Attitudes of physical education students towards masters athletes

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ABSTRACT

Introduction. The percentage of older people in our societies is on the rise. The present paper addresses the problem of young people’s attitudes towards senior citizens in the context of physical activity.

Aim of Study. Older people practising competitive sports have never been the subject to students’ opinion. The paper attempts to examine the attitudes of female and male students of physical education, who intend to work professionally in physical education and sport, towards competitive masters track and field athletes.

Material and Methods. The respondents were 174 third-year undergraduate physical education students (100 males and 74 females). The students’ age was from 20 to 23 years (21.6 ± 1.0 years). The participants filled in a questionnaire whose main part consisted of seven statements describing attitudes toward masters athletes and their performance.

Results. We observed, in general, positive attitudes of physical education students towards masters track and field athletes. This finding is contrary to the results of most studies on students of other majors, where rather negative attitudes were reported. The attitudes of female students were more positive than those of male students, which was consistent with results of research on gender differences in the context of ageing beliefs. Surprisingly, the personal contact with masters weakened the positive attitude in male students.

Conclusions. The results of the study show that the domain of sport may be less susceptible to the phenomenon of ageism and intolerance towards older people. Sport could be considered an effective tool of propagating positive attitudes towards older people. Physical education students seem to be mentally ready to take on the future challenge of working with the elderly, however, the problem still requires further research.

KEY WORDS masters athletes, students, physical education, attitudes.

Introduction

The structuring of age in modern Western societies assigns people at different stages of life to different social spheres. This causes age segregation and ageism, generating negative stereotypes and prejudices about the elderly [1]. The partial treatment of people on the basis of age has been observed in institutional, spatial and cultural spheres of life. In general, attitudes are more negative toward older than younger adults [2]. According to Kite et al. [2], the question is not whether ageism exists but when and where.

University or college students seem to be a special group when considering attitudes of young people towards older adults. As elite representatives of the general population, they mould opinions and beliefs towards the elderly in society. Research shows students’ attitudes towards the elderly are linked to several factors such as age, gender, knowledge about ageing and experience of working with older people [3, 4, 5, 6, 7, 8, 9, 10]. However, the problem needs further research including new aspects. Also, in the future, students of physical education, sport, recreation, health education, etc. will be most likely involved in activities with “pupils”, athletes or exercise participants with specific needs and fitness levels. It is therefore important to diagnose attitudes and beliefs about old age in this group of future “physical fitness care” specialists. Physical education students are a group interested in sports and physical activity, often involved in competitive and professional sports, with great potential to create opinions about seniors in these areas.

Masters track and field athletes are a very special group of people over 35 years old with no upper age limit (athletes aged 100 years and over have been known). They per-
form competitive sports, usually maintaining a high level of physical performance, unattainable for average individuals of the same age. This group includes both former athletes and people who began to participate in competitive sport at a later stage of life. Data on masters athletics and its social, biological and practical aspects are widely available [11]. Without going into details, it should be stressed that masters athletes defy stereotypical views of aging and stereotypical attitudes towards the elderly. They are, in a way, “stereotype busters” and provide seniors with valuable role models as their accomplishments do change perceptions of what is possible in one’s senior years [12].

**Aim of Study**

To the best of our knowledge, older people practising competitive sport have never been the subject to students’ opinion survey. Most of studies so far have been mainly concerned with students of geriatric care, nursing, social work, psychology and occupational therapy [3, 4, 7, 8, 13, 14, 15]. It should be noted that these specializations are most often chosen by females, while male specialists in these fields are rather underrepresented. Furthermore, the subjects’ age is often not uniform, or no separate groups of different age are taken into consideration [5, 8, 14]. The present study examines the attitudes of male and female students of physical education – who intend to work professionally in the areas of physical education and sport – towards competitive masters track and field athletes.

**Material and Methods**

**Subjects**

The respondents were 174 third-year undergraduate physical education students (100 males and 74 females) of the University School of Physical Education in Poznań, Poland. The students’ age was from 20 to 23 years (21.6 ± 1.0 years). According to the Center for Public Opinion Research in Poland [16], 100% of respondents at this age considered themselves young people relative to calendar age, and 96% felt young in relation to their physical and psychological well-being. The respondents' self-perceived age was recognized as adequate for our study. The students were in very good health (following mandatory periodical medical examinations), participated in recreational physical activity or competitive sports, and attended obligatory weekly training sessions in different sports as required by the curriculum of physical education faculty.

**Study design**

All students took part in a one-and-a-half-hour lecture about masters track and field athletes given by one of the authors (K. Kusy). The lecture introduced the students to the concept of masters athletics movement: its history, organization, events, achievements, and motives of undertaking long term sport activity. Examples of masters athletes’ performance were demonstrated verbally, in tables as well as in movies and photos taken during track and field competitions. Participants had also the opportunity to ask the lecturer questions. The lecture was given in a neutral manner, i.e. the masters athletics movement was not shown either as a positive or a negative phenomenon.

Immediately after the lecture, students were asked to fill in a three-part questionnaire. They were informed about the anonymous character of the study and were told that they should feel free not to respond to any or all of the questions. The first part of the questionnaire included questions about the respondent’s age, gender and year of study. The second part consisted of three questions: (a) “Do/did you practice sport professionally” (Yes/No), If Yes, for how many years?”, “Which sport?”), (b) “Have you ever watched a masters competition live?” (Yes/No); and (c) “Do you know a masters athlete in person?” (Yes/No). The third part consisted of seven items (statements) describing attitudes toward masters athletes and their performance:

- S1. “The physical performance of track and field masters athletes does impress me”.
- S2. “I think, I could become a masters athlete after 40 years of age”.
- S3. “The masters movement should be popularized as a healthy lifestyle”.
- S4. “The sight of an old person’s body wearing a skimpy sport costume is unsightly (ugly)”.
- S5. “I would willingly watch masters competitions on TV”.
- S6. A gold medal won at the World Masters Games or World Masters Championships is as valuable as a gold medal won by a young athlete at the Olympic Games.
- S7. “Watching masters contests may be as exciting as watching any other sport competitions”.

The students were asked to express their perceptions on a five-point Likert scale: 1 – “Strongly disagree”, 2 – “Disagree”, 3 – “Undecided”, 4 – “Agree” and 5 – “Strongly agree”. For statement S4, the scale was inverted: from 5 – “Strongly disagree” to 1 – “Strongly agree”, to maintain the same attitude direction as for the other statements. It was presupposed that the middle score of “3” represented a neutral attitude; while lower values were indicative of negative attitudes and higher of positive attitudes, with “1” and “5” signifying extreme choices. Additionally, a total score was calculated for each subject, expressed as the mean of all seven items.

**Statistics**

The results were presented as mean values and standard deviations. The statistical significance between mean values was calculated using the non-parametric Mann-Whitney U test. The mean scores for: (i) females vs. males; (ii) students who knew a master athlete in person vs. students who did not; and (iii) students who watched a masters competition live vs. students who did not, were compared. All the analyses were made using the Statistica 9.1 software package.

**Results**

**Attitudes and gender**

The total score for all respondents was 4.1 ± 0.6 (Table I). The most positive attitudes were related to respondents’ impression with masters athletes’ physical performance (4.8 ± 0.6, S1). The lowest scores were obtained for item S2, where the students were to envision themselves as masters...
athletes in the future (3.5 ± 1.0). All mean scores exceeded the neutral “3”.

Total scores of females and males differed significantly (p < 0.001), with women manifesting more positive attitudes towards masters athletes (4.3 ± 0.5) than men (4.0 ± 0.6). Female students were more tolerant of the sight of an old person wearing a skimpy sport costume than males (4.3 ± 0.8 vs. 3.9 ± 1.0, respectively; p < 0.01); would more willingly to watch a masters competition on television (4.1 ± 0.8 vs. 3.4 ± 1.1; p < 0.001); valued games/championships medals higher (4.5 ± 0.9 vs. 3.9 ± 1.2; p < 0.001), and were more willing to recognize masters contests as exciting events (4.3 ± 0.7 vs. 3.5 ± 1.2; p < 0.001). In the other three items, opinions of females and males did not differ significantly (Table I).

Table I. Attitudes of physical education students towards masters athletes

<table>
<thead>
<tr>
<th></th>
<th>All subjects</th>
<th>Females</th>
<th>Males</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age [years]</td>
<td>21.6±1.0</td>
<td>21.4±0.7</td>
<td>21.7±1.2</td>
<td>1.4</td>
<td>n.s.</td>
</tr>
<tr>
<td>S1 The physical performance of track and field masters athletes does impress me</td>
<td>4.8±0.6</td>
<td>4.8±0.6</td>
<td>4.8±0.7</td>
<td>-0.6</td>
<td>n.s.</td>
</tr>
<tr>
<td>S2 I think, I could become a masters athlete after 40 years of age</td>
<td>3.5±1.0</td>
<td>3.4±0.9</td>
<td>3.6±1.0</td>
<td>-1.5</td>
<td>n.s.</td>
</tr>
<tr>
<td>S3 The masters movement should be popularized as a healthy lifestyle</td>
<td>4.6±0.6</td>
<td>4.7±0.5</td>
<td>4.6±0.7</td>
<td>-0.6</td>
<td>n.s.</td>
</tr>
<tr>
<td>S4 The sight of an old person’s body wearing a skimpy sport costume is unsightly</td>
<td>4.1±0.9</td>
<td>4.3±0.8</td>
<td>3.9±1.0</td>
<td>3.1</td>
<td>&lt;0.01***</td>
</tr>
<tr>
<td>S5 I would willingly watch masters competition on television</td>
<td>3.7±1.1</td>
<td>4.1±0.8</td>
<td>3.4±1.1</td>
<td>-4.0</td>
<td>&lt;0.001***</td>
</tr>
<tr>
<td>S6 A gold medal won at the World Masters Games or World Masters Championship is as valuable as a gold medal won by a young athlete at the Olympic Games</td>
<td>4.2±1.1</td>
<td>4.5±0.9</td>
<td>3.9±1.2</td>
<td>-3.5</td>
<td>&lt;0.001***</td>
</tr>
<tr>
<td>S7 Watching masters contests may be as exciting as watching other sport competitions</td>
<td>3.8±1.1</td>
<td>4.3±0.7</td>
<td>3.5±1.2</td>
<td>-4.5</td>
<td>&lt;0.001***</td>
</tr>
<tr>
<td>S1−S7 Average score</td>
<td>4.1±0.6</td>
<td>4.3±0.5</td>
<td>4.0±0.6</td>
<td>-3.7</td>
<td>&lt;0.001***</td>
</tr>
</tbody>
</table>

n.s. – non-significant; * p < 0.05, ** p < 0.01, *** p < 0.001

Attitudes and acquaintance with a masters athlete

33 respondents (18 females and 15 males) declared acquaintance with a masters athlete. For combined and female respondents’ data, a similar total score was revealed in groups that did and did not know a masters athlete in person (Table II). However, two significant differences were found among the male respondents. Men who knew masters athletes in person were less impressed with their physical performance (4.3 ± 0.8 vs. 4.9 ± 0.4, respectively; p < 0.05) than those who did not know a masters athlete.

Table II. Attitudes of physical education students knowing (Yes) vs. not knowing (No) a masters athlete in person

<table>
<thead>
<tr>
<th></th>
<th>All subjects</th>
<th>Females</th>
<th>Males</th>
<th>Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes n = 33</td>
<td>No n = 141</td>
<td>Z</td>
<td>p</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S1 4.7±0.9</td>
<td>4.8±0.6</td>
<td>-1.08</td>
<td>n.s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S2 3.4±1.0</td>
<td>3.5±1.0</td>
<td>-0.16</td>
<td>n.s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S3 4.6±0.9</td>
<td>4.6±0.6</td>
<td>-0.35</td>
<td>n.s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S4 4.1±0.9</td>
<td>4.1±0.9</td>
<td>-1.44</td>
<td>n.s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S5 3.8±1.2</td>
<td>3.7±1.0</td>
<td>-0.85</td>
<td>n.s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S6 4.2±1.1</td>
<td>4.2±1.1</td>
<td>0.75</td>
<td>n.s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S7 3.9±1.0</td>
<td>3.8±1.1</td>
<td>0.04</td>
<td>n.s.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S1−S7 Average score</td>
<td>4.1±0.6</td>
<td>4.3±0.5</td>
<td>4.0±0.6</td>
<td>-3.7</td>
<td>&lt;0.001***</td>
</tr>
</tbody>
</table>

n.s. – non-significant; * p < 0.05, ** p < 0.01, *** p < 0.001

S1 – The physical performance of track and field masters athletes does impress me; S2 – I think, I could become a masters athlete after 40 years of age; S3 – The masters movement should be popularized as a healthy lifestyle; S4 – The sight of an old person’s body wearing a skimpy sport costume is unsightly (ugly); S5 – I would willingly watch masters competition on TV; S6 – A gold medal won at the World Masters Games or World Masters Championship is as valuable as a gold medal won by a young athlete at the Olympic Games; S7 – Watching masters contests may be as exciting as watching other sport competitions; S1−S7 – Average score from all items.
and less willing to consider the masters athletics movement as worth propagating as a healthy lifestyle (3.9 ± 1.4 vs. 4.7 ± 0.5; p < 0.05) than men who did not. In the case of acquaintance with a masters athlete or the lack thereof, women still expressed more positive attitudes than men in both groups with total scores of 4.4 ± 0.3 and 4.3 ± 0.5 vs. 3.7 ± 0.7 and 4.0 ± 0.6, respectively (p < 0.05).

### Attitudes and watching masters competition

From among all study participants, 35 students were spectators at masters competitions (23 females and 12 males). The statistical analysis did not reveal any differences in attitudes towards masters athletes between spectators and non-spectators in both females and males (Table III). Moreover, women and men who had ever watched a masters competition did not differ significantly in their opinions. Significant inter-gender differences were found in the group of non-spectators of masters competition. Women non-spectators accepted masters’ exposed bodies (4.4 ± 0.7 vs. 3.9 ± 1.0; p < 0.05), were ready to watch masters competitions (4.2 ± 0.7 vs. 3.4 ± 1.1; p < 0.001), valued masters medals higher (4.6 ± 0.9 vs. 3.0 ± 1.2; p < 0.001) and were fascinated with masters contests (4.4 ± 0.7 vs. 3.5 ± 1.2; p < 0.001) more willingly than men.

### Discussion

#### Attitudes towards masters athletes

The results of our study show that the attitudes of physical education students towards masters athletes are moderately to highly positive. The most appreciated aspect was the physical performance of senior competitors. The least plausible one the respondents considered becoming master athletes themselves in the future, but even in this case the mean score was still above the neutral level. Contrary to our results, most studies indicate generally negative attitudes towards older adults among nursing students, social work students, physicians and medical students, mental health professionals and criminal justice/law enforcement person-

#### Cultural factors

The more positive attitudes towards older people involved in competitive sport found in our study may presumably result from the cultural, religious and social environment in Poland. The problem is complex and any unequivocal answer is not possible on the basis of our findings only. Polish survey data have shown that Roman Catholic affiliation, religious commitment and religious participation do not have direct effects on political intolerance, while a theocratic orientation was found to increase it [21].

When considering attitudes towards older people, cultural differences may be of importance. Celik et al. [22] reported that the majority of Turkish nursing students displayed positive attitudes towards the elderly, similarly to

<table>
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<tr>
<th>Table III. Attitudes of physical education students who did watch (Yes) and did not watch (No) a master competition live</th>
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</thead>
<tbody>
<tr>
<td><strong>All subjects</strong></td>
</tr>
<tr>
<td><strong>Yes</strong></td>
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<tr>
<td>---</td>
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<tr>
<td><strong>S1</strong></td>
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<tr>
<td><strong>S2</strong></td>
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<td><strong>S3</strong></td>
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<td><strong>S4</strong></td>
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<td><strong>S7</strong></td>
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<td><strong>S1−S7</strong></td>
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</table>

n.s. – non-significant; Differences between students who know and do not know a masters athlete in person: * p < 0.05, ** p < 0.01, *** p < 0.001; Different from women in the same category: * p < 0.05, ** p < 0.01, *** p < 0.001.

S1 – The physical performance of track and field masters athletes does impress me; S2 – I think, I could become a masters athlete after 40 years of age; S3 – The masters movement should be popularized as a healthy lifestyle; S4 – The sight of an old person’s body wearing a skimpy sport costume is unsightly (ugly); S5 – I would willingly watch masters competitions; S6 – A gold medal won at the World Master Games or World Masters Championship is as valuable as a gold medal won by a young athlete at the Olympic Games; S7 – Watching masters contests may be as exciting as watching other sport competitions; S1−S7 – Average score from all items.
students from other Eastern cultures [23]. The authors attributed this to the influence of religion and specific cultural norms and traditions where older adults are the source of wisdom, guidance and life experience. On the other hand, Gattuso and Shadbolt [24] found no differences between students from a reputedly ageist culture (Australians) and those from cultures which are respectful of and honouring old age (Pacific Islanders). They suppose that this may be an effect of globalization with its impact on traditional cultures which emulate western technocratic values.

**Universal values of sport**

One can interpret the positive attitude towards masters athletes revealed in our study as an effect of participation in sport as such. Students of physical education have their own experience in sport and exercise, thus, they are probably more willing to assess the image of masters athletes, which is very similar to their own image, in a positive way. Moreover, it seems that not only young people involved in sport perceive exercising older adults more positively. In support of our results, Faulkner et al. [25] revealed that exercise-habit information positively influenced the impressions of younger adults (17-25 years) had about older people. Exercising older adults were rated more favourably than non-exercising ones on a variety of personality and physical dimensions.

Is sport an activity that may help with reducing ageist stereotypes and attitudes? Sport has been regarded as an important source of positive moral and spiritual values for long periods of human history. On the other hand, the critics of competitive sport indicate that sports promote negative values such as intolerance, chauvinism, anti-intellectualism, manipulative treating people, etc. [26]. Simon [27] asks the question: “But just how is sport connected to values?”. He distinguishes between two positions. The first one is called *externalism*, which stipulates that the values sport promotes or expresses simply mirror or reinforce the values found in society at large. Thus, sport only socializes participants to accept the values. The representatives of the other position, called *internalism*, claim that sport is autonomous from society, expresses a set of its own values and moral attitudes developed in sport transfer to other contexts. These values and attitudes may even run counter to or subvert values and attitudes dominant in a given culture. Regardless of standpoint, sport is commonly used as a means of inculcating proper values in young people. Pro-social values are enhanced when sport is integrated with life skills and community service. Similarly, Lee et al. [28] indicated that whether desirable personal and social qualities are positive or negative depends on the value systems transmitted in the teaching/coaching process. Sports activities provide situations where competitors confront moral dilemmas. Teachers and coaches can use such opportunities to mould participants’ attitudes in accordance with the prevailing value system in society. Probably, the focus on the mere content of exercise as the source of values is misguided and the process by which some activities are encouraged is the determining factor [28].

If exercise/sport provides convenient situations for values transmission, it is a long-lasting process. And if the transmitted values are morally positive, one may expect an appropriate change in attitudes. This could explain more positive attitudes expressed by our respondents as compared with other studies. It would also suggest that participating in sport is a proper tool for transmitting positive values. The link between sport and exercise participation and attitudes towards the elderly, especially those involved in competitive sport, still requires further research.

**Gender differences**

We found that women were more likely to value masters athletes higher than men. Less favourable attitudes toward older people among male students as compared with female students were also found in other studies on student samples [4, 8]. Furthermore, in our study, females assessed higher the aesthetic values of master athletes’ bodies, which is confirmed by the findings of Kane [6], who also found that females rated the beauty of old people’s bodies more positive. Women also appreciated the achievements of masters athletes more than men. Solomon [29] suggested that women might be more attracted to the gerontological field because of their fulfilling traditional care-giving roles for the elderly. Perhaps, there exists a parallel between gerontology and masters sport in this respect. Interestingly, the gender differences in attitudes towards older people seem to emerge very early. In a study by Downs and Walz [19], preschool boys were generally less positive than girls in their attitudes toward elderly individuals. Negative and positive attributes based on age of adults were closely tied to judgments of attractiveness.

**Personal contacts**

In our study, only the attitudes of male students depended to some extent on contacts with masters athletes (acquaintance in person). Females’ attitudes remained very similar, regardless of their experience with older sports(wo) men. Male students who did and did not know a masters athlete differed significantly in their attitudes towards masters’ physical performance and masters’ movement propagation. Interestingly, students who were in personal contact with master athletes were less willing to express their positive attitudes. This finding contradicts the majority of observations by other authors. Many studies on college, nursing, medical and English language students indicate that contacts and experience of working with older people result in positive shifts in the students’ attitudes and perceptions about older adults, and diminish the likelihood to express stereotypical attitudes [9, 10]. Such results suggest that positive exposure to the elderly can challenge ageist views and have a significantly favourable effect on students’ attitudes towards older people. However, a number of authors of studies on nursing students found that attitudes towards older people deteriorate during studying for a nursing degree [14]. Working in aged care could be, paradoxically, a deterrent. Probably, a distinction must be made between those entering nursing with earlier experience with older people and those students undertaking care work while pursuing their degree [17]. We can only speculate about factors that could weaken positive attitudes towards masters athletes in our subjects knowing them in person. This attitude deterioration was related to perceived
physical performance and the popularization of masters athletics movement. Certainly, the achievements of older track and field athletes are impressive, in a sense “superhuman”, when considering the advanced age of athletes. However, even the best masters’ results at the age of 60 or 70 may be attainable by fit and healthy young physical education students. Thus, personal contacts could be connected with a kind of disappointment in this respect. Moreover, masters’ training is very similar to that of young athletes, in being very demanding, time-consuming and intensive to maintain a high level of performance. Hence, students who could observe or learn about such training sessions may be less likely to recommend them as a healthy lifestyle. In fact, the training of competitive elite master athletes does not usually have anything in common with recreational exercise [30].

Limitations and strengths

A serious limitation of this study is the crude method of attitude assessment. For this reason, the results are to be considered as preliminary data and an attempt to raise an issue rather than a ready-made product. A specific research tool for measuring specific attitudes towards older athletes has not been developed as yet and is urgently needed to be elaborated. Moreover, our conclusions are weakened by the lack of a control group (students of other faculties). Also, the stability of the attitudes over time could not be shown.

The study has, in our opinion, some advantages. It is, to the best of our knowledge, the first study devoted to physical education students’ attitudes towards masters athletes. Additionally, male and female participants were represented in the sample to the same extent. Finally, the age range and students’ specialization were clearly defined.

Conclusions

In ageing societies, more and more older adults choose exercise and sport as their leisure time activity. They can exercise or practice sports on their own but also under the guidance of professionals. The demand for coaches and instructors who specialize in working with ageing customers will surely grow. Working with older people does not only mean assistance and care of the mentally and physically disabled (social work, nursing, etc.). It is, thus, necessary to take note of attitudes of potential professionals in “physical fitness care” towards older exercisers and athletes. The more so because sport seems to have the capability to revise the deeply ingrained stereotype of old age, based on old health, disability, solitude, ugliness and dependency.

To sum up, we observed positive attitudes of physical education students towards masters track and field athletes. This finding is contrary to the results of the majority of research on students of other specializations, where rather negative attitudes were reported. The attitudes of female students were more positive than those of male students, which was consistent with research on gender differences in the context of ageing beliefs. Surprisingly, personal contacts with masters athletes significantly weakened the positive attitude in male students. The questions whether the domain of sport may be less susceptible to the phenomenon of ageism and intolerance towards older people, whether sport could be considered an effective tool of propagating positive attitudes towards older people, and whether physical education students are mentally ready to take on the future challenge of working with older people definitely require further research.

References


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