Social Self-Efficacy and Prosocial Behaviour Among Students of High and Youth Schools

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Abstract
In this study, the differences in social self-efficacy and prosocial behaviour between students of high and youth schools were investigated. The random sample consisted of 394 students. Participants comprised 213 male and 181 female students; 198 of them were high school students, and 196 of them were youth school students. A Social Self-efficacy Scale (SSES) and a Revised Prosocial Tendencies Measure (PTM-R) were used. The findings indicated that students' social self-efficacy and prosocial behaviour scores were higher in high schools than in youth schools. The social self-efficacy of girls was found to be significantly higher than those of boys, however girls and boys did not differ significantly in overall scores of prosocial behaviour.

Keywords: social self-efficacy, prosocial behaviour, students, high school, youth school.

1. Introduction
Students’ problematic behaviour in the school environment has been tackled with great attention by many scientists (Van Ouytsel et al., 2017). Not surprisingly, parents and teachers believe that students are primarily concerned to satisfy their individual needs what is caused by their egoistic and selfish actions (Kudinov et al., 2018). On the other hand, society's formal standards and rules do not always ensure prosocial behaviour (Carlo et al., 2010), teachers should help students develop social self-efficacy and positive social skills that underlie prosocial behaviour (Sukys et al., 2017; Knight et al., 2018). The current study explored two constructs (social self-efficacy and prosocial behaviour) in the context of two different types of schools (high and youth schools) and strives to answer the question what are the differences in social self-efficacy and prosocial behaviour between students of high and youth schools.

The present study is based on the social cognitive theory (Bandura, 2001), which highlights learning from the social environment and punctuates reciprocal interactions among personal, behavioural, and social (environmental) factors. Self-efficacy with respect to Bandura (1993) is

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defined as one’s belief in one’s ability to effectively direct one’s actions to achieve the set goals and succeed in completing a specific task. Self-efficacy refers to a person’s perceived capability, as distinct from functional ability, to perform a particular action or course of action. According to Bandura (1993) self-efficacy beliefs have a major role in changing behaviours, as these beliefs determine the decision making in performing a behaviour, the effort spent, and the problems that arise throughout the process. One aspect of self-efficacy little explored is social self-efficacy (Zullig et al., 2011; Malinauskas, 2017). Social self-efficacy includes such skills as social boldness, participation in a social group or activity, friendly behaviours, and getting and giving help (Connolly, 1989). The level of social self-efficacy plays a determinant role in the student’s positive relationships and constructive interaction (Malinauskas et al., 2018). Persons with high social self-efficacy use more effective ways to solve problems because they have self-confidence about their ability to handle problem situations (Malinauskas et al., 2018). Students with poor social self-efficacy 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 (Akelaitis, Lisinskiene, 2018). Valid and reliable measures of social self-efficacy are essential for research and evaluation of efforts to suppress problematic behaviour, and to foster prosocial behaviour among students (Malinauskas et al., 2018). In our opinion, it is particularly relevant to investigate this phenomenon in the context of two different types of schools (high and youth schools) because teaching is known to have a major role in personality’s development.

Prosocial behaviours have been defined as voluntary actions aimed at sharing, comforting, and helping others (Batson, 2011). Since prosocial behaviour is defined as voluntary behaviour intended to help or benefit another (Batson, 2011), scientists underline that studies 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 (Akelaitis, Lisinskiene, 2018). Research on students’ prosocial behaviour has produced somewhat inconsistent findings. Some studies have found that prosocial behaviour increases during adolescence period (Eisenberg, Fabes, 1998), whereas others indicate a recession (Carlo et al., 2007), and still others researchers do not support the idea that prosocial behaviour increases with age (Foulkes et al., 2018). However, the available data in the field of gender differences in prosocial behaviour have been more consistently reported. These data indicate that girls exhibit more prosocial behaviour than boys (Kuhnert et al., 2017).

Youth schools are described in the present study as schools designed to provide specialized instruction to students that have discontinued their enrolment in conventional schools. It should be noted, that enhancing of prosocial behaviour could be mostly important for students of youth schools (students of youth schools often need higher educational aspirations, higher intrinsic motivation with respect to schoolwork) because the youth schools are those that generally serve a special population, such as students with unique learning interests or disabilities, potential dropouts, violent individuals, or court-adjudicated youths and those in juvenile detention systems (Malinauskas, 2019). Such schools are designed to return youths who have dropped out of high school to mainstream high schools, assist in credit recovery for youths who are behind in academic credits, or to facilitate the attainment of alternative educational credentials (Dunning-Lozano, 2016).

The following research questions guided this study which is based on the integration of social self-efficacy and prosocial behaviour in the context of two different types of schools: 1) Do social self-efficacy and prosocial behaviour differ in students of high and youth schools? 2) Are there gender differences in social self-efficacy and prosocial behaviour levels in students of high and youth schools?

Study hypothesis – we hypothesize that students’ social self-efficacy and prosocial behaviour scores will be higher in high schools than in youth schools.

The aim of the study was to determine the differences in social self-efficacy and prosocial behaviour between students of high and youth schools.

The significance of research. This study makes a novel contribution to the literature, because other research in this field has only evaluated social self-efficacy in sport schools students (Malinauskas et al., 2018), social self-efficacy in alternative (youth) schools students (Grunbaum et
2. Methods

Sample and Procedure. The random serial sampling method was used for this investigation. Three hundred ninety four participants were recruited from different high and youth schools in Kaunas region for this study. Participants comprised 213 male and 181 female students; 198 of them were high school students, and 196 of them were youth school students. The mean age of the students was 15.67 years (SD = 0.98). There were no gender differences in age between students of high and youth schools (t (392) = 1.03, n.s.). Participants completed the questionnaire during scheduled class time, with no time limit. The researcher introduced the study and gave the participants information about the study aims prior to administering the questionnaire. The study was approved by the Committee for Social Sciences Research Ethics of Lithuanian Sport University. The research was conducted in accordance with ethical guidelines and the legal code of the country in which the study was conducted. The questionnaire contained the instruments listed below.

Instruments. Social Self-efficacy Subscale (SSES). We measured social self-efficacy using six-items from the scale developed by Sherer et al. (1982), to evaluate the belief of individuals in their own social competence. The SSES items are rated on a 5-point Likert type scale ranging from 1 (strongly disagree) to 5 (strongly agree). A high score for the subscale indicates strong social self-efficacy. In Sherer et al. (1982), SSES coefficient alpha was .71. The Lithuanian version of the SSES shows internal consistency value .82 and a test-retest reliability coefficient of .84 for the present sample (Malinauskas, Brusokas, 2013). The value of the Cronbach’s alpha coefficient for this sample was 0.77.

Revised prosocial tendencies measure (PTM-R et al., 2003). The PTM-R comprised 21 item that measure how likely students were to engage in prosocial behaviours across a variety of situations. This scale was adapted to the Lithuanian population using back-translation procedures and was validated in previous studies (Šukys, Šukiienė, 2015). The PTM-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. Public prosocial behaviour was defined as behaviour intended to benefit others enacted in the presence of others. Anonymous behaviour was defined as the tendency to help others without other people’s knowledge. Dire behaviour involves helping others during emergency or crisis situations. Emotional behaviour is intended to benefit others enacted under emotionally evocative situations. Compliant behaviour involves helping others when asked. Altruistic behaviour involves helping others when there is little or no perceived potential for a direct, explicit reward to the self. A higher score on each of these scales reflected a stronger endorsement. In Lithuania, the four forms of prosocial behaviour were distinguished during the process of questionnaire adaptation: help in case of emergency, anonymous, public and altruistic prosocial behaviour (Šukys, Šukiienė, 2015). The four forms of prosocial behaviour were evaluated taking into consideration the factor of different cultures in this data analysis (Kromerova, Šukys, 2018). Cronbach alpha ranged from 0.61 (for altruism) to 0.84 (help in emergency).

Statistical Analysis. Research data were statistically processed using SPSS 24.0 (Statistical Package for Social Sciences). Descriptive statistics, namely means, standard deviations, were calculated. Skewness (the symmetry of a distribution) and kurtosis (the homogeneity of a distribution) coefficients were calculated to assess univariate normality because Student t test requires normally distributed data. Skewness and kurtosis coefficients between +1 and -1 indicated that data were normally distributed. We calculated the reliability of each dimension given by the
index of Cronbach’s alpha internal consistence. Data analysis used the Student $t$ test for independent samples, comparing the high and youth schools students and bys and girls. Effect sizes were expressed as Cohen’s $d$. Cohen’s $d$ effect sizes are generally defined as small ($d = .2$), medium ($d = .5$), and large ($d = .8$).

### 3. Results

The results of the independent samples $t$-tests were used to determine the differences between students of high and youth schools can be seen in Table 1. It was found that high school students’ social self-efficacy levels ($t (392) = 2.06; p < .05$) and overall prosocial behaviour levels ($t (392) = 2.26; p < .05$) were higher than those of youth school students. Statistical analyses revealed that high school students reported greater scores in altruistic ($t (392) = 1.97; p < .05$), anonymous ($t (392) = 1.98; p < .05$), public ($t (392) = 2.09; p < .01$) prosocial behaviours, and help in emergency situations ($t (392) = 1.97; p < .05$).

#### Table 1. The statistical indicators of social self-efficacy and prosocial behaviour among among students of high and youth schools ($M \pm SD$)

<table>
<thead>
<tr>
<th>Variables</th>
<th>High schools students ($n = 198$)</th>
<th>Youth schools students ($n = 196$)</th>
<th>$t$-test score</th>
<th>Cohen’s $d$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social self-efficacy</td>
<td>3.54 ± .69</td>
<td>3.40 ± .66</td>
<td>2.06*</td>
<td>.21</td>
</tr>
<tr>
<td>Altruism</td>
<td>2.88 ± .81</td>
<td>2.72 ± .80</td>
<td>1.97*</td>
<td>.20</td>
</tr>
<tr>
<td>Anonymous</td>
<td>2.79 ± .89</td>
<td>2.61 ± .91</td>
<td>1.98*</td>
<td>.20</td>
</tr>
<tr>
<td>Public</td>
<td>2.82 ± .78</td>
<td>2.65 ± .83</td>
<td>2.09*</td>
<td>.21</td>
</tr>
<tr>
<td>Help in emergency</td>
<td>3.31 ± .84</td>
<td>3.15 ± .77</td>
<td>1.97*</td>
<td>.20</td>
</tr>
<tr>
<td>Overall prosocial behaviour</td>
<td>2.96 ± .71</td>
<td>2.79 ± .78</td>
<td>2.26*</td>
<td>.23</td>
</tr>
</tbody>
</table>

Notes: ($M \pm SD$) – mean and standard deviation; Cohen’s $d$ – effect size; * - $p < .05$.

The results of the independent samples $t$-tests also were used to determine the differences between girls and boys. These results are summarised in Table 2. It was found that female students’ social self-efficacy levels ($p < .05$) were higher than those of male students.

There were the significant differences between adolescent girls and boys in terms of some of their prosocial behaviours: girls reported greater involvement in altruism ($t (392) = 2.05; p < .05$) and help in emergency situations ($t (392) = 2.00; p < .01$) than boys. Meanwhile, the independent samples $t$-test showed that there no significant differences between girls and boys in terms of their anonymous ($t (392) = .34; p > .05$), public prosocial behaviours ($t (392) = .46; p > .05$), and overall score of prosocial behaviour ($t (392) = 1.26; p > .05$).
Table 2. The statistical indicators of social self-efficacy and prosocial behaviour among girls and boys ($M \pm SD$)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Girls (n = 213)</th>
<th>Boys (n = 181)</th>
<th>t-test score</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social self-efficacy</td>
<td>3.49 ± .64</td>
<td>3.35 ± .72</td>
<td>2.02*</td>
<td>.21</td>
</tr>
<tr>
<td>Altruism</td>
<td>2.97 ± .80</td>
<td>2.81 ± .75</td>
<td>2.05*</td>
<td>.21</td>
</tr>
<tr>
<td>Anonymous</td>
<td>2.77 ± .88</td>
<td>2.74 ± .86</td>
<td>.34</td>
<td>.03</td>
</tr>
<tr>
<td>Public</td>
<td>3.01 ± .81</td>
<td>2.97 ± .89</td>
<td>.46</td>
<td>.05</td>
</tr>
<tr>
<td>Help in emergency</td>
<td>3.56 ± .85</td>
<td>3.39 ± .83</td>
<td>2.00*</td>
<td>.20</td>
</tr>
<tr>
<td>Overall prosocial behaviour</td>
<td>3.03 ± .56</td>
<td>2.96 ± .54</td>
<td>1.26</td>
<td>.13</td>
</tr>
</tbody>
</table>

Notes: ($M \pm SD$) – mean and standard deviation; Cohen’s d – effect size; * - $p < .05$.

4. Discussion
The purpose of the present study was to investigate differences in social self-efficacy and prosocial behaviour between students of high and youth schools. This study revealed differences in social self-efficacy and prosocial behaviour between high and youth schools students as well as some differences between male and female students. Our first hypothesis that high school students’ social self-efficacy and prosocial behaviour are significantly higher than those of youth school students was confirmed. The current study has shown that high schools students' social self-efficacy levels were higher than those of youth schools students (effect size was weak, Cohen’s $d = .21$) is in agreement with the data obtained by Malinauskas et al. (2014), where high schools students' had higher level of social skills like indicators of social self-efficacy: another-acceptance, emotional comfort and internality among students of high schools was higher than among students of youth schools (effect size was also week and varies from Cohen’s $d = -.18$ to Cohen’s $d = -.24$).

The present research data may be explained by the self-efficacy theory (Bandura, 1993), which emphasises that methods for enhancing (building, maintaining, regaining) social self-efficacy based on the information from the four major self-efficacy sources (i.e., mastery experiences, vicarious learning, verbal persuasion, and psychological arousal).

The present study revealed that overall prosocial behaviour levels were higher than those of youth school students (effect size was weak, Cohen’s $d = .23$). The current study findings suggest that school type could influence students’ personality development (i.e., prosocial behaviour). It was also established that high schools students’ act more prosocially compared to youth schools students by helping others in emergency situations and demonstrate more altruism towards others (effect size was weak, Cohen’s $d = .20$). These results reflect previous research, which has indicated that prosocial behaviour is a relatively supple variable that can be stimulated through appropriate educational environment (Mesurado et al., 2019). In addition, for the enhancement of social self-efficacy and prosocial behaviour, teaching/learning conditions have high importance, during which students have the opportunity to communicate and cooperate (Malinauskas, 2019) For instance, researchers (Akelaitis, Lisinskiene, 2018; Vazne et al., 2018) emphasized that participation in sports can lead to positive experiences and beneficial outcomes such as increased self-efficacy, confidence, identity development, and decreased delinquency. Youth school students of lower levels of social self-efficacy and prosocial behaviour can also be explained by the students’ personal characteristics because youth schools are designed to provide specialized instruction to students that have behavioural problems, truancy, poor academic performance.
Continuing the discussion we identified whether students gender has a difference on social self-efficacy and prosocial behaviour. Analyses indicated that female students’ social self-efficacy levels were higher than those of male students. The effect size for observed differences was week (Cohen’s $d = .21$). This finding was similar to the findings of Vantieghem, Vermeersch, and Van Houtte (2014) whose effect size was small (Cohen’s $d = .28$).

The present study revealed the significant differences between adolescent girls and boys in terms of two types prosocial behaviours: girls reported greater involvement in altruism (effect size was week, Cohen’s $d = .20$) and help in emergency situations (effect size was week, Cohen’s $d = .20$). These results are consistent with a study by Carlo and Randall (2002), showing that helping others in emergency or crisis situations and altruistic behaviour are two correlated types of behaviour. Study by Tuncel (2010) and by Kromerova and Šukys (2018) also supports our findings that in adolescents period female students are more likely to report prosocial behaviours (altruism and help) than male students (week effect sizes varies from Cohen’s $d = .20$ to Cohen’s $d = .34$). It was revealed that there were no significant differences between girls and boys in terms of their anonymous, public prosocial behaviours, and overall score of prosocial behaviour. This finding is consistent with previous research (Kromerova, Šukys, 2018), which identified no differences between girls and boys in terms of their anonymous and public prosocial behaviours. As girls are more sensitive to emotional situations when help is needed (Carlo et al., 2010) and have higher levels of empathy (Wentzel et al., 2007), revealed effect of gender on altruism and help in emergency situations was not unexpected. The authors (for instance, Kromerova, Šukys, 2018) consider, if gender differences are in fact constructed by the gender factor itself arising from stereotypes, the latter are likely to be sufficiently strong rooted in order to influence their true behaviour. In conclusion, our findings could be explained by the fact that the educational environment could play an important role, and the different activities of boys and girls could encourage them to develop different skills, could influence different attitudes, which could be reflected in adolescents’ prosocial behavior (altruism and help).

Limitations and future prospects. Our results were limited to 15–16-year-old students. This analysis did not cover students of other age, and as a result, the conclusions cover only social self-efficacy and prosocial behaviour of this particular age of group students. It would be appropriate to conduct similar study by examining late adolescence age. The present study is a cross-sectional rather than experimental study, and the correlational nature of the study design makes it difficult to draw cause-and-effect conclusions, i.e., that school type and gender cause social self-efficacy and prosocial behaviour. Longitudinal study design might be used in future to examine students’ social self-efficacy and prosocial behaviour in the context of two different types of schools (high and youth schools), and how these indicators occur over time.

5. Conclusion
Statistical analysis showed main effect of the school type on social self-efficacy and prosocial behaviour in students. The study results revealed that students’ social self-efficacy and prosocial behaviour scores were higher in high schools than in youth schools. The social self-efficacy of girls was found to be significantly higher than those of boys, however girls and boys did not differ significantly in overall scores of prosocial behaviour.

References


