| | I have control over my emotions | 4 |
| Social skills | I arrange events others enjoy | 5 |
| | I help other people feel better when they are down | 4 |
| Utilization of emotions | When I am in a positive mood, I am able to come up with new ideas | 4 |
| | I use good moods to help myself keep trying in the face of obstacles | 4 |

**5.8 Appendix C Example Observation Notes for Lewis**

*January 2012*. Something I noticed with Lewis is the passion that he plays each shift with. However, this weekend, I observed something that might lead to some unwanted interpersonal emotion regulation. After a shift that where Lewis missed the net on what should have been a scoring opportunity, he shouted a number of expletives on his way back to the bench. While I don't think Lewis noticed, I could see that his line-mates had noticed (likely felt) his frustration. They seemed to have that look on their face that was somewhere between guilt and confusion. I wonder if they thought Lewis was mad at them instead of his own missed opportunity—something I'll have to bring up with him later.

*March, 2012*. Despite the great weekend, it was a rough one physically for Lewis. Saturday he had to leave mid-way through the second with a suspected concussion. Sunday he had to do the same with similar symptoms following the first period. With him being out of the game, he took charge in both games as being the motivating voice on the bench. I joked with Sean on Sunday that I think Lewis enjoys being on the bench as much as being on the ice. Saturday he did much of his communicating through whichever players were nearest to him on the bench. One time in particular, I remember seeing Lewis get Gareth's attention and made a "calm down" motion with his hands. Gareth then gave the message to the rest of the bench. Perhaps a bit of interpersonal emotion regulation through another person? I suppose the mark of a good leader is that they keep leading even when they've been taken out of the game.

## CHAPTER 6: GENERAL DISCUSSION

### 6.1 Introduction

The first objective of this chapter is to summarise the present research programme, and draw conclusions concerning pertinent findings. This will be followed by an exploration of strengths of the present research programme and contribution to the emotion regulation literature. Postulations for future research will be presented having identified and discussed the limitations of the present research programme. In order to facilitate a coherent and robust conclusion, reference will be made to relevant sections of the thesis, and corresponding information.

### 6.2 Review of the Research Objectives and Outcomes

The purpose of this research programme was to develop and deliver an intervention to enhance the interpersonal emotion regulation within a professional ice hockey team. Despite the need to coordinate with teammates, coaches, managers, and sport science staff, emotion regulation has largely been studied from an intrapersonal perspective in sport psychology (Lane et al., 2012). The regulation of interpersonal emotions has been gaining attention in the social psychology circles (e.g., Butler & Gross, 2009; Campos et al., 2011; Fischer & Van Kleef, 2010; Hareli & Rafaeli, 2008; Niven et al., 2009; Totterdell et al., 2010) advancing theories that explore the mechanisms that potentially explain why and how emotions might to be regulated. Given that emotion regulation research has flourished across many psychology sub-domains (Gross, 2010), this research programme intended to incorporate the knowledge from these domains and integrate them within the realm of sport. The objective was to use this knowledge to inform and deliver an applied sport psychology intervention that enhanced the interpersonal emotion regulation within an ice hockey team and thereby help improve their performance.

The research programme comprised of three stages. Stage one reviewed available theory and research on interpersonal emotion regulation from social and sport psychology (see Chapter 2). Arising from this review were some of the key issues that helped formulate subsequent research questions including a discussion on instrumental emotion regulation, the social functions of emotions, and a recommendation to utilise the EASI model in sport as a theoretical framework of interpersonal emotion regulation.

The second stage of this research programme explored the interpersonal emotion regulation in ice hockey. To that end, two British ice hockey players, each captains of their respective teams participated in semi-structured interviews to explore how they decide to engage in interpersonal emotion regulation (see Chapter 3). A narrative analysis helped locate the social functions of emotions and how they potentially influence decisions to regulate others' emotions in ice hockey. Different social functions emerged depending upon what level of analysis was undertaken (Keltner & Haidt, 1999). Specifically, players described how emotions informed them of important circumstances in their environment that required attention and prepared them for such challenges at the individual level. For example, players' own feelings of embarrassment after a poorly executed shift can lead them to try to increase anger in their teammates to communicate the message that they are not on track to reach their goals. At a dyadic level, one's own emotions helped players understand the emotional states and intentions of their teammates contributing toward an assessment of the extent to which they were prepared to face their challenges. For example, seeing a teammate with more anxiety than what is perceived to be useful can trigger a player to help calm the teammate down. At a group level, emotions helped players lead their teammates to meet shared goals. For example, being a captain is often associated with portraying a calm demeanour in order to help teammates also maintain consistent emotional intensity levels. Finally, at the cultural level, emotions helped players maintain culture-related identities. For example, upon seeing

teammates playing poorly, a player might try to increase shame in the teammates in order to communicate the message that they are not playing according to ice hockey sub-cultural expectations.

The exploration into interpersonal emotion regulation continued with an examination into commonly used regulation strategies and moderators (see Chapter 4) in ice hockey. Sixteen members of a professional British ice hockey team were interviewed. A content analysis revealed verbal and behavioural strategies intended to initiate affective reactions and inferential processing in the target individual. Whether these strategies brought about intended performance effects in the target individual was suggested to be moderated by social-relational factors and the inferential processing abilities and motivation of the target individual.

The final stage of the research programme comprised of an intervention to develop the interpersonal emotion regulation abilities of a team of ice hockey players (see Chapter 5). I worked as an applied practitioner with a British team competing in a top-tier league over the course of three seasons. Specific intervention techniques included: a) managing myself as an intervention tool, thus to demonstrate effective emotion regulation; b) brief contact interventions, to help encourage reflection on the intensity of emotions and possible strategies to manage these emotions if the emotion is too intense or not intense enough; c) emotional intelligence assessment and feedback in order to raise awareness of the management and function of emotions and prompt further discussions; and d) dressing room debriefs that discussed the coach's use of interpersonal emotion regulation strategies. Results of the intervention were presented in the form of practitioner reflections, pre- and post-intervention measures of emotional intelligence, social validity contributions, and performance measures. Together, they showed support for the effectiveness of some aspects of the intervention.

## 6.3 Reflections on Applied Roles

Before proceeding with a review of potential contributions to research, because of the applied nature of the research programme it would be appropriate to include some reflections about the delivery of the intervention. Poczwardowski et al. (2004) suggested that applied practitioners can expect to fulfil a number of roles in any applied setting. There were three specific roles I fulfilled while working with the ice hockey team. The first role was that of educator. This included informing players what meta-emotional beliefs might potentially be useful in a situation, what the likely emotional effects might be if they were to try to regulate a teammate's emotions, and providing possible explanations for regulation attempts that failed to change a teammate's emotions or emotion intensity. For example, in section 5.4.1.1, Coach highlighted the extra insight and perspective I provided throughout the course of the intervention. One particular story to illustrate this point comes from a night on the ride home from an away game. The team had lost its eighth straight game. Coach and I were debriefing on the bus and I was telling him that his intermission speeches were getting too repetitive and the tone in which they were being delivered was becoming increasingly angry. I felt the players were starting to tune him out because they seemed less animated in the dressing room. To situate this within the EASI model, I felt that the players' motivation to adopt Coach's appraisal of the situation was decreasing therefore leading to ineffective emotion regulation (Van Kleef, 2010). I encouraged him to get the captains' group more involved in the intermission speeches rationalising that perhaps the speeches might have a greater likelihood of regulating the teams' emotions if they were delivered by someone other than the coach. Furthermore, captains are typically perceived as particularly influential in the dressing room. In this way my role was to educate the coach that it was not necessarily the appraisal of the situation that needed to be changed, but rather, the person that was sharing the appraisal.

The second role I played was that of catalyst or the facilitator of change or discussion. As evidence by section 4.4, the participants in the study had a wealth of experience with interpersonal emotion regulation strategies. Sometimes, my role was not to educate about emotion regulation, but rather to reinforce their past behaviours and suggest slight refinements to make the strategies more effective. This was partially my intent in providing emotional intelligence assessment and observational feedback as exemplified in the section 5.4.1.2. A story to help illustrate this point comes from my interactions with the captain of the team. From the interviews with the participants, it had been explained that tapping another player's equipment or pads was a strategy to increase pleasant emotions in another teammate or to help decrease frustration after making a mistake. The team captain was consistent in using this strategy as he would usually stand beside the gate to the playing surface and give each teammate a tap on the pads as they came off the ice. However, I had noticed that after periods where he himself had played poorly (and arguably was himself, in need of some encouragement) he would forego this gesture and immediately head into the locker room. Remembering that interpersonal emotion regulation can be affected by the lack of expected regulation (e.g., Vargas-Tonsing & Guan, 2007) I asked the captain if I could talk to him discretely off to the side (see section 4.4.1.1). I reminded him that giving the players a tap on the pads as they exited the ice was a helpful interpersonal emotion regulation strategy. I offered that the gesture likely increased pleasant emotions in his teammates and likely had beneficial emotional effects for him as well. I encouraged him to consistently perform that gesture and to be particularly attentive in doing so after he had played a poor period. Thus in this instance, my role was to reinforce the player's past patterns of interpersonal emotion regulation.

The third role that I fulfilled was to manage the potential emotional effects on the team. Botterill (2004) has offered that the first priority for the applied practitioner in the

hockey sub-culture is to manage the emotional or psychological effects from the ongoing interactions of the teammates, coaches, managers, fans, and anyone else. An example of this was provided in section 5.4.1.4 where the refusal of our starting goaltender to be substituted had unwanted emotional effects on our backup goaltender. In this instance, embedded in an interpersonal emotion regulation strategy from the starting goaltender to the rest of the team, was an unintended emotional effect on the backup goaltender. He believed that the gesture was a comment on his inability to adequately perform his role on the team. Situated within the EASI model, our starting goaltender had done something to increase the inferential processing of the team by violating a social norm in his refusal to be substituted. While this might have had a positive effect on the rest of the team, it had a negative effect on his counterpart. In this instance, my role was to manage the unintended emotional effects from this gesture. As described earlier, I had a brief contact intervention with our starting goaltender to explain the potential unwanted emotional effects his gesture triggered. Van Kleef (2010) has suggested that the relationship between the agent and target can influence the interpersonal emotion regulation process. Therefore, in this instance, my role was to manage the emotional effects on the team to ensure that an amicable relationship was maintained between goaltenders. In doing so, I was hoping to increase the effectiveness of potential future interpersonal emotion regulation attempts.

Given the applied nature of the research programme, I would be remiss to not discuss the dual practitioner-researcher role that I played throughout the intervention. For the first time in my applied practice, there was a secondary agenda to the performance enhancement of the athletes—that is, the requirements for PhD fulfilment. Whilst this might represent a potential conflict of interests with some research topics, emotion and performance regulation has been closely aligned as researchers (e.g., Stanley et al., 2012) and applied practitioners (e.g., Botterill, 2004) have illustrated the overlap between concepts. Rather than directly

influencing my actions as a practitioner, the research agenda provided a theoretical lens through which I was observing the interpersonal dynamics of the team. That is, much of what I observed was filtered and sorted through the EASI model. For example, during a discussion with our captain, he offered that his style of leadership was more soft-spoken and that he preferred to "lead by example." However, knowing that as captain, the team expected him to portray a certain persona and carry much of the verbal conversation that occurred in the dressing room, I offered that he might need to reconsider his style to adjust to team expectations. This observation was situated within the EASI model in that research suggests that attempts at interpersonal emotion regulation can be undermined when leaders do not comply with the expected social norms from followers (Van Kleef, Homan, et al., 2010). Having a theory which has been subjected to rigorous experimental analysis (see Van Kleef et al., 2011) was perceived as a strength of the present research programme as it answered the call for more theory-led applied practice (Lane & Terry, 2000).

**6.4 Strengths of the Present Research Programme and Contribution to Literature**

**6.4.1 Extending the EASI Model to Sport**

The vast majority of theory and research on social-functional approaches to emotions has been situated within social psychology (Keltner et al., 2006). The subsequent development of the EASI model utilised research predominantly situated within the sub-psychology disciplines of conflict resolution and negotiation (Van Kleef, De Dreu, & Manstead, 2010). Therefore, a proposed strength of the present research programme has been the application of theory from broader social psychology into the sporting context thereby addressing specific calls for future EASI model research (Van Kleef, 2009; 2010; Van Kleef et al., 2011). With this application, the current research programme provides the opportunity to support and challenge particular findings and conclusions offered by past research.

Results from the current research programme suggest that the EASI model has the potential to explain interpersonal emotion regulation in the sport context. In Chapter 3, participants described how they implicitly and explicitly considered the social functions of emotions when deciding if, when, and how to regulate teammates' emotions. This was an encouraging revelation as it provided support for the same theoretical framework (a social-functional approach to emotions) on which the EASI model was developed (Van Kleef, 2009). Further support for the EASI model was provided in Chapter 4 as additional participants detailed interpersonal emotion regulation through affective reactions and inferential processing, similar to those explained in EASI model literature. However, given the rich in-depth descriptions afforded by the qualitative methods of this research programme, further examination into some of the more particular details of the EASI model theory can be explored. This contextualisation reveals further support for the EASI model in sport contexts but also challenges a number of propositions.

Particularly, Van Kleef, De Drue, et al. (2010) presented a review of literature addressing an interpersonal approach to emotions and decision-making. Stemming from their review were two propositions that can be addressed by the results of the current research programme. The first proposition addressed by the current research programme concerns the social signals of emotions and dominant behavioural reactions proposed in cooperative versus competitive settings. Van Kleef and colleagues proposed that within cooperative situations (as would generally describe an ice hockey team), affiliation emotions such as happiness and contentment would foster increased cooperation between teammates. As presented in Section 4.4.1, participants indeed reported interpersonal emotion regulation strategies that would enhance affiliation emotions in their teammates. These included praising them for their efforts and using humour. Therefore, the present research supports this proposition.

Similarly, Van Kleef, De Drue, et al. (2010) proposed that supplication emotions such as sadness and disappointment will increase cooperation within cooperative settings. That is, players will come to the aid of teammates who are in distress. Generally, this reflects a trend developed throughout the results of the current research programme. For example, in the narrative analysis presented in section 3.4.3 Peter related the story of how he tried to console a teammate who was downhearted about a number of challenges he was facing outside of hockey. However, while expressions of sadness might increase cooperation between teammates thereby demonstrating beneficial consequences, because of the low arousal levels associated by sadness it is unlikely to be an emotion that a player would try to increase as a strategy to improve performance.

Van Kleef, De Drue, et al. (2010) further proposed that appeasement emotions such as guilt and embarrassment would result in reduced competition within a cooperative environment. Their contention was that embarrassment and guilt signalled that an individual cares about the consequences of their transgressions and that he or she is likely to comply to social norms in the future. The results from the current research programme indeed supported this proposition. Interpersonal emotion regulation to increase guilt and embarrassment were frequently reported. For example, in section 4.4.1.1 participants reported calling out their teammates' poor play as an emotion regulation strategy. Conceivably, highlighting a teammate's poor performance in the presence of the entire team would trigger embarrassment in the player. He would subsequently regulate his performance efforts as to not receive similar public rebuking in the future.

Lastly, Van Kleef, De Drue, and colleagues (2010) proposed that emotions associated with aggressive behavioural expressions such as anger and irritation will result in reduced cooperation or possibly inaction within cooperative settings. Their contention was that the emotion contagion of anger would lead to subsequently decreased performance as found in a

number of studies situated within work psychology (e.g., Barsade, 2002; Clark et al., 1996). Contrastingly, the results from the current research programme suggest that anger might be used to increase cooperation between teammates. For example, participants reported using interpersonal emotion regulation strategies such benching and line juggling as a means to increase teammates' anger in section 4.4.1.3. The rationale was that by limiting the amount of playing time a player receives, the player potentially becomes angry and subsequently plays better in order to regain their lost allotment of playing time. As was manifested throughout the research programme, this type of reaction will be moderated by a number of factors, perhaps none more prominent than the meta-emotion belief that anger increases performance which may or may not be shared between the individuals involved. Nevertheless, this represents a deviation from the expectant behavioural reactions as proposed by Van Kleef et al. and potentially demonstrates how the sport setting (and other confrontational settings, e.g., Tamir et al., 2007) will differ from other contexts in social psychology.

A possibly explanation for the deviation from the cooperative/competitive propositions given by Van Kleef, De Drue, et al. (2010) might come from the fact that even within a cooperative setting like a sports team, there exists many opportunity for competition between teammates. That is, even though a team is usually united in their quests for victory or excellence, competitive rivalries might exist between teammates which undermine their cooperative efforts (Botterill, 2005). For example, goaltenders are in competition with each other for the role of "starting goaltender" who typically plays in most games. Therefore if one plays well, the whole team benefits from the performance. However, if one plays poorly, the other goaltender might benefit from increased playing time. The result of which might be an environment that although is predominantly cooperative in nature, might also have strong competitive undertones. This blended environment would conceivably be more unpredictable

in using interpersonal emotion regulation strategies to trigger expectant behavioural responses.

The second proposition reported by Van Kleef, De Drue, et al. (2010) that can be addressed by the results from the current research programme is that interpersonal emotion regulation via affective reactions would be more prevalent in cooperative settings and strategies that trigger inferential processing would be more prevalent in competitive settings. Citing experiments such as Barsade (2002), Sy et al. (2005) and Van Kleef et al. (2008) who demonstrated the prevalence of affective reactions in cooperative settings, Van Kleef, De Drue, and colleagues (2010) proposed that few studies have found inferential processing to be prominent in cooperative situations. A noted exception was Van Kleef et al. (2009) where inferential processing was prevalent in regulating only anger in individuals under conditions which enhanced inferential processing motivation and abilities. Although section 4.4.1 did not include a specific frequency count of regulation strategies that utilised affective reactions as opposed to inferential processing, the results of the content analysis indicated that of the 22 strategies reported to be commonly used in the experiences of the participants, 12 of them represented strategies that initiate inferential processing. This contrasts Van Kleef and colleauges' (2010) proposition that affective reactions would be more prevalent in cooperative settings. A potential explanation for this contrast in results might stem from practices within sports training that help develop inferential processing skills. For example, consideration of attributions (e.g., Allen, Jones, & Sheffield, 2009), meta-emotion experiences (e.g., Nieuwenhuys et al., 2011), appraisals (e.g., Skinner & Brewer, 2004) via debriefing exercises (e.g., McArdle, Martin, Lennon, & Moore, 2010) all rely on cognitive channels to help build awareness of emotion-performance relationships.

In review of EASI model literature, Van Kleef et al. (2011) recommended additional avenues for future research on the EASI model and social influence which has been

addressed in the current research programme. Specifically, given the prominence of EASI model research that has utilised experimental procedures, Van Kleef et al. identified that their experimental rigour has come at the expense of mundane realism, a gap that the present programme of research sought to address. Further research was needed to examine whether processes identified in the laboratory can generalise to real world settings. To the author's knowledge, this is the first study that has attempted to research an ecologically valid setting and situate the observations and life experiences of the participants within the EASI model. The advantage of such has provided the opportunity to research participants with pre-established relationships over a period of three ice hockey seasons.

An additional avenue of future research identified by Van Kleef et al. (2011) that was addressed in the current research programme concerned the role of a minority individual's emotions in influencing the behaviour of the majority in a group setting. The current research programme illustrated this influence numerous times. For example, in the narrative analysis presented in section 4.4.3 Ben and Jerry shared their experiences with Charlie who they described as the cancer of the team. The cancer of the team has been defined as any individual who expresses negative emotions that spread destructively throughout a team (Cope et al., 2010). In describing how Charlie's emotions influenced the entire team Ben and Jerry related how other teammates did not want to play on the same line as Charlie. Furthermore, the performance of those that did play on Charlie's line was effectively neutralised because of his emotional effects. This corroborates with Cope et al. who found that team cancers will decrease team cohesion and negatively affect team performance. A more positive example from the intervention detailed in section 5.4.1.1 of this research programme documented pre-game, post-game and intermission speeches from the coach. As addressed in section 5.5.2, the team in this study maintained a losing record throughout the course of the intervention. During this time the coach was often charged with the task of

increasing facilitative emotions within the collective team. Whilst the intervention did not specifically measure emotional states before and after these speeches, such evidence from Breakey et al. (2009) has shown that a coach might successfully change the emotions of his or her players provided the coach expresses genuine emotion, keeps the speeches short using meaningful messages, and refers to team values. Therefore, the results of the current research programme supplemented with additional literature from sport addresses questions concerning the extent to which a minority member of a team or group can influence the emotions of a greater majority of members.

An additional call for future research suggested by Van Kleef et al. (2011) was for examination of "blended" emotions: emotional states that can be described as a combination of different discrete emotions. For example, in section 5.4.1.4, the starting goaltender discussed how he refused to be substituted after a poor performance. At that moment, he would have been experiencing negatively-valenced emotions such as embarrassment, disappointment, and guilt, but was also trying to emulate positively-valenced emotions in the form of pride and hope. In this particular case, the starting goaltender addressed the team collectively afterward to explain the rationale of his behaviour. Lane and Terry (2000) had offered a conceptual model of mood proposing that non-clinical depression will influence the intensity of other moods and moderate the emotion-performance relationship for anger and tension. Future research could investigate how athletes make sense of mixed emotional messages from their teammates and coaches.

**6.4.2 Behavioural Mimicry in Sport Psychology**

A particular contribution from the current research programme concerns the examination and use of emotion contagion and mimicry in sport psychology. The EASI model proposed that interpersonal emotion regulation occurs via inferential processing and affective reactions such as emotion contagion. Whilst research on the the role of appraisals in

emotion regulation has burgeoned in the sport psychology literature (e.g., Hanton, Neil, & Mellalieu, 2008; Jones, Meijen, McCarthy, & Sheffield, 2009; Lazarus, 2000, Skinner & Brewer, 2004; Uphill & Jones, 2007), much less has been studied on emotion contagion. And while emotion contagion has been studied in social psychology circles (e.g., Barsade, 2002; Bourgeois & Hess, 2008; Parkinson & Simons, 2009; Sy et al., 2005), to date, there have only been three studies that have addressed emotion contagion in sport. Totterdell (2000) demonstrated that the moods of cricket players are collectively linked to each other over the course of a four day competitive match. O'Neill (2008) reported that injury-induced emotions had the potential to spread throughout alpine ski team members. Moll et al., 2010 examined emotion contagion in soccer and reported that individual expressions of post-performance emotions served to enhance future team performance.

The current research programme extends the limited amount of research attention of emotion contagion in sport contexts. For example, in sections 4.4.1.2 and 4.4.1.4, participants explained their use of interpersonal emotion regulation strategies intended to initiate emotion contagious effects. Players employed these strategies to not only initiate emotional mimicry in their teammates, but also a behavioural mimicry as well (Hess & Fischer, 2013). Following the participants' example, I, as an intervention tool, attempted to employ interpersonal emotion regulation strategies that initiated emotion contagion. However, resultant effects were difficult to observe. This might have due to the team's high losing percentage as context has been suggested to be a strong moderator of mimicry effects (Hess & Fischer, 2013). Nevertheless, this research programme represents a continuation of what is a neglected, though fruitful avenue for future research.

### 6.5 Limitations

In addition to limitations presented at the conclusion of each individual article, a number of limitations permeated the entirety of the present research programme. One

acknowledged limitation was that the ice hockey team in the current study employed a player-coach instead of a traditional coach who does not play with the team. This presents a different interactive dynamic on the team that might influence the process of interpersonal emotion regulation. For example, it was proposed in section 4.5.1 that interpersonal emotion regulation might be hindered because line assignments dictate that players will be spatially near some players more than others. For a coach, who is typically charged with the regulation of the team's collective emotions, his opportunity to influence some teammates' emotions might have been mineralized because of his line assignments. Although it is unknown the extent, if any, this situational circumstance had on the results of the study, evidence suggests that individuals who are not playing might regulate others' emotions differently than individuals who are playing (see section 5.4.1.2).

An additional limitation is the reliance on self-report and memory recall utilised throughout the research programme. Measuring emotions and related response systems accurately continue to be highly debated (Mauss & Robinson, 2009). Event outcomes and memory decay potentially affect the ability to recall information. Furthermore, self-report methods rely on the participants' abilities to provide an accurate representation of the measured psychological construct. As suggested in section 5.5.2, participants in the current research programme might have overestimated their pre-intervention emotional intelligence abilities. Furthermore, social desirability can also lead to incorrect values on self-report data. Therefore retrospective self-report have been a target of criticism (Brewer, Van Raalte, Linder, & Van Raalte, 1991).

As a way to aid in the recall of interpersonal emotion regulation, future research might benefit from the incorporation of video-recall methods or emotion diaries as a means to debrief episodes of interpersonal emotion regulation with agents and targets. Adapting from methods proposed by Gottman and Levenson (1985), research in sport has demonstrated the

utility of video-recall methods as a means to develop empathic accuracy between coaches and athletes (e.g., Lorimer & Jowett, 2009a; 2009b). Dyadic pairings could have competitive and training sessions recorded. These recordings could be played back to the participants separately and each could rate their own emotional state as well as the perceived emotional state of their partner. The procedure would be replicated with the partner and results could be compared. Combined with debriefing methods (McArdle et al., 2010) video-recall methods could educate participants about potential factors that further moderate the successfulness of interpersonal emotion regulation. For example, results from the current study suggest that factors pertaining to the agent individual (e.g., meta-emotion beliefs or empathic accuracy) will influence the interpersonal emotion regulation process. Moderating factors pertaining to the agent individual are largely overlooked within the EASI literature. However, strategies to improve interpersonal emotion regulation in this research programme included educating agent individuals about the potential emotional state target individuals were in as well as challenging their meta-emotional beliefs (see sections 5.4.1.1 and 5.4.1.2).

Lastly, it should be acknowledged that during the course of the intervention, a number of psychometrics have been developed that include a measurement of interpersonal emotion regulation. For example, emotional intelligence scales have been modified to emphasise interpersonal regulation (e.g., Côté & Hideg, 2011; Little et al., 2011). Additionally, the Emotion Regulation Questionnaire (ERQ, Gross & John, 2003) has been validated with athletes (Uphill, Lane, & Jones, 2012) as has the Emotion Regulation of Others and Self scale (Niven et al., 2011; Lane et al., 2011). Utilisation of these scales would help measure both intra- and interpersonal emotion regulation. Van Kleef et al. (2011) proposed that a particular avenue for future research is determining how influential intrapersonal regulatory efforts are when regulating others' emotions. Niven et al. (2011) provided some interesting hypotheses between emotion regulation abilities and potential outcomes (e.g., emotion exhaustion, poor

health). As these would influence subsequent performance, it would have been beneficial to incorporate their scale.

## 6.5 Further Research Directions

This research study has supported the applicability of the EASI model within sport contexts. Future research should explore the delivery of similar interventions using similar theoretical orientations but under different conditions. Specifically, interventions to enhance interpersonal emotion regulation could be carried out with female participants, different sports, and facilitated by practitioners from different professional philosophical backgrounds. A shortcoming of the present research programme was the inclusion of only one female participant (see section 3.3.1). Hareli & Rafaeli (2008) proposed that the interpersonal regulation of emotions will be subject to gender differences. Within the sport context, it would be interesting to see if women are more likely than men to use strategies that help maintain relationships (cf. Timmers, Fischer, & Manstead, 1998), use different types of strategies (cf. Gross & John, 2003), or are different in susceptibility to emotion contagion (cf. Wild, Erb, & Bartels, 2001).

Further research would also benefit from exploring interpersonal emotion regulation interventions with alternative sports. Research using the EASI model has emphasised the moderating influence of cultural norms and appropriate display rules (e.g., Van Kleef & Côté, 2007). Similarly, the present research programme illustrated the moderating effects of certain cultural norms that characterise the ice hockey sub-culture (Botterill, 2004). For example, in section 3.4.4, Peter and Maggie described how emotions solidified ice hockey ideologies. Additionally, in section 4.4.1, participants described many interpersonal emotion regulation strategies that can double as performance regulation strategies in ice hockey (e.g., benching players, substituting goaltenders). It is conceivable that many of the regulation strategies described by the participants in this study would not necessarily be appropriate in different

sports. For example, fighting (either opponents or teammates) while seen as appropriate in ice hockey would likely not be appropriate in synchronised swimming. Similarly, spatial manipulation in the form of removing someone from the presence of an opponent who evokes unwanted emotions would be impractical in boxing, although it was reported as common strategy in the present research programme. Therefore, further research that appreciates the cultural nuances of each sport is warranted.

A fair critique of the intervention detailed in the present research programme is its low generalisability because it was largely influenced by myself as the practitioner. That is, as much as the intervention was rooted in a social-functional approach to emotions and utilised the EASI model, it was also influenced by my professional philosophy and how I chose to manage myself as an intervention tool (see section 5.3.2 and 5.3.2.6). While the individualisation of the intervention might be justified by an increase to the ecological validity of a study, other practitioners might be able to expand our understanding of interpersonal emotion regulation. For example, practitioners from a cognitive-behavioural approach might be more likely to focus on inferential processing strategies above those that initiate affective reactions.

Lastly, an avenue for future research in interpersonal emotion regulation can be found in examining the interaction of opponents. Van Kleef, De Drue, et al. (2010) proposed that emotions provide different signals between those working in cooperation and those in competition with each other. For example, interpersonal emotion regulation strategies that seek to increase a teammate's happiness would indicate that the teammate is making reasonable progress towards goal fulfilment (Lazarus, 1991). Correspondingly, a player would conceivably seek to reduce the happiness in an opponent as to communicate that the chances for their goal fulfilment (i.e., victory) are being jeopardised. The current research programme was confined to the interpersonal emotion regulation between teammates. An

avenue for potential future research would be to study interpersonal emotion regulation between competitors thereby furthering a very limited amount of current research in sport psychology (e.g., Buscombe et al., 2006). A particularly unlikely proposition from Van Kleef, De Drue, et al. (2010) to be supported in sport is that expressions of anger would elicit cooperation between opponents. This highlights a difference between competitive sport and negotiation contexts. In sport, both parties are looking for all-or-nothing results whereas in negotiation, both parties might be satisfied with mutually beneficial results in which both parties achieve moderate levels of goal fulfilment. As noted in section 2.7 however, this effect might be marginalised within recreation sport where competition and victory are not as valued as highly as for example, affiliation. Indeed interpersonal emotion regulation has been theorised as serving to strengthen affiliation and social bonds in contrasting models (e.g., Rimé, 2009; Hess & Fischer, 2013).

Finally, in light of the research presented in the current research programme, it should be noted that a number of additional studies have been undertaken as part of the the PhD experience. Further to the suggestion of studying interpersonal emotion regulation within additional sport contexts, a study has been conducted exploring the phenomenon in runners (Stanley et al., 2012). An online survey of over 500 runners indicated that runners typically used more cognitive strategies than behavioural strategies to regulate their emotions supporting the proposition in the current research programme that the type of sport will influence opportunity for emotion regulation.

Additionally, I have initiated another study examining lacrosse officials at a major world tournament. Research has shown that referees experience intense emotions when refereeing (Lane, Nevill, Ahmad, & Balmer, 2006), associated with giving decisions in favour of the away team when performing in front of a home crowd (Balmer, Nevill, Lane, Ward, Williams, & Fairclough, 2007).  For example, Balmer et al. demonstrated that referees

experience an increase in the intensity of anxiety when refereeing. Lacrosse officials in my study kept emotional diaries and participated in focus-group interviews about how they had attempted to regulate their own and others' emotions throughout the tournament. Results of this study are still being analysed but initial analysis suggests the emotions they experienced were contagious in the sense that they were collectively linked.

## 6.6 Summary of Key Contributions

In conclusion, the present research study utilised qualitative methods to develop an intervention intended to enhance the interpersonal emotion regulation within a professional ice hockey team. In reviewing the effectiveness of the intervention, data in the form of practitioner reflections, social validity interviews, pre- and post-intervention measures of emotion intelligence, and performance markers supported that participants learned why and how to regulate their teammates' emotions. This research programme extends present understanding of emotion regulation in a number of ways. Firstly, an overview of theory from broader psychology was undertaken concerning interpersonal emotion regulation. From this review stemmed the recommendation for EASI model to be utilised within sport contexts. This is important because while sport has dedicated research attention to intrapersonal emotion regulation, the regulation of others has been largely overlooked. This is an oversight considering that sport is a social activity and performance and excellence might be as much the result of collaborative efforts with teammates, coaches, and support staff as it is a result of individual performances.

Secondly, the present research programme has contributed to the literature by utilising qualitative methods to research a social-functional approach to emotions and the EASI model depicting interpersonal emotion regulation. Previous research has predominantly utilised experimental and theoretical contributions to help advance theory. The present research programme employed inductive and deductive approaches in the form of narrative and

content analyses to provide an in-depth exploration of a topic previously not accomplished. Strean (1998) had proposed four advantages to using qualitative methods in sport psychology. These included the potential to describe, interpret, verify, and evaluate psychological phenomena. The psychological phenomenon of interest in this research programme was interpersonal emotion regulation. Throughout this research programme, qualitative methods have been used to describe emotion regulation strategies common in ice hockey, interpret participant experiences of the interpersonal emotion regulation process, add verification for the use of the EASI model in sport contexts, and evaluate an intervention to enhance the interpersonal emotion regulation within a sports team.

The final contribution to the emotion regulation literature to be considered in the conclusion (see section 6.3 for others) is in the development and delivery of an ecologically valid intervention to improve interpersonal emotion regulation that is grounded in theory and the professional philosophy of the practitioner.

# REFERENCES

Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review*, *30*, 217-237. doi:10.1016/j.cpr.2009.11.004

Allain, K. A. (2011). Kid Crosby or Golden Boy: Sidney Crosby, Canadian national identity, and the policing of hockey masculinity. *International Review for the Sociology of Sport, 46*, 3-22. doi:10.1177/1012690210376294

Allen, M. S., Jones, M. V., & Sheffield, D. (2009). Causal attributions and emotion in the days following competition. *Journal of Sports Sciences, 27*, 461-468. doi:10.1080/02640410802538754

Amorose, A. J., & Weiss, M. R. (1998). Coaching feedback as a source of information about perceptions of ability: A developmental examination. *Journal of Sport & Exercise Psychology*, *20*, 395-420.

Andersen, M. B. (2000). Introduction. In M. B Andersen (Ed.). *Doing sport psychology*. (pp. xiii-xvii). Champaign, IL: Human Kinetics.

Andersen, M. B. (2005). Coming full circle: From practice to research. In M. B. Andersen (Ed.), *Sport psychology in practice* (pp. 287-298). Champaign, IL: Human Kinetics.

Andersen, M. B., McCullagh, P., & Wilson, G. J. (2007). But what do the numbers really tell us?: Arbitrary metrics and effect size reporting in sport psychology research. *Journal of sport and exercise psychology*, *29*, 664. Retrieved from http://journals.humankinetics.com/jsep

Anderson, A. G., Knowles, Z., & Gilbourne, D. (2004). Reflective practice for sport psychologists: concepts, models, practical implications, and thoughts on dissemination. *The Sport Psychologist*, *18*, 188-203. Retrieved from http://journals.humankinetics.com/tsp

Anderson, A. G., Miles, A., Mahoney, C., & Robinson, P. (2002). Evaluating the effectiveness of applied sport psychology practice: Making the case for a case study approach. *The Sport Psychologist*, *16*, 432-453. Retrieved from http://journals.humankinetics.com/tsp

Anderson, A. G., Miles, A., Robinson, P., & Mahoney, C. (2004). Evaluating the athlete's perception of the sport psychologist's effectiveness: What should we be assessing? *Psychology of Sport and Exercise, 5*, 255-277. doi:10.1016/S1469-0292(03)00005-0

Augustine, A. A., & Hemenover, S. H. (2009). On the relative effectiveness of affect regulation strategies: A meta-analysis. *Cognition and Emotion*, *23*, 1181-1220. doi:10.1080/02699930802396556

Averill, J. R. (1992). The structural bases of emotional behavior. In M.S. Clark (Ed.), *Emotion* (pp. 1-24). Newbury Park, CA: Sage.

Balish, S. M., Eys, M. A., & Schulte-Hostedde, A. I. (2013). Evolutionary sport and exercise psychology: Integrating proximate and ultimate explanations. *Psychology of Sport and Exercise*, *14*, 413-422. doi:10.1016/j.psychsport.2012.12.006

Balmer, N. J., Nevill, A. M., Lane, A. M., Ward, P., Williams, M. A., & Fairclough, S. A. (2007). Influence of crowd noise on soccer refereeing consistency. *Journal of Sport Behavior, 30,* 130-145.

Barker, J. B., Mellalieu, S. D., McCarthy, P. J., Jones, M. V., & Moran, A. (2013). A Review of Single-Case Research in Sport Psychology 1997–2012: Research Trends and Future Directions. *Journal of Applied Sport Psychology, 25*, 4-32. doi:10.1080/10413200.2012.709579

Barsade, S. G. (2002). The ripple effect: Emotional contagion and its influence on group behaviour. *Administrative Science Quarterly*, *47*, 644-677.

Bartholow, B. D., Fabiani, M., Gratton, G., & Bettencourt, B. A. (2001). A psychophysiological examination of cognitive processing of and affective responses to social expectancy violations. *Psychological Science, 12*, 197–204. doi:10.1111/1467-9280.00336

Baumeister, R. F., Vohs, K. D., DeWall, C. N., & Zhang, L. (2007). How emotion shapes behaviour: Feedback, anticipation, and reflection, rather than direct causation. *Personality and Social Psychology Review*, *11*, 167-203. doi:10.1177/1088868307301033

Beedie, C. J., & Lane, A. M. (2012). The role of glucose in self-control another look at the evidence and an alternative conceptualization. *Personality and Social Psychology Review*, *16*, 143-153. doi:10.1177/1088868311419817

Beedie, C. J., Terry, P. C., & Lane, A. M. (2000). The profile of mood states and athletic performance: Two meta-analyses. *Journal of Applied Sport Psychology*, *12*, 49-68. doi:10.1080/10413200008404213

Beedie, C., Terry, P., & Lane, A. (2005). Distinctions between emotion and mood. *Cognition & Emotion*, *19*, 847-878. doi:10.1080/02699930541000057

Boardley, I. D., Kavussanu, M., & Ring, C. (2008). Athletes' perceptions of coaching effectiveness and athlete-related outcomes in rugby union: An investigation based on the coaching efficacy model. *The Sport Psychologist*, *22*, 269-287. Retrieved from http://journals.humankinetics.com/tsp

Botterill, C. (1990). Sport psychology and professional hockey. *The Sport Psychologist, 4*, 358-368. Retrieved from http://journals.humankinetics.com/tsp

Botterill, C. (2004). The psychology of professional hockey. *Athletic Insight, 6*, 17-24. Retrieved from: http://athleticinsight.com

Botterill, C. (2005). Competitive drive: Embracing positive rivalries. In S. Murphy (Ed.), *The Sport Psych Handbook*. (pp. 37-48). Champaign, IL: Human Kinetics.

Botterill, C., & Brown, M. (2002). Emotion and perspective in sport. *International Journal of Sport Psychology*, *33*, 38-60.

Botterill, C., & Patrick, T. (2003). Understanding and managing emotions in team sports. In R. Lidor & K. P. Henschen (Eds.), *The psychology of team sports* (pp. 115-130). University of Michigan: Fitness Information Technology.

Bourgeois, P., & Hess, U. (2008). The impact of social context on mimicry. *Biological Psychology*, *77*, 343-352. doi:10.1016/j.biopsycho.2007.11.008

Breakey, C., Jones, M., Cunningham, C., & Holt, N. (2009). Female athletes' perceptions of a coach's speeches. *International Journal of Sports Science & Coaching*, *4*, 489-504. doi:10.1260/174795409790291376

Brewer, B. W., Van Raalte, J. L., Linder, D. E., & Van Raalte, N. S. (1991). Peak performance and the perils of retrospective introspection. *Journal of Sport and Exercise Psychology, 13*, 227-238.

Buscombe, R., Greenlees, I., Holder, T., Thelwell, R., & Rimmer, M. (2006). Expectancy effects in tennis: The impact of opponents' pre-match non-verbal behaviour on male tennis players. *Journal of Sports Sciences*, *24*, 1265-1272. doi:10.1080/02640410600598281

Butler, E. A., & Gross, J. J. (2009). Emotion and emotion regulation: Integrating individual and social levels of analysis. *Emotion Review*, *1*, 86-87. doi:10.1177/1754073908099131

Campen, C., & Roberts, D. C. (2001). Coping strategies of runners: perceived effectiveness and match to precompetitive anxiety. *Journal of Sport Behavior*, *24*, 144-161.

Campo, M., Mellalieu, S., Ferrand, C., Martinent, G., & Rosnet, E. (2012). Emotions in team contact sports: A systematic review. *The Sport Psychologist, 26*, 62-97. Retrieved from: http://journals.humankinetics.com/tsp

Campos, J. J., Walle, E. A., Dahl, A., & Main, A. (2011). Reconceptualizing emotion regulation. *Emotion Review*, *3*, 26-35. doi:10.1177/1754073910380975

Carron, A. V., Colman, M. M, Wheeler, J., & Stevens, D. (2002). Cohesion and performance in sport: A meta-analysis. *Journal of Sport and Exercise Psychology*, *24,* 168-188.

Carver, C. S. (2004). Self-regulation of action and affect. In R. F. Baumeister &, K. D. Vohs (Eds.). *Handbook of self-regulation: Research, theory and applications.* (pp. 13-39). New York: Guilford Press.

Clark, M. S., Pataki, S. P., & Carver, V. H. (1996). Some thoughts and findings on self-presentation of emotions in relationships. In G. J. O. Fletcher & J. Fitness (Eds.), *Knowledge structures in close relationships: A social psychological approach* (pp. 247–274). Mahwah, NJ: Lawrence Erlbaum Associates Inc.

Cohen, A. B., Tenenbaum, G., & English, R. W. (2006). Emotions and golf performance: An IZOF-based applied sport psychology case study. *Behaviour Modification*, *30*, 259-280. doi:10.1177/0145445503261174

Cope, C. J., Eys, M. A., Schinke, R. J., & Bosselut, G. (2010). Coaches' perspectives of a negative informal role: The 'cancer' within sport teams. *Journal of Applied Sport Psychology*, *22*, 420-436. doi:10.1080/10413200.2010.495327

Côté, S. (2005). A social interaction model of the effects of emotion regulation on work strain. *Academy of Management Review*, *30*, 509-530. doi:10.5465/AMR.2005.17293692

Côté, S., & Hideg, I. (2011). The ability to influence others via emotion displays A new dimension of emotional intelligence. *Organizational Psychology Review*, *1*, 53-71. doi:10.1177/2041386610379257

Craft, L. L., Magyar, T. M., Becker, B. J., & Feltz, D. L. (2003). The relationship between the Competitive State Anxiety Inventory-2 and sport performance: A meta-analysis. *Journal of Sport & Exercise Psychology*, *25*, 44-65.

Cropley, B., Miles, A., Hanton, S., & Niven, A. (2007). Improving the delivery of applied sport psychology support through reflective practice. *The Sport Psychologist*, *21*, 475-494. Retrieved from http://journals.humankinetics.com/tsp

Crocker, P. R., & Graham, T. R. (1995). Coping by competitive athletes with performance stress: Gender differences and relationships with affect. *The Sport Psychologist, 9*, 325-338. Retrieved from: http://journals.humankinetics.com/tsp

Davies, K. A., Lane, A. M., Devonport, T. J., & Scott, J. A. (2010). Validity and reliability of a brief emotional intelligence scale (BEIS-10). *Journal of Individual Differences*, *31*, 198-208. doi:10.1027/1614-0001/a000028

Denzin, N. K., & Lincoln, Y. S. (1994). *Handbook of qualitative research*. Thousand Oaks, CA: Sage Publications, Inc.

Devonport, T. J., & Lane, A. M. (2009). Reflecting on the delivery of a longitudinal coping intervention amongst junior national netball players. *Journal of Sports Science and Medicine*, *8*, 169-178.

Devonport, T. J., Lane, A. M., & Hanin, Y. (2005). Emotional states of athletes prior to performance-induced injury. *Journal of Sports Science and Medicine*, *4*, 382-394. Retrieved from: http://www.tandfonline.com/loi/rjsp20

Dittrick, R. (2013, 1, 25). Yakupov, Gagne's heorics propel Oilers to unlikely overtime

victory. [News article]. Retrieved from

http://oilers.nhl.com/club/news.htm?id=652252

Dosil, J. (2006). *The Sport Psychologist's Handbook: A Guide for Sport-Specific*

*Performance Enhancement*. Chichester, UK: John Wiley & Sons, Ltd.

Dunn, J. G., & Holt, N. L. (2003). Collegiate ice hockey players' perceptions of the delivery

of an applied sport psychology program. *The Sport Psychologist*, *17*, 351-368.

Retrieved from http://journals.humankinetics.com/tsp

Dunn, J. G. H., & Holt, N. L. (2004). A qualitative investigation of a personal-disclosure

mutual-sharing team building activity. *The Sport Psychologist*, *18*, 363-380. Retrieved

from http://journals.humankinetics.com/tsp

Dupuis, M., Bloom, G. A., & Loughead, T. M. (2006). Team captains' perceptions of athlete

leadership. *Journal of Sport Behavior, 29*, 60-78.

Eisenberg, N., Fabes, R.A., Guthrie, I.K., & Reiser, M. (2000). Dispositional emotionality

and regulation: Their role in predicting quality of social functioning. *Journal of*

*Personality and Social Psychology*, *78*, 136-157. doi:10.1037//0022-3514.78.1.136

Fehr, B., & Russell, J. A. (1984). Concept of emotion viewed from a prototype perspective.

*Journal of experimental psychology: General*, *113*, 464-486. doi.10.1037//0096-

3445.113.3.464

Fifer, A., Henschen, K., Gould, D., & Ravizza, K. (2008). What works when working with

athletes. *The Sport Psychologist*, *22*, 356-377. Retrieved from

http://humankinetics.com/tsp

Fischer, A. H., & Manstead, A. S. R. (2008). Social functions of emotion. In M. Lewis, J.

Haviland, & L. Feldman Barrett (Eds.), *Handbook of emotion* (3rd ed.). (pp. 456-470).

New York: Guilford Press.

Fischer, A. H., & Van Kleef, G. A. (2010). Where have all the people gone? A plea for including social interaction in emotion research. *Emotion Review*, *2*, 208-211. doi:10.1177/1754073910361980

Freeman, M., deMarrais, K., Preissle, J., Roulston, K., & St. Pierre, E. A. (2007). Standards of evidence in qualitative research: An incitement to discourse. *Educational Researcher, 36,* 25-32. doi:10.3102/0013189X06298009

Friesen, A., Devonport, T. J., Sellars, C. N., & Lane, A. M. (2013b). *An examination of the strategies, processes, and moderating factors to regulating teammates' emotions in ice hockey.* Manuscript submitted for publication.

Friesen, A., Devonport, T. J., Sellars, C. N., & Lane, A. M. (2013c). A narrative account of decision-making and interpersonal emotion regulation using a social-functional approach to emotions. *International Journal of Sport & Exercise Psychology* doi:10.1080/1612197X.2013.773664

Friesen, A., Lane, A., Devonport, T., Sellars, C., Stanley, D., & Beedie, C. (2013). Emotion in sport: Considering interpersonal emotion regulation strategies. *International Review of Sport and Exercise Psychology, 6*, 139-154. doi:10.1080/1750984X.2012.742921

Friesen, A., & Orlick, T. (2010). A qualitative analysis of holistic sport psychology consultants' professional philosophies. *The Sport Psychologist*, *24*, 227-244. Retrieved from http://journals.humankinetics.com/tsp

Friesen, A. & Orlick, T. (2011). Holistic Sport Psychology: Investigating the Roles, Operating Standards, and Intervention Goals and Strategies of Holistic Consultants. *Journal of Excellence, 14*, 18-42. Retrieved from http://www.zoneofexcellence.ca

Frijda, N. H. (1986). *The emotions*. Cambridge, UK: Cambridge University Press.

Frijda, N. H., & Mesquita, B. (1994). The social roles and functions of emotions. In S.

    Kitayama, & H. S. Markus (Eds.), *Emotion and culture: Empirical studies of mutual*

    *influence* (pp. 1–87). Washington, DC: American Psychological Association.

Gallmeier, C. P. (1987). Putting on the game face: The staging of emotions in professional

    hockey. *Sociology of Sport Journal*, *4*, 347-362.

Galvan, Z. J., & Ward, P. (1998). Effects of public posting on inappropriate on-court

    behaviours by collegiate tennis players. *The Sport Psychologist*, *12*, 419-426.

    Retrieved from http://journals.humankinetics.com/tsp

Gardner, F. L., & Moore, Z. E. (2005). Using a case formulation approach in sport

    psychology consulting. *The Sport Psychologist, 19*, 430-445. Retrieved from:

    http://journals.humankinetics.com/tsp

Gaudreau, P., Amiot, C. E., & Vallerand, R. J. (2009). Trajectories of affective states in

    adolescent hockey players: Turning point and motivational antecedents.

    *Developmental Psychology, 45*, 307-319. doi:10.1037/a0014134

Gearity, B. T., & Murray, M. A. (2011). Athletes' experiences of the psychological effects of

    poor coaching. *Psychology of Sport and Exercise*, *12*, 213-221.

    doi:10.1016/j.psychsport.2010.11.004

Gibbs, G. (1988). *Learning by Doing: A guide to teaching and learning methods.* London:

    Further Education Unit.

Giges, B., & Petitpas, A. (2000). Brief contact interventions in sport psychology. *The Sport*

    *Psychologist*, *14*, 176-187. Retrieved from http://journals.humankinetics.com/tsp

Gilbourne, D., & Richardson, D. (2006). Tales from the field: Personal reflections on the

    provision of psychological support in professional soccer. *Psychology of sport and*

    *exercise*, *7*, 325-337. doi:10.1016/j.psychsport.2005.04.004

Gino, F., Brooks, A. W., & Schweitzer, M. E. (2012). Anxiety, advice, and the ability to

discern: Feeling anxious motivates individuals to seek and use advice. *Journal of personality and social psychology*, *102*, 497-512. doi:10.1037/a0026413

Gollwitzer, P. M., & Sheeran, P. (2006). Implementation intentions and goal achievement: A meta-analysis of effects and processes. *Advances in experimental social psychology*, *38*, 69-119. doi:10.1037//0022-3514.73.1.186

Gottman, J. M., & Levenson, R. W (1985). A valid procedure for obtaining self-report of affect in marital interaction. *Journal of Consulting and Clinical Psychology, 53,* 151-160. doi:10.1037//0022-006X.53.2.151

Gould, D., (2001). Sport psychology and the Nagano Olympic Games: The case of the U.S. freestyle ski team. In G. Tenenbaum (Ed.), *The practice of sport psychology* (pp. 49-76). Morgantown, WV: Fitness Information Technology.

Gould, D., Feltz, D., & Weiss, M. (1985). Motives for participating in competitive youth swimming. *International Journal of Sport Psychology*, *16*, 126-140.

Gould, D., & Maynard, I. (2009). Psychological preparation for the Olympic Games. *Journal of Sports Sciences*, *27*, 1393-1408. doi:10.1080/02640410903081845

Gould, D., Murphy, S., Tammen, V., & May, J. (1991). An evaluation of US Olympic sport psychology consultant effectiveness. *The Sport Psychologist, 5*, 111-127. Retrieved from http://www.humankinetics.com/tsp

Griskevicius, V., Shiota, M. N., & Neufeld, S. L. (2010). Influence of different positive emotions on persuasion processing: a functional evolutionary approach. *Emotion*, *10*, 190. doi:10.1037/a0018421

Griskevicius, V., Shiota, M. N., & Nowlis, S. M. (2010). The many shades of rose-colored glasses: An evolutionary approach to the influence of different positive emotions. *Journal of consumer research*, *37*, 238-250. doi:10.1086/651442

Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, *2*, 271-299. doi:10.1037/1089-2680.2.3.271

Gross, J. J. (1999). Emotion Regulation: Past, present, future. *Cognition and Emotion, 13*, 551-573. doi:10.1080/026999399379186

Gross, J. J. (2010). The future's so bright, I gotta wear shades. *Emotion Review*, *3*, 212-216. doi:10.1177/1754073910361982

Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being. *Journal of personality and social psychology*, *85*, 348-362. doi:10.1037/0022-3514.85.2.348

Gross, J. J., Richards, J. M., & John, O. P. (2006). Emotion regulation in everyday life. In D.K. Snyder, J.A. Simpson, & J.N. Hughes (Eds.). *Emotion regulation in couples and families: Pathways to dysfunction and health* (pp. 13-35). Washington, DC: American Psychological Association.

Gross, J. J., & Thompson, R.A. (2007). Conceptual foundations. In J.J. Gross (Ed.), Handbook of emotion regulation (pp. 3–26). New York, NY: The Guilford Press.

Guba, E.G., & Lincoln, Y.S. (1998). Competing paradigms in qualitative research. In N.K. Denzin & Y.S. Lincoln (Eds.), *The landscape of qualitative research: Theories and issues* (pp. 195-220). Thousand Oaks, CA: Sage Publications, Inc.

Haberl, P., & McCann, S. (2012). Evaluating USOC Sport Psychology Consultant Effectiveness: A Philosophical and Practical Imperative at the Olympic Games. *Journal of Sport Psychology in Action*, *3*, 65-76. doi:10.1080/21520704.2012.683095

Halliwell, W. (1990). Delivering sport psychology services in professional hockey. *The Sport Psychologist,* 4, 369-377. Retrieved from http://www.humankinetics.com/tsp

Hagger, M. S., Wood, C. W., Stiff, C., & Chatzisarantis, N. L. (2010). Self-regulation and self-control in exercise: the strength-energy model. *International Review of Sport and Exercise Psychology*, *3*, 62-86. doi:10.1080/17509840903322815

Hall, C. J., & Lane, A. M. (2001). Effects of rapid weight loss on mood and performance among amateur boxers. *British journal of sports medicine*, *35*, 390-395. doi:10.1136/bjsm.35.6.390

Halliwell, W. (2004). Preparing professional hockey players for playoff performance. *Athletic Insight*, *6*, 25-33. Retrieved from: http://athleticinsight.com

Halliwell, W., Orlick, T., Ravizza, K., & Rotella, R. (2003). *Consultants guide to excellence for sport and performance enhancement.* Chelsea, PQ: Zone of Excellence.

Hanin, Y. L. (2000). *Emotions in sport*. Champaign, IL: Human Kinetics.

Hanin, Y. L. (2003). Performance Related Emotional States in Sport: A Qualitative Analysis [48 paragraphs]. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 4(1), Art. 5, Retrieved from: http://www.qualitative-research.net/fqs-texte/1-03/1-03hanin-e.htm

Hanin, Y. L. (2007). Emotions in sport: Current issues and perspectives. In G. Tenenbaum & R. C. Eklund (Eds.), *Handbook of sport psychology* (3rd ed., pp. 33-58). Hoboken, NJ: John Wiley & Sons.

Hanin, Y. L. (2010). Coping with anxiety in sport. In A. R. Nicholls (Ed.), Coping in sport: Theory, methods, and related constructs (pp. 159-175). Hauppauge, NY: Nova Science.

Hanin, Y., & Syrjä, P. (1995). Performance affect in junior ice hockey players: An application of the individual zones of optimal functioning model. *The Sport Psychologist, 9*, 169-187. Retrieved from http://journals.humankinetics.com/tsp

Hanton, S., & Jones, G. (1999a). The acquisition and development of cognitive skills and

strategies: I. Making the butterflies fly in formation. *The Sport Psychologist, 13*, 1-21.

Retrieved from http://journals.humankinetics.com/tsp

 Hanton, S., & Jones, G. (1999b). The effects of a multimodal intervention program on

performers: II. Training the butterflies to fly in formation. *The Sport Psychologist*, *13*,

22-41. Retrieved from http://journals.humankinetics.com/tsp

Hanton, S., Neil, R., & Mellalieu, S. D. (2008). Recent developments in competitive anxiety

direction and competition stress research. *International review of sport and exercise

psychology*, *1*, 45-57. doi:10.1080/17509840701827445

Hareli, S., & Hess, U. (2010). What emotional reactions can tell us about the nature of others:

An appraisal perspective on person perception. *Cognition and Emotion*, *24*, 128-140.

doi:10.1080/02699930802613828

Hareli, S., & Rafaeli, A. (2008). Emotion cycles: On the social influence of emotion in

organizations. *Research in organizational behavior*, *28*, 35-59.

doi:10.1016/j.riob.2008.04.007

Hasson, O. (2009). Emotional tears as biological signals. *Evolutionary Psychology*, *7*, 363-

370. Retrieved from http://www.epjournal.net/wp-content/uploads/ep07363370.pdf

Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1994). *Emotional contagion.* New York, NY:

Cambridge University Press.

Hawk, S. T., Van Kleef, G. A., Fischer, A. H., & Van der Schalk, J. (2009). "Worth a

thousand words": Absolute and relative decoding of nonlinguistic affect vocalizations.

*Emotion*, *9*, 293-305. doi:10.1037/a0015178

Hess, U. & Fischer, A. (2013). Emotional mimicry as social regulation. *Personality and

Social Psychology Review*. doi: 10.1177/1088868312472607

Hill, D. M., Hanton, S., Matthews, N., & Fleming, S. (2011). Alleviation of choking under pressure in elite golf: an action research study. *The Sport Psychologist*, *25*, 465-488. Retrieved from http://journals.humankinetics.com/tsp

Hodge, K., & Hermansson, G. (2007). Psychological preparation of athletes for the Olympic context: The New Zealand Summer and Winter Olympic Teams. *Athletic Insight, 9*, 1-14.

Holt, N. L., Hoar, S., & Fraser, S. N. (2005). How does coping change with development? A review of childhood and adolescence sport coping research. *European Journal of Sport Science*, *5*, 25-39.

Holmes, R. M., McNeil, M., & Adorna, P. (2010). Student athletes' perceptions of formal and informal team leaders. *Journal of Sport Behavior*, *33*, 442-465.

Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative health research*, *15*, 1277-1288. doi:10.1177/1049732305276687

Hutcherson, C. A., & Gross, J. J. (2011). The moral emotions: A social-functionalist account of anger, disgust, and contempt. *Journal of Personality and Social Psychology, 100*, 719-737. doi:10.1037/a0022408

Izard, C. E. (2010). The many meanings/aspects of emotion: Definitions, functions, activation, and regulation. *Emotion Review, 2*, 363-370. doi:10.1177/1754073910374661

Jokela, M., & Hanin, Y. L. (1999). Does the individual zones of optimal functioning model discriminate between successful and less successful athletes: A meta-analysis. *Journal of Sports Sciences*, *17*, 873-887. doi:10.1080/026404199365434

Jones, M. V. (2003). Controlling emotions in sport. *The Sport Psychologist*, *17*, 471-486. Retrieved from http://journals.humankinetics.com/tsp

Jones, M., Meijen, C., McCarthy, P. J., & Sheffield, D. (2009). A theory of challenge and threat states in athletes. *International Review of Sport and Exercise Psychology*, *2*, 161-180. doi:10.1080/17509840902829331

Jowett, S. (2003). When the" honeymoon" is over: A case study of a coach-athlete dyad in crisis. *The Sport Psychologist*, *17*, 444-460. Retrieved from http://journals.humankinetics.com/tsp

Kazdin , A. (1982). Single-case experimental designs . In P. C. Kendall & J. N. Butcher (Eds.), Handbook of research methods in clinical psychology (pp. 461 – 490 ). New York : Wiley.

Keltner, D., & Gross, J. J. (1999). Functional accounts of emotions. *Cognition & Emotion*, *13*, 467-480. doi:10.1080/026999399379140

Keltner, D., & Haidt, J. (1999). Social functions of emotions at four levels of analysis. *Cognition & Emotion*, *13*, 505-521. doi:10.1080/026999399379168

Keltner, D., Haidt, J., & Shiota, M. N. (2006). Social-functionalism and the evolution of emotions. In M. Schaller, J. A. Simpson, & D. T. Kenrick (Eds.), *Evolution and social psychology* (pp. 115–142). Madison, CT: Psychosocial Press.

Keltner, D., Young, R. C., & Buswell, B. N. (1997). Appeasement in human emotion, social practice, and personality. *Aggressive Behavior*, *23*, 359-374. doi:10.1002/(SICI)1098-2337(1997)23:5<359::AID-AB5>3.0.CO;2-D

Kerr, J. H. (1993). An eclectic approach to psychological interventions in sport: Reversal theory. *The Sport Psychologist, 7*, 400-418. Retrieved from http://journals.humankinetics.com/tsp

Kerr, J. H., & Grange, P. (2009). Athlete-to-athlete verbal aggression: A case study of interpersonal communication among elite Australian footballers. *International Journal of Sport Communication*, *2*, 360-372.

Kirk, B. A., Schutte, N. S., & Hine, D.W. (2008). Development and preliminary validation of an emotional self-efficacy scale. *Personality and Individual Differences, 45*, 432–436. doi:10.1016/j.paid.2008.06.010

Koole, S. L. (2009). The psychology of emotion regulation: An integrative review. *Cognition & Emotion*, *23*, 4-41. doi:10.1080/02699930802619031

Koole, S. L., van Dillen, L. F., & Sheppes, G. (2010). The self-regulation of emotion. *Handbook of self regulation: Research, theory, and applications.* New York, NY: Guilford.

Krane, V., Andersen, M. B., & Strean, W. B. (1997). Issues of qualitative research methods and presentation. *Journal of sport and exercise psychology*, *19*, 213-218.

Lane, A. M., Beedie, C. J., Devonport, T. J., & Stanley, D. M. (2011). Instrumental emotion regulation in sport: Relationships between beliefs about emotion and emotion regulation strategies used by athletes. *Scandinavian Journal of Medicine & Science in Sports, 21*, e445-e451. doi:10.1111/j.1600-0838.2011.01364.x

Lane, A. M., Beedie, C. J., Devonport, T. J., Friesen, A., Stanley, D. M., Uphill. M., & Jones, M. V. (in press). Should I try to make myself feel better, or change my emotions to help me perform better? *Sport Psychology: On the Way to the Olympic Games*. Eds. Zinchenko, Y. P., & Hanin, J. L.

Lane, A. M., Beedie, C. J., Jones, M. V., Uphill, M., & Devonport, T. J. (2012). The BASES Expert Statement on emotion regulation in sport. *Journal of Sports Sciences*, *30*, 1189-1195. doi.10.1080/02640414.2012.693621

Lane, A. M., Beedie, C. J., Stanley, D. M., & Devonport, T. J. (2011). Validity of the emotion regulation of self scale among runners. *Psychology*, *2*, 633-637. doi:10.4236/psych.2011.26097

Lane, A. M., Nevill, A. M., Ahmad, N. S., & Balmer, N. (2006). Soccer Referee Decision-Making: 'Shall I Blow The Whistle?' *Journal of Sports Science and Medicine, 5,* 243-253. Retrieved from http://www.jssm:vol5/n2/9/v5n2-9text.php

Lane, A. M., & Terry, P. C. (2000). The nature of mood: Development of a conceptual model with a focus on depression. *Journal of Applied Sport Psychology, 12,* 16-33. doi:10.1080/10413200008404211

Lanzetta, J., & Englis, B. (1989). Expectations of cooperative and competition and their effects on observers' vicarious emotional responses. *Journal of Personality and Social Psychology*, *56*, 543-554. doi:10.1037//0022-3514.56.4.543

Larsen, R. J. (2000). Toward a Science of Mood Regulation. *Psychological Inquiry*, *11*, 129-141. doi:10.1207/S15327965PLI1103_01

Lauer, L., & Paiement, C. (2009). The Playing Tough and Clean Hockey Program. *The Sport Psychologist*, *23*, 543-561. Retrieved from http://journals.humankinetics.com/tsp

Lazarus, R. S. (1991). *Emotion and Adaptation*. Oxford, UK: Oxford University Press.

Lazarus, R. S. (2000). How emotions influence performance in competitive sports. *The Sport Psychologist, 14*, 229-252. Retrieved from http://journals.humankinetics.com/tsp

Lazarus, R. S. (2006). *Stress and emotion: A new synthesis*. Springer Publishing Company.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Publishing Company.

Lazarus, R., & Lazarus, B. N. (2006). *Coping With Aging*. New York: Oxford University Press.

Lieblich, A., Tuval-Mashiach, R., and Zilber, T. (1998). *Narrative Research: Reading, Analysis and Interpretation.* Thousand Oaks, CA: Sage.

Lincoln, Y. S., & Guba, E. G. (1985). Establishing trustworthiness. *Naturalistic inquiry*, 289-331.

Little, L. M., Kluemper, D., Nelson, D. L. & Gooty, J. (2011). Development and validation of the Interpersonal Emotion Management Scale. *Journal of Occupational and Organizational Psychology*. doi:10.1111/j.2044-8325.2011.02042.x

Lorimer, R., & Jowett, S. (2009a). Empathic accuracy in coach–athlete dyads who participate in team and individual sports. *Psychology of Sport and Exercise, 10*, 152–158. doi:10.1016/j.psychsport.2008.06.004

Lorimer, R., & Jowett, S. (2009b). Empathic accuracy, meta-perspective, and satisfaction in the coach-athlete relationship. *Journal of Applied Sport Psychology*, *21*, 201-212. doi:10.1080/10413200902777289

Males, J. R., Kerr, J. H., Thatcher, J., & Bellew, E. (2006). Team Process and Players' Psychological Responses to Failure in a National Volleyball Team. *The Sport Psychologist, 20*, 275-294. Retrieved from http://journals.humankinetics.com/tsp

Mankad, A., Gordon, S., & Wallman, K. (2009). Psycho-Immunological effects of written emotional disclosure during long-term injury rehabilitation. *Journal of Clinical Sport Psychology*, *3*, 205-217. Retrieved from http://journals.humankinetics.com/jcsp

Manstead, A. S. (1991). Emotion in social life. *Cognition & Emotion*, *5*, 353-362. doi:10.1080/02699939108411047

Marsh, A. A., Ambady, N., & Kleck, R. E. (2005). The effects of fear and anger facial expressions on approach-and avoidance-related behaviors. *Emotion 5*, 119-124. doi:10.1037/1528-3542.5.1.119

Marshall, C. & Rossman, G. B. (1995). *Designing Qualitative Research* (2nd ed.). Sage: Thousand Oaks, CA.

Martindale, A., & Collins, D. (2007). Enhancing the evaluation of effectiveness with professional judgment and decision making. *The Sport Psychologist*, *21*, 458-474. Retrieved from http://www.journals.humankinetics.com/tsp

Mauss, I. B., & Robinson, M. D. (2009). Measures of emotion: A review. *Cognition and Emotion*, *23*, 209-237. doi:10.1080/02699930802204677

McArdle, S., Martin, D., Lennon, A., & Moore, P. (2010). Exploring Debriefing in Sports: A Qualitative Perspective. *Journal of Applied Sport Psychology*, *22*, 320-332. doi:10.1080/10413200.2010.481566

McCann, S. C. (2000). Doing sport psychology at the really big show. In M.B. Andersen, (Ed.), *Doing sport psychology* (pp. 209-222). Champaign, IL: Human Kinetics.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: A sourcebook of new methods* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Moll, T., Jordet, G., & Pepping, G. J. (2010). Emotional contagion in soccer penalty shootouts: Celebration of individual success is associated with ultimate team success. *Journal of Sports Sciences*, *28*, 983-992. doi:10.1080/02640414.2010.484068

Nadeau, L., Godbout, P., & Richard, J. F. (2008). Assessment of ice hockey performance in real-game conditions. *European Journal of Sport Sciences, 8*, 379-388. doi:10.1080/17461390802284456

Nesse, R. M., & Ellsworth, P. C. (2009). Evolution, emotions, and emotional disorders. *American Psychologist*, *64*, 129-139. doi:10.1037/a0013503

Nieuwenhuys, A., Vos, L., Pijpstra, S., & Bakker, F. C. (2011). Meta experiences and coping effectiveness in sport. *Psychology of Sport and Exercise, 12*, 135–143. doi:10.1016/j.psychsport.2010.07.008

Niven, K., Totterdell, P., & Holman, D. (2007). Changing moods and influencing people: The use and effects of emotional influence behaviours at HMP Grendon. *Prison Service Journal*, *173*, 39-45. Retrieved from http://www.crimeandjustice.org.uk/psj.html

Niven, K., Totterdell, P., & Holman, D. (2009). A classification of controlled interpersonal affect regulation strategies. *Emotion*, *9*, 498-509. doi:10.1037/a0015962

Niven, K., Totterdell, P., Stride, C. B., & Holman, D. (2011). Emotion regulation of self and others (EROS): The development and validation of a new individual difference measure. *Current Psychology, 30*, 53-73. doi:10.1007/s12144-011-9099-9

Oatley, K., & Jenkins, J. M. (1992). Human emotions: Function and dysfunction. *Annual Review of psychology*, *43*, 55-85. doi:10.1146/annurev.psych.43.1.55

O'Neill, D. H. (2008). Injury contagion in apline ski racing: The effects of injury on teammates' performance. *Journal of Clinical Sport Psychology, 2*, 278-292. Retrieved from http://www.humankinetics.com/jcsp

Page, J., & Thelwell, R. (2012). The value of social validation in single-case methods in sport and exercise psychology. *Journal of Applied Sport Psychology, 25*, 61-71. doi:10.1080/10413200.2012.663859

Parkindon, B. (2011a). How social is the social psychology of emotion? *British Journal of Social Psychology, 50*, 405-413. doi:10.1111/j.2044-8309.2011.02034.x

Parkinson, B. (1996). Emotions are social. *British Journal of Psychology*, *87*, 663-683. doi:10.1111/j.2044-8295.1996.tb02615.x

Parkinson, B., Fischer, A., & Manstead, A.S.R. (2005). *Emotion in social relations: Cultural, group, and interpersonal processes*: New York, NY: Psychology Press.

Parkinson, B., & Simons, G. (2009). Affecting others: Social appraisal and emotion contagion in everyday decision making. *Personality and Social Psychology Bulletin, 35*, 1071-1084. doi:10.1177/0146167209336611

Parkinson, B., & Totterdell, P. (1999). Classifying affect-regulation strategies. *Cognition and Emotion*, *13*, 277-303. doi:10.1080/026999399379285

Partington, J., & Orlick, T. (1987). The sport psychology consultant: Olympic coaches' views. *The Sport Psychologist, 1*, 95-102. Retrieved from http://www.humankinetics.com/tsp

Perkins, D., Wilson, G. V., & Kerr, J. H. (2001). The effects of elevated arousal and mood on maximal strength performance in athletes. *Journal of Applied Sport Psychology*, *13*, 239-259. doi:10.1080/104132001753144392

Petitpas, A. J., Giges, B., & Danish, S. J. (1999). Sport psychologist–athlete relationship: Implications for training. *The Sport Psychologist, 13*, 344-357. Retrieved from http://journals.humankinetics.com/tsp

Poczwardowski, A., Sherman, C. P., & Henschen, K. P. (1998). A sport psychology service delivery heuristic: building on theory and practice. *The Sport Psychologist*, *12*, 191-207. Retrieved from http://journals.humankinetics.com/tsp

Poczwardowski, A., & Sherman, C. P. (2011). Revisions to the sport psychology service delivery (SPSD) heuristic: explorations with experienced consultants. *The Sport Psychologist*, *25*, 511-532. Retrieved from http://journals.humankinetics.com/tsp

Poczwardowski, A., Sherman, C. P., & Ravizza, K. (2004). Professional philosophy in the sport psychology service delivery: Building on theory and practice. *The Sport Psychologist*, *18*, 445-463. Retrieved from http://journals.humankinetics.com/tsp

Poizat, G., Bourbousson, J., Saury, J., & Sève, C. (2012). Understanding team coordination in doubles table tennis: Joint analysis of first- and third-person data. *Psychology of Sport and Exercise, 13*(5), 630-639. doi:10.1016/j.psychsport.2012.03.008

Polman, R., Nicholls, A. R., Cohen, J., & Borkoles, E. (2007). The influence of game location and outcome on behaviour and mood states among professional rugby league players. *Journal of Sports Sciences, 25*, 1491-1500. doi:10.1080/02640410601175436

Porath, C. L., Overbeck, J. R., & Pearson, C. M. (2008). Picking up the gauntlet: How individuals respond to status challenges. *Journal of Applied Social Psychology*, *38*, 1945-1980. doi:10.1111/j.1559-1816.2008.00375.x

"Post-Game Raw: Sam Gagne. (2013, 1, 24). [Online video]. Retrieved from

    http://video.oilers.nhl.com/videocenter/console?catid=4&id=195844

Pugh, D. S. (2001). Service with a smile: Emotional contagion in the service encounter.

    *Academy of Management Journal, 44*, 1018-1027.

Rimé, B. (2006). Interpersonal emotion regulation. In J.J. Gross (Ed.), *Handbook of emotion*

    *regulation* (pp. 466-485). New York, NY: The Guilford Press.

Rimé, B. (2009). Emotion elicits the social sharing of emotion: Theory and empirical review.

    *Emotion Review*, *1*, 60-85. doi:10.1177/1754073908097189

Robazza, C., Bortoli, L., & Hanin, Y. (2006). Perceived effects of emotion intensity on

    athletic performance: A contingency-based individualized approach. *Research*

    *Quarterly for Exercise & Sport*, *77*, 372-385.

    doi:10.5641/027013606X13080770014888

Robazza, C., Pellizzari, M., & Hanin, Y. (2004). Emotion self-regulation and athletic

    performance: An application of the IZOF model. *Psychology of Sport and Exercise*, *5*,

    379-404. doi:10.1016/S1469-0292(03)00034-7

Ronglan, L. T. (2007). Building and communicating collective efficacy: A season-long in-

    depth study of an elite sport team. *The Sport Psychologist*, *21*, 78-93. Retrieved from

    http://journals.humankinetics.com/tsp

Ruiz, M. C., & Hanin, Y. L. (2011). Perceived impact of anger on performance of skilled

    karate athletes. *Psychology of Sport and Exercise, 12*, 242-249.

    doi:10.1016/j.psychsport.2011.01.005

Russell, J. A. (2003). Core affect and the psychological construction of emotion.

    *Psychological Review, 110*, 145-172. doi:10.1037/0033-295X.110.1.145

Scanlan, T. K., Carpenter, P. J., Schmidt, G. W., Simons, J. P., & Keeler, B. (1993). An

    introduction to the sport commitment model. *Journal of Sport & Exercise Psychology*,

    *15*, 1-15. Retrieved from http://journals.humankinetics.com/jsep

Schoenewolf, G. (1990). Emotional contagion: Behavioural induction in individuals and

    groups. *Modern Psychoanalysis*, *15*, 49-61.

Sève, C., Poizat, G., Saury, J., & Durand, M. (2006). A grounded theory of elite male table

    tennis players' activity during matches. *The Sport Psychologist*, *20*, 58-73. Retrieved

    from http://journals.humankinetics.com/tsp

Sève, C., Ria, L., Poizat, G., Saury, J., & Durand, M. (2007). Performance-induced emotions

    experienced during high-stakes table tennis matches. *Psychology of Sport and*

    *Exercise, 8*(1), 25-46. doi:10.1016/j.psychsport.2006.01.004

Shapcott, K. M., Bloom, G. A., & Loughead, T. M. (2007). An initial exploration of the

    factors influencing aggressive and assertive intentions of women ice hockey players.

    *International Journal of Sport Psychology*, *38*, 145-162. Retrieved from

    http://www.ijsp-online.com

Shariff, A. F., & Tracy, J. L. (2011). What are emotion expressions for? *Current directions in*

    *psychological science*, *20*, 395-399. doi:10.1177/0963721411424739

Sharp, L. A., & Hodge, K. (2011). Sport psychology consulting effectiveness: The sport

    psychology consultant's perspective. *Journal of Applied Sport Psychology*, *23*, 360-

    376. doi:10.1080/10413200.2011.583619

Skinner, N., & Brewer, N. (2004). Adaptive approaches to competition: Challenge appraisals

    and positive emotion. *Journal of Sport & Exercise Psychology, 26*, 283-305.

    Retrieved from http://journals.humankinetics.com/jsep

Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: A review and critique of category systems for classifying ways of coping. *Psychological Bulletin, 129*, 216–269. doi:10.1037/0033-2909.129.2.216

Smith, J. A. (2008). *Qualitative Psychology: A Practical Guide to Research Methods*. London: Sage.

Smith, J. A., & Osborn, M. (2008). Interpretive phenomenological analysis. In J. A. Smith (Ed.), *Qualitative Psychology: A Practical Guide to Research Methods* (pp. 51-80). London: Sage.

Smith, B., & Sparkes, A. C. (2006). Narrative inquiry in psychology: exploring the tensions within. *Qualitative Research in Psychology, 3*, 169–192. doi:10.1191/1478088706qrp068oa

Smith, B., & Sparkes, A. (2009). Narrative analysis and sport and exercise psychology: Understanding lives in diverse ways. *Psychology of Sport and Exercise, 10*, 279-288. doi:10.1016/j.psychsport.2008.07.012

Sparkes, A. C. & Partington, S. (2003). Narrative practice and its potential contribution to sport psychology: The example of flow. *The Sport Psychologist, 17,* 292-317. Retrieved from http://journals.humankinetics.com/tsp

Stanley, D. M., Lane, A. M., Beedie, C. J., Friesen, A. P., & Devonport, T. J. (2012). Emotion regulation strategies used in the hour before running. *International Journal of Sport and Exercise Psychology, 10*(3), 159-171. doi:10.1080/1612197X.2012.671910

Stevens, M. J., & Lane, A. M. (2001). Mood-regulating strategies used by athletes. *Athletic Insight*, *3*(3), Article 2. Available at: http://www.athleticinsight.com.

Strean, W. B. (1998). Possibilities for qualitative research in sport psychology. *The Sport Psychologist,* 333-345. Retrieved from http://journals.humankinetics.com/tsp

Sy, T., Côté, S., & Saavedra, R. (2005). The contagious leader: impact of the leader's mood on the mood of group members, group affective tone, and group processes. *Journal of Applied Psychology*, *90*, 295-305. doi:10.1037/0021-9010.90.2.295

Tamir, M. (2008). What do people want to feel and why? Pleasure and utility in emotion regulation. *Current Directions in Psychological Science*, *18*, 101-105. doi:10.1111/j.1467-8721.2009.01617.x

Tamir, M. (2011). The maturing field of emotion regulation. *Emotion Review*, *3*, 3-7. doi:10.1177/1754073910388685

Tamir, M., Chiu, C. Y., & Gross, J. J. (2007). Business or pleasure? Utilitarian versus hedonic considerations in emotion regulation. *Emotion*, *7*, 546-554. doi:10.1037/1528-3542.7.3.546

Tamir, M., & Ford, B. Q. (2009). Choosing to be afraid: Preferences for fear as a function of goal pursuit. *Emotion*, *9*, 488-497. doi:10.1037/a0015882

Tamir, M., Mitchell, C., & Gross, J. J. (2008). Hedonic and instrumental motives in anger regulation. *Psychological Science*, *19*, 324-328. doi:10.1111/j.1467-9280.2008.02088.x

Tenenbaum, G., Edmonds, W. A., & Eccles, D. W. (2008). Emotions, coping strategies, and performance: A conceptual framework for defining affect-related performance zones. *Military Psychology*, *20*(Suppl1), S11-S37. doi:10.1080/08995600701804772

Thatcher, J., & Day, M. C. (2008). Re-appraising stress appraisals: The underlying properties of stress in sport. *Psychology of sport and exercise*, *9*, 318-335. doi:10.1016/j.psychsport.2007.04.005

The Canadian Press. (2013, 1, 25). Gagner, Yakupov help Oilers stun Kings in overtime. [News article]. Retrieved from http://www.tsn.ca/nhl/teams/story/?id=414417&hubname=nhl-oilers

Thelwell, R. C., & Greenlees, I. A. (2003). Developing competitive endurance performance using mental skills training. *The Sport Psychologist*, *17*, 318-337. Retrieved from http://www.humankinetics.com/tsp

Thelwell, R. C., Greenlees, I.A., & Weston, N. (2006). Using psychological skills training to develop soccer performance. *Journal of Applied Sport Psychology*, *18*, 254-270. doi:10.1080/10413200600830323

Thomas, P. R., Murphy, S., & Hardy, L. (1999). Test of performance strategies: Development and preliminary validation of a comprehensive measure of athletes' psychological skills. *Journal of Sports Sciences*, *17*, 697-711. doi:10.1080/026404199365560

Thompson, R. A. (1994). Emotion regulation: A theme in search of definition. *Monographs of the Society for Research in Child Development*, *59*, 25-52. doi:10.2307/1166137

Tice, D. M., & Bratslavsky, E. (2000). Giving in to feel good: The place of emotion regulation in the context of general self-control. *Psychological Inquiry*, *11*, 149-159. doi:10.1207/S15327965PLI1103_03

Timmers, M., Fischer, A. H., & Manstead, A. S. (1998). Gender differences in motives for regulating emotions. *Personality and Social Psychology Bulletin*, *24*(9), 974-985. doi:10.1177/0146167298249005

Totterdell, P. (2000). Catching moods and hitting runs: Mood linkage and subjective performance in professional sport teams. *Journal of Applied Psychology*, *85*, 848-859. doi: 10.1037//0021-9010.85.6.848

Totterdell, P., Kellett, S., Teuchmann, K., & Briner, R. B. (1998). Evidence of mood linkage in work groups. *Journal of Personality and Social Psychology*, *74*, 1504–1515. doi:10.1037//0022-3514.74.6.1504

Totterdell, P., Niven, K., & Holman, D. (2010). Our emotional neighbourhoods. *The Psychologist, 23*, 474-477.

Tracy, S. J. (2010). Qualitative quality: Eight "big-tent" criteria for excellent qualitative research. *Qualitative inquiry*, *16*, 837-851. doi:10.1177/1077800410383121

Uphill, M. A., & Jones, M. V. (2007). Antecedents of emotions in elite athletes: A cognitive motivational relational theory perspective. *Research Quarterly for Exercise & Sport*, *78*, 79-89. doi:10.5641/193250307X13082490460508

Uphill, M. A., Lane, A., & Jones, M. V. (2012). Emotion Regulation Questionnaire for use with athletes. *Psychology of Sport and Exercise, 13*, 761-770. doi:10.1016/j.psychsport.2012.05.001

Uphill, M. A., McCarthy, P. J., & Jones, M. V. (2009). Getting a grip on emotion regulation in sport: conceptual foundations and practical applications. In S. Hanton, & S. Mellalieu (Eds.), Advances in applied sport psychology (pp. 162-194). London: Routledge.

Van Beest, I., Van Kleef, G. A., & Van Dijk, E. (2008). Get angry, get out: The interpersonal effects of anger communication in multiparty negotiation. *Journal of Experimental Social Psychology, 44*, 993–1002. doi:10.1016/j.jesp.2008.02.008

Van Der Schalk, J., Fischer, A., Doosje, B., Wigboldus, D., Hawk, S., Rotteveel, M., & Hess, U. (2011). Convergent and divergent responses to emotional displays of ingroup and outgroup. *Emotion*, *11*, 286-298. doi:10.1037/a0022582

Van Dijk, E., Van Kleef, G. A., Steinel, W., & Van Beest, I. (2008). A social functional approach to emotions in bargaining: when communicating anger pays and when it backfires. *Journal of Personality and social Psychology*, *94*, 600. doi:10.1037/0022-3514.94.4.600

Van Doorn, E. A., Heerdink, M. W., & Van Kleef, G. A. (2012). Emotion and the construal of social situations: Inferences of cooperation versus competition from expressions of

anger, happiness, and disappointment. *Cognition & Emotion*, *26*, 442-461. doi:10.1080/02699931.2011.648174

Van Kleef, G. A. (2009). How emotions regulate social life. *Current Directions in Psychological Science*, *18*, 184-188. doi:10.1111/j.1467-8721.2009.01633.x

Van Kleef, G. A. (2010). The emerging view of emotion as social information. *Social and Personality Psychology Compass*, *4*, 331-343. doi:10.1111/j.1751-9004.2010.00262.x

Van Kleef, G. A., & Côté, S. (2007). Expressing anger in conflict: When it helps and when it hurts. *Journal of Applied Psychology*, *92*, 1557-1569. doi:10.1037/0021-9010.92.6.1557

Van Kleef, G. A., De Dreu, C. K. W., & Manstead, A. S. R. (2004a). The interpersonal effects of anger and happiness in negotiations. *Journal of Personality & Social Psychology*, *86*, 57-76. doi:10.1037/0022-3514.86.1.57

Van Kleef, G. A., De Dreu, C. K. W., & Manstead, A. S. R. (2004b). The interpersonal effects of emotions in negotiations: A motivated information processing approach. *Journal of Personality & Social Psychology*, *87*, 510-528. doi:10.1037/0022-3514.87.4.510

Van Kleef, G. A., De Dreu, C. K., & Manstead, A. S. (2006). Supplication and appeasement in conflict negotiation: The interpersonal effects of disappointment, worry, guilt, and regret. *Journal of Personality and Social Psychology, 91*, 124-142. doi:10.1037/0022-3514.91.1.124

Van Kleef, G. A., De Dreu, C. K., & Manstead, A. S. (2010). An interpersonal approach to emotion in social decision making: The emotions as social information model. *Advances in experimental social psychology*, *42*, 45-96. doi:10.1016/S0065-2601(10)42002-X

Van Kleef, G. A., De Dreu, C. K., Pietroni, D., & Manstead, A. S. (2006). Power and emotion in negotiation: Power moderates the interpersonal effects of anger and happiness on concession making. *European Journal of Social Psychology*, *36*, 557-581. doi:10.1002/ejsp.320

Van Kleef, G. A., Homan, A. C., Beersma, B., & van Knippenberg, D. (2010). On angry leaders and agreeable followers how leaders' emotions and followers' personalities shape motivation and team performance. *Psychological science*, *21*, 1827-1834. doi:10.1177/0956797610387438

Van Kleef, G. A., Homan, A. C., Beersma, B., Van Knippenberg, D., Van Knippenberg, B., & Damen, F. (2009). Searing sentiment or cold calculation? The effects of leader emotional displays on team performance depend on follower epistemic motivation. *Academy of Management Journal*, *52*, 562-580. doi:10.5465/AMJ.2009.41331253

Van Kleef, G. A., Oveis, C., Van der Löwe, I., LuoKogan, A., Goetz, J., & Keltner, D. (2008). Power, distress, and compassion: Turning a blind eye to the suffering of others. *Psychological Science, 19*, 1315-1322. doi:10.1111/j.1467-9280.2008.02241.x

Van Kleef, G. A., Van Doorn, E. A., Heerdink, M. W., & Koning, L. F. (2011): Emotion is for influence, *European Review of Social Psychology, 22*, 114-163. doi:10.1080/10463283.2011.627192

Vargas-Tonsing, T. M. (2009). An exploratory examination of the effects of coaches' pre-game speeches on athletes' perceptions of self-efficacy and emotion. *Journal of Sport Behaviour*, *32*, 92-111.

Vargas-Tonsing, T. M., & Guan, J. (2007). Athletes' preferences for informational and emotional pre-game speech content. *International Journal of Sports Science & Coaching*, *2*, 171-180. doi: 10.1260/174795407781394338

Vargas-Tonsing, T. M., Myers, N. D., & Feltz, D. L. (2004). Coaches' and athletes' perceptions of efficacy-enhancing techniques. *The Sport Psychologist*, *18*, 397-414. Retrieved from http://www.humankinetics.com/tsp

Wagstaff, C. R. D., Hanton, S., & Fletcher, D., (2013). Developing Emotion Abilities and Regulation Strategies in a Sport Organization: An Action Research Intervention, *Psychology of Sport & Exercise.* doi: 10.1016/j.psychsport.2013.01.006

Webb, T. L., Gallo, I. S., Miles, E., Gollwitzer, P. M., & Sheeran, P. (2012). Effective regulation of affect: An action control perspective on emotion regulation. *European Review of Social Psychology*, *23*, 143-186. doi:10.1080/10463283.2012.718134

Webb, T. L., Miles, E., & Sheeran, P. (2012). Dealing with feeling: A meta-analysis of the effectiveness of strategies derived from the process model of emotion regulation. *Psychological Bulletin, 138*, 775-808. doi:10.1037/a0027600

Wickwire, T. L., Bloom, G. A., & Loughead, T. M. (2004). The environment, structure, and interaction process of elite same-sex dyadic sport teams. *The Sport Psychologist*, *18*, 381-396. Retrieved from http://www.humankinetics.com/tsp

Wild, B., Erb, M., & Bartels, M. (2001). Are emotions contagion? Evoked emotions while viewing emotionally expressive faces: Quality, quantity, time course and gender differences. *Psychiatry Research, 102*, 109-124. doi:10.1016/S0165-1781(01)00225-6

Williams, L. A., & DeSteno, D. (2008). Pride and perseverance: The motivational role of pride. *Journal of personality and social psychology*, *94*, 1007-1017. doi:10.1037/0022-3514.94.6.1007

Woodcock, C., Cumming, J., Duda, J. L., & Sharp, L. A. (2011). Working within an Individual Zone of Optimal Functioning (IZOF) framework: Consultant practice and athlete reflections on refining emotion regulation skills. *Psychology of Sport and Exercise, 13*, 291-302. doi:10.1016/j.psychsport.2011.11.011

Wubben, M. J. J., De Cremer, D., & Van Dijk, E. (2009). How emotion communication

   guides reciprocity: Establishing cooperation through disappointment and anger.

   *Journal of Experimental Social Psychology, 45,* 987-990.

   doi:10.1016/j.jesp.2009.04.010

# APPENDIX A: INFORMED CONSENT FORMS



## School of Sport, Performing Arts and Leisure
## University of Wolverhampton

**Primary researcher**: Andrew Friesen

**Supervising Researcher**: Professor Andy Lane

"Catching emotions": Emotions regulation in dyads

**Objective**: The objective of this project is to investigate interpersonal emotion regulation between sport participants.

**Programme**: Emotions in competitive sports can have powerful effects on performance. Although athletes and coaches often manage their emotions themselves, emotions are sometimes deliberately influenced by other people. This project involves you taking part in an interview about how you have managed the emotions of other people in your sport. Please be as honest as you can in the interview. The interview typically takes 1 hour although you are free to share as much or little as you like. I will ask you about the strategies you have used in past games and practices to influence the emotions your teammates have and what strategies you think your teammates, coaches, and opponents have used on you. There are no physical risks involved in this study and the possible social and psychological risks are minimal.

**Confidentiality**: Your interviews will be strictly confidential and in line with the code of conduct of the British Association of Sport and Exercise Sciences. Your data will be stored in a locked cabinet at the University of Wolverhampton and eventually destroyed. All transcripts will remove any names which may indicate your identity. The only people with access to the data will be the primary and supervising researchers.

You are free to withdraw from participating in this research and withdraw use of your data at any time without any negative pressure or consequences.

Please place a cross box to confirm that:

1. you have read and understand the information sheet for the above study and have had opportunity to ask questions

2. understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

3. agree to take part in the above study and agree to the terms set.

Name of participant:_____

Signature of participant:_____

Date

If you require further information, please contact: Andrew Friesen (University of Wolverhampton): a.p.f@wlv.ac.uk

APPENDIX B: INTERVIEW SCHEDULE

## Interview Guide

**Section 1: Introduction**

The prompt: "Please tell me what it is like being a hockey player"

**Section 2: Recalling past critical/emotional events**

The prompt:

"I would like you to take a few moments and think of a particularly emotional game or practice when you tried to alter or maintain the emotions of a teammate—for example, a game that was especially important. When you're ready, I'd like you to describe this time to me in as much detail as you can."

Follow up probes:
"What do you think caused your teammate to feel that way?"
"What made you think he was feeling that way?"
"Do you remember how you were feeling at that time?"
"Why was it important for you to change how he was feeling?"
"What did you do to try to change his emotion?"
"Do you think you were successful in changing your teammate's emotion? Why or why not?"

Probe for additional examples of interpersonal emotion regulation:
- other emotions
- strategies used on opponents, coaches
- times where a teammate has tried to change their emotions
- specific scenarios:
  - pulling a goalie
  - intermission talks
  - pregame and post game talks
  - coach singles you out on the bench
  - opponents on the ice
  - creating a turnover
  - exceptional good play
  - taking a bad penalty
  - the injured athlete