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A Social Identity Approach to Understanding the Conditions Associated With Antisocial Behaviors Among Teammates in Female Teams

Alex J. Benson and Mark W. Bruner
Nipissing University

Mark Eys
Wilfrid Laurier University

Using a social identity approach as a theoretical framework, the current research sought to better understand the conditions under which female athletes may be particularly prone to derogate and chastise teammates. With a focus on behaviors enacted toward teammates, we examined whether the relationship between perceived ingroup antisocial norms (i.e., the frequency in which athletes observe their teammates engaging in antisocial behaviors toward one another) and ingroup antisocial behaviors (IGAB; i.e., the frequency in which athletes personally engage in antisocial behaviors toward teammates) was moderated by social identity strength (i.e., the extent to which athletes identify with their team). We expected the positive association between perceived ingroup antisocial norms and IGAB to be amplified among athletes who strongly identify with their team. Individuals on sport teams ($N = 213$) completed measures assessing social identity (ingroup ties, cognitive centrality, ingroup affect), exclusionary social norms, antisocial practice norms, and IGAB. A series of moderated multiple regressions supported the hypothesized moderation effect. Across all analyses, the magnitude of the relationship between perceived antisocial norms (i.e., antisocial practice norms, exclusionary social norms) and self-reported antisocial behaviors increased as a function of social identity strength. The findings are consistent with our theoretical predictions derived from a social identity approach and provide insight into the joint roles that perceived norms and social identity play in relation to IGAB.

Keywords: group dynamics, ingroup behaviors, moral behavior, social identity, sport

Sport is a highly interactive and competitive social environment. In light of these characteristics, sport is a fertile context for studying athlete behaviors from a moral perspective. Although it is important to acknowledge that moral actions are governed by a complex interplay of factors, empirical accounts consistently show that the social environment of sport teams is associated with athletes' antisocial behaviors (i.e., volitional acts intended to harm or put others at a disadvantage; Kavussanu, Seal, & Phillips, 2006). Indeed, stronger athlete perceptions of a coach-initiated mastery motivational climate are linked to less frequent antisocial behaviors, while stronger performance (ego) climate perceptions are linked to more frequent antisocial behaviors (Boardley & Kavussanu, 2009). Research has also shown that athletes engaged in more frequent antisocial behaviors toward opponents when they perceived their team's moral atmosphere to endorse antisocial behaviors (Bortoli, Messina, Zorba, & Robazza, 2012). As a final example, athletes who felt exhibiting toughness would confer status and respect within their group tended to report more frequent antisocial behaviors toward teammates—a relationship partially mediated by moral disengagement (Boardley & Kavussanu, 2010). A common thread running across these studies is that athletes readily perceive the social cues and

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Alex J. Benson and Mark W. Bruner, School of Physical and Health Education, Nipissing University; Mark Eys, Departments of Kinesiology and Physical Education and Psychology, Wilfrid Laurier University.

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Correspondence concerning this article should be addressed to Alex J. Benson, 100 College Drive, Box 5002, North Bay, ON, Canada, P1B 8L7. E-mail: alexb@nipissingu.ca

behaviors of their peers and leaders, and these observations appear to play an important role in regulating how teammates interact with one another in morally relevant ways.

In an effort to understand the ways in which a group can influence the behavior of individuals—a topic area that has long been of central interest to social psychologists—there is much to be gained by considering the role of social identity (Hornsey, 2008). As noted by Rees, Alexander Haslam, Coffee, and Lavallee (2015), a social identity approach may be particularly useful for examining issues germane to sport because of the high degree of group distinctiveness associated with sport teams. Researchers interested in social identity have integrated interrelated concepts stemming from social identity theories (e.g., Hogg, 2006; Tajfel & Turner, 2004) and self-categorization theories (e.g., Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). A core idea of this approach is that people engage in self-categorization processes as a way to define themselves as part of a collective (i.e., ingroup) while distinguishing themselves from others (i.e., outgroup). A notable consequence of these self-categorization processes is that people's social identities take on a heightened salience compared with their personal identities. This shift not only changes how we think about ourselves, but also how we see others, and such a shift has broad implications for understanding ingroup relations (Hogg, 2006).

Despite an expansive literature in the broader social psychological domain, research investigating the process of social identification and its implications in sport teams has only begun to gain traction (e.g., Bruner, Eys, Blair Evans, & Wilson, 2015; Slater, Barker, Coffee, & Jones, 2015; Zuchermaglio, 2005). Bruner, Boardley, and Côté (2014) adapted a multidimensional conceptualization of social identity that explicates the various ways in which individuals identify with a particular group: (a) *cognitive centrality* refers to the degree to which group membership is psychologically salient, (b) *ingroup ties* refers to the degree to which a member feels psychologically bonded to a particular group, and (c) *ingroup affect* refers to the degree to which an individual associates group membership with positive emotions (Cameron, 2004). Using this multidimensional framework, recent qualitative work highlighted that the relations between social identity and antisocial behaviors toward teammates is rather complex. Specifically, Bruner, Boardley, Allan, Root, et al. (2016) found that some athletes readily justified high levels of antisocial behaviors toward teammates because they felt antisocial behaviors could strengthen teammate bonds. Bruner Boardley, Allan, Root, and colleagues (2016) also noted potential differences in how males and females construed antisocial behaviors enacted toward teammates, and thus encouraged future researchers to examine social identity and moral behaviors in males and females separately. In the current research, we apply a social identity approach to better understand the conditions under which the social environment in sport teams is associated with antisocial ingroup behaviors among female athletes.

A key proposition within a social identity approach is that the process of social identification is theorized to strengthen the correspondence between group norms and an individual's behavior. Group norms provide members with a heuristic for identifying prototypical group behaviors, and adhering to such behaviors is likely to be perceived as a way to maintain or enhance one's standing in his or her group (Hogg, 2006). As Terry and Hogg (1996) noted, "When social identity is salient, depersonalization occurs, such that a person's feelings and actions are guided more by group prototypes and norms than personal factors" (p. 791). Prior to discussing empirical findings that support this theoretical proposition, it is important to distinguish between *collective descriptive norms* and *perceived descriptive norms*.[1] On one hand, collective descriptive norms refer to the actual behavioral patterns enacted by members of a social group, which can be assessed through systematically documenting group member behaviors. Importantly, a behavior that is widely enacted by group members is not necessarily readily perceived and cognitively encoded by all group members (Lapinski & Rimal, 2005). On the other hand, perceived descriptive norms refer to how individuals construe the social behaviors of

[1] Moral atmosphere is a construct closely related to group norms, and one that has been linked to moral behaviors in sport. Previous studies in the domain of sport have operationalized moral atmosphere in a way that is consistent with perceived injunctive norms (Bortoli et al., 2012; Guivernau & Duda, 2002), which refers to people's perceptions of how other members will judge or respond to specific behaviors (i.e., approval/disapproval). The current study focuses on perceived descriptive norms, which refers to people's observations of their group members' behaviors.

other group members (e.g., Cialdini, Reno, & Kallgren, 1990). In the context of our social identity approach, we conceptualize norms as each person's interpretation of the social environment in which they are embedded—hereafter referred to as perceived norms.

With this conceptualization of norms in mind, several empirical studies support the previously described moderation hypothesis where individuals are more likely to engage in behaviors that are consistent with perceived norms when they strongly identify with the group.

Terry and Hogg (1996) demonstrated that perceived norms of university peers positively predicted individual behaviors related to exercise (Study 1) and sun-protective behaviors (Study 2), but only when individuals strongly identified with their university peers. In another study, the recycling behaviors of friends in a neighborhood positively predicted personal recycling behaviors, but once again, only when they strongly identified with those individuals (Terry, Hogg, & White, 1999). As an example from the sport domain, individuals reported higher levels of effort when they observed teammates engaging in higher effort, but only for teammates who were friends (Spink, Crozier, & Robinson, 2013). As a second example from sport, athletes reported that an individual would be more likely to act in a way consistent with group norms if the individual belonged to a cohesive group (Gammage, Carron, & Estabrooks, 2001). Whereas the previous examples revolve around positive and socially desirable behaviors, Goldman, Giles, and Hogg (2014) note that social identification processes can also motivate individuals to adhere to antisocial norms. Collectively, these findings support the notion that the perceived behaviors of a referent group (i.e., descriptive norms) are more likely to regulate individual behaviors when group membership is relevant to one's self concept.

The foregoing sections reveal the importance of considering how perceived norms and social identity interact in predicting ingroup behaviors in sport. An interesting extension of this theoretical perspective is that, if there are antisocial norms pertaining to how teammates interact with one another, athletes with a stronger social identity may be more prone to perpetuate these norms. To test this idea, we examined whether female athletes who strongly identified with their team were more prone to derogate and chastise teammates when they perceived antisocial ingroup behaviors to be normative.

Perceived norms were operationalized as the frequency in which athletes perceived their teammates to engage in antisocial behaviors toward ingroup members during practice—similar to how self-reported IGAB are traditionally measured (Kavussanu & Boardley, 2009). Considering that social exclusionary behaviors may be more readily perceived in female teams (Bruner, Boardley, Allan, Root, et al., 2016), we also assessed exclusionary social norms to determine whether less direct antisocial norms (e.g., talking behind a teammate's back) had a similar effect on athletes' self-reported IGAB. As it pertains to the construct of social identity, we examined how three distinct dimensions (i.e., cognitive centrality, ingroup ties, ingroup affect) moderated the relationship between perceived ingroup antisocial norms and female athletes' self-reported IGAB. We expected all three dimensions of social identity to magnify the positive association between both types of ingroup antisocial norms (i.e., antisocial practice norms, exclusionary social norms) and athletes' self-reported IGAB. For example, the cognitive centrality dimension (i.e., psychological salience of group membership) closely aligns with how theorists typically discuss social identity when discussing its role as a moderator of the norms-to-individual behavior relationship (e.g., Terry & Hogg, 1996). In addition, individuals who feel psychologically attached to their group (i.e., strong ingroup ties) should act in a way consistent with perceived norms (Cameron, 2004). Finally, the dimension of ingroup affect represents the emotional value people ascribe to group membership and has been linked to morally relevant behaviors in previous sport research (Bruner et al., 2014). Overall, we expected a positive relationship between both types of ingroup antisocial norms and female athletes' self-reported IGAB, with our key prediction being that social identity strength would amplify this positive relationship.

Method

Participants

Following institutional ethical approval, a convenience sample of participants was re-

cruited from all-female teams competing at an annual flag football tournament for Canadian university students. The flag football tournament involved teams representing more than 10 universities across Canada. Each team typically began to practice as a group 8 weeks prior to the tournament and thus had spent ample time together at the time of data collection. Experimental work has shown that group identification processes occur relatively quickly (e.g., Sherif, Harvey, White, Hood, & Sherif, 1961). The sport itself is a variation of traditional North American football with offensive and defensive units. Physical contact is permissible for blocking, but tackling is not allowed (i.e., each athlete is equipped with two flags, one of which must be grabbed from the ball carrier to stop play). To achieve 80% power based on an estimated effect size that fell between the small to medium range ($f^2 = 0.05$), we set out to recruit 220 participants. Questionnaire packages were returned by 213 athletes, who were an average age of 20.51($SD = 2.18$) years old, and had been members of their current team during the previous two tournaments, which includes several weeks of practice leading up to each tournament ($M = 1.88$, $SD = 1.19$).

Procedure and Measures

After gaining permission to recruit participants from the tournament coordinator, the lead author and a research assistant attended the tournament. The tournament began with a round-robin format and moved to a playoff format after each team had played three games. All data collection occurred during the round-robin portion of the tournament. Teams played multiple games per day and teams were invited to participate after they finished a game. We only approached teams when they did not have another game within the next two hours. Over the course of the multiday tournament, 14 teams were invited to participate and 13 teams indicated interest in participating. After explaining the study to interested teams, pen and paper questionnaires were distributed to the athletes. We did not have access to official rosters and thus were unable to calculate the ratio of athletes who completed the questionnaire versus those who did not. The majority of athletes appeared to participate, although teams varied in size ($M = 16.38$, $SD = 5.22$, 10 to 24 athletes). The ordering of the predictor and criterion measures was partially counterbalanced through the creation of two questionnaire packages.

Exclusionary social norms. Four items were adapted from Carron, Prapavessis, and Estabrooks' (1999) team norm questionnaire to examine perceived exclusionary social norms. Athletes were asked to reflect on the period of time leading up to the tournament (approximately 8 weeks) and indicate how often their team engaged in specific behaviors during social situations, with possible responses ranging from 1 (*never*) to 5 (*very often*). The items ("Talked negatively behind a teammate's back," "Only socialized with a small percentage of the team," "Go out in a small clique rather than as a team," "Are negative toward certain teammates in social situations") exhibited an acceptable level of internal consistency ($\alpha = .75$).

Antisocial practice norms. Five items were adapted from the Prosocial and Antisocial Behavior in Sport Scale (Kavussanu & Boardley, 2009) measure to examine perceived antisocial norms. Whereas recent work successfully adapted this measure to assess individuals' perceptions of being the recipient of moral actions (Al-Yaaribi, Kavussanu, & Ring, 2016), we modified the stem for each item to gauge athletes' perceptions of their teammates' behaviors toward one another (i.e., not necessarily directed toward them personally). Similar to the previously described norms measure, athletes were asked to indicate how often their team engaged in specific behaviors during practices (e.g., "Argued with a teammate"), with possible responses ranging from 1 (*never*) to 5 (*very often*).

Social identity. A sport-specific measure was used to assess athletes' perceptions of social identity across three dimensions (Bruner et al., 2014, adapted from Cameron, 2004). Athletes were asked to reflect on how they felt about being part of their team, and rate their agreement with statements ranging from 1 (*strongly* disagree) to 7 (*strongly agree*). The cognitive centrality dimension includes four items that measures the extent to which an athlete's team membership is salient in terms of thought frequency and perceived importance (e.g., "I often think about the fact that I am a team member"). The ingroup ties dimension includes four items that measure the degree to

which an athlete feels psychologically bonded to their team (e.g., "I feel strong ties to other members of this team"). The ingroup affect dimension includes four items that measure the degree to which team membership is associated with positive emotions (e.g., "In general, I'm glad to be a member of this team").

IGAB. The five-item antisocial subscale of the Prosocial and Antisocial Behavior in Sport Scale (Kavussanu & Boardley, 2009) was used to assess athletes' self-reported IGAB. Athletes were asked to reflect on their experiences interacting with teammates and to indicate how often they personally engaged in specific behaviors (e.g., "Criticized a teammate"), with possible responses ranging from 1 (*never*) to 5 (*very often*). The items exhibited an acceptable level of reliability ($\alpha = .80$).

Analytic Strategy

Prior to examining the interactive effect of group norms and social identity on antisocial behaviors, confirmatory factor analyses were conducted on the measures of interest. The three-factor structure of the Social Identity Questionnaire (cognitive centrality, ingroup affect, ingroup ties) was evaluated with the factors allowed to correlate. In testing the norms measures, a two-factor structure was evaluated with exclusionary social norms and antisocial practice norms specified as latent factors that were allowed to correlate. We evaluated IGAB as a unidimensional construct. Finally, we tested the overall measurement model.

We inspected the intraclass correlation coefficient (ICC) of the dependent measure (i.e., IGAB) because athletes are nested within teams and these data may violate assumptions of nonindependence. Although the ICC of exclusionary social norms (ICC = 0.18) and antisocial practice norms (ICC = 0.04) indicated some variability in perceived norms at the between-team level, the dependent measure of IGAB exhibited less than 1% (ICC = 0.008) variance at the between-team level. Given the lack of group-level variability in the intercept of the dependent measure, we did not incorporate random effects to account for nonindependence.

To test the hypothesis that the relationship between perceived norms and IGAB would vary as a function of social identity strength, six moderated multiple regressions were conducted.[2] In each moderation analysis, the respective type of perceived norm (antisocial practice norms, exclusionary social norms) and dimension of social identity (i.e., cognitive centrality, ingroup ties, and ingroup affect) were treated as continuous variables and grand mean centered. When decomposing each significant interaction effect, the simple slopes analysis for the relationship between perceived norms and IGAB was tested at ± 1 *SD* for social identity scores. The simple slopes analysis for the relationship between social identity and IGAB was tested at ± 1 *SD* for perceived norms scores Aiken, West, & Reno, 1991). We refer to variables at higher levels and lower levels as shorthand to denote 1 *SD* above the mean and 1 *SD* below the mean, respectively.[3] Several participants did not complete the entire questionnaire package. Only participants who completed the entire questionnaire package ($N = 204$) are included in the main analyses.

Results

Means, standard deviations, and correlations of the study variables are displayed in Table 1. It should be noted that 60 participants indicated that they engaged in no antisocial behaviors (i.e., responded to 1 on every antisocial item), 116 respondents indicated they rarely engaged in antisocial behaviors, and 28 reported higher levels of antisocial behaviors. Inspecting the variance inflation factor (VIF) among the predictor variables did not reveal issues of multicollinearity (VIF ranged from 1.01 to 1.02). However, assumptions of normality (i.e., skewness, kurtosis) were not met and thus all subsequent analyses were conducted in Mplus 7.1 using the maximum likelihood estimator that is robust to nonnormality (Muthén & Muthén, 2012).

[2] We collected data on whether participants won or lost their previous game because this could potentially confound the relationships of interest. Including performance as a covariate (effect coding: win = 1, loss = −1) in the moderated multiple regressions did not alter the significance or strength of the observed patterns. Therefore, we report the analyses without team performance as a covariate.

[3] Given that a standard deviation above the mean of ingroup affect is above the upper bound of the scale, we decomposed the simple slopes at ± 0.71 from its mean. In addition, a standard deviation below the mean of antisocial practice norms is below the lower bound of the scale, and thus we decomposed the simple slopes at ± 0.78 from its mean.

Table 1
Means, Standard Deviations, and Correlations of Variables

Variable	1	2	3	4	5	6
1. Cognitive centrality						
2. Ingroup ties	.62**					
3. Ingroup affect	.58**	.63**				
4. Exclusionary social norms	−.33**	−.37**	−.40**			
5. Antisocial practice norms	−.01	−.12	−.15*	.48**		
6. IGAB	.11	−.05	−.02	.29**	.55**	
Mean	5.27	5.84	6.29	1.93	1.78	1.49
Standard deviation	1.22	1.11	.94	.80	1.51	.60
α	.86	.94	.89	.75	.67	.78

Note. $N = 204$. IGAB = ingroup antisocial behaviors.
* $p < .05$. ** $p < .01$.

Based on traditional benchmarks of model fit (Hu & Bentler, 1999), model fit indices were adequate for perceived norms: $\chi^2(26) = 64.13$, $p < .001$, root-mean-square error of approximation (RMSEA) = .083, confirmatory fit index (CFI) = .928, Tucker-Lewis index (TLI) = .901, standardized root-mean-square residual (SRMR) = 0.071. In addition, all of the factor loadings (λs) were significant (exclusionary social norms, λs > .57; antisocial practice norms, λs > .53). The three-factor Social Identity Questionnaire also demonstrated adequate model fit, $\chi^2(51) = 118.135$, $p < .001$, RMSEA = .078, CFI = .948, TLI = .933, SRMR = 0.051, with significant factor loadings (cognitive centrality, λs > .72; ingroup ties, λs > .88; ingroup affect, λs > .65). Finally, the single factor of IGAB revealed adequate model fit, $\chi^2(5) = 10.816$, $p = .0551$, RMSEA = .074, CFI = .969, TLI = .938, SRMR = 0.032, with significant factor loadings (λs > .62). In testing the overall measurement model, residual covariances were allowed between the five pairings of antisocial practice norms items and ingroup antisocial behavior items because their wording is identical with the exception of the stem differentiating between teammate behaviors versus personal behaviors. The fit of the overall measurement model was adequate, $\chi^2(279) = 491.96$, $p < .001$, RMSEA = .061, CFI = .918, TLI = .904, SRMR = 0.067.

Cognitive Centrality as Moderator of the Perceived Norms-IGAB Relationship

Interaction between exclusionary social norms and cognitive centrality. As depicted in Table 2, the effects of exclusionary social norms and cognitive centrality were qualified by a significant interaction between these variables in predicting IGAB. As illustrated in Figure 1a, simple slopes analyses revealed that exclusionary social norms positively predicted IGAB at lower ($b = 0.22$, $SE = 0.04$, $p < .001$) and higher ($b = 0.41$, $SE = 0.08$, $p < .001$) levels of cognitive centrality, with a stronger relationship at higher levels of cognitive centrality. In decomposing the simple slopes between cognitive centrality and IGAB, there was a positive relationship at mean ($b = 0.09$, $SE = 0.05$, $p = .052$) and higher levels of exclusionary social norms ($b = 0.15$, $SE = 0.05$, $p = .001$). Cognitive centrality did not significantly predict IGAB at lower levels of exclusionary social norms ($p = .592$).

Interaction between antisocial practice norms and cognitive centrality. As seen in Table 2, the effect of antisocial practice norms was qualified by a significant interaction between antisocial practice norms and cognitive centrality in predicting IGAB. As illustrated in Figure 1b, simple slopes analysis revealed that antisocial practice norms positively predicted IGAB at lower ($b = 0.33$, $SE = 0.07$, $p < .001$) and higher ($b = 0.68$, $SE = 0.06$, $p < .001$) levels of cognitive centrality, with a stronger relationship at higher levels of cognitive centrality. Moreover, cognitive centrality positively predicted IGAB at higher levels of antisocial practice norms ($b = 0.16$, $SE = 0.06$, $p = .011$). Although cognitive centrality did not significantly relate to IGAB at mean levels of antisocial practice norms ($p = .200$), cognitive centrality negatively predicted IGAB at lower

Table 2
Social Identity as a Moderator of the Relationship Between Perceived Norms and Ingroup Antisocial Behaviors

	EXC × CC	APN × CC	EXC × IGT	APN × IGT	EXC × IGA	APN × IGA
Constant	1.52 (.05)	1.49 (.03)	1.53 (.04)	1.51 (.03)	1.51 (.04)	1.51 (.03)
Perceived norm	.31*** (.05)	.51*** (.06)	.27*** (.06)	.54*** (.06)	.28*** (.06)	.55*** (.07)
Social identity	.09* (.05)	.05 (.04)	−.01 (.07)	−.02 (.05)	.02 (.05)	−.02 (.04)
Perceived norm × Social identity	.08** (.03)	.14*** (.04)	.11*** (.03)	.16*** (.04)	.07*** (.02)	.16*** (.03)
ΔR^2 (interaction effect)	.02	.05	.04	.07	.02	.06
f^2	.02	.05	.04	.07	.02	.06
df (interaction effect)	(1, 200)	(1, 200)	(1, 200)	(1, 200)	(1, 200)	(1, 200)

Note. $N = 204$. Values are unstandardized regression coefficients. Standard errors are in parentheses. EXC = exclusionary social norms; APN = antisocial practice norms; CC = cognitive centrality; IGT = ingroup ties; IGA = ingroup affect. Ingroup antisocial behavior is the dependent measure in all analyses.
* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

levels of antisocial practice norms ($b = -0.07$, $SE = 0.03$, $p = .021$).

Ingroup Ties as a Moderator of the Perceived Norms-IGAB Relationship

Interaction between exclusionary social norms and ingroup ties. The effect of exclusionary social norms was accompanied by a significant interaction between ingroup ties and exclusionary social norms in predicting IGAB (see Table 2). As illustrated in Figure 2a, simple slopes analysis revealed that exclusionary social norms positively predicted IGAB at lower ($b = 0.15$, $SE = 0.05$, $p = .005$) and higher ($b = 0.39$, $SE = 0.07$, $p < .001$) levels of ingroup ties, with the relationship becoming stronger at higher levels of ingroup ties. Ingroup ties was not related to IGAB at the levels at which exclusionary social norms were probed.

Interaction between antisocial practice norms and ingroup ties. The effect of antisocial practice norms was qualified by a significant interaction between ingroup ties and antisocial practice norms in predicting IGAB (see Table 2). As depicted in Figure 2b, simple slopes analysis showed that antisocial practice norms positively predicted IGAB at lower ($b = 0.36$, $SE = 0.06$, $p < .001$) and higher ($b = 0.71$, $SE = 0.09$, $p < .001$) levels of ingroup ties, with a stronger relationship at higher levels of ingroup ties. Interestingly, ingroup ties negatively predicted IGAB at lower levels of antisocial practice norms ($b = -0.14$, $SE = 0.04$, $p < .001$). There was no relationship between ingroup ties and IGAB at higher ($p = .147$) and mean levels of antisocial practice norms ($p = .650$).

Ingroup Affect as a Moderator of the Perceived Norms-IGAB Relationship

Interaction between exclusionary social norms and ingroup affect. The effect of exclusionary social norms was accompanied by a significant interaction between ingroup affect and exclusionary social norms in predicting IGAB (see Table 2). As illustrated in Figure 3a, simple slopes analysis revealed that exclusionary social norms positively predicted IGAB at lower ($b = 0.22$, $SE = 0.05$, $p < .001$) and higher ($b = 0.33$, $SE = 0.06$, $p < .001$) levels of ingroup affect, with a stronger relationship at higher levels of ingroup affect. Ingroup affect

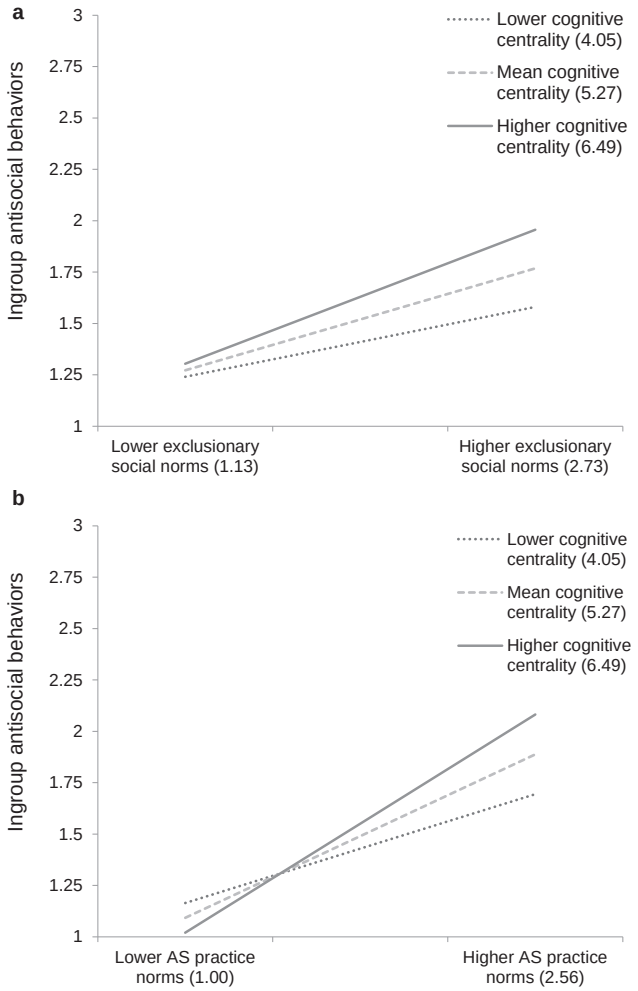

Figure 1. Interaction between perceived norms and cognitive centrality in predicting the frequency of ingroup antisocial behaviors.

was not significantly related to IGAB at the various levels at which exclusionary social norms were probed.

Interaction between antisocial practice norms and ingroup affect. The effect of antisocial practice norms was qualified by a significant interaction between ingroup affect and antisocial practice norms in predicting IGAB (see Table 2). As seen in Figure 3b, simple slopes analysis revealed that antisocial practice norms positively predicted IGAB at lower (b = 0.44, SE = 0.06, $p < .001$) and higher (b = 0.66, SE = 0.08, $p < .001$) levels of ingroup affect, with a stronger relationship at higher levels of ingroup affect. There was no relationship between ingroup affect and IGAB at mean levels of antisocial practice norms (p = .592). Moreover, ingroup affect positively predicted IGAB at higher levels of antisocial practice norms (b = 0.10, SE = 0.04, p = .014), but negatively predicted IGAB at lower levels of antisocial practice norms (b = −0.14, SE = 0.04, p = .001).

Discussion

Researchers have typically focused on the role of social identity in increasing an individ-

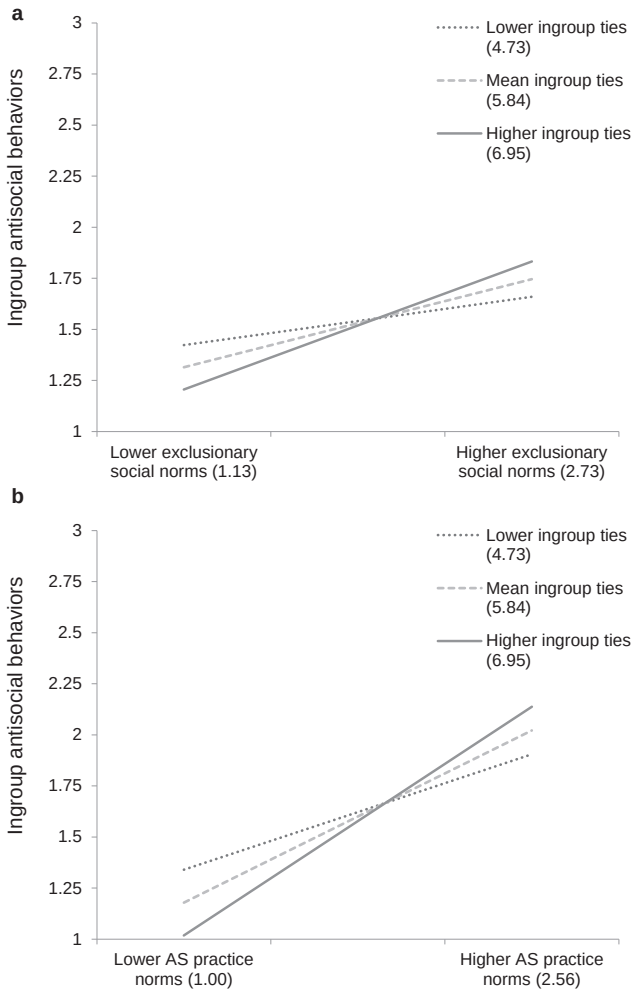

Figure 2. Interaction between perceived norms and ingroup ties in predicting the frequency of ingroup antisocial behaviors.

ual's adherence to norms that either benefit ingroup members (e.g., Blader & Tyler, 2009) or put outgroup members at a disadvantage (e.g., Goldman et al., 2014). What is less understood, however, is whether social identity can motivate personal adherence to norms that promote antisocial behaviors among group members. Consistent with the theoretical notion that individuals internalize the values and behaviors of the groups to which they strongly identify (Terry & Hogg, 1996), we expected that strongly identifying with a sport team would strengthen the correspondence between perceived antisocial norms and the frequency in which female athletes behaved antisocially toward teammates.

The observed relationships support our hypotheses derived from a social identity approach. Notably, each of the three distinct ways in which athletes identify with their group (cognitive centrality, ingroup ties, ingroup affect) positively moderated the relationship between perceived norms and female athletes' antisocial ingroup behaviors. It should be noted that the observed effect sizes related to the interactions were small. However, all three dimensions of social identity had a larger influence on the relationship between antisocial practice norms and IGAB ($f^2 = 0.05 – 0.07$) compared with their influence on the relationship between exclusionary social norms and IGAB ($f^2 = 0.02 –$

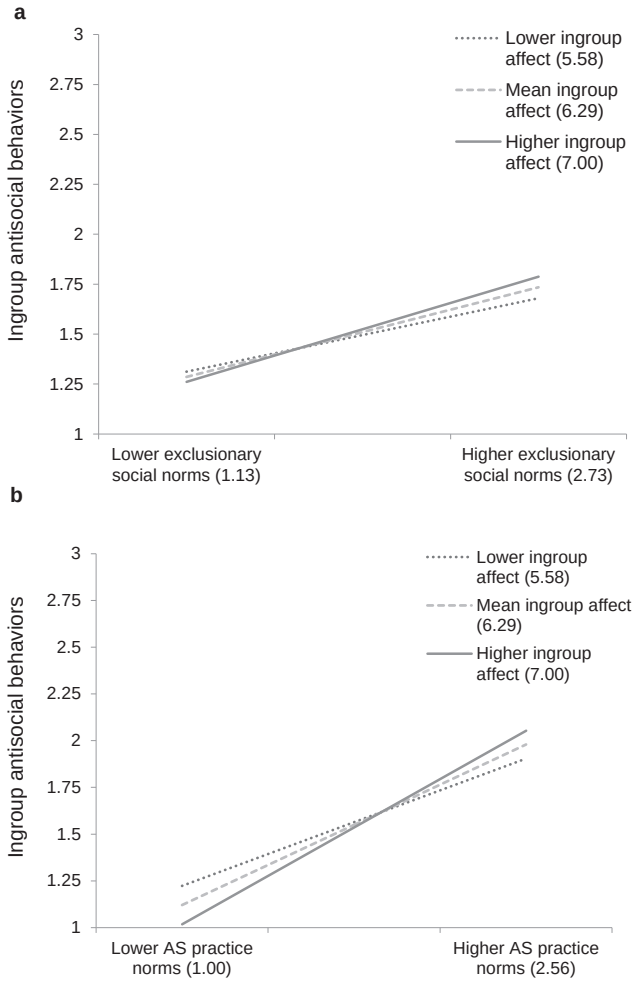

Figure 3. Interaction between perceived norms and ingroup affect in predicting the frequency of ingroup antisocial behaviors.

0.04). Despite the pattern of the interactive effects varying slightly across the analyses, a key and consistent finding was that the magnitude of the relationship between perceived ingroup antisocial norms and self-reported antisocial behaviors slightly increased as a function of social identity strength. Moreover, corroborating recent work that suggested a strong sense of social identification might exhibit protective properties under the right conditions (Bruner, Boardley, Allan, Root, et al., 2016), our findings provide some evidence that the social identities athletes develop through sport team membership may help to curtail antisocial behaviors under certain circumstances. Specifically, higher levels of ingroup ties as well as ingroup affect corresponded to lower levels of antisocial behavior at lower levels of antisocial practice norms. Together, the pattern of results further highlights how perceived norms and social identity work in tandem to regulate athletes' antisocial behaviors.

Although the positive association between perceived antisocial norms and IGAB was slightly stronger among athletes who strongly identified with their team, there was nonetheless a significant positive relationship between both types of perceived norms (i.e., antisocial practice norms, exclusionary social norms) and IGAB among athletes who scored in the lower

range of social identity scores. Although the interaction effect sizes were small, it is also worth noting that antisocial practice norms (e.g., swearing at a teammate) generally exhibited a stronger positive relationship with antisocial behaviors compared with exclusionary social norms (e.g., talking behind a teammate's back). At first glance, this may seem counter to previous work that did not find a significant relationship between perceived norms and personal behaviors under conditions of low group identification (Terry & Hogg, 1996; Terry et al., 1999). However, two factors merit consideration when interpreting the current findings in relation to previous work. First, participants' social identity scores were relatively high across all three social identity dimensions. As a result, probing the relations between perceived norms and IGAB at one standard deviation below the mean level of social identity did not capture athletes with a low social identity per se. These athletes fell around the midpoint of the scale and thus are more accurately described as having moderate levels of social identification. As a point of reference, our sample means are comparable to those documented in other sport-specific samples (Bruner et al., 2014; Bruner et al., 2015). The relatively high levels of social identity scores likely reflect the fact that sport teams are characterized by a high degree of entitativity, which is a group property that engenders a strong sense of social identification (Lickel et al., 2000). Second, the current research focused on negatively valenced norms (i.e., antisocial behaviors), and negative phenomena carry greater psychological weight than positive events and experiences (e.g., Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Compared with observing prosocial behaviors within the group, witnessing teammates behave antisocially toward one another should be a stronger source of social influence because people are more psychologically affected by negative events. Collectively, these points offer insight into why, even at the lower range of social identity scores, perceived antisocial norms were positively associated with athletes' antisocial behaviors.

Obtaining initial evidence for theoretically supported links between female athletes' perceptions of their group environment and antisocial ingroup behaviors offers a number of practical implications. These findings illustrate an important caveat regarding the benefits of engendering a strong sense of social identification. That is, developing a stronger sense of identification is not uniformly beneficial as it pertains to fostering desirable group dynamics. At a practical level, it may be particularly difficult to deter negative or counterproductive behaviors when athletes strongly identify with a team where antisocial behaviors are part of its social fabric. Although several empirical studies have shown antisocial behaviors directed toward teammates to be relatively infrequent, with reported sample means falling below the midpoint of the scale (e.g., Bruner et al., 2014; Studies 1–2 in Kavussanu, Stanger, & Boardley, 2013), even an isolated antisocial act can powerfully impact an athlete's sport experience (Bruner, Boardley, Allan, Forrest, et al., 2016). Moreover, Al-Yaaribi et al. (2016) demonstrated that being the recipient of antisocial behaviors enacted by teammates during a match was positively associated with anger and negatively associated with effort. Thus, individuals in positions of leadership (e.g., coaching staff, team captain) and practitioners working with sport teams should work to develop desirable group norms in combination with developing a sense of identity among teammates. Eys, Burke, Dennis, and Evans (2014) summarized several strategies for team-building that address the development of identity (e.g., promoting group distinctiveness via unique identifiers such as team clothing, mottos, and traditions) and group norms (e.g., establishing appropriate team standards for behaviors across multiple contexts and creating sanctions for those who do not adhere). With respect to the latter, Eys and colleagues (2014) provided an example of how the National Hockey League Toronto Maple Leafs team developed a set of team values/norms for the 2005/2006 season. This process included (a) a brief introduction to the concept, (b) the formation of small groups to allow for better inclusion and discussion from all team members, (c) a larger group discussion to develop consensus regarding the top team values (e.g., respect, loyalty, etc.) and what these values mean in plain terms, (d) the creation of a team plaque (signed by all players) outlining the values and placed in a visible spot in the dressing room, and (e) references to the team values by the coach throughout the season. In short, it is possible to intervene to design positive norms

within the sport environment that discourage IGAB.

In considering how to build upon this work in future research, it is important to consider the limitations of the current findings. Although using a social identity approach offered strong theoretical support to inform the specification of the predictor (social identity, perceived norms) and criterion (self-reported personal behaviors) variables, the cross-sectional nature of the study is a notable limitation. In terms of temporality, a plausible alternative account is that the constructs of interest may exhibit reciprocity. Using a time-lagged design with multiple time points would enable causal-based inferences and provide an opportunity to examine how engaging in moral behaviors may influence social identity and perceived norms. Moreover, manipulating either of these variables would introduce a greater degree of experimental control and ultimately enhance the study's internal validity. Nonetheless, testing the relationships of interest in a naturalistic group setting helped to bolster the ecological validity of the current findings.

Another point to consider is that the correlational nature of the study design raises the potential issue that the observed relationships are attributable to common method biases rather than the constructs of interest. To mitigate such concerns, we counterbalanced the order of the predictor and criterion variables, used a well-validated measure of antisocial behaviors, and used questionnaires with different response scaling formats (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). A key aspect, however, is that our research question centered on the interaction between two variables. Unlike a linear regression, this complex pattern is not easily explained by common method biases.

Another point is that the generalizability of these findings should be considered in the context of the representativeness of the current sample. One point to consider is that the sample has elements that are competitive (e.g., interuniversity competition, distinctions in starting status) and recreational (e.g., flag football is not the primary sport for many of the athletes, teams practiced a few times a week). Another point is that the sample only includes female university students. This is notable, given that recent qualitative work alluded to potential gender differences related to how athletes interpret their teammates' antisocial behaviors. Through the use of stimulated recall interviews, Bruner et al. (2016) found that female athletes were particularly attuned to the occurrence of more covert social exclusionary behaviors, whereas male athletes more commonly described more overt antisocial behaviors. Thus, it would be worthwhile to examine the role of social identity as a moderator of the relationship between perceived norms-individual behaviors in males, as well as other sport types.

With these considerations in mind, a promising avenue for future research is to test the interaction between social identity and perceived norms across a broader array of outcomes, including prosocial behaviors and intergroup moral behaviors. Indeed, the current research focused exclusively on antisocial behaviors directed toward teammates, and thus does not provide a complete picture of how perceived norms and social identity work in tandem in relation to moral behaviors in the context of sport. A second way to extend this work is to integrate the current findings with other lines of research that have sought to understand the psychological mechanisms that underpin morally relevant acts in sport. For example, there is evidence that moral disengagement may be a key psychological mechanism linking athletes' perceptions of the social environment to their antisocial behaviors (e.g., Boardley & Kavussanu, 2009). In addition, more recent work provided evidence that affective responses might be a more proximal mechanism that helps to explains antisocial behaviors (Stanger, Kavussanu, Boardley, & Ring, 2013). To meaningfully advance the current findings in conjunction with the previously described research, it would be worthwhile to begin to examine the conditional processes (i.e., moderated mediation) that contribute to antisocial sport behaviors.

In conclusion, the current research sought to better understand the conditions under which sport teammates are more likely to behave antisocially when interacting with one another. Our findings provide further evidence of the positive relationship between athletes' observations of their team environment and their personal actions, even when the resultant actions are morally objectionable. Notably, we showed that the positive association between perceived antisocial norms and IGAB is amplified among athletes who strongly identify with their team.

In garnering support for theoretical predictions derived from a social identity approach, these findings draw attention to the intertwined roles that perceived norms and social identity play in regulating ingroup behaviors.

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