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Athletes' Social Identities: Their Influence on Precompetitive Group-Based Emotions

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This research studied the influence of multiple social identities on the emotions that athletes felt toward their teammates/partners and opponents. Athletes ($N=714$) from individual and team-based sports reported their identification both as athletes of the sport and as athletes of their club before reporting their precompetitive emotions. The results showed that these multiple social identities influenced precompetitive emotions toward different targets, with higher levels of sport identification associated with increased positive and decreased negative emotions toward opponents and higher levels of club identification associated with increased positive and decreased negative emotions toward teammates/partners, although increased club identification was also associated with more positive emotions toward opponents. These findings extend intergroup emotions theory by showing its suitability and applicability to face-to-face task-oriented teams in sport. Particularly, they highlight the importance of investigating the simultaneous level of multiple social identities, rather than only a dichotomic self-categorization, on group-based emotions experienced toward multiple targets.

Keywords: emotion–performance relationship, group dynamics, intergroup emotions theory, social-identity approach, team sports

During international competitions such as World Cups or Olympic Games, members of national teams interact and compete with members of other national teams with whom they have much in common: they are all skilled athletes of the same sport. When thinking about other soccer players, a member of the French team may see the same specific skills in members of the British team—regardless of national affiliation, they are all soccer players, after all. Despite intergroup differences, members of all teams have in common a membership in an overarching group: athletes of their sport. Multiple authors have recently argued for the need to consider the social self in the study of emotions in the context of competitive sport (e.g., Campo, Mellalieu, Ferrand, Martinet, & Rosnet, 2012; Tamminen et al., 2016). Focusing especially on the consequences of social identity for competitive emotions among athletes, some studies have very recently provided the first evidence for players' experiences of *group-based emotions* in sport competition (Campo, Champely, et al., 2019; see Campo, Mackie, & Sanchez, 2019; Campo et al., 2018; Tamminen et al., 2016 for a review). But how are emotions in competitive team contexts influenced by identification with group memberships of different kinds and at different levels, especially if such identifications are simultaneously active and salient? This is the question considered in the current research.

Research on social identity indicates that individuals may have multiple social identities associated with the multiple different group memberships (Haslam, 2004; Mackie & Smith, 1998; Tajfel, 1978; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). More specifically, according to social identity approach (Haslam, 2004; see also Turner et al., 1987), individuals categorize the self and others into different social groups on the basis of salient attributes and fit with the context. This categorization may result in three different levels of self-abstraction: (a) a sublevel resulting in a personal identity (the *I* level, an individual player with a certain level of skill and motivation), (b) an intermediate level resulting in social identities (a *we* level, a member of a group or a social category such as *me as a member of my team or club*), and (c) a superordinate level that subsumes different social identities existing at the intermediate level into one category (an *all* level; e.g., *me as an athlete of this sport, along with all other players of this sport, regardless of their team or club*). Depending on the circumstances, an athlete could categorize himself or herself primarily at any one of these levels, or all of these different levels could be simultaneously active and salient.

According to intergroup emotions theory (IET; Mackie, Devos, & Smith, 2000; Mackie & Smith, 1998), emotions depend on such social categorization. Categorization at the personal or *I* level results in personal appraisal and individual emotions, whereas group categorization at either of the other two levels results in group-level appraisal and group-level emotions. Such group-level or group-based emotions are defined as “emotions that arise when people identify with a social group and respond emotionally to events or objects that impinge on the group” (Smith & Mackie, 2008, p. 428). Such emotions are influenced by the acceptance and recognition of group belonging, leading events to be appraised in terms of their costs and benefits to the group, rather than to the

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individual (Mackie et al., 2000; Ray, Mackie, Rydell, & Smith, 2008). Thus, when athletes are socially identified with their group, group goals become individual ones, and what is at stake for the group becomes what is at stake for the individual. For example, consider a rugby player who scores three tries during a game that, nevertheless, his or her team loses. At the individual level, such a performance (e.g., scoring three tries) would be appraised positively and trigger pride. But at the group level, the event (e.g., losing the match) is appraised negatively and triggers disappointment. The more highly the player identifies with his or her team, the more likely he or she is to feel disappointment (resulting from group-level appraisal) rather than pride (resulting from individual appraisal).

Most studies of social identities on group-level emotions within social psychology have focused on the effects of making one social identity more salient than another at the same level of categorization, especially in intergroup situations. For example, Ray et al. (2008) studied the effects of two different social identities on the emotions experienced toward the members of two distinct out-groups. Specifically, they investigated the emotional reactions of American students toward Muslims and the police. Their results showed that the perception of out-groups differed according to whichever social identity predominated. When American students self-categorized more as Americans than as students, they felt more anger in reaction to Muslims (considered as a threatening out-group) and less anger toward the police. However, when their student identity predominated over their American one, they felt more anger toward the police and less toward Muslims. Although IET-inspired studies often use individual emotions as a baseline, very few studies exist on the effect of different levels of self-abstraction, especially the intermediate versus superordinate levels, on emotions.

Sport, and in particular, team sports, appear to be an ideal context in which to study the impact of levels of categorization on group-based emotions (Campo, Champely, et al., 2019; Campo, Mackie, & Sanchez, 2019; Campo et al., 2018; Tamminen et al., 2016). As emotions are commonly recognized as a key factor of individual and team performance optimization (Campo et al., 2012; Hanin, 2000; Hanin, Hanina, Šašek, & Kobilšek, 2016), the time is ripe to investigate the role of identity on athletes' competitive emotional experiences. Competition is the prototypical example of a threatening intergroup situation in which athletes may activate different social (sport) identities (Rees, Haslam, Coffee, & Lavallee, 2015). Teams are by definition group-level units comprised of individuals, raising the logical question of the influence of social identities on what players may feel before during and after a performance (Campo, Mackie, & Sanchez, 2019; Campo et al., 2018; Tamminen et al., 2016). For instance, two very recent studies (Campo, Champely, et al., 2019; Campo et al., 2018) investigated the effect of personal compared with social identity on players' emotions during competition in team sports and showed not only that personal and group-based emotions differed but also that group-based emotions influenced performances (Campo, Champely, et al., 2019). However, currently, nothing is known about the effect of intermediate compared with superordinate levels of self-abstraction on athletes' emotions. Our research addressed this gap in the literature.

Self-categorizing at a superordinate level is theoretically interesting for two reasons. First, it subsumes categorization at the intermediate level. Categorization as a soccer player, for example, logically subsumes categorization as member of a particular soccer team (i.e., *I cannot be an athlete of my club without being more generally an athlete of my sport*). Second,

theoretically, members categorized at the superordinate level make no distinction between the groups subsumed by the superordinate level of social identity (Gaertner & Dovidio, 2000), a process that often leads to more positive evaluations of groups that, in other circumstances, would be seen as rivals (e.g., Nier, Gaertner, Dovidio, Banker, & Ward, 2001). Thus, before a soccer game between two rival clubs, the activation of a superordinate social identity (e.g., *we were all soccer players*) would theoretically lead players to feel less negative emotions (NE) toward their opponents, as they are considered to be part of the same category. In contrast, a salient categorization at the level of club (intermediate level) would promote more NE. Competitive emotions may thus be experienced as a function of these different social identity levels.

Consideration of categorization at a superordinate level highlights the fact that individuals may activate multiple social identities simultaneously (Crenshaw, 1989; Deschamps & Doise, 1979; Roccas & Brewer, 2002). This possible intertwining of structural cognitive features of multiple social identities makes the understanding of athletes' group-based emotional experience more complex. Although some social psychological work has considered the level of abstraction at which people prefer to categorize themselves (Brewer, 2003), multiple simultaneous social categorization has not often been considered. However, according to Campo et al. (2018), analyzing the level of two self-categorizations held simultaneously, the strategy we pursued in this study, seems to be more accurate than considering a simple dichotomic predominance of one or another social identity.

Drawing on social identity approach (Haslam, 2004) and IET (Mackie & Smith, 1998) as theoretical frameworks, this research aimed to assess the simultaneous role of superordinate (*an athlete of my sport*) and intermediate (*an athlete of my club*) identities on precompetitive emotional experiences. In a novel approach, we considered both social categorizations as potentially independent and simultaneously activated and assessed them both, rather than manipulating or assuming the predominance of only one. Specifically, we hypothesized that greater identification as a member of the club, in comparison with identification as a player of the sport, would lead athletes to feel (a) more NE toward their opponents and (b) more positive emotions (PE) toward their teammates/partners.

Methods

Participants

A consortium of independent researchers in the humanities verified that the study procedures followed international ethical guideline for research (World Medical Association, 2013).

In total, 714 French athletes (120 females and 594 males; $M_{\text{age}} = 23.05$ years, $SD = 8.74$; ages ranged from 14 to 58 years) affiliated with an athletic club and regularly participating in competitions at regional and national levels (athletics, basketball, American football, gymnastics, handball, ice hockey, judo, swimming, rugby union, ski, tennis, triathlon, and volleyball), volunteered to take part in the study.¹ All participants provided informed consent before taking part in the experiment.

Procedure

Measures of Identification. The participants reported identification as members of their club (intermediate level of self-abstraction)

and as athletes of their sport (superordinate level of self-abstraction) in counterbalanced order. Adapting Ray et al.'s (2008) measure, we asked the participants to describe the three main characteristics that athletes of their club possess and to report the extent to which they personally possessed each of those three traits, each on a scale ranged from 0 (*not at all*) to 6 (*very much*). The participants also described the three main characteristics that athletes of their sport possess and again reported the extent to which they personally possessed each of those three traits, using the same scale.

We averaged the three trait scores associated with each level of identification and, thus, obtained each participant's level of identification for each social identity; these served as the independent variables. Higher scores indicated higher identification.

Dependent Measures. Emotion measures were administered for the two levels of target (opponents and partners) in counterbalanced order. The participants rated the extent to which they felt each emotion toward each specific target (i.e., partners, opponents). To avoid any biases introduced by focusing on any specific or unique event, the athletes were provided with a hypothetical scenario that led them to report the emotions they usually felt "in general, before competition" toward either their teammates/partners or their opponents. Their emotions were assessed using the French version (Gaudreau, Sanchez, & Blondin, 2006) of the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988). The participants were asked to rate the intensity of 10 positive and 10 NE on a scale of 1 (*not at all or very slightly*) to 5 (*extremely*). We averaged across ratings of PE and across ratings of NE directed toward partners (PE: $\alpha = .74$ and NE: $\alpha = .77$) and opponents (PE: $\alpha = .88$ and NE: $\alpha = .71$).

Statistical Analysis. Our hypotheses suggested that both social identities might each have a different concomitant influence on emotions. To assess the effect of simultaneous identification with both the intermediate and the superordinate social identity on emotions toward teammates/partners and opponents, we considered both identities as potentially independent and used the level of both social identities as independent variables in linear models fitting the four dependent variables: the intensity of PE toward teammates/partners and opponents, and the intensity of NE toward teammates/partners and opponents. Because the notion of group membership is intrinsic to group sports, we controlled for sport type (individual vs. team sports) by including it as a covariate. For similar reasons, we also controlled for two kinds of membership experience: club experience (years of participation in the club) and sport experience (years of participation in the sport). Finally, because age (e.g., Brummer, Stopa, & Bucks, 2013; Sillars & Davis, 2017), level of sport expertise (lower [regional and lower] vs. higher [national and higher]; Haerem & Rau, 2007), and gender (e.g., Lawrence, Campbell, & Skuse, 2015; Sillars & Davis, 2017)

may influence appraisal processes, these variables were also employed as covariates. Stepwise model selection by Akaike information criterion was performed. The statistical significance of the remaining variables was assessed by *F* tests. To serve as effect sizes, standardized beta coefficients of the models were given. All computations were carried out using the R (version 3.0.2) software application (R Development Core Team, 2005). The Type I error of the *F* test was 1.25% to prevent from multiple testing of the four dependent variables ($0.05/4 = 1.25\%$).

Results

Table 1 shows correlations between identification and emotion factors.

Positive Emotions

Both sport and club identities positively influenced the participants' PE toward teammates/partners, $F(4, 706) = 16.70$, $p < .001$, and opponents, $F(5, 705) = 23.96$, $p < .001$. Specifically, the more participants were identified as athletes of the sport, the more they experienced positive precompetitive emotions toward both teammates/partners ($\beta = 0.074$; $p < .05$) and opponents ($\beta = 0.205$; $p < .001$). Similarly, the more they were identified as athletes of their club, the more positively they felt toward both teammates/partners ($\beta = 0.024$; $p < .001$) and opponents ($\beta = 0.180$; $p < .001$). The extent of identification with the two identities did not interact. Several covariates were positively related to PE. First, participation in individual-based sports was associated with less PE toward both teammates/partners ($\beta = -0.092$; $p < .01$) and opponents ($\beta = -0.199$; $p < .001$) in comparison with participation in team sports. Second, higher levels of expertise were positively associated with higher levels of PE toward opponents ($\beta = 0.093$; $p < .05$). Third, male athletes experienced more PE toward their teammates/partners ($\beta = 0.080$; $p < .05$) than female athletes did.

Negative Emotions

Both models had a significant effect on NE toward teammates/partners, $F(3, 707) = 5.643$, $p < .001$, and opponents, $F(3, 707) = 6.299$, $p < .001$. More particularly, the models showed that the influence of each identity differed as a function of the target (i.e., opponents or teammates/partners). The participants who were more identified with their sport experienced significantly less NE toward their opponents ($\beta = -0.096$; $p < .05$), but sport identity did not influence NE toward their teammates/partners. In contrast, those who were more identified with their club experienced significantly less NE toward their teammates/partners ($\beta = -0.099$; $p < .01$), but club identity had no effect on NE toward their

Table 1 Means, Standard Deviations, and Correlations

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Social identity (intermediate level): Club	4.28	1.01						
2. Social identity (superordinate level): Sport	4.25	0.88	.26***					
3. Negative emotions toward opponents	1.78	0.52	.01	-.09*				
4. Positive emotions toward opponents	3.15	0.72	.24***	.25***	.25***			
5. Negative emotions toward partners	1.55	0.49	-.10**	-.04	.48***	.12**		
6. Positive emotions toward partners	3.13	0.71	.25***	.14***	.16***	.61***	.15***	

Pairwise two-sided *p* values without adjustment: * $p < .05$, ** $p < .01$, *** $p < .001$.

opponents. Sport and club identity did not interact. The athletes who were younger ($\beta = -0.075$; $p < .05$) and higher in expertise ($\beta = 0.103$; $p < .01$) experienced more intense NE toward their opponents, and, perhaps reflecting their greater interdependence, the athletes in team-based sport reported more NE toward their teammates/partners ($\beta = 0.081$; $p < .05$).

Finally, neither club experience nor sport experience influenced precompetitive emotions.

Discussion

The aim of this study was to investigate the effect of two simultaneously held social identities at different levels of abstraction on athletes' precompetitive emotions toward their partner(s) and opponent(s). The results showed that both identities had effects, sometimes in different directions, on the precompetitive emotions that the participants felt toward both in-group members and out-group members. The more the athletes identified with their sport (the superordinate identity), the more they felt both more positive and less negative emotion toward opponents (as predicted). Greater club identity (intermediate identity) increased PE toward opponents (contrary to what might be expected), but had no impact on NE toward opponents. Both greater sport identification and greater club identity increased PE toward teammates/partners, but only greater club identity lowered NE toward teammates/partners as well. Thus, we showed that both identities simultaneously affected intergroup emotions in different ways.

Importantly, this study made several unique additional contributions to the literature. First, this is one of the very first studies to test the predictions of IET in functioning task groups rather than in social category groups (see Garcia-Prieto, Mackie, Tran, & Smith, 2007, for an exception). Given that IET proposes that group-level emotions will have similar antecedents and consequences in all groups (other than loose associations), demonstration of the emotional consequences of categorization in task groups makes a significant theoretical contribution. Although identification as *athlete of the sport* might be similar to social categories, *athlete of the club* is a task-based group membership that operates face-to-face with fellow team members and face-to-face against opposing individuals and teams from other clubs. Our findings do not just apply IET to the sports domain, but, theoretically, extend the scope and operation of categorization effects on group-based emotion principles to face-to-face, long-term, competitive groups (see calls for this extension, e.g., Mackie & Smith, 2015; Smith & Mackie, 2015).

Second, while Campo, Champely, et al. (2019) and Campo et al. (2018) showed the influence of the level of self-abstraction (personal vs. social identities) on athletes' emotions in competition, our findings highlight that emotions can also be influenced by the degree of self-abstraction when intermediate and superordinate categories are considered. In this study, the consideration of the level of abstraction straddles two hierarchically inclusive levels of self-categorization, namely, athletes of the sport and athletes of the club. According to self-categorization theory (Turner et al., 1987), this would mean that participants highly identified to their sport (superordinate category) would not draw distinctions between opponents and teammates/partners, as both would be considered as part of the same group and appraised accordingly (e.g., soccer players, skiers, etc.; see Nier et al., 2001 for consistent evidence). This was confirmed by our findings that showed that sport identity led the participants to experience less NE toward their opponents. In many ways, this is a more stringent theoretical test of the original social identity theories' postulation of the effects of levels of

self-abstraction than the usual manipulations, which change perceivers from one to another group membership at the same level of abstraction (e.g., Ray et al., 2008; see also Yzerbyt, Dumont, Mathieu, Gordijn, & Wingboldus, 2006). Finding that naturally occurring adherence to one identity rather than the other significantly changed NE, despite the overlap between the two levels of categorization, is a strong test of the effect of identification on emotions. Although experimental manipulation of categorization controls for many extraneous factors that might influence results, our findings are significant in that they showed naturally occurring participant-driven levels of greater chronic identification with particular groups to drive emotions. Thus, our findings extend the emotional effects of group membership to different levels of abstraction rather than just to different group memberships.

In that sense, it should also be noted that identity processes have been historically considered to be a binary process that renders social identities as being in apparent opposition (Yzerbyt et al., 2006). In the context of sport, this is reinforced by the fact that competitions are intergroup situations at the heart of athletes' experiences. Thus, asking only about either club belonging or sport belonging may imply a categorical emotional experience, whereas the combination of both social attributes may generate more complex identification processes. Indeed, in many circumstances, social human beings do not experience only a dichotomic choice or sense of group belonging. Therefore, considering in this study that both social identities might have concomitant influences allowed us to see at a more finely grained level the relationship between degree of identification with each level of self-abstraction and emotional intensity. This approach echoes intersectionality (Crenshaw, 1989), cross-categorization (Deschamps & Doise, 1979), or social identity complexity (Roccas & Brewer, 2002), which considers (with some theoretical differences) that several social identities may together influence how a person reacts (Crisp & Hewstone, 2007). For instance, as a female soccer player, an athlete might experience different emotions, depending on whether she thinks of herself more as a woman or more as a soccer player. Our results demonstrated for the first time that the simultaneous consideration of two social identities (here, member of her or his club, and athletes of her or his sport) can help to predict emotional reactions in sport. In comparison with typical IET methodology that invites people to focus on one or the other identity (Mackie et al., 2000), our approach enables researchers to assess the emotions that an athlete might be experiencing as both a female and a soccer player.

This approach allowed us to identify the specific effect of each identity when concomitant influences of both levels of self-abstractions were considered. Identity approaches typically assume that, in intergroup situations, group belonging leads to out-group biases that increase the experience of NE toward the out-group, as well as antisocial behaviors, such as aggression (e.g., Gordijn, Yzerbyt, Wigboldus, & Dumont, 2006; Huddy & Feldman, 2011; Mackie et al., 2000). In this study, however, when the simultaneous effects of both identities were considered, the findings showed that club identity had no influence on NE and, in fact, increased PE toward opponents. This result may suggest that sport out-groups are not "all bad" because they are necessary for competition. It might also be supposed that experiencing the concomitant effects of different levels of self-abstraction (levels of club and sport identifications) led to different results than are typically found when the effects of two categorical identities are independently compared (self-categorization as members of the club *or* as athletes of the sport). Thus, we encourage future replication and extension of this finding, which adds to other studies showing that categorical

biases are lessened when two social identities at the same level of self-abstraction are activated (Deschamps & Doise, 1979). In this regard, the model of social identity complexity (Roccas & Brewer, 2002) offers one promising approach to investigate this complexity by suggesting that several social identities may coexist in relationships of domination or congruence among one another. Such theoretical models of the antecedents and consequences of the intertwining of multiple social identities may help researchers to better understand the group-based emotions–performance relationship in sport (Campo, Mackie, & Sanchez, 2019).

Finally, our study is one of very few (and the first one in sport) that looks at the emotional consequences of self-categorization for emotions toward in-groups and out-groups. Indeed, most IET studies have focused on out-group emotions, as we did here when the opponents were targets (see Smith, Seger, & Mackie, 2007, for an exception). In this study, the findings show that considering multiple emotional targets helps to more accurately understand the actual influence of identity processes on athletes' emotions. In particular, club identity had no effect on NE toward opponents, but had negative effects on NE and positive effects on PE toward teammates/partners. In comparison, sport identity reduced NE and increased PE toward opponents, while having no effect on NE toward teammates/partners. Together, these findings may suggest that club identification led the participants to focus mainly on the in-group, with the potential of increasing cohesion and coordination, whereas sport identification increased perceived permeability with the out-group, with the potential to facilitate less "aggressive" intergroup sport competitions (Campo et al., 2012). Thus, considering the target of appraisal may help to better understand the effects of social identity on precompetitive athletes' emotional experience. Future research in the field of emotion–performance should, therefore, take the target of competitive emotions into consideration.

In the last four decades, an impressive amount of research has shown that emotions influence performance (Hanin, 2000; Lazarus, 2000). However, the influence of social identity on emotions is only at its early stages (Campo, Mackie, & Sanchez, 2019; Rees et al., 2015). In particular, only recently has attention been turned more systematically to emotions (other than guilt, e.g., Doosje, Branscombe, Spears, & Manstead, 2006) toward the in-group (see Mackie & Smith, 2015 for a similar point). Future research might usefully extend this paradigm to include objective indicators of these potential outcomes, such as considering the effect of group-based emotions toward teammates/partners and opponents on individual and team performances. Moreover, recent theorizing has suggested that in-group-directed emotions may be more important for intergroup relations than out-group-directed emotions (Greenwald & Pettigrew, 2014). This implies different strategies for optimizing precompetitive preparation, some more focused on the intergroup context (opposition) and others more focused on in-group dynamics (cohesion and motivation). Our results do not speak to the effect of each type of group-based emotion (positive vs. negative) on performance or to the way that each type of target of the emotions (here, opponents vs. teammates/partners) may moderate this potential effect. Such conclusions thus await research that combines manipulations of such emotions with the assessment of performance indicators to best predict outcomes in intergroup competition.

Of course, our research is limited in some respects. Our findings showed the influence of the type of sport on participants' emotional precompetitive experiences in some cases. In individual sports, training partners are not teammates and may also become

opponents in competition. Therefore, we acknowledge that it is possible that the results might be influenced by this type of categorization intricacy. Moreover, club identity may not be at the same level of self-abstraction for athletes in individual sports as for those in team sports. Indeed, for some team-based sport participants, the club might be considered a higher level of self-abstraction than the team. Therefore, we invite future research to investigate this question experimentally and adapt the variables manipulated to the characteristics of each type of sport.

In addition, athletes were presented with a global scenario and asked to report the emotions they typically experience. However, we acknowledge that this scenario did not consider the specificities of a particular game (e.g., type of opposition, game location, player status, current ranking of the club, etc.). Therefore, the present findings call for more investigation, particularly of situational variables that affect competition, to increase the ecological generalizability of our results.

Overall, the current research is a strong call for integration of identity, particularly, a more nuanced approach to identification, and group-based emotions in the context of sport, especially in team sports. Given the well-established role of emotions in sports performance, our results promote the likely benefit of integrating identity, emotions, and performance in future work as well.

Note

1. This may seem a huge sample size, but a power calculation using a small effect $f^2 = 0.02$ for the importance of the two identification independent variables, considering six covariates, a Type I alpha error of .05/4 [corresponding to a Bonferroni correction for the multiple test of the four dependent variables], and a conventional power of 80% leads to $N = 675$ [= 666.6 + 6 + 2 + 1].

References

- Brewer, M.B. (2003). Optimal distinctiveness, social identity, and the self. In M.R. Leary & J.P. Tangney (Eds.), *Handbook of self and identity* (pp. 480–491). New York, NY: The Guilford Press.
- Brummer, L., Stopa, L., & Bucks, R. (2013). The influence of age on emotion regulation strategies and psychological distress. *Behavioural and Cognitive Psychotherapy*, 42(6), 668–681. doi:10.1017/S1352465813000453
- Campo, M., Champely, S., Louvet, B., Rosnet, E., Ferrand, C., Pauketat, J.V.T., & Mackie, D.M. (2019). Group-based emotions: Evidence for emotion–performance relationships in team sports. *Research Quarterly for Exercise and Sport*, 90(1), 54–63. doi:10.1080/02701367.2018.1563274
- Campo, M., Mackie, D.M., & Sanchez, X. (2019). Emotions in group sports: A narrative review from a social identity perspective. *Frontiers in Psychology*, 10, 666. doi:10.3389/fpsyg.2019.00666
- Campo, M., Martinent, G., Pellet, J., Boulanger, J., Louvet, B., & Nicolas, M. (2018). Emotion–performance relationships in team sport: The role of personal and social identities. *International Journal of Sports Science & Coaching*, 13(5), 629–635. doi:10.1177/1747954118785256
- Campo, M., Mellalieu, S.D., Ferrand, C., Martinent, G., & Rosnet, E. (2012). Emotions in contact team-based sports: A systematic review. *The Sport Psychologist*, 26, 62–97. doi:10.1123/tsp.26.1.62
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*,

- I*(8), 139–167. Retrieved from <https://chicagounbound.uchicago.edu/uclff/vol1989/iss1/8>
- Crisp, R., & Hewstone, M. (2007). Multiple social categorization. *Advances in Experimental Social Psychology*, *39*, 163–254. doi:10.1016/S0065-2601(06)39004-1
- Deschamps, J.C., & Doise, W. (1979). L'effet du croisement des appartenancescatégorielles. In W. Doise (Ed.), *Expériences entre groupes* (pp. 293–326). Berlin, Germany/Boston, MA: De Gruyter. doi:10.1515/9783110807394-019
- Doosje, B., Branscombe, N.R., Spears, R., & Manstead, A.S.R. (2006). Antecedents and consequences of group-based guilt: The effects of ingroup identification. *Group Processes and Intergroup Relations*, *9*, 325–338.
- Gaertner, S.L., & Dovidio, J.F. (2000). *Reducing intergroup bias: The common ingroup identity model*. Philadelphia, PA: The Psychology Press.
- Garcia-Prieto, P., Mackie, D.M., Tran, V., & Smith, E.R. (2007). Intergroup emotions in workgroups: Some emotional antecedents and consequences of belonging. In E.A. Mannix, M.A. Neale, & C.P. Anderson (Eds.), *Research on managing groups and teams* (Vol. 10, pp. 145–184). Greenwich, CT: JAI Press.
- Gaudreau, P., Sanchez, X., & Blondin, J.P. (2006). Positive and negative affective states in a performance-related setting: Testing the factorial structure of the PANAS across two samples of French-Canadian participants. *European Journal of Psychological Assessment*, *22*(4), 240–249. doi:10.1027/1015-5759.22.4.240
- Gordijn, E.H., Yzerbyt, V., Wigboldus, D., & Dumont, M. (2006). Emotional reactions to harmful intergroup behavior. *European Journal of Social Psychology*, *36*(1), 15–30. doi:10.1002/ejsp.296
- Greenwald, A.G., & Pettigrew, T.F. (2014). With malice toward none and charity for some: Ingroup favoritism enables discrimination. *American Psychologist*, *69*(7), 669–684. PubMed ID: 24661244 doi:10.1037/a0036056
- Haerem, T., & Rau, D. (2007). The influence of degree of expertise and objective task complexity on perceived task complexity and performance. *Journal of Applied Psychology*, *92*(5), 1320–1331. PubMed ID: 17845088 doi:10.1037/0021-9010.92.5.1320
- Hanin, Y.L. (2000). Individual zones of optimal functioning (IZOF) model: Emotions–performance relationships in sports. In Y.L. Hanin (Ed.), *Emotions in sport* (pp. 65–89). Champaign, IL: Human Kinetics.
- Hanin, Y., Hanina, M., Šašek, H., & Kobilšek, A. (2016). Emotion-centered and action-centered coping in elite sport: Task execution design approach. *International Journal of Sports Science & Coaching*, *11*(4), 566–588. doi:10.1177/1747954116654782
- Haslam, S.A. (2004). *Psychology in organizations: The social identity approach* (2nd ed.). London, UK: Sage.
- Huddy, L., & Feldman, S. (2011). Americans respond politically to 9/11: Understanding the impact of the terrorist attacks and their aftermath. *American Psychologist*, *66*(6), 455–467. PubMed ID: 21823777 doi:10.1037/a0024894
- Lawrence, K., Campbell, R., & Skuse, D. (2015). Age, gender, and puberty influence the development of facial emotion recognition. *Frontiers in Psychology*, *6*, 761. PubMed ID: 26136697 doi:10.3389/fpsyg.2015.00761
- Lazarus, R.S. (2000). How emotions influence performance in competitive sports. *The Sport Psychologist*, *14*(3), 229–252. doi:10.1123/tsp.14.3.229
- Mackie, D.M., Devos, T., & Smith, E.R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *Journal of Personality and Social Psychology*, *79*, 602–616. PubMed ID: 11045741 doi:10.1037/0022-3514.79.4.602
- Mackie, D.M., & Smith, E.R. (1998). Intergroup relations: Insights from a theoretically integrative approach. *Psychological Review*, *105*(3), 499–529. PubMed ID: 9697429 doi:10.1037/0033-295X.105.3.499
- Mackie, D.M., & Smith, E.R. (2015). Intergroup emotions. In M. Mikulincer, P.R. Shaver, J.F. Dovidio, & J.A. Simpson (Eds.), *APA handbooks in psychology. APA handbook of personality and social psychology* (Vol. 2, Group Processes, pp. 263–293). Washington, DC: American Psychological Association. doi:10.1037/14342-010
- Nier, J.A., Gaertner, S.L., Dovidio, J.F., Banker, B.S., & Ward, C.M. (2001). Changing interracial evaluations and behavior: The effects of a common group identity. *Group Processes & Intergroup Relations*, *4*(4), 299–316. doi:10.1177/1368430201004004001
- R Development Core Team. (2005). *R: A language and environment for statistical computing*. Vienna, Austria: R Foundation for Statistical Computing. Retrieved from <http://www.R-project.org>.
- Ray, D.G., Mackie, D.M., Rydell, R.J., & Smith, E.R. (2008). Changing categorization of self can change emotions about outgroups. *Journal of Experimental Social Psychology*, *44*(4), 1210–1213. doi:10.1016/j.jesp.2008.03.014
- Rees, T., Haslam, S.A., Coffee, P., & Lavalley, D. (2015). A social identity approach to sport psychology: Principles, practice, and prospects. *Sports Medicine*, *45*(8), 1083–1096. PubMed ID: 26092187 doi:10.1007/s40279-015-0345-4
- Roccas, S., & Brewer, M.B. (2002). Social identity complexity. *Personality and Social Psychology Review*, *6*(2), 88–106. doi:10.1207/S15327957PSPR0602_01
- Sillars, A.A., & Davis, E.L. (2017). Children's challenge and threat appraisals vary by discrete emotion, age, and gender. *International Journal of Behavioral Development*, *42*(5), 506–511. doi:10.1177/0165025417739178
- Smith, E.R., & Mackie, D.M. (2008). Intergroup emotions. In M. Lewis, J.M. Haviland-Jones, & L.F. Barrett (Eds.), *Handbook of emotions* (3rd ed., pp. 428–439). New York, NY: Guilford Press.
- Smith, E.R., & Mackie, D.M. (2015). Dynamics of group-based emotions: Insights from intergroup emotions theory. *Emotion Review*, *7*(4), 349–354. doi:10.1177/1754073915590614
- Smith, E.R., Seger, C.R., & Mackie, D.M. (2007). Can emotions be truly group level? Evidence for four conceptual criteria. *Journal of Personality and Social Psychology*, *93*, 431–446.
- Tajfel, H. (1978). *Differentiation between social groups: Studies in the social psychology of intergroup relations*. Oxford, UK: Academic Press.
- Tamminen, K.A., Palmateer, T.M., Denton, M., Sabiston, C., Crocker, P.R., Eys, M., & Smith, B. (2016). Exploring emotions as social phenomena among Canadian varsity athletes. *Psychology of Sport and Exercise*, *27*, 28–38. doi:10.1016/j.psychsport.2016.07.010
- Turner, J.C., Hogg, M.A., Oakes, P.J., Reicher, S.D., & Wetherell, M.S. (1987). *Rediscovering the social group: A self-categorization theory*. Cambridge, MA: Basil Blackwell.
- Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*(6), 1063–1070. PubMed ID: 3397865 doi:10.1037/0022-3514.54.6.1063
- World Medical Association. (2013). World Medical Association Declaration of Helsinki: Ethical principles for medical research involving human subjects. *The Journal of the American Medical Association*, *310*(20), 2191–2194. doi:10.1001/jama.2013.281053
- Yzerbyt, V.Y., Dumont, M., Mathieu, B., Gordijn, E., & Wigboldus, D. (2006). Social comparison and group-based emotions. In S. Guimond (Ed.), *Social comparison processes and levels of analysis: Understanding cognition, intergroup relations, and culture* (pp. 174–205). New York, NY: Cambridge University Press.