## REDUCING GENDER STEREOTYPES AND PROMOTING GENDER EQUALITY IN THE PHYSICAL EDUCATION LESSON – A SYSTEMATIC REVIEW ANALYSIS

## Anamaria Georgeta PĂUȚU<sup>1,\*</sup>, Eugen BOTA<sup>2</sup>, Simona PETRACOVSCHI<sup>2</sup>

Received 2023 November 05; Revised 2023 December 18; Accepted 2023 December 19; Available online 2024 March 15; Available print 2024 March 15. ©2023 Studia UBB Educatio Artis Gymnasticae. Published by Babeş-Bolyai University. This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License

**ABSTRACT.** Introduction: The teacher has a very important role in making students aware of the importance of physical education and sports classes and has a decisive role in building the fundamental bases of gender equality. For this reason, teachers must support and encourage the reduction of gender stereotypes developed over the years in Romania, as well as implement diversified methods and techniques to homogenize the group from an early age. The purpose of this study is to analyse how gender inequalities were removed in other countries by specialists and what measures were taken by them. Identifying the methods and strategies applicable to the class in order to implement gender equality. **Method:** Using the systematic review method, a number of 420 articles were initially identified. After establishing the inclusion and exclusion criteria, a number of 20 articles were retained for analysis. **Discussions:** Gender differences are found in all fields, but they are more pronounced in physical education lessons. Gender stereotypes in the physical education lesson have a close connection with the attitude of the students, with the strategies and perceptions of the teachers and last but not least, with the prejudices of the parents. **Conclusions:** The following studies regarding gender differences should target the attitudes and conceptions of parents and teachers, but also the way in which they are reflected in the students' actions later in the lessons.

Keywords: gender, stereotype, physical education.

<sup>&</sup>lt;sup>1</sup> PhD Student, West University of Timisoara, Faculty of Physical Education and Sport

<sup>&</sup>lt;sup>2</sup> West University of Timisoara, Faculty of Physical Education and Sport

<sup>\*</sup> Corresponding author: anamaria.pautu96@e-uvt.ro

REZUMAT. Reducerea stereotipiilor de gen si promovarea egalitătii de gen în lectia de educatie fizică. O analiză sistematică. Introducere: Profesorul detine un rol foarte important în constientizarea importantei orelor de educatie fizică și sport de către elevi, și are un rol determinant în construirea bazelor fundamentale ale egalității de gen. Din acest motiv, cadrele didactice trebuie să susțină și să încurajeze atât diminuarea stereotipurilor de gen dezvoltate pe parcursul anilor în România, cât și implementarea metodelor și tehnicilor diversificate pentru omogenizarea grupului, încă de la o vârstă mică. **Scopul** acestui studiu este acela de a analiza modul în care inegalitătile de gen au fost înlăturate în alte țări de către specialiști și care au fost măsurile luate de aceștia în identificarea metodelor și strategiilor aplicabile la clasă în vederea implementării egalității de gen. Metodă: Folosind metoda revizuirii sistematice, au fost identificate inițial un număr de 420 de articole. În urma stabilirii criteriilor de includere și excludere, un număr de 20 de articole au fost reținute pentru analiză. Discuții: Diferențele de gen se regăsesc în toate domeniile, dar ele sunt mai accentuate în lecțiile de educație fizică. Stereotipurile de gen în lecția de educație fizică au o strânsă legătura cu atitudinea elevilor, cu strategiile si perceptiile profesorilor si nu în ultimul rând, cu prejudecătile părintilor. Concluzii: Studiile următoare care privesc diferențele de gen ar trebui să vizeze atitudinile si conceptiile părintilor si profesorilor dar si felul în care acestea se reflectă în acțiunile elevilor mai târziu în lecții.

Cuvinte cheie: gen, stereotip, educație fizică.

### INTRODUCTION

A teacher's role is to make informed and intelligent decisions about practice to achieve different outcomes with and for the students in their classrooms. For this reason, teachers play a very important role in reducing gender stereotypes and achieving gender equality.

The role of a teacher is to adapt the methods and materials to the students' requirements and to find the most efficient way to help their students learn in the environments in which they teach. They should be aware that their decisions may not achieve the desired results, therefore it is necessary to monitor their decisions over time, evaluating the results and rethinking the strategy, if this measure is necessary.

Physical education is a mandatory discipline in school, it is present in the schooling plan from the small classes to the higher education level, having an increasingly important role in society and in education. Physical education as a discipline was introduced in the curriculum and is a fundamental discipline when it comes to training children, even more so if it is implemented at an early age, it helps the child to develop cognitive, affective and social skills and abilities that prepare him for everyday life. With the help of physical exercise, the child manages to express himself freely and develop a series of things such as creativity and spontaneity, but also respect, both when it comes to him and in his relationship with others. Due to this reason, it is necessary to experience a varied range of sports and recreational activities implemented constantly, during classes as well as through certain pedagogical activities with the aim of accepting gender equality.

Stereotypes were constructed and preserved to maintain the patriarchal power structure, generating in people the mental representations corresponding to each gender. This has given rise to the unequal distribution of the cultural, economic and political capital of the society in which we are immersed.

These mental representations that constitute personal identity when not constructed by the subject themselves, are imposed by established power and developed through stereotypical representations of the masculine and feminine (Illera Arino, 2016).

Gender is a cultural and social construct that defines what it means to be a woman and what it means to be a man. This is used to highlight social constructions of what it means to be a man, what it means to be a woman and the differences between them. It is understood that gender differences do not correspond only to biological differences, but are determined by the social, cultural and historical contexts through which the processes of primary and secondary socialization develop (Illera Arino, 2016).

The construction of personal identity is a complex process in which personal, relational and cultural factors intervene, these factors interrelate and operate at every moment, at the same time. In order to make the explanation of the analyzed theme more fluid, I consider it essential, before entering the analysis, to clarify the following terms that we frequently use in daily life, however, in the educational field, these words must be explained because they have different meanings. The concepts I will cover are the following: sex, gender, mixed school, physical education and gender (Illera Arino, 2016).

## Physical education and gender

According to the studies we evaluated, sex is understood as the differences that exist in relation to the genital organs and their function in human reproduction, determined by the genetic, hormonal, physiological and functional characteristics by which human beings are biologically differentiated. In the middle of the 19<sup>th</sup> century, differences were noticeable between the sports activity predominant in the education of boys and the restricted framework of

girls. Later, with the incorporation of the movements and schools of gymnastics (Swedish, French, English and German), the first participation of women in physical activity was introduced; in particular, the Swedish methodology based on individual and analytical exercises was adopted (Illera Arino, 2016).

*Mixed education* is understood as that common education of boys and girls, which apparently develops neutral and universal contents, but which in reality are stereotyped and dominant, guided by a dominant male model, without taking into account individual or collective differences (Illera Arino, 2016).

*The purpose* of this study is to analyze how gender inequalities were removed in other countries by specialists and what measures were taken by them. Identifying the methods and strategies applicable to the class in order to implement gender equality.

## **MATERIALS AND METHODS**

*Method:* Using the systematic review method, a number of 420 articles were initially identified. After establishing the inclusion and exclusion criteria, a number of 20 articles were retained for analysis.

This study represents a systematic literature review based on previous research and new research trends as well as developments and open issues of this topic.

### THE RESEARCH PROCESSES

Starting from the fundamental research question, an advanced search algorithm was established to list articles/books of interest for clearer search efficiency: (differences) AND (gender) AND (physical education). And then for a more precise search we used another algorithm: (gender) AND (gender differences) AND (students) AND (physical education) AND (physical education and sports teachers) AND (gender equality) AND (the best practices) AND (attitudes). Databases searched in this study included Pubmed, SPORTDiscus, JSTOR Arts & Sciences, ProQuest, SAGE, Taylor & Francis Online, and Web of Science.

## Inclusion and exclusion criteria

Articles on the following topics were included:

Systematic literature reviews (RSL), meta-analyses (MA), experimental and quasi-experimental studies

## **Data collection**

Initially, all articles were reviewed to determine whether titles, abstracts, and keywords met our inclusion criteria. Through initial screening, 420 articles were identified as relevant to this review, and the authors performed a preliminary coding of the selected articles. During the coding process, 197 articles were identified as not meeting the inclusion criteria.

After a re-evaluation of all of them, as well as after reading the abstract and the whole study, a total of 20 studies and articles were analyzed (see figure 1).



Figure 1. Diagram illustrating the literature search and selection process.

## RESULTS

Table 1 provides an overview of all the studies included in the research, with reference to the main findings from the literature of studies on gender differences in physical education lessons.

## ANAMARIA GEORGETA PĂUȚU, EUGEN BOTA, SIMONA PETRACOVSCHI

Article, authors	Sample (profile, n, sex, age)	Research design	Research method	
Ávalos-Ramos & Vega-Ramírez (2020)	675 Spanish students	Exploratory	sectional study	In the present study, gender differences in gymnastics skills were examined. The results show a very low tendency of technical achievement of specific skills. The assessed elements are classified in the category of basic elements and can be performed from a young age, the development of gymnastic skills remains minimal. The author Davis (22) stated that skills are developed inadequately or almost not at all due to the lack of preparation of students and due to the lack of understanding of gymnastics as an educational field of knowledge, as well as due to the lack of preparation of physical education teachers in teaching gymnastics in its various forms.
Clayton & Humberstone (2007)	young people under the age of 18 years	Exploratory	study	This paper examines the implications and effects of a compulsory module on 'sex, difference and leisure' taught to a group of physical education students. The data presented reveal a number of pedagogical issues arising as identity issues, not least the need for teachers to critique masculine identities and to find a way in conveying information unchallenged.
(2008)	3,000 children in 12 different school	Qualitative	naire	Due to the growing field of sport psychology, there is a growing concern and interest in gender and performance differences and participation in different sports. Over the past decade Eccles and her colleagues have discovered a theoretical model that examines the motivational factors underlying children's choices. They concluded that gender differences emerge from a very early age and that they are a consequence of gender role socialisation rather than natural differences.
Gutierrez & Garcıa-Lopez (2012)	boys (n= 31) and girls (n = 43) in four age groups	Exploratory	Quasi- experi- mental	The results confirmed the existence of stereotypical forms of participation in invasion games. The boys focused on handling the ball and achieving the goal, while the girls displayed more off-the-task (spectator-player) behaviours.

# **Table 1.** The main findings of studies regarding gender differences in physical education lessons

### REDUCING GENDER STEREOTYPES AND PROMOTING GENDER EQUALITY IN THE PHYSICAL EDUCATION LESSON

		0.10		
Lewis, Kamon & Hodgson (1986)		Qualitative	Literature analysis	Physiological and morphological gender differences become evident in different types and different training regimes. Boys and girls develop similar strength gains when training according to the same programme. Data from different research suggests that there are no substantial differences in cardiovascular and peripheral adaptations to aerobic training. The data support that aerobic exercise will be beneficial for both boys and girls when it comes to increasing lean body mass.
Verscheure & Amade-Escot (2007)	Sixteen students (six girls and ten boys) and two teachers	Exploratory	mental	A number of studies show that girls do not have equal opportunities when it comes to access to sports activities. This paper aims to understand how teachers and students address gender during physical education and sport classes. Students show different levels of understanding and performance during sports games.
Vilhjalmsson & Kristjansdottir (2003)	3270 students	Exploratory	Question- naire	In the present study, findings were made about girls' enrolment in sports clubs and how these low enrolments were favored by girls' low participation rate in physical education classes. Other variables are awareness of physical exercise and the benefits of sports training in social shaping and health promotion.
& Ngetich (2012)	30 males and 20 females	Qualitative	Question- naire	An important variable in sport and physical education is motivation, which determines involvement and engagement in physical education lessons. The study was carried out on a group of physical education students, who perceived their physical health to be good and were physically and mentally present in class. The main factors that might decrease the number of participants in the class are lack of motivation, lack of time and injuries.
González- García, Martínez -Martínez & Pelegrín (2022)	357 Spanish athletes	Qualitative	Question- naire	The article aimed to find out whether there are differences in parenting styles and whether parents act according to gender. The results showed that girls are more protected by male parents, while boys who play sports reported more authoritarian mothers. Intervention plans are recommended for parents depending on the needs of their children.
Pikos & Straub (2019)	11 thousand observed games	Explorator y	Case study	In performance sport there are wide differences, analyzing these differences the result showed that boys have better results than girls and this is due to physical capacity.

The deductive phase of the analysis was the starting point, namely the categorization and coding of the data into categories. The second step was the inductive approach and this was aimed at open coding and again at identifying categories. Finally, all the collected data were analysed, described and interpreted.

## DISCUSSION

Gender differences are found in all fields, but they are more pronounced in physical education lessons. Gender stereotypes in the physical education lesson have a close connection with the attitude of the students, with the strategies and perceptions of the teachers and last but not least with the prejudices of the parents. After the evaluation of the studies, we can say that we noticed three big factors that influence gender inequalities and stereotypes in the physical education lesson, as they were mentioned previously: the students, the teachers and the prejudices of the parents.

According to the studies reviewed, boys report being more motor than girls but findings by (Ávalos-Ramos & Vega-Ramírez, 2020) reinforce possible gender differences in the development of basic skills, with boys demonstrating better motor skills and dexterity, including quickness and jumping, and girls having better flexibility, agility and balance, qualities that are most likely to develop at the age of 5-6 and are attributed to girls, in a similar way, hence the gender differences in the sports branch of gymnastics and not only.

Another study by (Clayton & Humberstone, 2007) identified how a male-dominated culture can create insensitivity, embarrassment and discomfort for girls in particular. The ratio of boys to girls varied across class times, but all groups were dominated by boys, and the lecture group as a whole was predominantly male. In addition, most of the male students were members of the university's sports teams and therefore part of an athletic and especially football subcultural fraternity, from which we can conclude that boys can put pressure on the shoulders of their female colleagues by to them the freedom to express themselves both in sports and in other fields.

A number of studies show that boys are more physically active in physical education lessons, have greater determination in games and greater enjoyment of the mark. They perform better than girls in team games. Experimental studies have shown that with a correct approach and a welldefined methodology we can diminish these differences, as these stereotypes are largely directly related to the educational instructional process carried out during the learning process (Gutierrez & García-Lopez, 2012). REDUCING GENDER STEREOTYPES AND PROMOTING GENDER EQUALITY IN THE PHYSICAL EDUCATION LESSON

Another study clearly determines the passive attitude of girls in sports games and the meaning that students attribute to a situation depends on the status and role they play in the context in which the action takes place, and this meaning influences their game behavior. Therefore, behavior is highly dependent on the distribution of roles and power relations during the game. This leads us to suggest that the formation of groups, whether according to gender, friendship or performance criteria, determines gaming behavior and probably gaming performance (Gutierrez & Garcia-Lopez, 2012). In order to combat these socially accepted inequalities, teachers should schedule tasks in which role equality is favored, they are a key piece in achieving any change in the educational project, for this reason, it is vitally important that they are prepared to develop coeducational strategies, making students see that it is education and cultural conditions that influence correct attitudes related to gender equality.

A study by (González-García et al., 2022) aimed to find out whether there are differences in parenting styles and whether parents act according to gender. The results showed that girls are more protected by male parents, while boys who play sports reported more authoritarian mothers. Intervention plans are recommended for parents depending on the needs of their children.

#### CONCLUSIONS

This study emphasizes the importance of the following aspects:

- 1. Mixed classes within the lesson
- 2. Assigning roles in physical education classes
- 3. Adaptation of school programs
- 4. The existence of teacher training courses

5. Debates with parents in which they are presented with the importance of supporting their daughters in choosing a sport declared "masculine."

The following studies regarding gender differences should target the attitudes and conceptions of parents and teachers, but also the way in which they are reflected in the students' actions later in the lessons.

#### REFERENCES

- Ávalos-Ramos, M. A., & Lilyan, V. R. (2020). Gender Differences in the Level of Achievement of Gymnastic and Acrobatic Skills *Int. J. Environ. Res. Public Health*, 17, 7216 DOI: 10.3390/ijerph17197216
- Cheryl, C., Marko, B., Don, S., Carole A. O., & Marj S. (2014). Gender and sport participation in Montenegro *International Review for the Sociology of Sport* 1–23 DOI: 10.1177/1012690214559109

- Clayton, B., & Humberstone, B. (2007). Gender and race -what's that to do with football studies?' Contested 'knowledges' in sport and leisure curricula in HE *Gender and Education* Vol. 19, No. 4, pp. 513–533. doi.org/10.1080/09540250701442682
- Eccles, J. S., & Harold, R. D., (2008). Gender differences in sport involvement: Applying the eccles' expectancy-value model *Journal of Applied Sport Psychology* Volume 3 Issue 1 Pages 7-35 DOI.org/10.1080/10413209108406432
- Glen, N., & Gertrud P., & Lars, B. A. (2011). Gender differences in the daily physical activities of Danish school children. *European Physical Education Review* 17(1) 69–90 DOI: 10.1177/1356336X11402267
- González-García H., Martínez, F. D., & Pelegrín, A. (2022). Gender differences in parental educational styles in athletes: Competition level and sport *International Journal* of Sports Science & Coaching 1–9 DOI: 10.1177/17479541221087205
- Gregory, S., Robert, J., & Helen, L. (1995). Coping processes in competitive gymnasts: gender differences' *Perceptual and Mofor Skills*, 81, 1139-1145. DOI.org/10.2466/pms.1995.81.3f.1
- Gutierrez, D,. & Garcia-Lopez, L. M. (2012). Gender differences in game behaviour in invasion games *Physical Education and Sport Pedagogy* Vol. 17, No. 3, 289–301 doi.org/10.1080/17408989.2012.690379
- Hiromi T. & Frances L. S. (2012). Gender and family status differences in leisure-time sports/fitness participation *International Review for the Sociology of Sport* Vol. 49(1) 65–84 DOI: 10.1177/1012690212454762
- Illera Arino, J. M., (2016) Los estereotipos de género que influyen en las clases de Educación Física Buenos Aires, Año 22, № 227, Abril de 2017
- Ingrid, V., & Chantal, A. E. (2007). The gendered construction of physical education content as the result of the differentiated didactic contract *Physical Education and Sport Pedagogy* Vol. 12, No. 3, pp. 245–272 DOI: 10.1080/17408980701610185
- Lewis, D. A., Kamon, E., & Hodgson, J. L. (1986). Physiological Differences Between Genders Implications for Sports Conditioning *Sports Medicine* 3: 357-369
- Pikos, K. A., & Straub, A. (2019). Mind the Absent Gap: Gender-Specific Competitive Behavior in Nonprofessional Sports *Journal of Sports Economics* 1-19 DOI: 10.1177/1527002519887414
- Rintaugu, E. G., & Ngetich, E. D. K., (2012). Motivational gender differences in sport and exercise participation among university sport science students. *Journal of Physical Education and Sport* Art 28, pp.180 – 187
- Runar, V., & Gudrun, K. (2003). Gender differences in physical activity in older children and adolescents: the central role of organized sport *Social Science & Medicine* 56 363–374 DOI: 10.1016/s0277-9536(02)00042-4
- Shea, M. B., Robert, O. D., Daniel, R., & Chris, B. (2016). Sex Differences in Sport Remain When Accounting for Countries' Gender Inequality *Cross-Cultural Research* 1– 20 DOI: 10.1177/1069397116665815