Dynamics of the Sociability of Future PE Teachers in the First Decades of the 21st Century

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Abstract

The article aims to answer the question, what is the dynamics of the future physical education (PE) teachers’ sociability in the first decades of the 21st century? The study documented the peculiarities of sociability in future PE teachers in 2001. It was conducted in 2018 and aimed to answer the question of whether the changing social environment and educational reform in the last decades have recently been linked to changes in the sociability of future PE teachers. An analysis of sociability was made using the adapted Rogov questionnaire and the Bales System of process categories in the interaction process analysis. The research model was selected by interviewing a sample of 3rd and 4th year students (n = 139) in 2001 and in 2018 (n = 134). The survey data showed that in 2018 status striving of future PE teachers is statistically significantly stronger than in 2001. The research findings revealed that in 2001 during the teaching practice students (future PE teachers) were more committed to solidarity, encouraged others more frequently, were calmer, felt more satisfied, and communicated more easily than in 2018. In 2018 during the teaching practice students survived bigger tension and more frequently showed antagonism than in 2001.

Keywords: sociability, physical education teachers, social training, teaching practice.

1. Introduction

The integration of the country into a market-based environment and the ever-accelerating pace of life raise even more requirements for physical education (PE) teacher than a decade ago. The professional activity of today’s PE teacher is especially in need of social competence, since academic excellence no longer guarantees the success of a professional activity and satisfaction with the results of work. Today’s teacher (in our case – PE teacher) solves not only problems of the quality of education, of the development of skills, of integration and communication and other issues, but also carries out new social roles. Therefore, the social training of the teacher becomes not an advantage, but as a prerequisite for a successful personality development process (Goroshit, Hen, 2014).

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Previous research has shown that sociability of the teacher determines the quality of the teaching interaction (social relationships between the teacher and the learners) (Dicke et al., 2015; Jennings, 2015). Growing number of works have argued that socially prepared teacher can help reduce the stress of schoolchildren and increase their self-confidence and self-esteem (Jennings, Greenberg, 2009; Roeser et al., 2012; Jennings, 2015; Tynjälä et al., 2016). Recent research has indicated that social training improves the ability of teachers: the ability to know more precisely their own and other emotions, the ability to more accurately assess their strengths and weaknesses (Jones et al., 2013); ability to cope with stress, i.e. effectively to regulate your emotions, thoughts and behaviors in various tension situations (Flook et al., 2013; Vesely et al., 2014); ability to communicate constructively and collaborate with students of all ages (Patti, 2006; Stormont et al., 2015); ability to make responsible decisions in accordance with ethical standards, safety requirements, and social norms (Garner, 2010).

Some of the problems of social training among teachers were discussed in the context of general teachers training by Lithuanian scientists (for instance, Barkauskaite et al., 2006). Teachers communication culture (Aukstkalnite, 2001) and students' relations with teachers were investigated a little deeper (Barkauskaite, Guoba, 2015). Social training of PE teachers as a specific problem was discussed in more detail in the monograph of Malinauskas (2006), but the problems of the training of PE teachers in the last decade have not received enough attention.

The theoretical relevance of this work is based on the fact that in Lithuania the assessment of the development of sociability of teachers is not a thoroughly analysed, moreover phenomena occurring in the society indicates that scientific research of this problem is appropriate: in changing conditions of the society, teacher’s pedagogical competences also change (Triandis, 2018). We have to admit that it has not succeeded to detect research works aimed to investigate the sociability of PE teachers in the perspective of time. So this empirical study provides new knowledge about future PE teachers in the context of socio-economic changes.

Research done in Lithuania more than a decade ago (Bulajeva, 2000) showed that the main subjects lacking in future teachers are higher self-esteem, dignity, abilities to manage emotions, develop positive attitudes, overcome tension, anxiety, constructively resolve conflicts and emerging problems. Nevertheless, lately, future teachers are experiencing emotional difficulties due to lack of social competence, which can lead to the failure of the whole educational process (Lazdauskas, Saikauskiene, 2015). It has been suggested (Becker et al., 2014; Lazdauskas, Saikauskiene, 2015) that the feelings experienced by the teacher during a lesson are affected by the emotions experienced by the students. The scope of teaching practice in 2001 was 17 credits and in 2018 – 20 credits. During the teaching practice future educators now often identify the challenges of class management, which depend on sociability, on the management of pedagogical communication and cooperation skills (Lazdauskas, Saikauskiene, 2015).

Recent studies (Barkauskaite, Guoba, 2015) indicate that future teachers lack the knowledge and skills of pedagogy, seminars for social skills development, situation analysis, video tracking and discussion, as well as knowledge of the student's values. With respect to the latest research data (Barkauskaite, Guoba, 2015), the practical preconditions for sociability and development of competences are revealed in teaching practice, when reflecting on both school and university experience, the future teacher begins to work.

Only in practice it becomes clear whether the future teacher (in our case – PE teacher) is capable of creating a positive atmosphere of communication and collaboration. In this work, the focus is on teaching practice, since teaching practice is a period in which the final student's professional provisions for pedagogical work are formed. Teaching practice is the educational area in which social competence is developed. Therefore, it can be assumed that in the preparation of social competent teachers during teaching practice, the focus should be on the readiness of teachers to communicate and cooperate. The increased requirements for teachers' communication and cooperation culture and their social competence raise new challenges for the social training of future teachers and the organization of teaching practices whose purpose is to provide students, assisted by mentors and practitioners, with the opportunity to study in the workplace, thus gaining some of the competences and experience necessary for the pedagogical work (Hussain et al., 2013). It is indicated (Barkauskaite, Peciuliauskiene, 2007) that no global research on teaching practice has been conducted since the beginning of the school reform to this day (almost 16 years). This also proves the relevance of this study.
The research problem of the present study is that it is not clear what the role of social training (in our case – teaching practice as the main form of social training) for the development of the sociability of future PE teachers in the last decades in the context the changing social environment. A study carried out more than a decade ago (2001) recorded some peculiarities of the sociability of future PE teachers (Malinauskas, 2003). The study conducted in 2018 aimed to answer the question of whether the changing social environment and educational reform in the last decades have recently been linked to changes in the sociability of future PE teachers.

The aim of this study was to investigate the dynamics of the future PE teachers’ sociability in the first decades of 21st century. The following research tasks guided this study: 1) to establish the differences in sociability dimensions (social competence, status striving, performance-avoid orientation) among future PE teachers in 2001 and in 2018; 2) by the method of observation to compare the level of future PE teachers’ sociability in 2001 and in 2018.

The research is based on Malinauskas' (2004) proposed concept among PE teacher’s sociability that social training among future PE teachers is a purposeful training of specialists in order to successfully fulfill their social roles. Sociability means the mastery of social skills, the ability to adapt and adequately behave, self-knowledge, effective communication and cooperation, decision-making, and problem solving (Malinauskas, 2004).

Social competence is one of the most important components of sociability, the ability to create effective interpersonal relationships, when efficiency is recognized not only by the individual but also by other individuals (Antiniene, Lekaviciene, 2012). It can therefore be argued that social competence determines the level of social efficiency. Not only social competence was investigated but also two other variables (status striving and performance-avoid orientation) were analyzed, because these variables are very important in the changed social environment (for instance, steady increase in the pace of life, difficulty in employability). Status striving is interpreted as an attempt to be recognized and successful in a particular group, and performance-avoid orientation is an attempt to choose only tasks to be overcome. For instance, when oriented to performance-avoid goals, students’ purpose or goal in an achievement setting is to avoid the demonstration of incompetence. Attention is focused on the self.

2. Methods

This research is based on pragmatic philosophy concept of dynamics (Triandis, 2018), which states that in changing conditions of society, teacher’s pedagogical competences also change. This idea is manifested in the following motto “changing personality in dynamic environment”.

Instruments. Questionnaire (adapted questionnaire by Rogov (Rogov, 1998)) and observation (System of process categories in the interaction process analysis (Bales, 1970)) were used in the present study.

Adapted questionnaire by Rogov (Rogov, 1998) is comprised of 131 statements. Three of the seven components identified by E. Rogov’s questionnaire were analyzed: level of social competence, status striving and performance-avoid orientation. For the present study pilot testing of the questionnaire was performed at the Lithuanian Academy of Physical Education (now Lithuanian Sports University). Seventy-six students of the Faculty of Sport Pedagogy were examined. They were investigated using the adapted questionnaire by Rogov. By pilot testing the questionnaire was administered to the students on two occasions. The second test took place one month after the first. The test-retest correlation ranged from .83 to .88 (Malinauskas, 2003). The Bales System of process categories in the interaction process analysis is presented in Table 1.
Table 1. System of process categories in the interaction process analysis, related psycho-social group functions and processes (Bales, 1970)

<table>
<thead>
<tr>
<th>Function</th>
<th>Processes (categories of observation and analysis)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social-Emotional Area: Positive Reaction</td>
<td>1. Shows solidarity, raises other’s status, gives help, reward 2. Shows tension release, jokes, laughs, shows satisfaction 3. Agrees, shows passive acceptance, understands, concurs, complies</td>
</tr>
</tbody>
</table>

In order to ensure the validity of the observation instrument (Bales System of process categories in the interaction process analysis), preparatory studies have been carried out. Based on the observation scheme, two independent observers conducted the observation act, who, without consulting, registered categories of interaction process during the same lessons. Correlation coefficients (according to Pearson) were used to check out the validity of the observation instrument. It has been established that Bales System of process categories in the interaction process analysis essentially meets the requirements for the validity of the study instrument. The correlation coefficients for the categories range from 0.76 to 0.89. Based on these calculations, it is concluded that the data obtained by Bales System of process categories in the interaction process analysis could be interpreted meaningfully.

Statistical Analysis. Research data were statistically processed using SPSS 22.0 (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’s 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. A statistical analysis used the Student t-test for independent samples and the chi squared (χ²) test. Effect sizes were calculated using Cohen's d. Cohen's d effect sizes are generally defined as small (d = .2), medium (d = .5), and large (d = .8).

Sample and Procedure. Students of Lithuanian Sports University and Lithuanian University of Educational Sciences (now Vytautas Magnus University) were chosen because 80 % of Lithuanian PE teachers are trained by these universities. Study design of repeated measures was used, in which change of peculiarities among similar respondents over time was assessed. The research sample was selected using a targeted screening procedure: third-and fourth-year students were selected because they had already undergone teaching practice. The study was organized in two stages. In the first study, in 2001, the study group consisted of 139 third- and fourth-year students. The second study was conducted after more than a decade in 2018. In 2018,
the study group consisted of 134 third- and fourth-year students. There were no significant differences between the first (in 2001) and the second (in 2018) groups by age (p > .05) and gender (p > .05).

The researchers presented the study and provided the participants information about the study objectives. Participants completed the questionnaire (described above) during scheduled class time, with no time limit. This research meets the ethical guidelines, including adherence to the legal requirements of the country where this study was conducted. Participants were instructed to mark the response “I agree to participate” or “I disagree to participate” (on the survey’s first page) to give their consent to participate in the study before beginning the survey.

3. Results
The assumption was made that social education (teaching practice) encourages the development of sociability in future PE teachers. Therefore, we analysed the level of sociability in future PE teachers during teaching practice or after it – i.e., in the third or fourth year of studies. Sociability dimensions among future PE teachers (M ± SD) (social competence, status striving, performance-avoid orientation) in 2001 and 2018 are presented in Table 2.

In order to compare the components of sociability in 2001, and in 2018, the components’ scores differences were determined using Student’s t-test. Table 2 shows that students’ data in the second study compared with the students’ data in the first study (in 2001) showed that the status striving of students is statistically significantly stronger in the second study (in 2018): t (271) = -2.01, p < .05; Cohen’s d = .19).

Table 2. Sociability dimensions among future PE teachers during first and second investigation (M ± SD)

<table>
<thead>
<tr>
<th>Sociability dimensions</th>
<th>M ± SD</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In 2001 (n = 139)</td>
<td>In 2018 (n = 134)</td>
</tr>
<tr>
<td>Social competence</td>
<td>10.20±1.11</td>
<td>10.13±1.27</td>
</tr>
<tr>
<td>Status striving</td>
<td>08.40±1.63</td>
<td>08.69±1.38*</td>
</tr>
<tr>
<td>Performance-avoid orientation</td>
<td>09.30±1.14</td>
<td>09.47±1.12</td>
</tr>
</tbody>
</table>

Note. * p < .05; ** p < .01. M = mean; SD = standard deviation; Cohen’s d – effect size.

The only tendency that has emerged is that in 2018 students’ performance-avoid orientation increased (t (271) = -1.24, p > .05) but the difference was not statistically significant. Statistically significant difference with respect to the social competence among future PE teachers was not established (t (271) = 0.48, p > .05).

In order to compare the changes in the sociability among future PE teachers in 2001 and in 2018, Bales System of process categories in the interaction process analysis was used during the teaching practice. The average frequencies of the categories describing the level of sociability among future PE teachers were determined (Table 3).

Table 3 showed that statistically significant differences were observed in 2001 and in 2018 during teaching practice in preparedness of students to create emotionally positive and emotionally negative relationships. It can be assumed that this observation-based change is related to the changed social environment (increasing emigration, difficulty in employability, demographic is deteriorating) and insufficient attention to the social training of future PE teachers during the teaching practice.

Attention should be paid to the fact that the ability of sports teachers to create emotionally positive relationships was better in 2001 than in 2018. In the first study (2001) students statistically significant \( \chi^2 (1) = 3.81, p < .05 \) more often showed solidarity, raised other’s status, gave help, reward, more often encouraged others. In 2001 students were statistically significant


\( (\chi^2 (1) = 4.17, p < .05) \) calmer, more satisfied (showed tension release, jokes, laughs, showed satisfaction).

**Table 3.** The average frequencies of recorded categories during the control students' classes during first and second investigation

<table>
<thead>
<tr>
<th>Categories</th>
<th>The average frequencies of recorded categories</th>
<th>( \chi^2 (1) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>In 2001</td>
<td>In 2018</td>
<td></td>
</tr>
<tr>
<td>1. Shows solidarity, raises other's status, gives help, reward</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>2. Shows tension release, jokes, laughs, shows satisfaction</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>3. Agrees, shows passive acceptance, understands, concurs, complies</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>4. Gives suggestion, direction, implying autonomy for other</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>5. Gives opinion, evaluation, analysis, expresses feeling, wish</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>6. Gives orientation, information, repeats, clarifies, confirms</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>7. Asks for orientation, information repetition, confirmation</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>8. Asks for opinion, evaluation, analysis, expression of feeling</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>9. Asks for suggestion, direction, possible action</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>10. Disagrees, shows passive rejection, formality, withholding help</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>11. Shows tension, asks for help, withdraws out of field</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>12. Shows antagonism. Deflates other's status, defends/asserts self</td>
<td>3</td>
<td>11</td>
</tr>
</tbody>
</table>

*Note:* *p < .05; **p < .01.

Emotionally negative relationships increased in 2018 compared to 2001. In the first study (in 2001) students were statistically significant (\( \chi^2 (1) = 4.26, p < .05 \)) less stressed (showed less tension, less frequently asked for help, less frequently withdrew out of field), as well as statistically significant (\( \chi^2 (1) = 4.57, p < .05 \)) less frequently showed antagonism, deflated other's status than in 2018.

**4. Discussion**

The aim of this study was to investigate the dynamics of the future PE teachers' sociability in the first decades of the 21st century. The results of the present study showed that the recent social environment and the ongoing educational reform are possibly related to changes in the sociability among future PE teachers. The results of this study are in line with our previous research data that a person is socially mature when choosing and realizing values (Malinauskas, 2015). Students' (future PE teachers') research was carried out when they performed teaching practice, because it was observed that teaching practice as one of the most important forms of social training helps future PE teachers not only to improve themselves professionally, but also increases their sociability.

With respect to McLeskey et al., (2017) after teaching practice, students have developed a much higher level of communication and interactive skills. It can be assumed that teaching practice, as one
of the forms of social training, not only helps to develop and consolidate social skills, but also inspires experimentation, i.e. transform, change your behavior, beliefs and values (Durlak, 2015).

The authors of the transformational learning theory, Bell et al. (2016) indicate that adults, unlike young people, have their own beliefs, values and assumptions that give them a threefold expression of experience: psychological, social, and cognitive. Thus, social training during teaching practice is only effective when the future PE teacher changes his beliefs and skills (in our case, changes his perception of sociability) due to the pedagogical interaction with the schoolchildren. This has also been mentioned by other authors (Harden et al., 2018): only with critical thinking the PE teacher identifies and verifies the assumptions of his behavior that can help him succeed. Therefore, we can suggest that higher education institutions, which pay more attention to social training during teaching practice, can expect a higher level of sociability among future PE teachers. In our opinion, this suggested that the future PE teachers lacked social training in 2018 by comparing with social training in 2001. The fact that during the teaching practice in 2001 future PE teachers more often showed solidarity, were calmer, more satisfied (showed tension release, jokes, laughs, showed satisfaction) compared to the future PE teachers in 2018, may mean there is possible satisfaction with the future professional activities among students.

The fact that emotionally negative relationships increased in 2018, compared to 2001, could be explained by the fact that some students (mostly adolescents) during their lessons are more prudent and inappropriate. These relationships are inevitable during a pedagogical interaction, since during the practice students often experience tension and anxiety. The results of the present research were also in line with the data of earlier research (Aukstkalnyte, 2001), which suggests that many pedagogical communication and collaboration problems are caused by specific peculiarities of schoolchildren’ age.

The increased number of emotionally negative relationships could also be explained by the changing social environment (increased alienation), because there is no clarity about the future, a large proportion of young people emigrate, it becomes more and more difficult to find a job and work at favorite job. Alienation therefore means a weakened ability of the personality system’s capacity to judge, evaluate, and think through the world (Thompson, 2013). Alienation affects not only the feelings of individuals, it also affects and determines their moral attitudes and evaluative capacities. Alienation means a pathology of moral cognition, a particular deformation of the capacities for moral judgment shaped by the kind of social relations that occur particularly within modern economic life; relations characterized by rationalized hierarchical social structures, routinized patterns of everyday life (Thompson, 2013).

A number of future PE teachers learn the basics of pedagogical communication and cooperation from their experience, but this is often a long and painful path. In fact, it is possible to accumulate and develop a social skills reserve during social training exercises and teaching practice; contemplative/emotion training which reduces negative emotional behaviour could be used (Kemeny et al., 2012; Virgili, 2015; Meichenbaum, 2017; Vazne et al., 2018). Therefore, it can be assumed that social skills acquired at a higher education institution can be transferred to other spheres of life (Hargreaves, 2017), can promote the development of a harmonious personality and the development of its social competence. Considering the data of students (future PE teachers) in 2018, it can be argued that more attention should be paid recently to social training during teaching practice. Nevertheless, we would think that new and more in-depth studies are needed to analyze how the sociability of future PE teachers is determined by the length of the teaching practice.

Previous studies have analyzed the sociability of future PE teachers using cross-sectional designs, which does not allow causal conclusions (Gallagher, Vella-Brodrick, 2008). In this study, however, we employed longitudinal design (repeated cross-sectional study) to assess the dynamics of the future PE teachers’ sociability in the first decades of 21st century. Another strength of this study is that the research was conducted with not only self-report measures but also with observational measures.

Several limitations of the present study should be noted. First limitation was that our results were limited to future PE teachers and the findings may not be generalized to the whole population of university students in Lithuania. This analysis did not examine students from another study programs, and as a result, the conclusions only apply to future PE teachers. The extended sample might be employed in further investigations and future research should include the wider population and analyze the existence of possible differences.
5. Conclusion
When comparing the difference between the components of sociability among future PE teachers (level of social competence, status striving and performance-avoid orientation) now and more than a decade ago, it was found that in 2018 status striving among future PE teachers is statistically significantly stronger than in 2001. However, there were no statistically significant differences with respect to level of social competence and performance-avoid orientation between the first and the second surveys.

By using observation as a method of data collection during teaching practice the research findings revealed differences in the sociability among future PE teachers in 2001 and in 2018. The data suggested that during the teaching practice in 2001 future PE teachers more often showed solidarity, raised other’s status, gave help, reward, more often encouraged others, were calmer, more satisfied (showed tension release, jokes, laughs, showed satisfaction), and communicated easier than in 2018. In 2018 during the teaching practice students survived the bigger tension and more frequently showed antagonism than in 2001.

References


