



Anna Malisz

ORCID: <https://orcid.org/0000-0002-3973-1009>
Jesuit University Ignatianum in Cracow, Poland;
e-mail: aniam170@gmail.com

Gender-Specific Teacher Expectations and Stereotypes Observed in Interactions with Students¹

<http://dx.doi.org/10.12775/PBE.2021.009>

Abstract

This article is a report from research on gender stereotyping of students by teachers. The aim of the study was to verify whether teachers show a tendency to stereotype students by gender in their work. School, or specifically teacher-student interactions, was chosen as the research area because it constitutes a critical and powerful socialising agenda that provides a permanent social and physical context for children's activities and identity formation. To analyse this phenomenon, a survey was conducted on 133 primary school teachers in Poland. The study shows that teacher gender-specific expectations affect both boys and girls in the school environment; however, their distribution is not even across all studied areas of interaction. The studied tendency was found to be relatively low for questions about gender role expectations towards children. However, an opposite trend was discovered with regard to the frequency and type of teachers' interactions with girls and boys.

Keywords: gender stereotyping, teachers, socialisation, masculinity, femininity.

¹ The article was awarded in the 2nd edition of Professor Mariola Chomczyńska-Rubacha's Competition on „Masculinity and Femininity as Coordinates of Education”.

Introduction

Gender is a concept most readily and most frequently applied in processes of social categorisation along with the resulting generalisations (Strykowska, 1991, pp. 123–134). It is by far the most important criterion recognised even by very young children who use gender to categorise the social environment. There are many reasons why children do it. Firstly, they are constantly provided with information about gender. Secondly, gender is often perceived as a binary category, making it easier for children to classify information. Moreover, it determines children's first direct experiences with both in-group and out-group members (Mackie et al., 1999, pp. 44–45). As a biological but also fundamental social category, gender has a significant impact on the behavioural, cognitive, and emotional functioning of an individual, conditioning people's expectations and opportunities (Chomczyńska-Miliszkievicz, 2002, p. 39).

The democratisation of life in Poland and the global rise of the second-wave feminism of the 1960s have revolutionised the social functioning of women and men. Changes emerging in the areas of culture, language, and social awareness have contributed to raising the profile of sex and gender also in pedagogy and the sociology of education. Identity formation and the development of human sexuality are currently recognised as fundamental in social sciences.

This article revolves around the key concept of gender that determines a person's identity not only in anatomical terms but also as a result of cultural and social pressure. Children's psychological and biological potential is largely influenced by the culture and society in which they function. School is one of the key socialisation agents that children are confronted with in the early years of life. Using socio-cultural terms, school disseminates through its activities both open and hidden messages about masculinity and femininity, while forming expectations towards children as to which behaviour is consistent with a given gender schema (Chomczyńska-Rubacha, 2004, p. 53). Through its structure, organisation, internal relations, and culture, school tends to reflect the commonly accepted and dominant values, norms and beliefs with regard to what is recognised to be feminine or masculine, frequently reproducing the asymmetry in the statuses and roles of men and women. As a result, the patriarchal social order continues to be reinforced not only through routine and formal practices, but also in interpersonal relations determined by a gender regime and, consequently, gender stereotypes and prejudices, discriminating educational practices, and gender-specific teacher expectations towards students (Chmura-Rutkowska & Mazurek, 2018, pp. 133–134).

Gender stereotypes in education observed in teacher-student interactions

Research shows that children begin to absorb gender stereotypes at a very early stage of development, which automatically affects their ambitions, life, and career choices in the future. The stereotype according to which boys have higher levels of intellectual ability than girls is observed in children as young as 6, as revealed by studies on mixed-sex groups of children aged 5 to 7 (Bian et al., 2017, pp. 389–391).

One of the studies assessed children's endorsement of the 'brilliance = male' stereotype using three tasks. In task I, children were told a story about a person who was 'really, really smart', whereby no hints were provided as to the protagonist's gender. Then they were asked to indicate which of four unfamiliar adults (two men, two women) was the main character of the story. In task II, children were introduced to several pairs of same- or different-gender adults and were asked to guess who was the 'really, really smart' one in every pair. In task III, children had to match attributes (e.g. intelligence) and objects (e.g. a hammer) with images of unfamiliar men and women.

The answers of 5-year-old children corresponded to their own gender: girls identified the protagonist of the story as a woman, boys as a man. However, the situation was different in children aged 6. While boys stood by their original choice claiming that the main character of the story was the same sex as them, girls had no such certainty and a vast majority of them did not point to their own gender in the presented tasks (Bian et al., 2017, pp. 389–391).

Education based on a transfer of meanings, the essence of which is a direct interaction between a teacher and a student, makes the former a crucial socialisation factor in the life of the latter (Barnes, 1998, pp. 10–12). Student-teacher interactions are founded on both verbal and non-verbal behaviours carrying certain attitudes, expectations, and requirements that continue to permeate our gender (Chomczyńska-Rubacha, 2004, p. 111). Gender socialisation that occurs also through teachers' gender-specific expectations has an effect on students and their performance (Muntoni & Retelsdorf, 2018, pp. 212–220).

Current research clearly indicates that stereotypical views about women and men are present among both female and male teachers in Polish schools, who believe that differences in human predispositions and characteristics are largely dictated by biological potential (Kopciwicz, 2009, p. 311; Pesu et al., 2016, pp. 63–71).

Teachers' personal views and expectations regarding children's gender are visible as early as in pre-school education – not only in direct teacher-child

interactions, expressed for example by different disciplining strategies for boys and girls, but also in how the space is organised in the nursery school (Børve & Børve, 2017, pp. 1069–1081). These findings are to a certain degree an extension of the results of research conducted on parents and teachers. Parents of children aged 3 to 5 seem to show a strong tendency to prefer certain toys depending on gender – boys’ toys and games concentrate on action and technology, while those of girls on care and stereotypically female behaviour (Francis, 2010, pp. 325–344). In addition, pre-school teachers report gender differences, further perpetuated, as regards children’s involvement in playing. Girls are said to be more engaged in playing home/family and games related to caring, while boys in playing superheroes and rough-and-tumble play (Logue & Harvey, 2009, pp. 32–49; Hardardottir & Petursdottir, 2014, pp. 1–14).

The reproduction of the stereotypical feminine/masculine beliefs at the pre-school stage is also highlighted by Małgorzata Falkiewicz-Szult. In her study, teachers were asked to categorise children’s toys and activities. Girls were offered board games with fewer elements or with a limited number of rules. In contrast, boys were encouraged to engage in ‘more educational’ activities that foster logical and creative thinking (Falkiewicz-Szult, 2007, p. 130).

Interesting findings may be found in studies of pre-school boys’ and girls’ reading skills, depending on teachers’ views of gender. In one of them, boys turned out to be less motivated to read in pre-school and less competent in reading one year later in primary school if their pre-school teacher held a traditional gender role attitude. Researchers measured the teacher’s gender role attitude, children’s motivation to read, their reading skills in pre-school, and at the end of the first grade in primary school. It was established that the more traditional the teacher’s attitude was, the weaker was boys’ motivation to learn to read. Girls’ motivation did not seem to be related to the teacher’s gender role attitude and it did not have an effect on their later reading skills in primary school (Wolter et al., 2015, pp. 1–10).

Traditional gender role attitudes are also reflected in primary school where teachers tend to concentrate more on boys when teaching mathematics and on girls when teaching reading. Ample research indicates that boys are at the focus of teachers’ attention in science lessons. For example, Grzegorz Mazurkiewicz’s observations of 30 chemistry, biology, and mathematics lessons in six different schools show that girls were very rarely involved in the subject due to teachers’ general focus on boys. Female students did not attempt to answer questions addressed to the entire class; however, teachers did not encourage them to try and share their opinion. Even when one teacher emphasised how important it

was for everyone to be involved, which she did by looking for someone ‘who hasn’t said anything yet’, she still turned to more quiet boys rather than girls. Boys were more often asked to do the assignments on the board while girls were engaged in activities such as writing down the topic or circulating test sheets. An analysis of teacher-student interactions in each lesson revealed that boys received more attention than girls; for example, during one lesson of mathematics only nine interactions were observed that involved girls compared with 19 that involved boys (Mazurkiewicz, 2006, pp. 89–91).

Another important aspect in the studied context is the communication between teachers and students. Research shows that teacher-student interactions are dominated by the model where a teacher imposes a certain behavioural pattern while students submit to it (Mazurkiewicz, 2006, p. 82). Moreover, teachers are more likely to interact with boys rather than girls in categories such as offering instructions, listening, expressing approval or disapproval. While boys are more frequent recipients of negative comments, they also are given relatively more positive feedback compared with girls. In addition, boys experience a more severe criticism than their female friends (Kaplan & Sedney, 1980, p. 216).

Comments on boys’ inappropriate behaviour have also been found to differ from those addressed to girls – not only in the terms used to stress the degree of reprehensible behaviour but also in quantity. Male students are typically punished for inappropriate behaviour during lessons, breaks, or towards adults. A frequently emphasised aspect in this context is their aggressive behaviour. Educators often say that boys enter into conflict situations with teachers because they are more sensitive to acts of injustice than girls. Teachers tend to use this argument also to justify boys’ aggression which they explain with boys’ need to defend the weak as well as with biological or developmental reasons. In contrast, in teachers’ opinion girls are more respectful of them than boys and find public criticism more distressing. Moreover, a vast majority of teachers’ comments addressed to girls refer to their appearance (hairstyle, clothes), which is a rarity in the case of boys (Górnikowska-Zwolak, 2004, pp. 102–103). Teachers’ use of this strategy stems from the organisational principles and disciplinary practices they apply with respect to students. Persuading students to follow the other group as an example and promoting competition between genders strengthen the gender dichotomy and frequently give rise to antagonisms in the classroom (Pankowska, 2005, pp. 99–102). These examples also indicate that girls are typically identified with qualities such as conscientiousness, hard work, diligence, accuracy, and a sense of aesthetics, while boys with autonomy and independence of thinking (Ahslund & Boström, 2018, pp. 28–44).

Teachers' approach is an extremely important aspect of research highlighting a correlation between children's performance and safe relations in the classroom. An atmosphere of harmony and tolerance contributes to a more effective dissemination and acquisition of knowledge. This seems to be particularly true in early childhood education, especially in the case of boys (Patrick et al., 2011, pp. 367–382). Boys taught in classes with conditions unfavourable to them tend to display a greater number of competition and avoidance strategies (Hopland & Nyhus, 2016, pp. 271–286).

Teachers' practice of identifying children with specific qualities was also confirmed by a study conducted among secondary school teachers in Finland. Despite extensive efforts invested in ensuring gender equality in education, Finnish teachers still recognised boys as smart but immature and lazy. Moreover, boys were generally viewed as having low ambitions and interested in achieving the desired effect with as little effort as possible. In contrast, girls were perceived as conscientious and less creative. Boys' success was attributed to their ability to think logically, while that of girls was linked to their hard work (Perander et al., 2019, pp. 185–199).

Differences in how teachers communicate with students may also be observed on the example of class discussions, in particular at the level of secondary school. Teachers are more likely to single out male students against the rest of the class, making them speak up on important class matters. Boys are frequently asked to elaborate, which gives girls a clear signal that their voice in the classroom is being marginalised or ignored (Meighan, 1993, p. 177; Eliasson et al., 2016, pp. 1655–1672).

The problem of teachers' communication with girls and boys concerns not only higher classes of primary schools; its genesis may be attributed already to pre-school education. Research shows that pre-school teachers pay more attention to boys, offering them more affection (hugging) as well as more detailed instructions on how to perform a task (Muszyńska, 2004, pp. 46–47).

It is also suggested that future research should focus on studying verbal and non-verbal behaviours of female science teachers in terms of their involvement in the teaching process. The currently available research shows that students' motivation to learn a subject tends to decline if the teacher is less enthusiastic about it (especially in the case of science and technical subjects). Particularly girls are more sensitive to teachers' attitudes than boys. The teacher's low enthusiasm for the subject taught evokes a negative attitude towards it in girls, even more so when the subject is taught by a woman (Denessen et al., 2015, pp. 1–7).

Boys seem to perform better in contacts with teachers not only in terms of their quantity. Research indicates that teachers are generally more approving of assignments given to boys. When girls are unable to perform a given task, teachers often help by doing their work for them (Muszyńska, 2000, pp. 99–100).

It is also a common practice for teachers to suppress girls' interest in technical subjects. Stereotypically labelled as, for example, emotional and affectionate, girls are automatically identified as performing better in humanities and social sciences while boys, equipped with an analytical mind, are said to be more successful in exact sciences (Trusz, 2015, pp. 266–268).

Reflections presented in this article revolve around stereotypical messages about femininity and masculinity as cultural and social categories transmitted by school through teacher-students interactions. Based on the collected empirical data, hypotheses are proposed to paint a general picture of the teaching community and its role in blocking the free development of students' personal concept of gender identity, which has a significant impact on children and their gender role socialisation.

School is an environment where two polarised systems of values – male and female – clash. Boys and girls have to deal with this situation and the resulting difficulties, different for each group, at every level of the education system. Research clearly shows that teachers present stereotypical and traditional gender role beliefs. As a result, students are typically approached in a manner that is dictated by a teacher's own vision of what is feminine or masculine (Górnikowska-Zwolak, 2004, pp. 85–91; Kopciewicz, 2004, pp. 75–84; Pankowska, 2005, p. 99; Chomczyńska-Rubacha & Rubacha, 2007, p. 188). While generally aware of how society can create and strengthen rigid gender-specific expectations towards children, teachers do not reflect on how they themselves contribute to this process (Perander et al., 2019, pp. 185–199).

In light of the above, it is worth adopting a broader perspective when analysing teachers' behaviours and attitudes towards students to assess their effect on the ultimate reinforcement of stereotypical gender role attitudes in young people.

Research objectives and methodology

Given the results of these empirical studies, the aim of our research was to verify whether teachers show a tendency to stereotype students by gender in their work. Based on the available research, indicators were identified and accordingly encoded in a questionnaire – a test containing descriptions of different edu-

cational situations presenting teachers' stereotypical behaviours towards students. The questionnaire was intended to assess teachers by the following items:

- Disciplining strategies employed by teachers;
- Gender role expectations towards children;
- Frequency and type of teachers' interactions with girls and boys;
- The focus of teachers' attention.

The questionnaire consisted of 12 questions, with each offering two response options: 'I would behave in the same way' or 'I would behave differently'. The answers marked by teachers served as an indicator to define respondents' tendency to stereotype children by gender. Here is an example situation used as an indicator for measuring gender role expectations towards children:

During a meeting of the teaching staff, a physical education teacher presents his assessment of students' behaviour. Boys' grades for the behavioural component do not differ from girls' grades; they are just as high even though there have been a few cases of minor fights started during breaks by boys from this class. When asked about this, the teacher explains that students' evaluation in the category of behaviour requires a different approach due to boys' nature. Boys tend to be more energetic and provocative than girls; however, as long as their behaviour is not a threat to anyone, it can be tolerated with no consequences for their overall evaluation. It is their nature, they grow out of it, things have been like that from generation to generation.

- a) During the discussion, you accept this explanation as reasonable because you know that compared with girls boys need more time to meet the expectations.
- b) You do not agree with this explanation because the same standards of behaviour should apply to everyone.

Below is another example of a situation used as an indicator for assessing the frequency and type of teachers' interactions with girls and boys:

When organising a class event and assigning tasks to students, you ask boys from your class to prepare the classroom, handle the equipment, arrange the tables, and girls to decorate the room and make sandwiches.

- a) I would divide the tasks in a similar way.
- b) I would divide the tasks differently.

The test consisted of 12 items whose discriminant power, measured with a two-series coefficient, ranged from 0.67 to 0.16. The test reliability was cal-

culated using the Spearman-Brown coefficient and it amounted to 0.87 for the entire test. The factor analysis confirmed the theoretical validity of the tool.

The study was conducted on a sample of randomly selected primary school teachers ($N = 133$) from the Lower Silesian, Lesser Poland, and Silesian voivodships in Poland. Simple random sampling without replacement was applied. Female teachers with a work experience of up to 10 years accounted for most of the respondents (67%), while those with the work experience of over 20 years were the least represented group (10%). The survey was conducted at the turn of February and June 2019. Respondents were contacted individually and asked to complete the gender stereotyping questionnaire. Upon submitting informed consent for participation, respondents received the questionnaire forms. Interviewers answered any questions regarding the study by providing standard information included also in the introduction letter attached to the questionnaire, e.g. 'This questionnaire presents situations faced by school teachers in relations with students. Please choose (a) or (b) to mark the answer that is closest to your preferences and experience.' Respondents were also informed that the study was confidential.

Analysis of results

Table 1 shows the percentage distribution of gender socialisation messages communicated by teachers towards students in all studied areas. A detailed analysis reveals that their distribution for the individual indicators is not even.

The percentage of behaviours that perpetuate gender stereotypes towards children was the highest for Question 4. It was the question about organising a class event where teachers were asked if they would also tell the girls to make decorations and sandwiches, while boys were to handle the equipment and tables. As many as 72% of the teachers included in the study were inclined to divide tasks in exactly the same way, which leads to the conclusion that their responses were largely influenced by students' gender. Girls were automatically assigned to tasks that required conscientiousness and diligence, while boys were immediately put in charge of 'technical stuff'. This confirms a very frequent practice, present already in pre-school education, where tasks are divided among students by the category of gender.

Table 1. Percentage distribution of gender socialisation messages communicated by teachers in all areas.

Indicator	Questionnaire items	Behaviour that perpetuates stereotypes (%)	Behaviour that does not perpetuate stereotypes (%)
Disciplining strategies	5	37%	63%
	6	45%	55%
Gender role expectations towards children	1	23%	77%
	10	17%	83%
Frequency and type of teachers' interactions with girls and boys	4	72%	28%
	7	16%	84%
	3	17%	83%
	2	10%	90%
The focus of teachers' attention	8	45%	55%
	12	56%	44%
	9	41%	59%
	11	47%	53%

Source: Author's research.

An analysis of school reality indicates that girls are more involved in spheres such as keeping order, decorating the classroom, and helping out with the organisation of school activities (preparing school newsletters, working in the school shop, helping with the organisation of the artistic component in school performances, volunteering, etc.). Compared with boys, girls are relatively more often associated with caring, providing support, and engaging in initiatives for the school or local community. In contrast, boys are entrusted with organisational/logistic tasks, physical assistance, and representing the school outside (handling the equipment, representing the school at sports competitions) (Szczepanik, 2004, p. 101). The division of children into groups by gender is also visible, for example, at lessons of physical education (PE), where students compete against each other within their own gender, or in the arrangement of class registers (Pankowska, 2005, p. 99).

At the same time, it should be highlighted that the results for the remaining questions – about the frequency and type of teachers' interactions with girls and boys, i.e. Questions 7, 3, and 2 – were the lowest. This indicates that teachers

did not perpetuate stereotypes about femininity and masculinity among children in these spheres. For example, Question 7 referred to how activities were split between girls and boys in mathematics. Teachers were asked to imagine a situation where boys from their class were better and more successful in this subject, while girls had no major problems in this area but showed practically no activity in the classroom during the lessons. At the same time, the question specified that boys' lively temperament and spontaneity virtually 'did not allow' girls to be active; boys were always first to answer the teacher's questions, never afraid to ask questions or attempt to solve the assignments they did not fully understand. Teachers were asked whether they would accept this state of affairs or strive to activate girls more. In this context, only 16% of teachers opted for the former option because it did not affect the overall understanding of the lesson by the class.

A similar observation was obtained in Question 3. This time teachers were asked how they would react if boys' parents did not want their sons to join the Polish language club claiming that boys are more interested in sports. Only 17% of teachers agreed with this argument, stating that they could see a clear division between boys and girls in terms of school interests.

Question 2 revealed the lowest tendency to stereotype students based on gender in the entire questionnaire. Of all teachers included in the study, 90% declared that they would encourage girls to try to solve an assignment in technical subjects despite their apparent difficulties with it.

At this point, it is worth asking to what extent the views presented in the survey reflect teachers' anti-stereotypical attitudes or are a result of their relying on official teaching curricula. The **School Education Act** [*Ustawa o systemie oświaty*] and the resulting core curricula do not differentiate educational goals or content by gender. However, neither the **Law on School Education** [*Prawo oświatowe*] nor the subsequent regulations of the Minister of National Education issued on the basis of this act provide for 'anti-discrimination education' as part of school education, which may in a way suggest a general consent to this type of practice (Law on School Education, 2016). Secondly, there is also the issue of hidden content, i.e. all aspects instilled in young people alongside the official curriculum, even those not planned as a component of educational activities (Jankowski, 1989, p. 63). Current research clearly shows that anti-discrimination education, as defined by teachers, rarely translates into specific actions in practice, while its implementation is a random rather than planned activity.

The next part of the survey was dedicated to verifying whether teachers had different views about children's characteristics and predispositions depend-

ing on their gender which could shape adults' perceptions of students' skills. Indicators used to measure this tendency were included in respective sets of questions about: disciplining strategies employed by teachers (Questions 5 and 6); gender role expectations towards children (Questions 1 and 10); and the focus of teachers' attention (Questions 9 and 11).

To study gender stereotyping tendencies in the category of disciplining strategies, respondents were asked to refer to the issue of discipline in the classroom (Question 5). They were presented with the following situation: 'Other teachers tell you that they find it difficult to maintain discipline in your class. This is nothing new to you because sometimes you also have a problem to keep order at your lessons. Especially boys tend to talk to each other while sitting together at one table. Fellow teachers suggest a solution which they claim has worked in their classes – separating the boys and, as a punishment, sitting them at one table with girls who are more quiet by nature.' As many as 37% of respondents were likely to follow this approach. Furthermore, Question 6 showed that 45% of the teachers included in the study paid attention to aesthetic differences in note-taking between boys and girls, and were likely to use a different grading system based on gender because, in their opinion, one could not expect the same level of care from boys as from girls.

These examples illustrate not only the stereotypical thinking about gender as a category indicative of certain qualities of character, but also specifically about girls treated as an aggression management resource whose appropriate 'distribution' in the classroom may be conducive to the optimisation of relations at school (Kopciewicz, 2009, pp. 293–295).

Such practices reinforce the androcentric vision of the world in students. Boys receive a clear message that sitting with girls at one table is something diminishing for them, while girls need to face the fact that their value is undermined. Any feelings a girl might experience at the time because, for example, she does not want to part with her girlfriend or she does not like the boy she is to share the table with, are of secondary value.

Organising a class into boy-girl pairs in order to improve the effectiveness of teaching or as a punishment is also indicative of a belief deeply embedded in teachers' awareness that girls are more responsible than boys and more capable of understanding teachers' expectations towards them (Mazurkiewicz, 2006, p. 113; Ahslund & Boström, 2018, pp. 28–44).

An opposite tendency was revealed in Questions 1 and 10. In the former case, teachers had to either agree or disagree with the overall high assessment of students' behaviour as proposed by a PE teacher, despite the reported incidents

of boys fighting during breaks. The teacher argued that this resulted from the fact that boys tend to be more energetic and provocative than girls by nature, but as long as their behaviour was not a threat to anyone, it could be tolerated with no consequences for their overall evaluation. In this situation, teachers' tendency to stereotype was assessed as one of the lowest (23%). Most teachers disagreed with the PE teacher's argumentation and concurred that the standards of behaviour should be the same for everyone. Similarly, only 17% of teachers said that they would not react to boys saying 'stop acting like a girl' to another boy who got hurt and is scared of having his injury disinfected (Question 10).

In contrast, Question 11 shows that as many as 47% of teachers, aware of boys' general sloppiness, would present a dirty test paper to the entire class saying that according to her it was submitted by one of the male students. The focus of the teacher's attention would in this situation be directed towards boys. Instead of asking an open-ended question such as 'Who is the author of this paper?', these respondents would automatically link the negative aesthetics of the work with the male gender. A similar finding was produced in Question 9, where 41% of teachers agreed that boys were far worse in arts than girls.

These examples indicate that school is becoming a potential area of conflict between male and female gender roles. The stereotypical presentation of girls as eager students and boys as less capable of adapting to school requirements, commonly accepted as natural, is causing an asymmetry of experience between both groups in the school environment. The broadly defined culture, school requirements, and regulations may either stand in opposition to or facilitate children's training towards their traditionally defined male or female gender roles.

Similarly high results were obtained in the remaining questions assessing the focus of teachers' attention. In Question 2, where teachers were asked to take a stand in a situation in which students came up with an idea of organising a cycling trip, whereby girls wanted to transfer its organisation/logistics to boys, 56% of teachers opted for entrusting boys with this responsibility. Marking this answer, they followed the line of argumentation according to which boys at that age were mature enough to handle such a task and that it would be an excellent lesson for them to learn how to be more independent. Question 8 produced comparable, albeit slightly lower, results; 45% of respondents were in favour of withdrawing from a conflict between boys, agreeing with the opinion that they should develop their independent thinking skills.

The choice made by teachers in the former case cannot be viewed one-dimensionally. While contributing to gender stereotyping and perceiving boys as more independent and reliable than girls, the decision to agree to such a solution

could also result from the fact that teachers wanted students of both genders to make an autonomous choice how to handle the situation. If teachers put pressure on girls to get involved in the project, on the one hand, they could break gender polarisation stereotypes; on the other hand, their interference could interfere with students' subjectivity. In the latter situation (refusal to become part of a conflict between boys), there is no certainty whether the respondents would react in the same way if girls were involved.

Summary

Given the sample size, the presented study does not allow for generalisations. Nevertheless, it confirms certain observations made by other authors about gender stereotyping at school. Gender-specific teacher expectations, as reflected in teachers' responses, affect both boys and girls in the school environment; however, they particularly reinforce the androcentric vision of the world in students' minds. Approached by teachers as an intellectual challenge, boys tend to overshadow their female peers in many areas of school reality, even though girls often perform better and are objectively more successful in these areas. By basing their interactions with students on their own gender-specific expectations and ideas, teachers essentially induce certain behaviours and attitudes in their pupils. This in turn winds up a spiral of gender-specific perceptions among children who begin to behave according to gender-specific expectations imposed by teachers. As long as the issue of gender ideology is ignored, any present efforts to ensure gender equality not only will not reduce the current gap, but in some cases may even contribute to its intensification (Skelton, 2010, pp. 131–142).

Stereotypical teacher-student interactions, as demonstrated by numerous studies, have long-term consequences for children in areas such as further education, professional career, self-esteem, and aspirations. Stereotypes further perpetuated by the teaching staff leave a significant mark not only on individual relations within school, but also on its functioning as an institution and on educational results. Stereotyping dehumanises people in two ways. Firstly, it limits personal development in accordance with natural needs. Secondly, it categorises people rather than approach them as individuals.

As a conclusion, it is worth highlighting that despite considerable efforts towards changing it, the pattern where women dominate in social and natural sciences, and men in science, technology, engineering, and mathematics (STEM) fields has remained stable for decades. Interesting arguments as to why it is so have been provided by research on *educational-gender-equality paradox* and

the resulting gender differences in STEM fields, to the disadvantage of women, in countries with theoretically high levels of gender equality such as Finland, Norway, and Sweden. For example, in Finland, which stands at the forefront of gender equality, girls outperform boys in categories such as reading and writing, while the country itself ranks second in educational attainment statistics in Europe. Nevertheless, Finland's gender gap in college degrees in STEM subjects is one of the largest in the world. A similar situation can be observed in Sweden and Norway, where women account for less than 25% of STEM graduates. According to researchers, to achieve balance in this area it is necessary not only to improve the quality of STEM education for girls and the overall gender equality. Individual differences in academic skills and expectations that are inextricably connected with the value of pursuing one type of career over another must also be reflected in initiatives aimed at a greater activation of women in STEM fields (Stoet & Geary, 2018, pp. 581–593).

References

- Ahslund, I., & Boström, L. (2018). Teachers' Perceptions of Gender Differences – What About Boys and Girls in the Classroom? *International Journal of Learning, Teaching and Educational Research*, 17(4), 28–44, doi: 10.1177/0829573514521992.
- Barnes, D. (1998). *Nauczyciel i uczniowie. Od porozumiewania się do kształcenia* [Teacher and Students. From Communication to Education]. Warszawa: WSIP.
- Bian, L., & Leslie, S., & Cimpian A. (2017). Gender Stereotypes About Intellectual Ability Emerge Early and Influence Children's Interests. *Science*, 355(6323), 389–391, doi: 10.1126/science.aah6524.
- Chmura-Rutkowska, I., & Mazurek, M. (2018). (Nie) widzialne różnice. Gender [Invisible Differences. Gender]. In: K. Szafranec (Ed.), *Młodzi 2018. Cywilizacyjne wyzwania. Edukacyjne konieczności* [Youth 2018. Civilizational Challenges. Educational Necessities], (p.129-143). Warszawa: A PROPOS Serwis Wydawniczy Anna Sikorska-Michalak.
- Chomczyńska-Miliszkievicz, M. (2002). *Edukacja seksualna w społeczeństwie współczesnym. Konteksty pedagogiczne i psychosocjalne* [Sex Education in Contemporary Society. Pedagogical and Psychosocial Contexts]. Lublin: Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej.
- Chomczyńska-Rubacha, M. (2004). Nauczycielskie i uczniowskie przekazy socjalizacyjne związane z płcią [Teacher and Student Gender-Related Socialisation Messages]. In: M. Chomczyńska-Rubacha (Ed.), *Płeć i rodzaj w edukacji* [Gender and Type in Education], (p. 53-63). Łódź: Wyższa Szkoła Humanistyczno-Ekonomiczna.

- Chomczyńska-Rubacha, M. (2004). Wpływ działań edukacyjnych na postrzeganie stereotypów płciowych [The Impact of Educational Activities on Perceptions of Gender Stereotypes]. In: M. Chomczyńska-Rubacha (Ed.), *Role płciowe. Kultura i edukacja* [Gender Roles. Culture and Education], (pp.111-119). Łódź: Wydawnictwo Wyższej Szkoły Ekonomicznej.
- Chomczyńska-Rubacha, M., & Rubacha, K. (2007). *Płeć kulturowa nauczycieli. Funkcjonowanie w roli zawodowej* [The Cultural Gender of Teachers. Functioning in a Professional Role]. Kraków: Oficyna Wydawnicza 'Impuls'.
- Denessen, E., Vos, N., Hasselman, F., & Louws, M. (2015). The Relationship Between Primary School Teacher and Student Attitudes Towards Science and Technology. *Education Research International*, 1–7, 534690, doi: 10.1155/2015/534690.
- Eliasson, N., Sørensen, H., & Karlsson, K.G. (2016). Teacher-Student Interaction in Contemporary Science Classrooms: Is Participation Still a Question of Gender? *International Journal of Science Education*, 38(10), 1655–1672, doi: 10.1080/09500693.2016.1213457.
- Falkiewicz-Szult, M. (2007). *Przemoc symboliczna w przedszkolu* [Symbolic Violence in Kindergarten]. Kraków: Oficyna Wydawnicza 'Impuls'.
- Francis, B. (2010). Gender, Toys and Learning. *Oxford Review of Education*, 36(3), 325–344, doi: 10.1080/03054981003732278.
- Górnikowska-Zwolak, M. (2004). Nauczycielskie koncepcje ról społecznych kobiety i mężczyzny – czynnik wzmacniający czy osłabiający szanse rozwojowe dziewcząt i chłopców? [Teachers' Conceptions of the Social Roles of Women and Men – a Factor that Strengthens or Weakens Developmental Opportunities for Girls and Boys?]. In: M. Chomczyńska-Rubacha (Ed.), *Płeć i rodzaj w edukacji* [Gender and Type in Education], (pp. 85-103). Łódź: Wyższa Szkoła Humanistyczno-Ekonomiczna.
- Hardardottir, G.A., & Petursdottir, G.M. (2014). Gendering in One Icelandic Pre-School. *Nordisk barnehageforskning*, 9, 1–14, doi: 10.7577/nbf.681.
- Børve, H.E., & Børve, E., (2017). Rooms With Gender: Physical Environment and Play Culture in Kindergarten. *Early Child Development and Care*, 187, 1069–1081, doi: 10.1080/03004430.2016.1223072.
- Hopland, A.O., & Nyhus, O.H. (2016). Learning Environment and Student Effort. *International Journal of Educational Management*, 30, 271–286, doi: 10.1108/IJEM-05-2014-0070.
- Kaplan, A.G., & Sedney, M.A. (1980). *Psychology and Sex Roles. An Androgynous Perspectives*. Boston – Toronto.
- Kopciwicz, L. (2004). Schematy rodzaju (gender) w pracy pedagogicznej nauczycielek edukacji wczesnoszkolnej [Gender Patterns in the Pedagogical Work of Early Child-

- hood Education Teachers]. In: M. Chomczyńska-Rubacha (Ed.), *Płeć i rodzaj w edukacji* [Gender and Type in Education], (pp. 75–84). Łódź: Wydawnictwo Wyższej Szkoły Humanistyczno-Ekonomicznej.
- Kopciewicz, L. (2009). Wczesna edukacja i płeć kulturowa [Early Childhood Education and Gender]. In: D. Klus-Stańska, & M. Szczepska-Pustkowska (Eds.), *Pedagogika wczesnoszkolna – dyskursy, problemy, rozwiązania* [Early School Pedagogy – Discourses, Problems, Solutions], (pp. 291–311). Wydawnictwa Akademickie i Profesjonalne.
- Kopciewicz, L. (2009). Edukacja jako praktyka dominacji. Udział szkoły w wytwarzaniu kapitałów rodzajowych uczennic i uczniów [Education As a Practice of Domination. School's Contribution to the Generation of Students' Generic Capitals]. In: L. Kopciewicz, & E. Zierkiewicz (Eds.), *Koniec mitu niewinności? Płeć i seksualność w socjalizacji i edukacji* [The End of the Myth of Innocence? Gender and Sexuality in Socialisation and Education], (pp. 293–295). Warszawa: Eneteia Wydawnictwo Psychologii i Kultury.
- Logue, M. E., & Harvey, H. (2009). Pre-School Teachers' Views of Active Play. *Journal of Research in Childhood Education*, 24, 32-49, doi: 10.1080/02568540903439375.
- Mackie, D.M., Hamilton, D.L., Susskind, J., & Rosselli, F. (1999). Społeczno-psychologiczne podstawy powstawania stereotypów [Social-Psychological Bases of Stereotypes Formation]. In: C.N. Macrae, Ch. Stangor, & M. Hewstone (Eds), *Stereotypy i uprzedzenia* [Stereotypes and Prejudices], (pp. 44–45). Gdańsk: Gdańskie Wydawnictwo Psychologiczne.
- Mazurkiewicz, G. (2006). *Kształcenie chłopców i dziewcząt. Naturalny porządek, nierówność czy dyskryminacja?* [Educating Boys and Girls. Natural Order, Inequality or Discrimination?]. Kraków: Centrum Edukacji Obywatelskiej.
- Meighan, R. (1993). *Socjologia edukacji* [Sociology of Education]. Toruń: Edytor.
- Muntoni, F., & Retelsdorf, J. (2018). Gender-Specific Teacher Expectations in Reading: The Role of Teachers' Gender Stereotypes. *Contemporary Educational Psychology*, 54, 212–220, doi: 10.1016/j.cedpsych.2018.06.012.
- Muszyńska, E. (2000). Wychowanie i edukacja a płeć [Upbringing and Education and Gender]. *Studia Edukacyjne*, 5, pp. 93–109.
- Muszyńska, E. (2004). Warunki edukacji szkolnej dziewcząt i chłopców: różnice, ich przyczyny i skutki [Schooling Conditions of Girls and Boys: Differences, Their Causes and Effects]. In: M. Chomczyńska-Rubacha (Ed.), *Płeć i rodzaj w edukacji* [Gender and Type in Education], (pp. 46–47). Łódź: Wyższa Szkoła Humanistyczno-Ekonomiczna.
- Pankowska, D. (2005). *Wychowanie a role płciowe* [Upbringing and Gender Roles]. Gdańsk: Gdańskie Wydawnictwo Psychologiczne.

- Patrick, H., Kaplan, A., & Ryan, A.M. (2011). Positive Classroom Motivational Environments: Convergence Between Mastery Goal Structure and Classroom Social Climate. *Journal of Educational Psychology*, 103, 367-382, doi: 10.1037/a0023311
- Perander, K., Londen, M., & Holm, G. (2019). Anxious Girls and Laid-Back Boys: Teachers' and Study Counselors' Gendered Perceptions of Students. *Cambridge Journal of Education*, 50, 185-199, doi: 10.1080/0305764X.2019.1653825.
- Pesu, L., Viljaranta, J., & Aunola, K. (2016). The Role of Parents' and Teachers' Beliefs in Children's Self-Concept Development. *Journal of Applied Developmental Psychology*, 44, 63-71, doi: 10.1016/j.appdev.2016.03.001.
- Skelton, C. (2010). Gender and Achievement: Are Girls the Success Stories of Restructured Education Systems? *Educational Review*, 62, 131-142, doi:10.1080/00131910903469536.
- Stoet, G., & Geary, D. C. (2018). The Gender-Equality Paradox in Science, Technology, Engineering, and Mathematics Education. *Psychological Science*, 29, 581-593, doi:10.1177/0956797617741719.
- Strykowska, M. (1991). Tożsamość płciowa kobiet a ich funkcjonowanie zawodowe [Women's Gender Identity and Their Occupational Functioning]. *Przegląd Psychologiczny*, 1, 123-134.
- Szczepanik, R. (2004). Nauczyciele wobec zachowań szkolnych uczniów i uczennic starszych klas szkoły podstawowej [Teachers Towards School Behaviour of Male and Female Pupils in the Older Grades of Primary School]. In: M. Chomczyńska-Rubacha (Ed.), *Płeć i rodzaj w edukacji* [Gender and Type in Education], (p. 93-109). Łódź: WSHE.
- Trusz, S. (2015). Kulturowa transmisja stereotypu płci. Co sprawia, że mężczyźni studiują na kierunkach ścisłych lub technicznych, a kobiety na kierunkach humanistycznych lub społecznych? [The Cultural Transmission of Gender Stereotype. What Makes Men Major in Science or Technology and Women Major in Humanities or Social Sciences?]. *Labor et Educatio*, 3, 266-268.
- Ustawa Prawo Oświatowe (2016). Ustawa z dnia 14 grudnia 2016 r. Prawo oświatowe [Act of 14 December 2016, the Law on School Education]. Retrieved 05 February 2019 from <http://isap.sejm.gov.pl/>.
- Wolter, I., Braun, E., & Hannover, B. (2015). Reading is for Girls!? The Negative Impact of Pre-school Teachers' Traditional Gender Role Attitudes on Boys' Reading Related Motivation and Skills. *Frontiers in Psychology*, 6, 1-10, doi:10.3389/fpsyg.2015.01267.