UNIVERSITY BIRMINGHAM University of Birmingham Research at Birmingham

Exploring emotions as social phenomena among Canadian varsity athletes

Smith, Brett; Tamminen, Katherine A; Palmateer, Tess M; Denton, Michael; Sabiston, Catherine; Crocker, Peter; Eys, Mark

DOI: 10.1016/j.psychsport.2016.07.010 License:

Creative Commons: Attribution-NonCommercial-NoDerivs (CC BY-NC-ND)

Document Version Peer reviewed version

Citation for published version (Harvard):

Smith, B, Tamminen, KA, Palmateer, TM, Denton, M, Sabiston, C, Crocker, P & Eys, M 2016, 'Exploring emotions as social phenomena among Canadian varsity athletes', *Psychology of Sport and Exercise*, vol. 27, pp. 28-38. https://doi.org/10.1016/j.psychsport.2016.07.010

Link to publication on Research at Birmingham portal

Publisher Rights Statement: Checked for eligibility: 07/09/2016

General rights

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes permitted by law.

•Users may freely distribute the URL that is used to identify this publication.

•Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.

•User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?) •Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.

When citing, please reference the published version.

Take down policy

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact UBIRA@lists.bham.ac.uk providing details and we will remove access to the work immediately and investigate.

1	Running head: EMOTIONS AS SOCIAL PHENOMENA
2	
3	
4	
5	Exploring emotions as social phenomena among Canadian varsity athletes
6	
7	Katherine A. Tamminen ¹
8	Tess M. Palmateer ¹
9	Michael Denton ¹
10	Catherine Sabiston ¹
11	Peter Crocker ²
12	Mark Eys ³
13	Brett Smith ⁴
14	
15	
16 17 18 19 20	 ¹ Faculty of Kinesiology & Physical Education, University of Toronto ² School of Kinesiology, The University of British Columbia ³ Departments of Kinesiology/Physical Education and Psychology, Wilfrid Laurier University ⁴ School of Sport, Exercise, and Rehabilitation Sciences, University of Birmingham
21 22 23 24 25 26	Corresponding author: Katherine A. Tamminen, Faculty of Kinesiology and Physical Education, University of Toronto, 55 Harbord St. Toronto, ON M5S 2W6 <u>katherine.tamminen@utoronto.ca</u>
20 27 28 29 30	This study was supported by an Insight Development Grant awarded to the first author by the Social Sciences and Humanities Research Council of Canada.
31	Keywords: group, team, affect, emotion; group-based emotions; collective emotions

32

Abstract

Objectives: Athletes are constantly engaging with teammates, coaches, and opponents, and rather 33 34 than treating emotions as manifested in the individual as is often the case, psychological analyses 35 need to treat emotions as social and relational. The purpose of this research was to explore 36 athletes' accounts of emotions as social phenomena in sport using qualitative inquiry methods. 37 Method: Fourteen Canadian varsity athletes (7 males, 7 females, age range: 18-26 years) from a 38 variety of sports participated in two semi-structured interviews. Data were analyzed using 39 inductive coding, categorization, micro-analysis, and abduction (Mayan, 2009; Strauss & Corbin, 40 1998). Results: Athletes reported individual and shared stressors that led to individual, group-41 based, and collective emotions, and they also reported emotional conflict when they 42 simultaneously experienced individual and group-based or collective emotions. Emotional 43 expressions were perceived to impact team functioning and performance, communicated team 44 values, served affiliative functions among teammates, and prompted communal coping to deal with stressors as a team. Factors which appeared to influence athletes' emotions included athlete 45 identity, teammate relationships, leaders and coaches, and social norms for emotion expression. 46 47 Conclusions: Our study extends previous research by examining emotions as social phenomena 48 among athletes from a variety of sports, and by elaborating on the role of athletes' social identity 49 with regard to their emotional experiences in sport.

50

Exploring emotions as social phenomena among Canadian varsity athletes

51 Athletes report a wide variety of emotions associated with their participation in sport, which can have positive and negative consequences for performance and team functioning (e.g., 52 Martinent, Nicolas, Gaudreau, & Campo, 2009). Researchers have focused largely on the 53 54 implications of emotions at an individual level, where emotions are thought to arise as a response to an event that an individual appraises as relevant to his or her goals and that serve to help the 55 56 individual adapt to their environment and deal with problems or challenges (Lazarus, 1991; 57 1999). Positive or pleasant emotions are generally associated with adaptive performance 58 outcomes, while negative or unpleasant emotions are generally associated with maladaptive 59 performance outcomes (e.g., Cerin, 2003; Wilson, Wood, & Vine, 2009), although in some cases 60 negative emotions have been found to be beneficial for performance (e.g., Robazza & Bortoli, 61 2007; Woodman, et al., 2009). However, this intrapersonal approach typically has not taken into 62 consideration the social context within which emotions occur and operate, despite theoretical 63 propositions that emotions influence and are influenced by others (Lazarus, 1991). Additionally, 64 researchers investigating team chemistry in sport have argued that "the interaction among shared cognitions, socio-behaviors, and affections in sports has been conceptually noted as crucial in 65 competitive athletic settings" (Gershgoren, et al., 2016). This is also underscored in rare research 66 67 on emotional life in sport and physical activity that highlighted emotions are constituted within 68 embodied social relationships (Phoenix & Orr, 2014). In so doing, it was argued that rather than treating emotions as manifested in the individual as is often the case, psychological analyses 69 70 need to treat emotion as social and relational. Such a conceptual move is reinforced in cultural 71 sport psychology (McGannon & Smith, 2015). Athletes are constantly interacting with 72 teammates, coaches, and opponents, and it is therefore important to explore emotional

73 phenomena while considering the social aspects of the sport context.

74 Group-Based and Collective Emotions

75 Group-based and collective emotions explicitly concern the social dynamics of emotional 76 experiences. Group-based emotions refer to emotions that are tied to an individual's 77 identification with a particular social group/team and they are thought to occur in response to 78 events that are deemed relevant to the group as a whole (Goldenberg, Saguy, & Halperin, 2014; 79 Goldenberg, Halperin, van Zomeren, & Gross, 2016). Collective emotions are a form of group-80 based emotions that are also experienced as a function of one's identity as a team member, but 81 they are experienced simultaneously by a team or group of individuals (Goldenberg et al. 2014). 82 Collective emotions refer to the "synchronous convergence in affective responding across 83 individuals towards a specific event or object" (von Scheve & Ismer, 2013, p.406), which is 84 similar to emotional contagion (Barsade, 2002). An example of collective emotions could be a 85 team of athletes who are happy and celebrating together after winning a competition. In contrast, 86 group-based emotions need not occur in the presence of others: for example, an athlete may feel 87 group-based emotions such as pride or shame as a function of his or her identity as a team 88 member, but does not need to be physically present with teammates to experience such emotions. 89 Sport may be a particularly valuable context for studying emotions as social phenomena. 90 Specifically, sporting matches are collective events with specific features that contribute to 91 collective emotional experiences or emotional synchrony among spectators (Cottingham, 2012; 92 Paez, Rimé, Basabe, Wlodarczyk, & Zumeta, 2015). Among athletes, Totterdell (2000) 93 investigated mood convergence among 33 professional cricket players and found that the happy 94 moods of individual players were positively associated with the team's average level of 95 happiness during a championship match. Athletes' own positive mood was significantly

96 associated with their subjective ratings of their own performance, and over the course of the 97 match, changes in the team's aggregate positive mood were associated with changes in the 98 team's performance. In spite of this early evidence suggesting that team collective emotions may 99 be important for performance outcomes, athletes' perceptions of group-based or collective 100 emotions in sport, and the social functions of these emotions, have not been explored.

101 Considering emotions as social phenomena also seeks to account for the social functions 102 of emotions within the context of social relationships. Within a socio-functional perspective of 103 emotions, emotions are thought to help individuals adapt to their environment and solve 104 problems, but also coordinate social interactions and relationships (Fischer & Manstead, 2008; 105 Keltner & Haidt, 1999). Although there has been little attention to the interpersonal or social 106 functions of emotions in sport (Crocker, Tamminen, & Gaudreau, 2015; Tamminen & Gaudreau, 107 2014), one exception is a study by Friesen, Devonport, Sellars, and Lane (2013), who provided 108 initial evidence that emotions function at multiple levels within the social context of sport 109 according to a socio-functional perspective outlined by Keltner and Haidt (1999). At the 110 individual and dyadic/peer levels, athletes' perceptions of their own emotions and the emotions 111 of their teammates served as indicators of when they should regulate the emotions of their 112 teammates. At the team level, changes in the team's goals were associated with new emotions 113 and the use of different emotion regulation strategies. Emotions such as guilt, embarrassment, 114 and anger were evoked to motivate teammates to adhere to a cultural mentality of winning and 115 productivity. The Friesen et al. (2013) work was limited to the narratives created from two 116 athletes' perceptions of the impact of their own emotions on interpersonal emotion regulation. 117 We sought to build on this research by investigating multiple athletes' perceptions of the social 118 functions of emotions, and we sampled athletes from a variety of sports that reflect the social

contexts where athletes train and sometimes compete with other team members (Evans, Eys, &Bruner, 2012).

121 Emotions are also thought to mobilize group members and coordinate collective actions 122 to deal with problems as a group (Kelly, Iannone, & McCarty, 2014) and to meet shared goals 123 (Keltner & Haidt, 1999). Thus, another objective was to explore the role of emotions in 124 coordinating the actions of athletes to deal with stressors collectively as a team. Drawing on 125 collectivist frameworks of coping (e.g., Lyons, Mickelson, Sullivan, & Coyne, 1998), communal 126 coping takes place when a stressor is perceived as "our" stressor rather than "yours" or "mine". 127 To understand how emotions may coordinate collective actions to deal with stressors as a team 128 or group, it is important to comprehend how athletes appraise events as relevant for the team or 129 group. Sport stressors can have repercussions for group members even if an athlete is not directly 130 or initially affected by the event. For example, injuries can cause changes in team lineup, 131 teammate relationships, and the team emotional climate (Surya, Benson, Balish, & Eys, 2015). 132 Organizational stressors (Arnold & Fletcher, 2012) can also affect an entire team or group of 133 athletes, as they include cultural and team issues as well as leadership and personnel issues. To 134 date, researchers have tended to adopt an intrapersonal approach to examine how athletes 135 perceive stressors in relation to their personal goals and values (e.g., Wolf, Evans, Laborde, 136 Kleinert, 2015; Thatcher & Day, 2008) and in examining athletes' individual responses to 137 organizational stressors (e.g., Fletcher, Hanton, & Wagstaff, 2012). In keeping with an 138 exploration of emotions as social phenomena, we sought to explore athletes' appraisals of 139 stressors that were relevant for themselves and for their team, and to investigate how emotions 140 may coordinate actions to deal with stressors collectively as a group.

The purpose of this research was to explore emotions as social phenomena in sport. The research questions were: (a) What do athletes perceive as individual and shared stressors in sport? (b) How do athletes experience and express emotions individually and collectively in sport contexts? (c) What social functions do emotions serve in sport settings? (d) What factors are associated with emotions as social phenomena in sport teams and groups?

146

Methods

147 We approached this research from an interpretivist/constructionist position (Guba & 148 Lincoln, 2005; Schwandt, 1994), which seeks to understand the complex worlds of those who 149 live them, and wherein knowledge is portrayed as a construction of relative consensus among 150 individuals' experiences/interpretations (Guba & Lincoln, 2005). From this perspective, 151 interpretation is central to understanding the meanings and experiences of participants, who 152 construct and interpret their own behaviours and those of people around them (Schwandt, 1994); 153 accordingly, our interpretations are viewed as constructions of our participants' interpretations of 154 their own experiences. This reflects a transactional epistemology where findings were co-created 155 between the investigators and participants, and also through ongoing discussions between the co-156 investigators during the analysis and writing of the results.

157 **Participants**

We purposefully sampled male and female athletes who had a range of years of experience on their team and who participated sports which varied in terms of interdependence levels, including integrated sports (basketball, soccer, volleyball, hockey) and independent and collective or cooperative sports (e.g., swimming or track and field athletes who may compete individually and also compete together to obtain team results; see Evans et al., 2012). The participants in this study included fourteen varsity athletes between the ages of 18-26; seven

164	athletes were in their first or second year on the team and the other seven athletes were in their
165	third, fourth, or fifth year on the team. Thirteen athletes identified as White/Caucasian and one
166	identified as African Canadian. Participant codes are used in the results section to indicate the
167	athletes' gender and sport: WBB = women's basketball ($n = 1$); MBB = men's basketball ($n = 1$)
168	1); WVB = women's volleyball ($n = 1$); MVB = men's volleyball ($n = 2$); WSc = women's
169	soccer ($n = 3$); WTF = women's track and field ($n = 2$); MTF = men's track and field ($n = 1$),
170	MH = men's hockey ($n = 1$); MSw = men's swimming ($n = 2$). For example, Participant 1 was a
171	woman basketball player: "P1, WBB". ¹

172 **Data collection**

173 Following institutional ethics approval, information about the study was sent to coaches 174 to distribute to their athletes. Interested athletes contacted the researchers and completed 175 informed consent forms prior to participating. The athletes each participated in two semi-176 structured interviews to explore their perceptions of the social aspects of stressor appraisals, emotional experiences, and communal coping in sport.² Three athletes participated in pilot 177 178 interviews to test the interview questions; based on their feedback, questions were added to the 179 interview guides to ask athletes about the influence of coaches on their emotional experiences in 180 sport. The interviews were conducted by the second and third authors, who had both competed as 181 varsity athletes and whose shared experiences helped to develop rapport with the athletes. 182 Interviews were conducted in a private interview room at the university campus. 183 The first interview began by asking athletes about their past sport experiences, their role 184 on their team and the general team environment, and their relationships with teammates.³ 185 Athletes were then asked about stressors and to describe the types of situations they typically

186 dealt with individually or collectively with teammates or other athletes (e.g., 'Tell me about a

187 stressful situation you have experienced recently as an athlete.' and 'Tell me about a stressful 188 situation that your team experienced as a group.'). The first interviews ranged from 27 to 48 189 minutes (M = 38 min) and were transcribed verbatim by the interviewer, who reviewed the 190 transcripts to make notes about follow up questions prior to the second interview. The second 191 interview was scheduled within two weeks of the first interview, and it focused on emotional experiences in sport, emotion expressions within the team or among other athletes, emotions 192 193 experienced as a group or team member, and experiences of collective or shared emotions (e.g., 194 'Can you tell me about a time when you had an emotional reaction or expressed your emotions 195 within the team?', 'Can you describe an example when a teammate expressed his or her emotions 196 within the team/group?' and 'Can you describe a situation when it felt like emotions were 197 'shared' between teammates?'). During the second interview we also discussed our developing 198 interpretations of emotions as social phenomena and asked athletes to comment on the 199 developing themes to deepen interpretations. For example, in the second interview athletes 200 elaborated on the experience of group-based and collective emotions versus individual emotions. 201 Athletes also described additional examples of situations when emotions served affiliative or 202 distancing functions, and examples of emotional expressions communicating team values. The 203 second interviews ranged from 29 to 93 minutes (M = 50 min). Athletes were provided with a 204 \$10 gift card for participating in the first interview, and a \$15 gift card for the second interview. 205 **Data analysis**

The analysis was led by the first author who has experience in qualitative investigations of emotions, coping, and interpersonal processes in sport. The first author read each participant's transcripts to become familiar with the data and communicated regularly with the interviewers to gain a sense of the participants' experiences and the main topics that were important within each

210 interview. Inductive content analysis (Mayan, 2009) was used to code chunks of data with 211 descriptive theme labels such as 'emotions reflect team values' or 'sharing emotions with 212 others'. Each participant's transcripts (first and second interviews) were coded together as a set 213 before moving on to the next athlete's transcripts. After coding, similar data and codes were 214 grouped together (i.e., categorization; Mayan, 2009) and constant comparison (Corbin & Strauss, 215 2008) was used to determine consistency within themes. In some cases this resulted in the 216 creation of new themes to represent distinct ideas or collapsing similar themes together. For 217 example, the theme 'performance stressors' was separated into 'individual performance' and 218 'team performance' to reflect stressors that were relevant to athletes' own goals versus stressors 219 that were relevant for them as a function of their team membership. Micro-analysis (Strauss & 220 Corbin, 1998) of phrases and words was also used to advance our interpretations of participants' 221 meanings and to further develop connections between themes. Phrases such as 'a duty to feel 222 proud' and 'manufacturing an emotional appearance' were analyzed and interpreted in relation to 223 the social functions of emotions, as they highlighted the importance of social norms and leaders' 224 attempts to influence the emotions of athletes.

225 Theoretical and empirical literature on individual, collective, and group-based emotions 226 informed the topic of investigation and in developing the main interview questions, and it was 227 also used in the latter stages of data analysis to examine congruence between existing theory and 228 concepts identified in our analysis (Sandelowski, 1993). For example, our inductive analysis led 229 to the identification of data related to emotional conflict, which led us to draw on theory to 230 consider the importance of athletes' multiple goals and goal hierarchies (Lazarus, 1999) for their 231 experiences of individual and collective emotions. An abductive process was then used to 232 identify relationships between the categories of data (e.g., to explore possible relationships

233	between group-based and collective emotions, social identity, and communal coping processes).
234	Abduction refers to a process of identifying possibilities in the data, seeking confirmation or
235	disconfirmation of the interpretations in the data set, and considering alternative possibilities
236	until an overall interpretation of the data is reached (Mayan, 2009).
237	Regular meetings were held with co-investigators throughout the analysis and writing
238	process to present ongoing interpretations of the data and to confer with the interviewers
239	regarding their interpretations of the data, based on their experience with the participants during
240	the interview process and drawing on their own experiences as varsity athletes (see Corbin &
241	Strauss, 2008, p.80). Also acting as critical friends (Sparkes & Smith, 2014), other co-
242	investigators provided critical questions and suggestions on the interpretations of results to
243	clarify or elaborate on themes (e.g., ongoing peer review, Mayan, 2009), and later in the analytic
244	process they also provided feedback regarding the theoretical implications of the results.
245	Results
246	The consideration of emotions as social phenomena revolved around three key themes
247	corresponding to the first three research questions: a) athletes' appraisals of stressors as relevant
248	for themselves and/or their team, b) the experience and expression of emotions, and c) the social
249	functions of emotions. To address the fourth research question, we also indicate several factors
250	which were perceived to influence the stressors, emotions, and functions of emotions in sport
251	(e.g., athlete identity, teammate relationships, leaders and coaches, and social norms for emotion
252	expression).
253	Individual vs. Shared Stressors or Experiences

Since emotions are thought to arise as a function of appraised stressors (Lazarus, 1999),
any consideration of emotions as social phenomena necessarily implicates the consideration of

256	the social nature of stressor appraisals. We noted that athletes did describe a number of stressors
257	that they considered individual in nature, including personal performance expectations or poor
258	performance, balancing academics and training load, injuries, playing time, and broader life
259	stressors such as being away from home, relationship, and family problems (see Table 1 for
260	examples of individual and communal stressors). Conversely, athletes also perceived shared
261	stressors as those which impacted everyone on the team: "Team problems are when more than
262	one person is involved and it is affecting more than one person. That's a team thing" (P7, MTF).
263	Shared stressors included: team performance expectations, poor team performance,
264	organizational stressors (e.g., travel, food, and hotel arrangements), interpersonal conflict with
265	teammates or coaches, coaching changes, and changes in the team lineup (e.g., due to a
266	teammate's injury; see Table 1).
267	All the athletes stated that team performance expectations and team failures would be
268	considered examples of shared experiences that had consequences for all members of the team:
269	"winning and losing that's probably the ultimate stressor for the team especially at our
270	competitive level, because we are results based" (P5, MVB). Individual sport athletes also
271	identified performance as a stressor with the potential to affect the entire team, but they made a
272	clearer distinction between individual and team performance expectations:
273	Interviewer (I): What makes a stressor the group's problem versus [your] own problem?
274 275	P9: There really has to be some significant stressor that actually affects the majority of
275	the team for it to become a team problem As much as we are a team sport with those
277	team points, we are primarily an individual sport if I run well and someone else
278	doesn't run well that doesn't really affect each other for that day, until nationals does that
279	become a problem. (P9, WTF)
280	
281	Athletes frequently used the example of an injured teammate as a stressor that could be
282	considered both an individual stressor as well as a shared stressor in terms of the impact it could

have for the team as a whole. Participant 5 (MVB) said "depending on which teammate it is it
will have a bigger impact on the team," while Participant 3 (WSc) said "When someone gets hurt
it's really awful for the player but sometimes for the team too if it's a key player." One athlete
described a recent situation where a teammate's personal stressors that originated outside the
sport context had a negative impact on the entire team:
One of the guys was undergoing a very stressful time with his girlfriend troubles and kind

288 One of the guys was undergoing a very stressful time with his girlfriend troubles and kind 289 of psychological issues and they both compounded to hit him at once ... for about three 290 weeks he was visibly stressed, visibly negative ... he was a terrible person to be around. 291 He wouldn't try in the drills, people began avoiding him because he was so down and 292 that was a very visible display of a stressor that wasn't handled well. (P14, MH)

294 Participant 3 (WSc) said:

When it becomes the team's problem is when you are reflecting these encounters or situations into your play or in the way you talk to or approach your teammates. So I believe that if you can deal with your own situations and not have it impact the team in any way that is totally fine. But if you are going to deal with these situations and have negative impacts on the team, then it is the team's problem and we need to do something to help you and fix it.

301

293

302 Emotional Experience and Expression

303 **Individual emotions.** Athletes described a number of emotions in response to individual 304 stressors or experiences in sport, including happiness, sadness, anger, anxiety, pride, shame, and 305 relief. Athletes typically described positive emotions in response to individual performance 306 success: "I actually ended up running the fastest leg of the relay. It was just a combination of 307 shock but excitement and happiness" (P10, WTF). Conversely, athletes reported negative 308 emotions in response to individual stressors such as injuries or performance failures: "I took one 309 penalty shot and it got saved, no it hit the post ... I was just... kind of like embarrassed I guess, 310 and ashamed or whatever that I didn't score" (P4, WSc). 311 Group-based emotions. Athletes described group-based emotions as a function of their

312 *social identity as athletes or team members* and in response to events or shared stressors that

313	affected the team as a whole. A basketball player said that he experienced positive group-based
314	emotions "simply just making the playoffs this year I felt that excitement and pride on behalf
315	of the entire team" (P13, MBB). Another athlete said:
316 317 318 319 320	When somebody exceeds the average or sets a new personal best, or has no errors in the set that makes me very happy for them even in a team if it's someone who you are competing with for a spot. Let's say you're competing with someone for a spot and they have a fantastic game, that's still a good feeling because the team is succeeding. (P6, MVB)
321	Participant 7 (MTF) also described feeling group-based emotions as a team member even though
322	he could not be physically present at a championship match where his teammates were
323	competing: "Even though I didn't directly participate in [the competition], I was super happy to
324	hear and I was following along and when they won I was super proud of them."
325	Athletes further described group-based emotions that were tied to their <i>identity</i> as an
326	athlete and as a group or team member. Participant 11 (MSw) said that as a university athlete,
327	"It's an incredible feeling. It is a feeling of pride," while Participant 9 (WTF) said "I would say I
328	am in general really proud of our team and excited about it and that's how I kind of feel about
329	being on it." Athletes also reported experiencing strong group-based emotions at important team
330	competitions; one soccer player described her feelings as a varsity athlete competing in a
331	national championship game: "I just felt like so happy and excited to be a part of the [team]
332	because we had everyone cheering us on and rooting for us. So as a group I think that's when I
333	felt I guess pride and I was satisfied being here and everything" (P4, WSc). Group-based
334	emotions were generally positive, although some participants reported negative emotions
335	associated with their identity as varsity athletes:
336 337	I: What kind of emotions come to your mind when you think about yourself as a [varsity athlete]?
338 339 340	P: 50% pride, 50% failure, because I am here I am not in the NCAA A bit of shame in that and in myself, but also pride because being here is so much harder than any other school. I am proud of being a [varsity athlete] in that way.

341	Collective emotions. Collective emotions are a form of group-based emotions that are
342	experienced simultaneously by a team or group of individuals (Goldenberg et al., 2014). Athletes
343	easily described experiences of positive collective emotions following successes: "After any win
344	that emotion is pretty uniform throughout the room. Guys are all happy, dancing around,
345	celebrating and stuff. It is a very memorable thing to be a part of" (P14, MH). Athletes also
346	easily described the experience of negative collective emotions following losses:
347 348 349 350	At the end of the game we literally all just went to the bench and just sat and cried and our coach just talked to us then he started crying. We all walked to the change room and no one got changed right away, we all just sat there and cried. (P4, WSc)
351	Another athlete said that collective emotions following this loss carried over to the next practice:
352	"Everyone was down and depressed we lost on the Sunday, so the Monday we were all
353	together on the field just kind of being depressed together" (P8, WSc). Overall, athletes
354	experienced positive and negative group-based and collective emotions as a function of their
355	identity as athletes and as members of their teams, as well as in response to events that held
356	consequences for the group as a whole (i.e., shared stressors).
357	Athletes were asked to describe 'what it feels like' to experience emotions collectively
358	within a team. Some athletes referred to the 'vibe' or the 'climate' when team members were
359	experiencing the same emotions together: "I can't really describe it. You can definitely tell when
360	it's a collective emotion. I don't know. I can't really put my finger on it" (P11, MSw). Another
361	athlete said, "it is more you can kind of feel it, it's not really vocal. Like if you are doing a set
362	and you are racing your buddy and you're training really hard and you're going incredibly fast
363	you kind of look at each other and know" (P11, MSw). Athletes also said that experiencing
364	collective emotions amplified their feelings: "Definitely way stronger, like I said when you see
365	other people crying it makes you more depressed and cry more, but when you win a big game

366 and you have your whole team there to help out and everyone took part in it, then that is just a 367 greater feeling, that everyone is feeling the same way" (P8, WSc). Similarly a track athlete said, 368 "you get a bigger emotional boost of happiness because it is something you share with people 369 and it's like you have that prosocial emotion of sharing in others' joy" (P7, MTF). 370 Emotional conflict: Experiencing individual and group-based or collective emotions. 371 Several athletes reported instances where they experienced individual and group-based emotions 372 simultaneously. A track athlete who was injured during a competition said: 373 Watching the relay happen and not being in it was just like, really sad. I just, I was 374 jealous in a way, but not like in a resentment kind of way. Like I was there watching and 375 cheering the team on and really wanting them to do well but it was definitely just sadness 376 that I couldn't be a part of it ... on the one hand you want your teammates to run as fast 377 as they can and improve because that's better for the team and ultimately better for you 378 because training with them will make you a better athlete. But at the same time you don't 379 want them to run faster than you because then you might not make it on the relay or make 380 it in the top 15 to be able to go to nationals. So that's a huge conflicting situation to deal with and it's a mixture of like, feeling like there's a duty to feel proud of them and happy 381 382 for them but you can't help feeling like resentful or bitter. (P10, WTF) 383 384 Our interpretation of such data was that the athlete's multiple goals in track and field (e.g., team 385 goal to win the competition vs. individual goal to make the top 15 and go to nationals) 386 contributed to her experiencing positive group-based emotions and negative individual emotions 387 simultaneously. Another swimmer described an event where he did not perform well but his 388 team won the event: 389 Last year our team won by like 100 points. So I mean team-wise great, that was good [but] that was one of the worst races of my life ... I kind of just tried to brush off my 390 391 individual feelings but it's not that easy to do. I was pretty bummed out. I tried to be like 392 'yay, we won' but I probably would have been happier had I swam fast. (P12, MSw) 393 394 We interpreted that some co-acting/individual sport athletes felt an obligation to 'perform' 395 collective emotions that were expected of them as team members. In the quote above, Participant 396 10 (WTF) described 'a duty to feel proud' for the team, and Participant 12 (MSw) described how

397	he attempted to 'brush off his individual feelings' and express happiness when the team won.
398	Team sport athletes also described these experiences, such as a soccer player commenting:
 399 400 401 402 403 	Most of the time everyone's just like, follows the trend like 'oh, wow, that was a great game' and everyone displays the emotion that they thought it was a great game, but some people might keep it inside like 'oh man, I had an awful game' but you are kind of forced to show an outward emotion I would say. (P3, WSc)
404	We inferred that experiencing individual and group-based or collective emotions simultaneously
405	was related to athletes having multiple goals within particular situations, as well as perceptions
406	that they ought to display particular emotions consistent with the collective emotions of the team,
407	but which may have been in conflict with their individual emotions.
408	Social Functions of Emotions
409	Within our analyses, we identified four themes concerning the social functions of
410	emotions for (a) team functioning and performance, (b) communicating team values and
411	commitment, (c) affiliative and distancing functions, and (d) promoting and coordinating
412	communal coping.
413	Emotions impact team functioning and performance. When asked about the impact of
	Emotions impact team functioning and performance. When asked about the impact of
414	emotions within teams and groups, athletes generally perceived positive emotions being adaptive
414 415	
	emotions within teams and groups, athletes generally perceived positive emotions being adaptive
415	emotions within teams and groups, athletes generally perceived positive emotions being adaptive for the team: "When it's positive, it rubs off, like it's good energy" (P1, WBB). When discussing
415 416	emotions within teams and groups, athletes generally perceived positive emotions being adaptive for the team: "When it's positive, it rubs off, like it's good energy" (P1, WBB). When discussing negative emotions, Participant 2 (WVB) said: "if someone comes in with a negative attitude and
415 416 417	emotions within teams and groups, athletes generally perceived positive emotions being adaptive for the team: "When it's positive, it rubs off, like it's good energy" (P1, WBB). When discussing negative emotions, Participant 2 (WVB) said: "if someone comes in with a negative attitude and a few other people have that same negative attitude it does kind of dampen the spirit it's going
415 416 417 418	emotions within teams and groups, athletes generally perceived positive emotions being adaptive for the team: "When it's positive, it rubs off, like it's good energy" (P1, WBB). When discussing negative emotions, Participant 2 (WVB) said: "if someone comes in with a negative attitude and a few other people have that same negative attitude it does kind of dampen the spirit it's going to ruin the team dynamic." However, some athletes described examples where negative emotions
 415 416 417 418 419 	emotions within teams and groups, athletes generally perceived positive emotions being adaptive for the team: "When it's positive, it rubs off, like it's good energy" (P1, WBB). When discussing negative emotions, Participant 2 (WVB) said: "if someone comes in with a negative attitude and a few other people have that same negative attitude it does kind of dampen the spirit it's going to ruin the team dynamic." However, some athletes described examples where negative emotions could positively impact other members of the team. Athletes reported that they sometimes

423	thing" (P8, WSc). Another athlete described a teammate yelling and said: "I think it is a helpful
424	display of emotion because a lot of the times that can get guys into the game more" (P14, MH).
425	Participant 4 (WSc) shared an example where she expressed negative emotions during a game:
426	Three weeks ago during one of our games we were losing I think 2-0 and I was like I
427	just felt like no one was really trying so I was like I just yelled out of frustration like,
428	'come on guys, let's pick this up!' kind of thing. And everyone could tell I was frustrated.
429	
430	I: And how do you think your teammates perceived that? Did it impact them at all?
431	
432	P4: I guess not too much because it was an off-season type of game so they were just
433	like, 'ok yeah I get it' but like people around me would try to stick their tackles more
434	and get into position for people to have options and stuff.
435	
436	Emotions communicate team values and commitment. We interpreted that athletes'
	F
437	emotional expressions communicated information to others about their values, their identity as
438	team members, and the perceived importance of the game/outcome. A soccer player said, "If you
439	were the only one in the change room happy or crying about a loss or something, I myself would
440	feel frustrated because it would make me feel like I was the only one who really cared and
441	wanted it" (P4, WSc). Another athlete also said:
442	I feel after games are a true reflection of who you are as a person and how much you care
443	about the team and the sport, because if you are laughing right after the game or having
444	fun after a loss, it shows that you didn't really care what the team did or how the team
445	performed. Whereas if you're really feeling that sense of down, sadness after a loss then
446	you are truly showing that you are a team player and you have bought into the process of
447	the team and what the team believes. (P5, MVB)
448	
449	Connecting this theme to the previous one, we interpreted that athletes perceived expressions of
450	negative emotions as positive for the team's functioning and performance when those emotions
451	communicated shared team values and commitment.
452	Affiliative and distancing functions of emotions. Individual and group-based or
453	collective emotions appeared to serve affiliative functions among athletes. Athletes said that
454	when they felt positive emotions, they wanted to share their experiences with others: "every

455	good race I had I wanted to go upstairs and see [my parents and friends] even if I have a good
456	race now I will want to call them and tell them" (P9, WTF). Conversely, athletes reported that
457	experiencing emotions individually was perceived as isolating: "I think it's when you experience
458	it individually you just feel disconnected from everyone" (P4, WSc). Participant 1 (WBB) said:
459 460 461 462 463 464	I think that sometimes when you feel emotions individually you are thinking 'no one understands what I am going through' kind of thing. So when you are on a team it is kind of like, well when you are sharing the same emotion with people it is nice to have people that can relate whether it is positive or negative it is just better to share it with someone.
465	Participant 10 (WTF) said "I think it's easier to experience negative emotions as a group than as
466	an individual because you're kind of all in it together even though it sucks." Collective emotions
467	also served affiliative functions among athletes by contributing to the social bond between
468	teammates. A volleyball player described the team's collective emotions after the final game of
469	the season:
470 471 472 473 474 475 476	I: Can you think of any other examples when emotions were shared between teammates? P5: When the fifth years were graduating and you all came into the room I think we all felt the same emotion where we were happy and we all felt together and as one At that moment we all felt the same emotion, we all connected and felt that sense of joy and pride, but also a sense of sadness to see them go. (P5, MVB)
471 472 473 474	P5: When the fifth years were graduating and you all came into the room I think we all felt the same emotion where we were happy and we all felt together and as one At that moment we all felt the same emotion, we all connected and felt that sense of joy and
471 472 473 474 475 476	P5: When the fifth years were graduating and you all came into the room I think we all felt the same emotion where we were happy and we all felt together and as one At that moment we all felt the same emotion, we all connected and felt that sense of joy and pride, but also a sense of sadness to see them go. (P5, MVB)
471 472 473 474 475 476 477	P5: When the fifth years were graduating and you all came into the room I think we all felt the same emotion where we were happy and we all felt together and as one At that moment we all felt the same emotion, we all connected and felt that sense of joy and pride, but also a sense of sadness to see them go. (P5, MVB)Participant 14 (MH) said that facing shared stressors with teammates led to collectively
471 472 473 474 475 476 477 478 479 480 481 482 483	 P5: When the fifth years were graduating and you all came into the room I think we all felt the same emotion where we were happy and we all felt together and as one At that moment we all felt the same emotion, we all connected and felt that sense of joy and pride, but also a sense of sadness to see them go. (P5, MVB) Participant 14 (MH) said that facing shared stressors with teammates led to collectively experiencing emotions as a team, which strengthened social connections among his teammates.
 471 472 473 474 475 476 477 478 479 480 481 482 	 P5: When the fifth years were graduating and you all came into the room I think we all felt the same emotion where we were happy and we all felt together and as one At that moment we all felt the same emotion, we all connected and felt that sense of joy and pride, but also a sense of sadness to see them go. (P5, MVB) Participant 14 (MH) said that facing shared stressors with teammates led to collectively experiencing emotions as a team, which strengthened social connections among his teammates. He described one situation as a 'battle' where teammates: feel the exact same emotion That really, really brings guys togetherWe've had some moments like that where it doesn't matter if you are pissed off at the guy on your team or what, if he is in a situation everyone bands together and collectively addresses it,

487 488 489 490 491	If someone is acting angry, then um, it's really hard to try to make them feel better or talk to them because you don't know if they are generally angry or angry at you. Like it's just a harder emotion to read In terms of fear, that's probably one of the most contagious ones. So if someone if expressing their anxiety about a race or a hard workout, it spreads. (P10, WTF)
492 493	In another example, P9 (WTF) noted that one teammate's negative emotional expressions
494	typically indicated to others that she preferred to be left alone: "this year there was a girl who is
495	usually is one of those people who, when she has a bad day, she is like completely mad and
496	angry and cuts herself off for the rest of the day." Thus, in many cases, emotions appeared to
497	serve affiliative functions and communicate the need for support among teammates. However, in
498	other cases emotional expressions communicated athletes' preferences for distancing and
499	isolation from teammates.
500	Emotions promote communal coping. The affiliative functions of collective and group-
501	based emotions also appeared to promote a communal orientation among team members and
502	social relationships among teammates, thereby improving athletes' perceptions that they could
503	deal with shared stressors as a team. A volleyball player (P5, MVB) said:
504 505 506	With a team, emotions are universal for the most part and are easier to deal with because other people are feeling similar to you. You can kind of relate to them and they can relate to you, so emotions in that case are easier to overcome and talk about or deal with.
507 508	We interpreted that there was a reciprocal association between the experience of
509	collective and group-based emotions with communal coping, as the athletes perceived that
510	coping with shared stressors contribute to collective emotional experiences and subsequently
511	stronger social ties with teammates. "Handling collective stressors as a collective is the best way
512	to do it because it brings the guys so much closer together. If you can get through that adversity
513	you begin to trust even more the guy beside you" (P14, MH).

514 Factors Influencing Emotions as Social Phenomena

515	In addition to experiencing group-based or collective emotions as a function of their
516	social identity as described previously, athletes also said that they experienced stronger group-
517	based emotions as a result of their relationships with teammates: "this year I felt like we were
518	just more attached emotionally," which led to stronger negative emotions after a failure: "I think
519	the most negative emotion was when we lost to [rival team] I feel like this year because I was
520	so much, like I bonded so much more with the team, that I was just so upset" (P4, WSc). To
521	further illustrate this point, we identified a case in our analysis where a team did not seem to
522	engage in any communal coping after a major loss, which had negative consequences for the
523	social relationships within the team. One athlete said, "every time we lose a game there is always
524	a huge after [sic] team talk," however at the end of the season, the team did not engage in any
525	communal coping to deal with the season-ending loss:
526 527 528 529 530 531 532	I don't think we handled it as well after we lost we had about three weeks off of everything, lifts, practices, anything. Like three weeks go by and you don't even know how they are doing or if they are ok, stuff like that I just think that I almost feel like it was bad that we had time off, I feel like we should have had practice maybe twice a week just to keep the team together and help each other out. Our team just sort of separated after the loss which I think made it harder on everyone.
533	This example illustrated the importance of communal coping within teams, since a lack of
534	communal coping to deal with a major loss led to negative consequences for team members.
535	Athletes also reported that <i>leaders and coaches</i> also influenced the expression and
536	experience of emotions within groups and teams. Participant 1 (WBB) said that "the older
537	players, the starters I think their emotions are probably the most important as far as
538	influencing the team's emotion." Participant 14 (MH) discussed how dominant team members
539	influenced the team's collective emotions:
540 541 542	In my first year I was here we had a great captain and he kept things very positive. We were a really strong team, but when he left some more negative minded people became the dominant voices in the room and that had a huge influence on the emotions. That

543 544 545	continued for two years. Basically, until those personalities left, the dominant atmosphere in the room was negativity.
545 546	We also identified some instances where athletes described social norms for emotional
547	expressions within the team, which were at times explicitly shaped by team leaders and coaches.
548	Participant 14 said: "there is really no room for negativity in our room now. If someone is
549	negative they will get called out as an individuals and that kind of keeps the collective more
550	positive." Participant 1 said that "the starters I think their emotions are probably the most
551	important as far as influencing the team's emotion." Similarly, Participant 5 said that "leaders
552	and big voices influence the team emotions more than, say, someone who is very reserved."
553	Participant 3 also commented on the coach's influence on her emotions after a game where she
554	performed well but the team lost:
555 556 557 558 559 560 561	I scored a goal and got an assist so I was really happy with myself. But he was like 'that was terrible' so I wasn't really sure how to react because I felt happy but if everyone is crying and you are super happy I don't know. So I guess its conformingIf he told us 'wow that was terrible' everyone would hang their heads in shamesometimes it was just kind of like follow what the coach does and not have opinions for yourself, I don't know. It's always pretty much tainted by the coach I would say.
561 562	Another athlete also shared an example where the coach attempted to explicitly influence
563	the emotions that were expressed within the team after a loss: " our coach pretty much put the
564	word that there would be no laughing or smiling on the bus ride back so collectively it was
565	manufactured that we would have the exact same external appearance" (P6). In this situation, the
566	athlete said that the team was "resenting the coach's decision to eliminate happiness from the
567	team for that bus ride I am pretty sure the entire team had the same mental state for that bus
568	ride back." Although the coach tried to 'manufacture' a collective emotional 'appearance' among
569	the athletes, the coach's actions appeared to have led to a collective emotion of resentment

among the members of the team towards the coach rather than collective emotions of sadness oranger over the team's performance.

572 Based on the results of this study and drawing on theoretical work concerning group-573 based and collective emotions (Golderberg et al., 2014) and the social functions of emotions 574 (REF), we present an overview of the themes in Figure 1 as an empirical framework on the social 575 functions of emotion in sport. Individual and shared stressors/experiences are proposed to lead to 576 individual or group-based and collective emotions, respectively, although these may be 577 experienced simultaneously and contribute to experiences of emotional conflict among athletes. 578 Emotional experiences and expressions served multiple social functions within teams (impacted 579 team functioning and performance, affiliative and distancing functions, communicated team 580 values and commitment, and promoted communal coping). The social functions of emotions in 581 turn also contributed to athletes' subsequent emotional experiences. For example, an athlete's 582 expression of anger due to her team's poor performance could function to impact team 583 functioning and communicate team values regarding effort and the value of the game, which 584 could in turn elicit group-based shame or anger among other athletes on the team. Factors such 585 as athletes' social identity, teammate relationships, leaders or coaches, and social norms for 586 emotion expression are thought to influence the experience and expression of emotions as well as 587 the social functions of emotions within teams.

588

Discussion

589 **Contribution of Research Findings**

590 This study provides an initial exploration of emotions as social phenomena in sport, and 591 we found variation in both the forms and functions of athletes' emotional experiences. Athletes 592 distinguished between individual and shared stressors/experiences, and they described individual 593 emotions relevant to their own goals, as well as group-based and collective emotions as a 594 function of their social identity as team members. Emotions influenced team functioning and 595 performance, communicated team values and commitment, served affiliative functions among 596 teammates, and contributed to processes of communal coping. Overall, the results of this study 597 and interrelationships between themes identified in Figure 1 provide a platform for investigating 598 the social and interpersonal aspects of emotions in sport. Throughout the discussion, we consider 599 the implications of individual and shared stressors and experiences that contribute to individual 600 or group-based and collective emotions, the social functions of emotional experience and 601 expression within groups and teams, and the factors that appeared to influence emotions as social 602 phenomena.

603 Athletes reported that in general, individual stressors were best dealt with individually, 604 although some stressors had the potential to become shared stressors that could impact the entire 605 team. To date there is little research examining processes by which individual stressors become 606 shared stressors or how ineffective coping of one athlete may impact other athletes on the team. 607 However, researchers have recently investigated the impact of athletes' injuries on team 608 processes, including changes to team strategy and personnel, role adjustments, interpersonal 609 tensions, and changes in the team emotional climate (Surya, et al., 2015). The current findings 610 support the conceptualization of injury as a potential 'shared stressor' with wide-ranging 611 implications for teams and groups. The distinction between individual and shared stressors, and 612 the findings concerning athletes' emotional conflict also suggest that athletes have multiple goals 613 that are relevant for their stressor appraisals and emotional experiences within a given situation. 614 To date, researchers examining stressor appraisals, emotions, and coping have focused primarily 615 on competitive stressors from an intrapersonal perspective (e.g., Wolf, et al., 2015; Thatcher &

616 Day, 2008), although there has been recent research examining athletes' responses to 617 organizational and interpersonal stressors, which could conceivably be considered shared 618 stressors for teams and groups (Fletcher, et al., 2012; Hoar, Crocker, Holt, & Tamminen, 2010). 619 Further work that examines stressor appraisals as a function of athletes' identity as team members would be beneficial, particularly in identifying if and how athletes' coping differs in 620 621 response to these stressors. Methodologically this would mean asking athletes about multiple 622 goals or values that are relevant for their stressor appraisals, including individual and team goals. 623 It would also be important to examine goal conflict and goal hierarchies, as well as the 624 communal orientation of athletes toward their team in predicting stressors, emotions, and coping in teams and groups (Berrios, Totterdell, & Kellett, 2015; Lazarus, 1999). Furthermore, since 625 626 team cohesion concerns the satisfaction of members' affective needs (e.g., Pink, Lane, Jones, & 627 Hall, 2000), it would be another important concept to consider in future research examining 628 emotions from an interpersonal perspective. From an applied perspective, one implication of the 629 findings regarding individual and shared stressors is the impact that athletes' stressors can have 630 on the rest of their team. Stressors that might be considered 'individual' problems can affect 631 athletes' performance and interactions with teammates. However, rather than try to minimize or 632 avoid stressors that could potentially affect others on the team, sport psychology practitioners, 633 coaches, and athletes may seek to find opportunities to help teammates dealing with stressors 634 (e.g., engaging in forms of shared or communal coping).

Athletes perceived that emotional expressions had an impact on team performance, and in many cases emotions served affiliative functions and promoted communal coping among team members to deal with stressors. There is evidence that anger can be facilitative for athletes' own performance (Robazza & Bortoli, 2007; Woodman, et al., 2009), and our findings support the 639 idea that in some cases expressions of negative emotions such as anger and sadness may be 640 important for the team's performance (Friesen et al., 2013; Hanin, 2010). Furthermore, athletes 641 perceived that emotions were important for communicating team values, commitment, and 642 expressing the importance of competitive outcomes, which is consistent with the idea that 643 emotions help to define group boundaries and to identify group members as 'one of us' (Keltner 644 & Haidt, 1999). Thus, expressions of positive and negative emotions may promote behaviours 645 among teammates that are consistent with team norms and that promote positive performance or 646 demonstrations of effort and acceptance of team goals and values. A practical implication of 647 these findings may include encouraging leaders and coaches to consider the impact of their 648 emotional expressions on other team members and to express emotions that are consistent with 649 the team's desired goals and values.

650 Conversely, some athletes reported feeling forced to express particular emotions in a 651 team or group setting, which supports previous research suggesting that social norms for 652 emotional expressions influence the degree to which athletes consider certain emotional displays 653 to be appropriate (Wong, Steinfeldt, LaFollette, & Tsao, 2011). This is an important finding 654 since little research to date has examined the expression and suppression of emotion and 655 perceptions of conformity and group membership in sport (see Goldenberg et al., 2016 for a 656 discussion of the regulation of group-based emotions). Is it possible that athletes who do not 657 express the appropriate emotions in certain situations (e.g., not expressing sadness after a loss) 658 may be perceived as 'not one of us', thereby undermining group cohesion and performance. In 659 addition to examining intrapersonal performance outcomes of emotion regulation, it would be 660 valuable to also examine the social consequences of emotional suppression and forced emotional 661 expression among athletes. Additionally, leaders' and coaches' emotional expressions appeared

662 to be important for influencing emotional phenomena in teams, which supports recent 663 experimental research that demonstrated leaders' expressions of confidence in their team's ability to succeed were associated with increases in athletes' team identification and with team 664 665 performance (Fransen et al., 2015). Taken together, the implication of these findings is that 666 through their emotional expressions, team leaders may have the capability to strengthen (or weaken) team members' social identity and connection to the team, potentially contributing to 667 668 emotional experiences that promote better (or worse) performance and communal coping. 669 Dealing with negative emotions as a team was often viewed positively and athletes 670 perceived they contributed to strengthened social bonds between teammates, which is consistent 671 with theory and research that individuals are motivated to share emotions with others (Rimé, 672 2009). Discussing negative group events can lead to negative group-based emotions but also 673 increased group-based identity (Yzerbyt, Kuppens, & Mathieu, 2015), and individuals with a 674 strong need to belong express preferences for group-based sadness and also expect that group-675 based sadness would be socially beneficial for their connections with others (Porat, Halperin, 676 Mannheim, & Tamir, 2015). Within sport, researchers examining mutual-disclosure team sharing 677 interventions have provided support for improved teammate relationships and communication 678 (Holt & Dunn, 2006; Windsor, Barker, & McCarthy, 2011), and it is possible that one 679 mechanism by which these positive outcomes are achieved is through increases in social identity 680 (Evans, Slater, Turner, & Barker, 2013). One applied implication from these findings is that 681 athletes may actually benefit from opportunities to cope with failure and negative emotions 682 collectively as a team, since the absence of such opportunities may lead to weakened 683 relationships with teammates.

684 The fact that individual and team sport athletes both reported group-based and collective 685 emotions was not surprising, since sports that require less task interdependence (i.e., individual 686 sports) are embedded in social contexts where athletes train and sometimes compete together 687 (i.e., they are interdependent in other ways; Evans et al., 2012). However, this study is among the 688 first to examine group-based and collective emotions in a sport context and to examine emotions as social phenomena among team and individual sport athletes. Importantly, this study draws 689 690 attention to athletes' social identity as team members or as varsity athletes as an important aspect 691 of their emotional experiences in sport.

692 Methodological Reflections and Future Research

693 The methodological coherence and rigor (Mayan, 2009) of our study is reflected through 694 the alignment of our research question with our interpretive position, the use of purposeful 695 sampling and multiple interviews with participants, and by explicitly acknowledging our own 696 experiences in the research process (e.g., considering the roles of the interviewers as former 697 varsity athletes) and by engaging in ongoing peer debriefing to discuss interpretations of the 698 data. Some criteria that may be used for judging such interpretations within an 699 interpretivist/constructionist perspective include thoroughness, coherence, comprehensiveness, 700 and a determination of whether the interpretations put forth are useful, original, and significant 701 (Schwandt, 1994).

One limitation of this study was that we focused primarily on athletes' descriptions of stressors that led to individual and group-based or collective emotions; however, there were other events such as teammate successes that athletes identified as experiences which contributed to group-based emotions such as pride or happiness. Events or experiences that lead to positively toned emotions are those which have meaning for the individual, but they might not be

707 considered as stressors that are appraised as "taxing or exceeding one's resources" (Lazarus, 708 1999, p.141). Thus, appraisals of events which might not be considered as 'stressors' could still 709 evoke positively-toned emotions, and furthermore the term 'stressor' is not often used in 710 contemporary emotion theory (see Brosch, 2013; Feldman Barrett, 2014; Fredrickson, 2001). 711 The focus on stressors may be too narrow to adequately capture the range of events and 712 experiences that are relevant for the study of emotions as social phenomena, particularly when 713 studying positively toned emotions. Moving forward, researchers may wish to avoid using the 714 term 'stressor' when considering the appraisal of a broader range of events that may have 715 significance for athletes.

716 There are some additional constraints and limitations to this study that provide avenues 717 for future research. The examination emotional expressions within teams may have led athletes 718 to provide responses that were socially desirable, which is a limitation of studies investigating 719 social phenomena. It may be advantageous to conduct longitudinal research and use participant 720 observations to explore the social functions of emotions within teams over the course of a 721 season. Observational methods may also enable researchers to identify additional examples of 722 the social functions of emotions that athletes might not discuss in interviews. Additionally, the 723 use of focus group interviews would be valuable to stimulate discussion among athletes 724 regarding the social functions of emotions in sport. We did not interview coaches in the present 725 study and further research is required to examine the role of coaches in establishing social norms 726 for emotional expressions in teams, as well as their contribution to collective and group-based 727 emotions. Based on our findings we have proposed associations between group-based and 728 collective emotional experiences, connection among teammates, and communal coping

729	processes, however the relationships between these concepts remain tentative and should be
730	explored in additional studies.
731	
732	
733	
734	
735	
736	
737	
738	
739	
740	
741	
742	
743	
744	
745	
746	
747 748 749	¹ In some cases there is no participant number associated with quotes in the results section in order to protect the anonymity of the athletes who provided the information.
750 751 752	² One participant was not able to schedule a time for his second interview since he was attending an international training camp. To accommodate his schedule, the topics from both interviews were conducted in the same session.
753 754	³ The interview guides are available from the first author upon request.

755	References
756	Arnold, R., & Fletcher, D. (2012). A research synthesis and taxonomic classification of the
757	organizational stressors encountered by sport performers. Journal of Sport and Exercise
758	Psychology, 34, 397-429.
759	Barsade, S. G. (2002). The ripple effect: Emotional contagion and its influence on group
760	behavior. Administrative Science Quarterly, 47, 644-675.
761	Berrios, R., Totterdell, P., & Kellett, S. (2015). Investigating goal conflict as a source of mixed
762	emotions. Cognition and Emotion, 29, 755-63. doi: 10.1080/02699931.2014.939948
763	Brosch, T. (2013). Comment: On the role of appraisal processes in the construction of emotion.
764	Emotion Review, 5, 369-373. doi: 10.1177/1754073913489752
765	Cerin, E. (2003). Anxiety versus fundamental emotions as predictors of perceived functionality
766	of pre-competitive emotional states, threat, and challenge in individual sports. Journal of
767	Applied Sport Psychology, 15, 223-238. doi: 10.1080/10413200305389
768	Corbin, J., & Strauss, A. (2008). Basics of qualitative research (3rd ed.). Thousand Oaks, CA:
769	Sage.
770	Cottingham, M. D. (2012). Interaction ritual theory and sports fans: Emotion, symbols, and
771	solidarity. Sociology of Sport Journal, 29, 168-185.
772	Crocker, P.R.E., Tamminen, K. A., & Gaudreau, P. (2015). Coping in sport. In S. Hanton & S.
773	Mellalieu (Eds.), Contemporary advances in sport psychology: A review (pp.28-67). New
774	York: Routledge.
775	Evans, M. B., Eys, M. A., & Bruner, M. W. (2012). Seeing the "we" in "me" sports: The need to
776	consider individual sport team environments. Canadian Psychology, 4, 301-308. doi:
777	10.1037/a0030202

778	Evans, A. L., Slater, M. J., Turner, M. J., & Barker, J. B. (2013). Using personal-disclosure		
779	mutual-sharing to enhance group functioning in a professional soccer academy. The Sport		
780	Psychologist, 27, 233-243.		
781	Feldman Barrett, L. (2014). The conceptual act theory: A précis. Emotion Review, 6, 292-297.		
782	doi: 10.1177/1754073914534479		
783	Fischer, A. H., & Manstead, A. S. R. (2008). Social functions of emotion. In M. Lewis, J.		
784	Haviland, & L. Feldman Barrett (Eds.), Handbook of emotion (3rd ed.). New York:		
785	Guilford.		
786	Fletcher, D., Hanton, S., & Wagstaff, C. R. D (2012). Performers' responses to stressors		
787	encountered in sport organisations, Journal of Sports Sciences, 30, 349-358. doi:		
788	10.1080/02640414.2011.633545		
789	Fransen, K., Haslam, S. A., Steffens, N. K., Vanbeselarer, N., De Cuyper, B., & Boen, F. (2015).		
790	Believing in "us": Exploring leaders' capacity to enhance team confidence and		
791	performance by building a sense of shared social identity. Journal of Experimental		
792	Psychology: Applied, 21, 89-100.		
793	Fredrickson, B. (2001). The role of positive emotions in positive psychology. American		
794	Psychologist, 56, 218-226.		
795	Friesen, A. P., Devonport, T. J., Sellars, C. N., & Lane, A. M. (2013). A narrative account of		
796	decision-making and interpersonal emotion regulation using a social-functioning		
797	approach to emotions. International Journal of Sport and Exercise Psychology, 11, 203-		
798	214. doi: 10.1080/1612197X.2013.773664		
799	Gershgoren, L., Basevitch, I., Filho, E., Gershgoren, A., Brill, Y. S., Schinke, R. J., &		
800	Tenenbaum, G. (2016). Expertise in soccer teams: A thematic inquiry into the role of		

- 801 Shared Mental Models within team chemistry. *Psychology of Sport and Exercise*, 24,
- 802 128-139. doi: 10.1016/j.psychsport.2015.12.002
- 803 Goldenberg, A., Halperin, E., van Zomeren, M., & Gross, J. (2016). The process model of group-
- 804 based emotion: Integrating intergroup emotion and emotion regulation perspectives.
- 805 *Personality and Social Psychology Review, 20, 118-141. doi:*
- 806 10.1177/1088868315581263
- 807 Goldenberg, A., Saguy, T & Halperin, E. (2014). How group-based emotions are shaped by
- collective emotions: Evidence for emotional transfer and emotional burden. *Journal of Personality and Social Psychology*, *107*, 581-596. doi: 10.1037/a0037462
- 810 Guba, E. G., & Lincoln, Y. S. (2005). Paradigmatic controversies, contradictions, and emerging
- 811 confluences. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative*812 *research* (3rd ed., pp. 191-216). Thousand Oaks, CA: Sage.
- Hanin, Y. (2010). Coping with anxiety in sport. In A. R. Nicholls (Ed.), *Coping in sport* (pp.
 159-176). New York: Nova.
- 815 Hoar, S. D., Crocker, P. E., Holt, N. L., & Tamminen, K. A. (2010). Gender differences in
- 816 adolescent athletes' coping with interpersonal stressors in sport: More similarities than
- 817 differences. Journal of Applied Sport Psychology, 22, 134-149.
- Holt, N.L., & Dunn, J.G.H. (2006). Guidelines for delivering personal-disclosure mutual-sharing
 team building interventions. *The Sport Psychologist*, 20, 348–367.
- 820 Kelly, J. R., Iannone, N. E., & McCarty, M. K. (2014). The function of shared affect in groups.
- 821 In C. von Scheve & M. Salmela (Eds.), *Collective emotions* (pp.175-188). Oxford:
- 822 Oxford University Press.

- Keltner, D. & Haidt, J. (1999). Social functions of emotions at four levels of analysis. *Cognition and Emotion*, *13*, 505-521.
- 825 Lazarus, R. S. (1991). Progress on a cognitive–motivational–relational theory of emotion.
- 826 *American Psychologist, 46,* 819-834. doi:10.1037//0003-066X.46.8.819
- 827 Lazarus, R. S. (1999). Stress and emotion: A new synthesis. New York: Springer.
- Lyons, R. F., Mickelson, K. D., Sullivan, M. J. L., & Coyne, J. C. (1998). Coping as a communal
 process. *Journal of Social and Personal Relationships*, *15*, 579-605.
- 830 Martinent, G., Nicolas, M., Gaudreau, P., & Campo, M. (2013). A cluster analysis of affective
- 831 states before and during competition. *Journal of Sport & Exercise Psychology*, 35, 600-
- 832 611.
- 833 Mayan, M. J. (2009). *Essentials of qualitative inquiry*. Walnut Creek, CA: Left Coast Press.
- 834 McGannon, K.R., & Smith, B. (2015). Centralizing culture in cultural sport psychology research:
- 835 The potential of narrative inquiry and discursive psychology. *Psychology of Sport &*836 *Exercise*, 17, 79-87.
- 837 Paez, D., Rimé, B., Basabe, N., Wlodarczyk, A., & Zumeta, L. (2015). Psychosocial effects of
- perceived emotional synchrony in collective gatherings. *Journal of Personality and Social Psychology*, *108*, 711-729. doi: 10.1037/pspi0000014
- Phoenix, C., & Orr, N. (2014). Pleasure: A forgotten dimension of ageing and physical activity.
 Social Science and Medicine, 115, 94–102.
- Pink, M. J., Lane, A. M., Jones, G. J. W., & Hall, M. P. (2000). Perceptions of group cohesion
- 843 and mood in sport teams. *Group Dynamics: Theory, Research, and Practice, 4,* 244-253.
- doi: 10.1037/1089-2699.4.3.244

- 845 Porat, R., Halperin, E., Mannheim, I., & Tamir, M. (2015). Together we cry: Social motives and
- 846 preferences for group-based sadness. *Cognition and Emotion*. Advance online
- 847 publication. doi: 10.1080/02699931.2015.1039495
- 848 Rimé, B. (2009). Emotion elicits the social sharing of emotion: Theory and empirical review.

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

- 850 Robazza, C., & Bortoli, L. (2007). Perceived impact of anger and anxiety on sporting
- 851 performance in rugby players. *Psychology of Sport and Exercise*, 8, 875-896.
- doi:10.1016/j.psychsport.2006.07.005
- 853 Sandelowski, M. (1993). Theory unmasked: The uses and guises of theory in qualitative
- research. *Research in Nursing & Health, 16, 213-218.*
- 855 Schwandt, T. A. (1994). Constructivist, interpretivist approaches to human inquiry. In N. K.
- 856 Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 118-137).
- Thousand Oaks, CA: Sage.
- Sparkes, A. C., & Smith, B. (2014). *Qualitative research methods in sport, exercise and health: From process to product.* New York: Routledge.
- 860 Strauss, A., & Corbin, J. (1998). *Basics of qualitative research*. Thousand Oaks, CA: Sage.
- Surya, M., Benson, A. J., Balish, S. M., & Eys, M. A. (2015). The influence of injury on group
 interaction processes. *Journal of Applied Sport Psychology*, 27, 52-66. doi:
- 863 10.1080/10413200.2014.941512
- Tamminen, K. A., & Gaudreau, P. (2014). Coping, social support, and emotion regulation in
- teams. In M. R. Beauchamp & M. A. Eys (Eds.), Group dynamics in exercise and sport
- 866 *psychology: Contemporary themes* (2nd ed., pp. 222-239). New York: Routledge.

- 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.
- 869 doi:10.1016/j.psychsport.2007.04.005
- 870 Totterdell, P. (2000). Catching moods and hitting runs: Mood linkage and subjective
- 871 performance in professional sport teams. *Journal of Applied Psychology*, 85, 848–859.
- 872 doi:10.1037/0021-9010.85.6.848
- von Scheve, C., & Ismer, S. (2013). Towards a theory of collective emotions. *Emotion Review*, *5*,
 406-413. doi: 10.1177/1754073913484170
- 875 Wilson, M. R., Wood, G., & Vine, S.J. (2009). Anxiety, attentional control, and performance
- 876 impairment in penalty kicks. Journal of Sport & Exercise Psychology, 31, 761-775.
- Windsor, P. M., Barker, J., & McCarthy, P. (2011). Doing sport psychology: Personal disclosure
 mutual sharing in professional soccer. *The Sport Psychologist*, 25, 94-114.
- 879 Wolf, S. A., Evans, M. B., Laborde, S., & Kleinert, J. (2015). Assessing what generates
- 880 precompetitive emotions: Development of the precompetitive appraisal measure. *Journal*

881 of Sports Sciences, 33, 579-587. doi:10.1080/02640414.2014.951873

Wong, Y. J., Steinfeldt, J. A., LaFollette, J. R., & Tsao, S. C. (2011). Men's tears: Football

players' evaluations of crying behavior. *Psychology of Men & Masculinity*, *12*, 297-310.
doi:10.1037/a0020576

- 885 Woodman, T., Davis, P. A., Hardy, L., Callow, N., Glasscock, I., & Yuill-Proctor, J. (2009).
- 886 Emotions and sport performance: An exploration of happiness, hope, and anger. *Journal*
- 887 of Sport & Exercise Psychology, 31, 169-188.

- 888 Yzerbyt, V., Kuppens, T., & Mathieu, B. (2015). When talking makes you feel like a group: The
- 889 emergence of group-based emotions. *Cognition and Emotion*. Advance online
- 890 publication. doi: 10.1080/02699931.2015.1045454

Main theme	Sub theme	Example quote
Individual stressors or experiences	Personal performance	"I would say the most thing as an individual that you stress about is your performance." (P4, WSc)
experiences	Sport-academic balance	"Most of my stressors come from school. Just being able to manage volleyball and school." (P2, WVB)
	Injury*	"I think injuries are an individual struggle injury can be quite a solitary process on an individual team." (P10, WTF)
	Playing time	"The first individual stressor would be playing time, having to work every day in the hopes of getting play time." (P13, MBB)
	Life stressors	"Just being so far from home I am completely in charge my finances, I am completely in charge of my bills. So just really being thrust into the real world right away." (P11, MSw)
Shared stressors or	Team performance expectations	"No one said it but everyone kind of figured we would lose to them." (P1, WBB)
experiences	Poor team performance	"A stress to a team is your collective identity of like how good you are as a team." (P7, MTF)
	Organizational stressors	"It took two weeks to get an ok to stay in the hotel. During that period we were constantly wondering if we were going to have to travel in the morning, I don't know, it was really stressful for us." (P8, WSc)
	Officiating	"I think a more particular one that we are trying to control as a team is if the ref makes a bad call and everyone reacts badly to it." (P6, MVB)
	Coaching changes	"The best example would be our coach when we all freaked out about losing him because he was the best coach anyone on our team has ever had finding out it was a possibility that he was leaving was really stressful." (P4, WSc)
	Interpersonal conflict	"Where we have to address it as a group is more [team] relationship stuff or general trends if there is one guy who is making everyone pissed off on the team then we will address that as a team." (P7, MTF)
	Changes to lineup (e.g., due to illness or injury)	"Last year at our provincial championships for example, in the 4x800 team, one girl was sick, had a bad race the day before, and decided that she wouldn't run the relay. So our alternate, she had to step up and run. So, that involved everyone on the team." (P10, WTF)

Table 1. Examples of individual and shared stressors or experiences

*Injury was identified as having the potential to become a shared stressor, depending on which athlete was injured.

EMOTIONS AS SOCIAL PHENOMENA 39

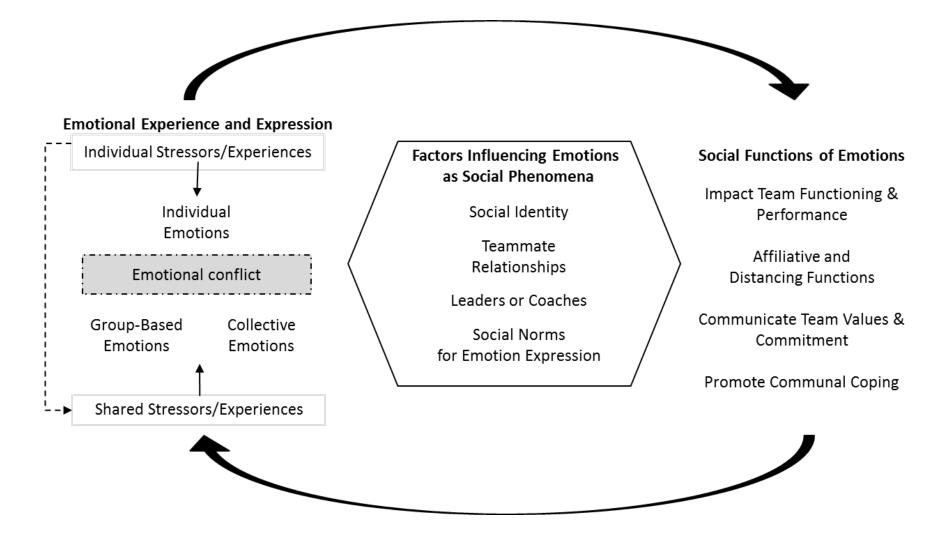


Figure 1. Emotions as social phenomena - overview and interrelationships between themes