Group Cohesion and Positive Youth Development in Team Sport Athletes

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Previous research demonstrates that the cohesion of a group can influence the perceptions of its individual group members. The purpose of this study was to examine group cohesion and perceptions of positive youth development (PYD) in team sport athletes. Male and female adolescent athletes (N = 424) from 35 high school sport teams completed measures of cohesion (Youth Sport Environment Questionnaire; Eys et al., 2009a) and PYD (Youth Experience Survey-Sport; YES-S; MacDonald et al., 2012). The Youth Sport Environment Questionnaire assessed perceptions of team task and social cohesion, while the YES-S assessed five PYD subscales (personal and social skills, initiative, cognitive skills, goal setting, and negative experiences). A multilevel analysis was performed for each PYD subscale. At level one, higher perceptions of task cohesion predicted greater PYD in the form of greater personal and social skills, initiative, goal setting, and less negative experiences. Similarly, higher perceptions of social cohesion also predicted greater PYD as indicated by higher levels of personal and social skills, cognitive skills, goal setting, and lower levels of negative experiences. At level two, team means for task and social cohesion predicted negative experiences. Higher perceptions of team task cohesion predicted less negative experiences, while higher perceptions of team social cohesion predicted more negative experiences. Cohesion accounted for variance at both the individual and team levels ranging from 3% (cognitive skills) to 13% (personal and social skills). Results indicate the influential role a cohesive sport team has on youth personal development in sport.

Keywords: group dynamics, personal development, physical activity

Positive youth development (PYD) is a strength-based perspective of adolescence that suggests that all young people possess the potential for positive, successful, and healthy development (Lerner et al., 2005). While recent work in PYD emphasizes the importance of optimizing the potential of youth (Damon, 2004), we are left with questions as to where and how we can optimally impact the personal and social development of this population. Structured extracurricular activities provide one important group context to promote PYD.

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In a review of studies that assessed the daily experiences of youth in different activities, Larson (2000) proposed that structured extracurricular activities such as sport provide a unique viable environment to reach youth and foster PYD. There is mounting empirical evidence to support Larson’s proposition (e.g., Eccles, Barber, Stone, & Hunt, 2003; Fredericks & Eccles, 2006, 2008), although it is unclear how the group setting promotes PYD. What is known is that group settings have powerful influences on their members and provide an effective vehicle for change (Cartwright, 1951). Further, youth are drawn to extracurricular activities as group membership fulfills a psychological need for belonging (Baumeister & Leary, 1995) and the desire by youth for affiliation and social status (Allen, 2003). Taken together, structured extracurricular activities provide a fertile group context for PYD.

Participation in the structured extracurricular activity of sport provides youth with opportunities to be physically active, learn fundamental motor skills, and enhance psychosocial development (Côté & Fraser-Thomas, 2011). Despite the potential benefits of sport, youth report a broad range of positive and negative developmental experiences (Fraser-Thomas & Côté, 2009). Subsequently, these experiences directly influence a youth’s future involvement and PYD in sport (Fraser-Thomas, Côté, & Deakin, 2008). To date, the majority of research on PYD in youth sport has focused on intrapersonal factors (e.g., enjoyment; MacDonald, Côté, Eys, & Deakin, 2011). However, researchers have encouraged greater consideration of the social factors that impact developmental experiences in youth sport (Holt, Black, Tamminen, Fox, & Mandigo, 2008).

One important social factor shaping and supporting the behavior of participants is the dynamic sport team environment (Bruner, Eys, & Turnnidge, 2013). Sport teams constitute an influential type of peer group and serve as an important developmental context (Holt et al., 2008). A recent survey indicated that approximately 80% of youth (aged 12–17 years) who participate in sport report doing so in a team sport setting (Canadian Fitness & Lifestyle Research Institute, 2009). This report is supported by recent data in the United States indicating that approximately 21.5 million youth (aged 6–17 years) participate in a team sport (Sporting Goods Manufacturers Association, 2011). However, despite the highlighted importance and high participation rate of youth on teams, minimal research has examined how the sport team environment shapes and supports adolescents’ personal and social development within the sport context (Taylor & Bruner, 2012).

A recent study by Fry and Gano-Overway (2010) was among the first to examine the relationship between young athletes’ perceptions of the team environment and youth sport experiences. The authors reported that a more caring climate in a community youth soccer setting was associated with higher enjoyment, more positive attitudes toward their coaches and teammates, and greater commitment to the sport.

As highlighted by the work of Fry and Gano-Overway (2010), there are likely several characteristics of the dynamic sport team environment that could play a role in the PYD of group members. In the present study, we focused specifically on youth perceptions of cohesion as a potentially influential variable impacting PYD (Bruner et al., 2013). Cohesion is commonly defined as “a dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of instrumental objectives and/or for the satisfaction of member affective needs” (Carron, Brawley, & Widmeyer, 1998, p. 213). Perceptions of group cohesion were considered important given that the National Research Council and Institute of Medicine (NRCIM, 2002) and researchers in sport (e.g., Fraser-Thomas, Côté, Deakin, 2004; Strachan, Côté, & Deakin, 2011) identified sense of belonging among eight setting features that are most likely to foster PYD. In addition, recent research in physical activity-based summer camps for youth reported that increased perceptions of social connections with the camp leader and peers were associated with enhanced psychological outcomes (e.g., global self-worth, physical self-worth; Ullrich-French, McDonough, & Smith, 2012).

While the conceptualization of cohesion has been a topic of considerable interest in sport (see Carron et al., 1998), Eys, Loughead, Bray, and Carron (2009a, 2009b) recently examined cohesion in a youth sample (aged 13–17 years) and highlighted the relevance of two key dimensions including (a) task cohesion—individuals’ perceptions of the level of unity possessed by
the group around task aspects (e.g., team goals, objectives) and (b) social cohesion—individuals’ perceptions of the level of unity possessed by the group regarding social aspects (e.g., social relationships, friendships). Eys et al. (2009a; 2009b) found empirical evidence for the task versus social dimensions of cohesion through the development of a youth sport cohesion measure.

From a developmental perspective, there is conflicting empirical evidence for the possible links between cohesive groups and the PYD of its members. Two studies challenged the popularly held assumption that high cohesion is always beneficial for teams and team members (Hardy, Eys, & Carron, 2005; Shields, Bredermeier, Gardner, & Bostrom, 1995). Shields et al. (1995) examined leadership, cohesion, and team norms for cheating and aggression among high school and community college baseball and softball players. They found high perceptions of task cohesion to be positively correlated with peer cheating and aggression norms toward the opposition. It was postulated that higher levels of task cohesion may emphasize victory over fair play, leading to the acceptance of antisocial behavior toward opponents. As a second example, Hardy et al. (2005) investigated the potential consequences of high team cohesion in a heterogenous sample of 105 athletes. Analysis of open-ended responses revealed that 56% of the athletes reported possible disadvantages to high social cohesion and 31% reported possible disadvantages to high task cohesion. Furthermore, both group- (e.g., communication problems) and personal-level negative consequences (e.g., decreased task commitment) were suggested to be associated with high cohesion.

In contrast to the above findings, emerging research in youth sport supports the assumption that cohesion is a positive characteristic of teams and highlights the potential advantages of high cohesion in sport teams (Taylor & Bruner, 2012). Taylor and Bruner (2012) examined cohesion and personal development in a sample of male elite youth soccer players. Player perceptions of task cohesion were found to be positively related to psychological need satisfaction that, in turn, was related to athletes’ perceptions of developmental experiences such as increased opportunities for leadership, emotional regulation, and goal setting, as well as decreased social exclusion. This study supports the role of cohesion in facilitating positive youth outcomes.

The highlighted lack of consensus on the influence of cohesion on athletes warrants further consideration. In an effort to illuminate the equivocal findings, it may be instructive to address the limitations of previous work on the topic. Past research on cohesion in regards to PYD has been constrained by the absence of valid, age-appropriate, sport-specific measures of cohesion and PYD; however, recent work developed tools to assess these concepts (Eys et al., 2009a; MacDonald, Côté, Eys, & Deakin, 2012). Furthermore, the samples of athletes previously used to investigate the cohesion–PYD relationships were narrow in scope (i.e., soccer, Taylor & Bruner, 2012; baseball/softball, Shields et al., 1995). Thus, the purpose of this study was to examine group cohesion and perceptions of PYD in a range of youth team sport athletes. At present, the empirical evidence to formulate specific hypotheses in this study is limited and exploratory. Based on preliminary cohesion–PYD research with youth in sport (Taylor & Bruner, 2012), we hypothesized that enhanced perceptions of both task and social cohesion would positively predict PYD.

Method

Participants

In total, 424 male and female youth (\(M_{\text{age}} = 15.74\) years; \(SD = 1.26; 63\%\) male) from 35 high school sport teams (\(k = 14, n = 139\) basketball\(^1\); \(k = 9, n = 86\) volleyball; \(k = 4, n = 54\) soccer; \(k = 3, n = 44\) ice hockey; \(k = 2, n = 60\) American football; \(k = 2, n = 29\) rugby; \(k = 1, n = 12\) lacrosse) in Canada volunteered to participate in this study. Using the Sport Team Interdependence Typology (Evans, Eys, & Bruner, 2012), the teams were classified as integrated—teams required to work together during competition with a clear group goal (\(k = 33\))—and segregated—teams whose members compete together but are not always required to interact with one another on the task (\(k = 2\)). A diverse sample of team sports was

\(^1k\) represents the number of teams for each category while \(n\) represents the number of participants.
used to provide a wide range of possible experiences (MacDonald et al., 2011). Each team was represented by 5 to 38 athletes ($M = 12.11; SD = 5.75$). Twenty-one of the teams were male and 14 were female.

### Measures

**Group cohesion.** The Youth Sport Environment Questionnaire (Eys et al., 2009a) was completed at the end of the regular season to evaluate both task and social cohesion. The 16 items were answered using a 9-point scale anchored by 1 (strongly disagree) to 9 (strongly agree). An example task item is “As a team, we are all on the same page.” An example social cohesion item is “Some of my best friends are on this team.” The reliability of the task and social cohesion subscales was assessed and found to be acceptable ($\alpha = .91$ and $.94$ for task and social cohesion, respectively). Eys et al. (2009a) reported acceptable factorial validity in a sample of youth athletes.

**Positive youth development.** The Youth Sport Experience Survey for Sport (YES-S; MacDonald et al., 2012) was completed by the participants at the end of the regular season to evaluate the young athletes’ positive and negative developmental experiences through sport team involvement. The YES-S has 37 items and evaluates five dimensions: (a) personal and social skills (14 items; “I became better at giving feedback”); (b) initiative (4 items; e.g., “I put all my energy into this activity”); (c) cognitive skills (5 items; e.g., “this activity improved skills for finding information”); (d) goal setting (4 items; e.g., “I set goals for myself in this activity”); and (e) negative experiences (10 items; e.g., “I got stuck doing more than my fair share”). Youth sport participants were asked to reflect on their current sport involvement on their high school team and respond to each statement using a 4-point Likert-type scale anchored by ‘Not at all’ to ‘Yes definitely’ as representing experiences that occurred during their sport involvement. The 10-item negative experience scale includes four items that evaluate experiences with the coach (e.g., Adult leaders scared me; Adult leaders in this activity were controlling and manipulative). For the purposes of this study examining team cohesion as a predictor of PYD, the four coach-related items were excluded from the analysis, resulting in a six-item negative experiences scale and 33 items in the YES-S. The reliability of the five PYD scales including the modified negative experiences scale was assessed and found to be acceptable ($\alpha = .78 \leq \alpha \leq .84$). Evidence supporting the validity and reliability of the measure with youth samples was also previously reported (MacDonald et al., 2011, 2012).

### Procedure

Before conducting the study, ethical approval was attained from the lead author’s institution ethics review board and three participating school boards. Approximately 80 high school coaches from the three school boards were invited to participate in the study through presentations at school board athletic meetings and coaching meetings. Participants were recruited from the high school teams of interested coaches. Informed consent was then obtained from each of the participants and the parents of those participants aged <18 years. Participants completed a questionnaire before or after a scheduled practice at the end of the regular season. Regular seasons were 3 to 4 months (12–16 weeks) in length.

### Data Analysis

Multilevel analyses were conducted using hierarchical linear modeling software (HLM7; Raudenbush, Bryk, Cheong, Congdon, & du Toit, 2011). HLM is an approach that permits researchers to model relationships among variables with nested data. In the present study, young athletes were nested within their respective high school sport teams such that athletes’ perceptions of the group environment could not be assumed to be independent. An observed strength of HLM is the ability to partition variance into within- and between-groups components (Tabachnick & Fidell, 2007). As such, the unit of analysis was at the individual and group level. Restricted maximum likelihood was used to estimate the models. A separate model was fit for each of the PYD subscales. First, a null model was computed for each of the PYD subscales to determine the level of independence. Next, a model was specified with task and social cohesion entered on the individual level (level 1) centered around the team average (group mean centered). On level two, the team means for both social and task cohesion were included.
on the intercept. In the main analyses, we compared the random and fixed slopes. If the random slopes were not significant, then the slopes were fixed. Assumptions for the multilevel models including normality, independence, and variance of the level 1 and 2 residuals were evaluated for each model of the PYD subscales.

Results

Assumptions of multilevel analysis were evaluated and the assumptions were met for the personal and social skills as well as cognitive skills. There appeared to be minor violations in the normality of the residuals for goal setting, initiative, and negative experiences. The analyses were repeated with transformed variables and the results were the same. As such, the untransformed findings are presented for ease of interpretation.

To determine if there was group-level variance in PYD, a null model was run for each of the five PYD outcome variables (personal and social skills, cognitive skills, goal setting, initiative, and negative experiences) without any predictors (task and social cohesion). The null model partitioned the variance into individual-level (Level 1) within-team variance, and group-level (Level 2) between-team variance. The resulting intraclass correlations were .10 (Personal and Social Skills), .16 (Initiative), .08 (Cognitive Skills), .12 (Goal Setting), and .07 (Negative Experiences). These findings suggest that between 7% and 16% of the variability in the scores can be attributed to team-level variability. As such, athletes who were on the same team shared some similarity in their perceptions of PYD.

Table 1 highlights the results for the Models. For all PYD subscales, the slopes for both task and social cohesion were fixed given that the random slopes were not significant. Model 1 includes task and social cohesion (group mean centered) as Level 1 variables and team task and social cohesion (grand mean centered) as Level 2 variables predicting each of the PYD variables. For personal and social skills, both task \((b = .08, p < .001)\) and social \((b = .09, p < .001)\) cohesion at level 1 were significant predictors. Athletes who reported higher levels of cohesion also reported greater personal and social skills. Overall this model explained 13% of the variance. Similarly for goal setting, both task \((b = .13, p < .001)\) and social \((b = .05, p < .001)\) cohesion at level 1 were significant predictors. Model 2 included task and social cohesion (grand mean centered) as Level 1 variables and team task and social cohesion (grand mean centered) as Level 2 variables predicting each of the PYD variables. For all PYD subscales, the slopes for both task and social cohesion were fixed given that the random slopes were not significant. Model 2 includes task and social cohesion (group mean centered) as Level 1 variables and team task and social cohesion (grand mean centered) as Level 2 variables predicting each of the PYD variables. For personal and social skills, both task \((b = .08, p < .001)\) and social \((b = .09, p < .001)\) cohesion at level 1 were significant predictors. Athletes who reported higher levels of cohesion also reported greater personal and social skills. Overall this model explained 13% of the variance. Similarly for goal setting, both task \((b = .13, p < .001)\) and social \((b = .05, p < .001)\) cohesion at level 1 were significant predictors.

Table 1

<table>
<thead>
<tr>
<th>Fixed effects</th>
<th>Personal and social skills</th>
<th>Initiative</th>
<th>Cognitive skills</th>
<th>Goal setting</th>
<th>Negative experiences</th>
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<tbody>
<tr>
<td></td>
<td>Coefficient (SE)</td>
<td>Coefficient (SE)</td>
<td>Coefficient (SE)</td>
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<tr>
<td>Level 1</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Intercept</td>
<td>3.04 (0.04)**</td>
<td>3.30 (0.05)**</td>
<td>2.42 (0.06)**</td>
<td>3.01 (0.05)**</td>
<td>1.73 (0.04)**</td>
</tr>
<tr>
<td>Task cohesion</td>
<td>0.08 (0.02)**</td>
<td>0.15 (0.03)**</td>
<td>0.06 (0.05)</td>
<td>0.13 (0.03)**</td>
<td>−0.13 (0.03)**</td>
</tr>
<tr>
<td>Social cohesion</td>
<td>0.09 (0.02)**</td>
<td>0.02 (0.02)</td>
<td>0.08 (0.03)*</td>
<td>0.05 (0.02)*</td>
<td>0.004 (0.02)</td>
</tr>
<tr>
<td>Level 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task cohesion mean</td>
<td>0.08 (0.08)</td>
<td>0.08 (0.12)</td>
<td>0.01 (0.09)</td>
<td>0.12 (0.12)</td>
<td>−0.27 (0.12)*</td>
</tr>
<tr>
<td>Social cohesion mean</td>
<td>0.08 (0.02)</td>
<td>0.09 (0.08)</td>
<td>0.01 (0.08)</td>
<td>0.02 (0.08)</td>
<td>0.16 (0.07)*</td>
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<td>Random effects</td>
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<td>Level 1 (r)</td>
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<td>0.53</td>
<td>0.38</td>
<td>0.46</td>
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<tr>
<td>Level 2 (u_{ij})</td>
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<td>0.06</td>
<td>0.05</td>
<td>0.06</td>
<td>0.03</td>
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<tr>
<td>Pseudo R2</td>
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<tr>
<td>Overall</td>
<td>13.0%</td>
<td>9.0%</td>
<td>2.7%</td>
<td>8.1%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Level 1</td>
<td>15%</td>
<td>10%</td>
<td>4%</td>
<td>10%</td>
<td>4%</td>
</tr>
<tr>
<td>Level 2</td>
<td>11%</td>
<td>2%</td>
<td>12%</td>
<td>7%</td>
<td>29%</td>
</tr>
<tr>
<td>Intraclass correlation</td>
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<td>1.6</td>
<td>.08</td>
<td>12</td>
<td>.07</td>
</tr>
<tr>
<td>−2 log likelihood</td>
<td>583.28</td>
<td>744.47</td>
<td>975.20</td>
<td>838.86</td>
<td>908.25</td>
</tr>
</tbody>
</table>

Note. Level 1: PYDij = β0i + β1 (Task cohesion) + β2 (Social cohesion) + r; Level 2: \(β_0 = γ_00 + γ_01\) (Task cohesion mean) + \(γ_02\) (Social cohesion mean) + \(μ_0\); \(β_1 = γ_{10}\); \(β_2 = γ_{20}\); Group mean centered variables are italicized, grand mean centered are underlined.

* \(p < .05\). ** \(p < .001\).
p < .05) cohesion were significant level 1 predictors that explained 8% of the overall variance. For initiative, only task cohesion at level 1 was a significant predictor ($b = .15, p < .001$), explaining 8% of the overall variance. For cognitive skills, only social cohesion emerged as a significant level 1 predictor ($b = .08, p < .05$), with 3% of the overall variance explained. Negative experiences were a little different from the other subscales of PYD. For negative experiences, task cohesion at level 1 ($b = -.15, p < .001$) and the team means for task ($b = -.27, p < .05$) and social ($b = .17, p < .05$) cohesion at level 2 significantly predicted negative experiences. Those teams who had higher average social cohesion reported greater negative experiences, while both teams with higher average task cohesion and individuals who perceived greater task cohesion reported less negative experiences. Overall, 6% of the variance in negative experiences was explained by cohesion. Across most of the PYD subscales, the results suggest that youth with positive feelings toward the task and social cohesion of the team will tend to have a high degree of PYD.

**Discussion**

The purpose of the current study was to examine group cohesion and perceptions of PYD in team sport athletes. Task and social cohesion were conceptualized as individual- and group-level variables on PYD. At an individual level, perceptions of task and social cohesion were associated with greater levels of PYD. The study findings support its hypothesis and preliminary evidence (i.e., Taylor & Bruner, 2012) associating group cohesion and PYD in a facilitative manner within sport. The findings also supplement the myriad of individual benefits associated with enhanced group cohesion in sport and exercise settings including increased personal sacrifices, effort, and satisfaction (Prapavessis & Carron, 1997; Spink, Nickel, Wilson & Odnokon, 2005).

In addition, the findings support an emerging body of research examining the salient role of social factors on PYD in sport and physical activity settings (Fry & Gano-Overway, 2010; Strachan et al., 2011; Ullrich-French, McDonough, & Smith, 2012). Specifically, the evidence linking cohesion with PYD extends previous research, highlighting the role of a caring team climate on athletes’ enjoyment, perceptions of coaches and teammates, and commitment in youth sport (Fry & Gano-Overway, 2010), as well as intervention research indicating the important role of social connections on psychological outcomes (global self-worth, physical self-worth, attraction to physical activity, and hope) in a physical activity-based PYD program (Ullrich-French et al., 2012). Further, the findings extend past research with coaches in elite sport identifying the importance of a supportive team environment on youth development (Strachan et al., 2011).

The finding that different types of cohesion (task and social) at the individual level were related to different perceptions of PYD deserves comment. First, task and social cohesion were significant predictors of personal and social skills and goal setting. These findings align with past formative research indicating empirical relationships between task and social cohesion and PYD in sport (e.g., Taylor & Bruner, 2012). Taylor and Bruner (2012) found greater cohesiveness of the team environment to positively predict psychological need satisfaction of athletes, which in turn was positively related to adaptive developmental experiences (i.e., personal and social skills, goal setting). While the study provided a possible explanation for the cohesion–PYD relationship (i.e., mediated by psychological need satisfaction), further consideration of this explanation is warranted.

Specific findings from the present study indicated that only task cohesion emerged as a significant predictor of initiative and decreased negative experiences, while only social cohesion significantly predicted enhanced perceptions of cognitive skills from the sport experiences. The nature of the items may provide insight into the results. An examination of the initiative items revealed a task focus in the wording. Example initiative items include “Learned to push myself,” “Learned to focus my attention,” and “I put all my energy into this activity.” Many of the negative experience items also placed an emphasis on the activity rather than social elements.

In addition to the nature of the items to account for the cohesion–PYD findings, a theoretical rationale can be offered for the findings. For example, the social cohesion–cognitive skills finding can be explained drawing on theoretical
work in social psychology and group dynamics. As highlighted earlier, one of the salient reasons youth seek out and engage in sport are for social reasons (i.e., fulfillment of a psychological need for belonging, desire for affiliation, Allen, 2003; Baumeister & Leary, 1995). It is plausible that if youth perceive stronger relationships among their sport team members (i.e., higher social cohesion), this may fulfill their need for belonging, and in turn foster a supportive social environment to enhance their cognitive skills. Support for this explanation can be drawn from work in group dynamics postulating, for example, the socially supportive role of important others in finding necessary and relevant information, as well as providing guidance and advice (Forsyth, 2010).

A substantive explanation can also be provided for the task cohesion–initiative link. Larson (2000) described the key elements in structured extracurricular activities that promote initiative including concerted engagement in the environment. Considering Larson’s supposition, one could argue that a sport setting with a high level of focus around the task (i.e., high task cohesion) would elicit initiative development among its team members.

One surprising finding was the absence of a significant relationship between task cohesion and cognitive skills (e.g., academic skills). While the relationship between the two constructs was positive and in the predicted direction (yet nonsignificant within the multilevel analyses), an examination of the bivariate correlations between cohesion (task, social) and cognitive skills suggests that the nonsignificant finding may have been a statistical anomaly. Given the strong correlations between task and social cohesion ($r = .60$) and relatively similar correlations with cognitive skills ($r = .16$ and $r = .18$) it is possible that the relative impact of social cohesion on cognitive skills influenced the relationship between task cohesion and cognitive skills when entered together into the multilevel analysis. However, this explanation is speculative, and a replication of this analysis with another sample is suggested before dismissing the task cohesion–cognitive skills link.

In terms of the findings at the group level, it was found that teams with higher means of task cohesion were associated with decreased perceptions of negative sport experiences, while higher means of social cohesion were associated with increased perceptions of negative experiences. The higher team task cohesion findings relating to decreased negative experiences support the study hypothesis, and are consistent with the previous initial research on task cohesion and PYD (Taylor & Bruner, 2012). However, for social cohesion, this maladaptive finding (i.e., increased negative experiences) extends previous research, highlighting potential disadvantages of high social cohesion on the individual and group (Hardy et al., 2005). Some possible reasons might be communication problems (i.e., more fighting with teammates) and social isolation (i.e., increased formation of cliques; Hardy et al., 2005). Further work delving into these reasons may be illuminative to determine the explanation(s) for the study findings.

The multilevel approach permitted examining young athletes’ perceptions of cohesion at an individual and group level simultaneously. With variability in PYD at both the athlete and team level as well as the nested nature of sport teams, future researchers should not overlook the impact of the interdependent nature and influence of the social context on PYD.

**Future Directions**

Given that this is the first study to use a multilevel approach to examine the relationship between group cohesion and PYD, there are a number of avenues of future research. The group-level findings revealed team perceptions of cohesion influenced young athletes’ negative experiences in sport. Higher team task cohesion appeared to have a protective effect on negative experiences, while higher team social cohesion was associated with increased negative experiences. Future qualitative work with youth sport teams may provide valuable insight into the study findings. The proposed work would build on previous qualitative work on cohesion in a youth sample (i.e., Eys et al., 2009b) and research examining disadvantages of high cohesion with adult athletes (i.e., Hardy et al., 2005) to better understand the mixed group level findings. In addition, the present study included high school team sport athletes, and recent research has encouraged further work examining the influence of group dynamics on individual team sports athletes (Bruner, Hall, & Côté, 2011). It may be fruitful to replicate the multi-
level approach to examine cohesion and PYD in different sport team environments using the recent sport team interdependence typology (Evans et al., 2012). Finally, future research should consider extending the findings through experimental work to examine the potential effects of group-based interventions designed to enhance cohesion (e.g., through team building) on PYD. Given the correlational nature of the study design, it is possible that greater PYD potentially fostered by the coach could have resulted in greater task or social cohesion. Further experimental research would clarify the directionality of the cohesion–PYD relationship.

**Practical Implications**

In addition to the theoretical and empirical contributions of the study findings to the literature, the results offer several practical implications for coaches and practitioners. First, coaches and practitioners should be encouraged to foster group cohesion to enhance PYD among their athletes. Individual perceptions of both task and social cohesion were positively associated with PYD. Furthermore, individual and team task cohesion were associated with decreased negative experiences within the sport setting. Second, coaches need to be mindful of striking a balance between task and social cohesion, as increased perceptions of team social cohesion were associated with negative experiences. The increased negative experiences may be attributed to enhanced potential subgroups or cliques as identified in previous work (Hardy et al., 2005), but this conclusion awaits further research. Coaches play a critical role in shaping a team environment and affecting the young athlete’s experiences in sport (Taylor & Bruner, 2012). The present findings suggest that coaches should strive to foster a cohesive environment with an emphasis on both the task and social aspects to facilitate an enriched developmental experience for youth.

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