Social Emotional Skills and Prosocial Behaviour among 15–16-year-old Adolescents

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Abstract
The purpose of this study was to determine and compare social emotional skills and prosocial behaviour among 15 – 16 – year-old adolescent athletes and non-athletes. The measures of social emotional skills and prosocial behaviour were evaluated using Schutte Self-Report Inventory, Self-control scale, Social Skills Rating System (Student form), Bulotaite and Gudzinskiene communication skills questionnaire, revised prosocial tendencies measure. The study results revealed that adolescent sport participation has influence on social skills and strongly links to athletes’ prosocial behaviour. Emotional, social and prosocial behaviours have an effect on gender differences.

Keywords: social emotional skills, prosocial behaviour, adolescent athletes and non-athletes.

1. Introduction
Social emotional skills are particularly important during adolescence because youth at this stage are going through rapid biological, cognitive, and physiological changes associated with puberty (Yurgelun-Todd, 2007). These developmental and contextual shifts challenge positive youth development and increase normative risk for problem behaviours such as violence, substance use, and school dropout (Guerra, Bradshaw, 2008; Steinberg et al., 2011). According to CASEL (2015), adolescents also engage in more risky behaviour than younger students and face a variety of challenging situations, including increased independence, peer pressure, and exposure to social media.

Students with poor social emotional skills are more at risk of experiencing learning difficulties and engaging in such behaviours as anti-social behaviour, violence and criminality, and to leave school without any certification or vocational skills, with consequently poor employability opportunities (Adi et al., 2007; Bradley et al., 2008; Colman et al., 2009). In contrast, students with higher social emotional skills tend to perform better in school (Rivers et al., 2012;...
Malinauskas, Dumciene, 2017), have better quality relationships (Lopes et al., 2004), resolve conflict in more constructive ways (Brackett et al., 2006), solve social reasoning problems more effectively (Reis et al., 2007), and engage less frequently in unhealthy behaviours (Brackett et al., 2004).

Since prosocial behaviour is defined as voluntary behaviour intended to help or benefit another (Carlo et al., 2013; Eisenberg et al., 2006), researchers emphasize that knowledge about prosocial behaviour as an important phenomenon can be useful for a better understanding of overall psychosocial development during adolescence (Carlo et al., 2010). Substantial evidence supports the idea that prosocial behaviour is learned through observation and verbal behaviour. Therefore the study is based on the Social Cognitive Theory (Bandura, 1977), which is one of the widely used models to address the importance of observational learning, imitation and modelling. Social cognitive theory emphasizes learning from the social environment and postulates reciprocal interactions among personal, behavioural, and social, environmental factors. Sport as a social environment plays an important role in the lives of many adolescents (Malinauskas, Juodsnukis, 2017; Trottier, Robitaille, 2014) life. Many researchers have emphasized that the pro-social development of youth is promoted in sporting environment (Fraser-Thomas, Côté, 2009; Kavussanu et al., 2013; Wells et al., 2008) where new friends are found, new contacts are established, and adolescents become part of the growing social network. Sporting activities encourage children to help others and to develop altruism and empathy (Lee et al., 2008). Adolescents who play sports are friendlier to peers, especially to those involved in similar activities, and have less contact with peers who are inclined to engage in antisocial behaviour (Smoll et al., 2011; Trottier, Robitaille, 2014).

**Study hypothesis** – we hypothesize that adolescent athletes have more developed social emotional skills and display more prosocial behaviour than adolescent non-athletes.

**The aim of the study** – to determine and compare social emotional skills and prosocial behaviour among 15–16-year-old adolescent athletes and non-athletes.

### 2. Research methods

**Instruments.** For the quantitative phase, a cross-sectional survey design was used. To study the prosocial behaviour of adolescent athletes and non–athletes, we used the Revised prosocial tendencies measure (PTM-R, Carlo, Hausmann, Christiansen, Randall, 2003). This scale was adapted to the Lithuanian population using back-translation procedures and was validated (Sukys, 2004). These previous studies showed acceptable reliability of the subscales ranging from 0.63 to 0.86. The PTN-R assesses six types of prosocial behaviours: public, anonymous, dire, emotional, compliant, and altruistic. The subjects had to rate each statement using a 5-point Likert-type scale (1 = does not describe me at all, 5 = describes me greatly, except for altruism, which used reverse scoring). Higher scores on each of the subscales reflected a stronger tendency to engage in prosocial behaviour.

To determine adolescents’ social emotional skills following questionnaires were used:

- Schutte Self-Report Inventory (SSRI), developed by Schutte and colleagues (1998). This instrument is extremely beneficial in the way that it divides emotional skills into four separate components (Palmer, 2003), namely: ability to use personal positive emotional experience, ability to assess emotions, ability to understand and analyze emotions and ability to manage emotions. The SSRI comprises 33 items (in our case 15 items), which students need to evaluate by using a 5-point scale, where 1 means „strongly disagree” and 5 – „strongly agree”. In this study, we used only the ability to assess emotions (6 items) and the ability to understand and analyse emotions subscale – .81. The Lithuanian version of the SSRI shows internal consistency value .79 and a test-retest reliability coefficient of .84 for the overall questionnaire (Malinauskas, Vazne, 2014).

- Self-control scale (Grasmick et al., 1993) consists of 24 items, divided evenly into impulsivity, simple tasks, risk seeking, physical activities, self-centered, and temper subscales. The subjects had to rate each item using a 4-point scale (1 = strongly agree to 4 = strongly disagree). The previous studies (Grasmick et al., 1993; Delisi et al., 2003) showed acceptable reliability of the subscales ranging from .81 to .91.
Communication skills questionnaire, developed by Bulotaite and Gudzinskiene (2003), consists of 30 items (in our case 20 items, because the scale of situational skills was not analysed) which students need to assess using a 4-point scale (1 = I fail to do that, 2 = I do not really lucky, 3 = I do pretty well, 4 = I do great success). The Lithuanian version of the communication skills survey questionnaire has a reported internal consistence of .71 (Akelaitis, Malinauskas, 2016).

Social Skills Rating System, Student form (SSRS-S), developed by Gresham and Elliott (1990). The SSRS-S is self-report questionnaire for the 7th to 12th grade students, consisting of 39 items (in our case 19 items) to which each student responded based on two parameters: the frequency of the behaviour and their perceived importance of the behaviour. In this study, we used only the cooperation (10 items) and assertiveness (9 items) skills assigned parts of the questionnaire. Each item is rated on a 3-point frequency scale (0 = never, 1 = sometimes, 2 = many times), based on respondents’ perception of the frequency with which they exhibit each behaviour. In addition, the questionnaire includes a rating of importance on a 3-point scale (0 = not at all important, 1 = important, 2 = very important). In the current study a Cronbach alpha of .71 was found for the SSRS-S total score (cooperation subscale – .68, assertiveness subscale – .67). The Lithuanian version of the SSRS-S ranges from .66 to .76 (Akelaitis, Malinauskas, 2016).

Statistical Analysis. Research data analysis was performed using SPSS version 22.0 and included calculating Cronbach’s alpha coefficients, descriptive statistics, independent samples t tests, Cohen’s d effect sizes. Statistical significance was set at \( p < .05 \).

Sample and procedure. A total of 468 adolescents (258 girls and 210 boys) aged between 15 and 16 years (M = 15.76; SD = 0.43) participated in the quantitative study. They were recruited from 12 general education schools in Kaunas, Klaipeda, Siauliai, Alytus cities, including Kaunas district secondary schools, using multi-stage sampling. In phase one, we selected schools from all lists of schools. In the second phase, we selected participants using a simple random sampling of classes from the selected schools. In the third phase, we invited all students to participate in the survey from the selected classes. For the data analysis, the participants were divided into two groups: athletes (n = 140) and non-athletes (n = 328). Students’ sport participation was assessed using the question “Do you participate in competitive sports?” with three alternative answers. This question has been validated with adolescents in earlier studies (Sukys, 2004).

The research was carried out during the period from January, 2016 to March, 2016. The principles of beneficence, research ethics and legal requirements were observed. Prior to the research, each school principal’s permission to interview the students was obtained. In some cases, permission from the regional Education Department was sought prior to receiving the school principal’s permission. The researchers visited the schools at an arranged time. Permission was obtained from school administrators to conduct the study and then we contacted the senior management at the target schools. Prior to collecting data from the students, parental informed consent forms were completed and informed consent was obtained from the students themselves with the understanding that participation in the study was voluntary. The students completed the survey with the researchers present in the classroom. The social worker and the psychologist of the school were present in the class. The research goal was explained to the children and they were instructed on how to fill in the questionnaire. The anonymity of the survey and the possibility to refuse participation were also explained. The filled-in questionnaires were sealed in envelopes.

3. Results

The analysis of social emotional skills among adolescent athletes and non-athletes showed that athletes have more developed assertiveness skills than non-athletes: \( t (466) = 2.77; p < .01; d = .26 \). Meanwhile, Student’s \( t \) test for independent samples showed that there no significant differences between adolescent athletes and non-athletes in terms of their abilities to assess, understand and analyse emotions, self-control, communication, and cooperation skills \( (p > .05) \) (Table 1).
### Table 1. The statistical indicators of social emotional skills and prosocial behaviour among athlete and non-athlete adolescents (M ± SD)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Athletes (n = 140)</th>
<th>Non-athletes (n = 328)</th>
<th>Scores of Student’s t-test</th>
<th>p-value</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotional skills:</strong></td>
<td></td>
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</tr>
<tr>
<td>Ability to assess emotions</td>
<td>22.25 ± 2.90</td>
<td>22.33 ± 3.63</td>
<td>-.22</td>
<td>.826</td>
<td>.02</td>
</tr>
<tr>
<td>Ability to understand and analyse emotions</td>
<td>32.10 ± 4.02</td>
<td>32.60 ± 4.31</td>
<td>-1.18</td>
<td>.238</td>
<td>.11</td>
</tr>
<tr>
<td>Self-control</td>
<td>59.82 ± 4.52</td>
<td>59.68 ± 4.59</td>
<td>.33</td>
<td>.742</td>
<td>.03</td>
</tr>
<tr>
<td><strong>Social skills:</strong></td>
<td></td>
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<tr>
<td>Communication</td>
<td>56.74 ± 9.23</td>
<td>57.03 ± 9.05</td>
<td>-.31</td>
<td>.755</td>
<td>.03</td>
</tr>
<tr>
<td>Cooperation</td>
<td>12.03 ± 3.43</td>
<td>12.28 ± 3.31</td>
<td>- .76</td>
<td>.451</td>
<td>.07</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>11.14 ± 3.07</td>
<td>10.28 ± 3.07</td>
<td>2.77**</td>
<td>.006</td>
<td>.26</td>
</tr>
<tr>
<td><strong>Prosocial behaviour:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>8.99 ± 2.83</td>
<td>8.25 ± 2.51</td>
<td>2.81**</td>
<td>.005</td>
<td>.26</td>
</tr>
<tr>
<td>Emotional</td>
<td>18.14 ± 3.85</td>
<td>17.29 ± 4.43</td>
<td>1.97*</td>
<td>.049</td>
<td>.18</td>
</tr>
<tr>
<td>Altruism</td>
<td>13.72 ± 3.88</td>
<td>12.92 ± 3.40</td>
<td>2.23*</td>
<td>.027</td>
<td>.21</td>
</tr>
<tr>
<td>Dire</td>
<td>11.06 ± 2.44</td>
<td>10.44 ± 2.49</td>
<td>2.48*</td>
<td>.014</td>
<td>.23</td>
</tr>
<tr>
<td>Compliant</td>
<td>7.44 ± 1.78</td>
<td>7.40 ± 1.75</td>
<td>.25</td>
<td>.806</td>
<td>.02</td>
</tr>
<tr>
<td>Anonymous</td>
<td>10.57 ± 3.78</td>
<td>10.27 ± 3.72</td>
<td>.79</td>
<td>.432</td>
<td>.07</td>
</tr>
<tr>
<td>Total of prosocial behaviour</td>
<td>69.91 ± 9.80</td>
<td>66.57 ± 10.57</td>
<td>3.20**</td>
<td>.001</td>
<td>.30</td>
</tr>
</tbody>
</table>

**Notes.** (M ± SD) – mean and standard deviation; Cohen’s d – effect size; * - p < .05; ** - p < .01.

Data analysis also showed the significant differences in terms of prosocial behaviours among adolescent athletes and non-athletes: Student’s t test for independent samples indicates that athletes reported greater mean public (t (466) = 2.81; p < .01; d = .26), emotional (t (466) = 1.97; p < .05; d = .18), altruistic (t (466) = 2.23; p < .05; d = .21), and dire (t (466) = 2.48; p < .05; d = .23) prosocial behaviours than non-athletes. The adolescent athletes also demonstrated higher overall score of prosocial behaviour (t (466) = 3.20; p < .01; d = .30) than non-athletes.

The comparison of social emotional skills among adolescent girls and boys revealed that girls were more able to understand and analyse emotions (t (466) = 5.37; p < .001; d = .50), and to collaborate (t (466) = 2.39; p < .05; d = .22) with others than boys (Table 2).

### Table 2. The statistical indicators of social emotional skills and prosocial behaviour among adolescent girls and boys (M ± SD)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Girls (n = 258)</th>
<th>Boys (n = 210)</th>
<th>Scores of Student’s t-test</th>
<th>p-value</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emotional skills:</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Ability to assess emotions</td>
<td>22.47 ± 3.15</td>
<td>22.10 ± 3.73</td>
<td>1.19</td>
<td>.236</td>
<td>.11</td>
</tr>
<tr>
<td>Ability to understand and analyse emotions</td>
<td>33.37 ± 4.10</td>
<td>31.32 ± 4.11</td>
<td>5.37***</td>
<td>.000</td>
<td>.50</td>
</tr>
<tr>
<td>Self-control</td>
<td>59.66 ± 4.56</td>
<td>59.80 ± 4.57</td>
<td>-.31</td>
<td>.755</td>
<td>.03</td>
</tr>
<tr>
<td><strong>Social skills:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>57.56 ± 8.46</td>
<td>56.19 ± 9.79</td>
<td>1.63</td>
<td>.104</td>
<td>.15</td>
</tr>
<tr>
<td>Cooperation</td>
<td>12.54 ± 3.11</td>
<td>11.80 ± 3.58</td>
<td>2.39*</td>
<td>.017</td>
<td>.22</td>
</tr>
<tr>
<td>Assertiveness</td>
<td>10.16 ± 3.05</td>
<td>10.11 ± 3.13</td>
<td>.16</td>
<td>.874</td>
<td>.02</td>
</tr>
<tr>
<td><strong>Prosocial behaviour:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>8.19 ± 2.57</td>
<td>8.81 ± 2.66</td>
<td>-2.59*</td>
<td>.010</td>
<td>.24</td>
</tr>
<tr>
<td>Emotional</td>
<td>18.22 ± 4.22</td>
<td>16.71 ± 4.21</td>
<td>3.84***</td>
<td>.000</td>
<td>.36</td>
</tr>
<tr>
<td>Altruism</td>
<td>13.33 ± 3.33</td>
<td>11.92 ± 3.52</td>
<td>4.43***</td>
<td>.000</td>
<td>.41</td>
</tr>
</tbody>
</table>

24
The results from the current study showed that there no significant differences between adolescent girls and boys in terms of their abilities to assess emotions, self-control, communication, and assertiveness skills ($p > .05$).

There were also the significant differences between adolescent girls and boys in terms of their prosocial behaviours: girls reported greater involvement in emotional ($t(466) = 3.84; p < .001; d = .36$), altruism ($t(466) = 4.43; p < .001; d = .41$), and compliant ($t(466) = 3.03; p < .01; d = .28$) prosocial behaviours than boys. In contrast, adolescent boys reported greater mean public ($t(466) = -2.59; p < .05; d = .24$), and anonymous ($t(466) = -3.33; p < .01; d = .31$) prosocial behaviours than adolescent girls.

4. Discussion

The purpose of this study was to determine and compare social emotional skills and prosocial behaviour among 15–16-year-old adolescent athletes and non-athletes. First, we identified the prosocial behaviour and social emotional skills and compared results between athletes and non-athletes. The study results showed that sport have no influence on emotional adolescent skills, namely: ability to assess emotions, ability to understand and analyse emotions, self-control, however on social skills we found that adolescent athletes scored higher on assertiveness skills compared to non-athletes. Therefore social skills such as communication and cooperation had no significant impact. It is important to note that adolescent athletes scored higher on prosocial behaviour skills on four subscales: public, emotional, altruism, dire. The total prosocial behaviour score showed statistically significance on adolescent athletes overall prosocial behaviour. Tuncel (2010) compared prosocial tendencies of athletes and non-athletes and found that that participants displayed anonymous prosocial behaviour most followed by emotional, altruistic, dire, public and compliant. In addition, our study revealed that a social skill such as assertiveness is important predictor finding links between prosocial behaviours. Sage and Kavussanu (2007) support our findings and found that both social affiliation and social recognition were positively associated with prosocial behaviour, whereas social status was positively linked to antisocial behaviour. Moreover, the study of Kavussanu, Stanger, Boardley, (2013) found that prosocial behaviour toward opponents was positively associated with moral identity and empathy. The current study findings suggest that sport as a social phenomenon strongly influences young athletes’ personality development. Young athletes act more prosocially compared to non-athletes by helping others in a various of situations and demonstrate empathy, altruism towards others. Authors Bredemeier & Shields (2006); Camire & Trudel (2010) emphasized that participation in sports can lead to positive experiences and beneficial outcomes such as increased self-esteem, confidence, citizenship, character building, identity development, meaningful adult and peer relationships, academic achievement, and decreased delinquency.

Continuing the discussion we identified whether adolescent gender has a difference on adolescent prosocial behaviour and social, emotional skills. The study revealed that girls scored higher on emotional skills, such as ability to understand and analyse emotions and social skills such as cooperation. Moreover, boys scored higher on prosocial behaviour such as public and anonymous. However, girls expressed higher on other prosocial behaviour such as emotional, altruism, compliant compared to boys. Study by Tunel, (2010) supports our findings that at late adolescence age females were more likely to report emotional prosocial behaviour than males.

Although the present study examined the links between prosocial behaviour and social emotional skills in the Lithuanian context and is one of the few studies which examined such predictors in the sport context there are a few limitations of our study which should be mentioned. Firstly, data were collected evaluating middle adolescence age and enabled to get a deeper
understanding of this particular age of group. It would be appropriate to conduct similar study by examining early and late adolescence age. Secondly, longitudinal designs might be used in future to examine athletes’ prosocial behaviour in relation to social and emotional skills, and how these skills occur over time. Finally, we did not identified participants of the study whether they are individual or team sport athletes. Evaluating specifically individual or team sport athletes could inform useful information for theorists and practitioners the importance of young athletes’ prosocial behaviour and social emotional skills in youth sport environment.

5. Conclusion
Adolescent sport participation and the development of adolescent social, emotional skills in sport environment have a positive impact on youth prosocial behaviour. Adolescent sport participation has influence on social skills and strongly links to athletes’ prosocial behaviour. Emotional, social and prosocial behaviours have an effect on gender differences. Boys are more prosocial on public and anonymous behaviours compared to girls. Girls expressed emotional intelligence such as emotional prosocial behaviour, as well as altruism and compliant. Overall the study results revealed that youth sport participation have a positive effect on adolescent personality development.

References


