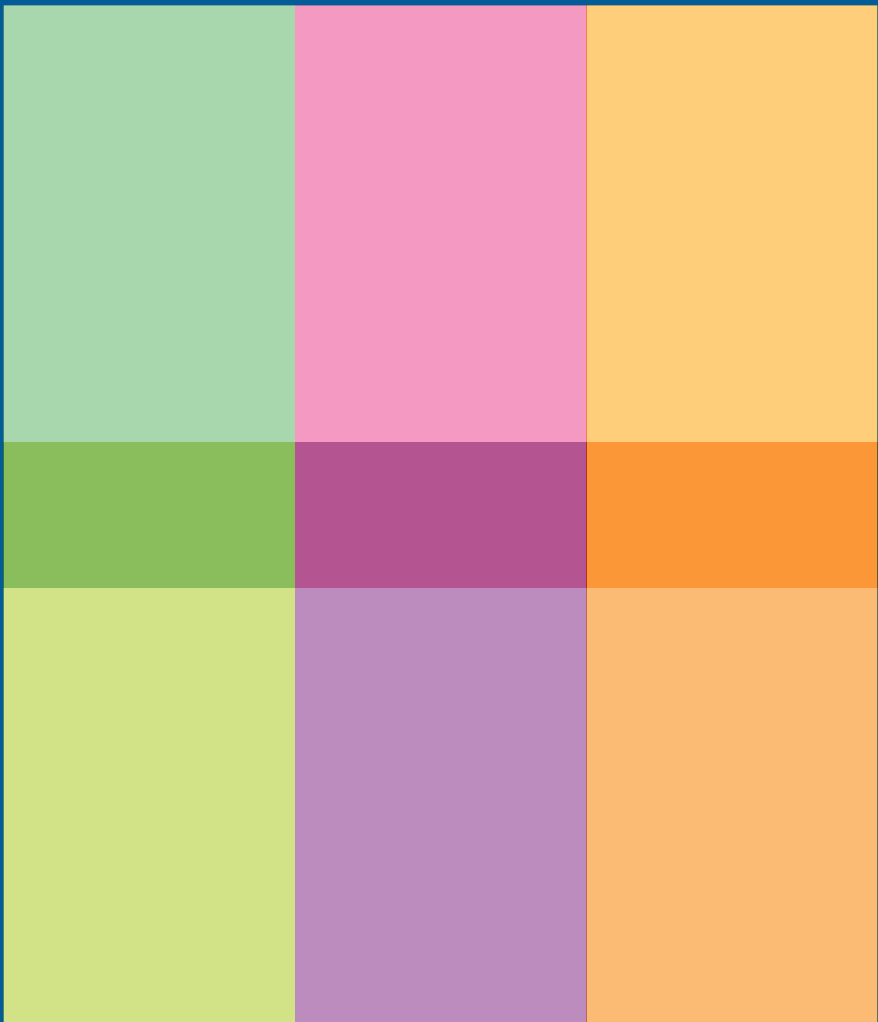


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VERONIKA TAŠNER and MILICA ANTIĆ GABER

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The CEPS Journal is an open-access, peer-reviewed journal devoted to publishing research papers in different fields of education, including scientific.

Aims & Scope

The CEPS Journal is an international peer-reviewed journal with an international board. It publishes original empirical and theoretical studies from a wide variety of academic disciplines related to the field of Teacher Education and Educational Sciences; in particular, it will support comparative studies in the field. Regional context is stressed but the journal remains open to researchers and contributors across all European countries and worldwide. There are four issues per year. Issues are focused on specific areas but there is also space for non-focused articles and book reviews.

About the Publisher

The University of Ljubljana is one of the largest universities in the region (see www.uni-lj.si) and its Faculty of Education (see www.pef.uni-lj.si), established in 1947, has the leading role in teacher education and education sciences in Slovenia. It is well positioned in regional and European cooperation programmes in teaching and research. A publishing unit oversees the dissemination of research results and informs the interested public about new trends in the broad area of teacher education and education sciences; to date, numerous monographs and publications have been published, not just in Slovenian but also in English.

In 2001, the Centre for Educational Policy Studies (CEPS; see <http://ceps.pef.uni-lj.si>) was established within the Faculty of Education to build upon experience acquired in the broad reform of the

national educational system during the period of social transition in the 1990s, to upgrade expertise and to strengthen international cooperation. CEPS has established a number of fruitful contacts, both in the region – particularly with similar institutions in the countries of the Western Balkans – and with interested partners in EU member states and worldwide.



Revija Centra za študij edukacijskih strategij je mednarodno recenzirana revija z mednarodnim uredniškim odborom in s prostim dostopom. Namenjena je objavljanju člankov s področja izobraževanja učiteljev in edukacijskih ved.

Cilji in namen

Revija je namenjena obravnavanju naslednjih področij: poučevanje, učenje, vzgoja in izobraževanje, socialna pedagogika, specialna in rehabilitacijska pedagogika, predšolska pedagogika, edukacijske politike, supervizija, poučevanje slovenskega jezika in književnosti, poučevanje matematike, računalništva, naravoslovja in tehnike, poučevanje družboslovja in humanistike, poučevanje na področju umetnosti, visokošolsko izobraževanje in izobraževanje odraslih. Poseben poudarek bo namenjen izobraževanju učiteljev in spodbujanju njihovega profesionalnega razvoja.

V reviji so objavljeni znanstveni prispevki, in sicer teoretični prispevki in prispevki, v katerih so predstavljeni rezultati kvantitativnih in kvalitativnih empiričnih raziskav. Še posebej poudarjen je pomen komparativnih raziskav.

Revija izide štirikrat letno. Številke so tematsko opredeljene, v njih pa je prostor tudi za netematske prispevke in predstavitve ter recenzije novih publikacij.

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Editorial

Gender and Education

The first feminists were more than aware of the fact that education is one of the crucial areas with potential for achieving gender equality and equity. Mary Astell demanded higher education institutions for women as early as in 1694. In the eighteenth century, two exceptional thinkers, Mary Wollstonecraft and Olympe de Gouges, claimed that women and men are born equal and yet do not have equal rights. They both believed that education would bring women greater equality. Inspired by Catherine Maculay's *Letters of Education* (1790), Wollstonecraft advocated changes to the education of girls, claiming that education should not differ for boys and girls. She argued for education of women that would equip them for cooperation with men and fought for the same model of education for both genders in families and schools, as she believed that women would be free if they were enlightened and able to provide for themselves independently of men. In her opinion, women were weak due to education that forced them, from their earliest years, to be passive, obedient and (only) beautiful. She recognised the reasons for the subordination of women as being rooted in the social environment and insufficient education. Her claim for equal educational opportunities for girls and women, allowing women to participate equally in all spheres of social life, aligns her with those thinkers who advocated a different social order, and therefore a different gender order. Maculay's and Wollstonecraft's ideas were undoubtedly revolutionary and had to wait for centuries to become our reality, but they were crucially important ideas that eventually became the basis for changes in social conditions allowing structural changes to take place in the various fields of our individual and social lives.

On the background of these and similar ideas, and despite the fact that gender equality seemed to be a rather distant goal, we witnessed the rise of second-wave feminism in the 1960s and 1970s. The fact that feminism was and is not just one unique phenomenon – there are many feminisms supported by different feminist organisations and groups with specific attitudes and demands – led to debate on a wide range of topics, including inequality in education, demands for more gender-neutral schools, critiques of gender-stereotypical subjects, the inability of girls to make different professional choices, the unequal treatment of girls and boys in institutionalised contexts, and the effects of the hidden curriculum that privileges boys at almost all levels. Among the important demands of the second-wave feminist movement – based on an awareness of the lack or almost complete absence of knowledge on women's lives in history and in the present time in the official curriculum – was a demand for special courses on women, in order to fill the gap in

knowledge production, to raise awareness of the importance of women's lives, and to overcome "man-made language", male-centred knowledge production, etc.

Five decades later, we can see that this is not an easy task. Gender equality and gender equity in education is still an important and highly debated issue, as there are still enormous differences and a wide range of inequalities in this field worldwide. On the one hand, there are millions of girls who are still illiterate in poor countries and, on the other, there are countries in which girls significantly outperform boys in school achievements. There are countries and regions that tackle the issue of gender (in)equalities in education and countries that do not care about them, countries that support the development of women and gender studies and countries in which these studies are on the margins and addressed only by women's NGOs.

The present issue of the CEPS Journal is the first edition of a scientific journal completely dedicated to the question of gender and education, and is an important element in the mosaic of scientific production on the theme in Central-East Europe. Moreover, this issue brings six articles all dealing with specific gender-related issues in the field of education.

The issue starts with the article "Mapping Women's and Gender Studies in the Academic Field in Slovenia", which maps the development of women's and gender studies (WGS) in the academic field in Slovenia. In her paper, Milica Antić Gaber asks and answers the following questions: How, when and why has this happened? How has this been connected to the women's and feminist movements and politics towards women's issues and demands? What have the obstacles been in this process? Who were the agents and what were the factors that supported demands for the incorporation of WGS in academia? as well as many other questions. The mapping in this paper is primarily based on the primary sources of university programmes and their curricula at faculties of the University of Ljubljana, as well as on interviews with important agents in the field.

In their article "The Anti-Gender Movement in Europe and the Educational Process in Public Schools", Roman Kuhar and Aleš Zobec analyse the mass protests across Europe against marriage equality, reproductive rights, gender mainstreaming and sex education, which have centralised in the past few years around so-called "gender theory". The authors point to the fact that many of these debates (and concrete actions) are targeted towards schools and the education process. It is believed that "gender theory" is already being taught in schools, and that this will have detrimental consequences for pupils. Taking this debate as the starting point, the authors first examine the roots of the term "gender theory" and point to its "empty signifier" nature. They then analyse the various types of anti-gender actions across Europe that interfere with the educational process in public schools.

Finally, the authors consider the role of parents and their right to intervene (or not) in the educational process.

In the first part of their paper “Gender in the Teaching Profession: University Students’ Views of Teaching as a Career”, Veronika Tašner, Mojca Žveglič Mihelič and Metka Mencin Čeplak discuss the fact that women prevail numerically in the teaching profession and examine the reasons behind this fact. In the second part of the article, which is based on a pilot study including 132 students, the authors attempt to address the context from which pre-service teachers’ desired characteristics of their future employment arise. They single out the factors influencing the choice of teaching as a career, as well as students’ attitudes towards the reputation of female and male teachers. The collected data confirmed the thesis that the prevalent number of women in the teaching profession(s) is an effect of the harmonisation of the female respondents’ habitus and their perception of the field they are entering.

“Students’ Gender-Related Choices and Achievement in Physics”, authored by Ivana Jugović, explores the role of motivation, gender roles and stereotypes in the explanation of students’ educational outcomes in a stereotypically male educational domain: physics. The research sample included 736 grammar school students from Zagreb, Croatia. The variables that were explored were expectancy of success, self-concept of ability and subjective task values of physics, gender roles and stereotypes, educational outcomes (academic achievement in physics), intention to choose physics in the high school leaving exam, and intention to choose a technical sciences university course.

In their article “Gender Differences in Children’s Language: A Meta-Analysis of Slovenian Studies”, Ljubica Marjanovič-Umek and Urška Fekonja-Peklaj offer readers the first meta-analysis of ten Slovenian studies published between 2004 and 2016, which include in total 3,657 toddlers, children and adolescents, aged from 8 months to 15 years. The language outcome and gender differences measures referred to various aspects of language ability, including vocabulary, mean length of utterance, sentence complexity, language expression and comprehension, storytelling ability and metalinguistic awareness.

In the final article published in this focus edition, “Adolescent Boys, Embodied Heteromasculinities, and Sexual Violence”, James W. Messerschmidt summarises several life-history case studies of adolescent boys who eventually engaged in various forms of sexual violence. The life stories reveal the interrelationship between in-school bullying, reflexivity, embodiment and the social construction of heteromasculinities in the commission of adolescent sexual violence. The author concludes with a discussion of the implications of the research for the evolving discussions on social scientific conceptualisations of reflexive embodiment and heteromasculinities.

The Varia section of this edition of the CEPS Journal includes two articles. The article by Milan Kubiátko, Gregor Torkar and Lenka Rownanova entitled “The Teacher as One of the Factors Influencing Students’ Perception of Biology as a School Subject” aims to determine whether the teacher is one of the factors influencing students’ perception of biology as a school subject. The article also aims to identify the influence of certain other factors, such as: students’ gender and place of residence, the number of biology teachers who have taught the students, and the teachers’ gender. The sample consisted of 261 lower secondary school students (ISCED 2) in Slovakia, aged 14 and 15 years. The findings confirm the impact of biology teachers on students’ perception of the subject, while the students’ gender and place of residence did not have any significant influence on their perception of the subject.

The article entitled “To What Extent Do School Leaders in Slovenia Understand Physical School Environments as a Learning Factor?” by Majda Cencič analyses how school leaders assess the school environment as a factor of learning. A total of 150 school leaders in primary education in Slovenia were invited to complete an online questionnaire asking them about their views regarding the extent to which their school as a physical environment encouraged certain factors. The results show that, in their school environment, school leaders assess ecology, movement and respect the highest, while feelings, imagination and space gain the lowest assessment. The results provide interesting information, especially for school policymakers and everyone involved in the planning, building or renewal of school premises.

The present edition of the CEPS Journal ends with Nina Perger’s review of the book *Returning to Reims* by Didier Eribon. The book is presented as an attempt at social self-analysis, which is “an analysis of one’s own biographical trajectory in relation to social factors that influenced it”. Eribon’s work is inspired by Bourdieu’s social self-analysis, yet, as Perger stresses, the author takes his self-analysis a step further by taking “into the account the experiential and affective side of rupturing one’s habitus by wilful distancing from primary social environment and its di-visions of social world and thus entering the process of resubjection”. In the reviewer’s opinion, the book offers a valuable elaboration of Bourdieu’s self-analysis, because, as Nina Perger concludes in her review, Eribon’s work “enables us a sociologically important insight into how relationality between objective structures and everyday life on a subjective level is played out not through a relation of causal determination, but through a dynamic in which there is a space for creative innovation that, at the same time, requires creative destruction of the unquestionable”.

Mapping Women's and Gender Studies in the Academic Field in Slovenia

MILICA ANTIĆ GABER¹

∞ The aim of the present paper is to map the development of women's and gender studies (WGS) in the academic field in Slovenia. Slovenia is the first of the former Yugoslav state republics in which WGS have succeeded in entering the academic field and becoming part of institutionalised university study. In this paper we will ask the following questions: How, when and why did this happen? How was this connected to women's and feminist movements and politics regarding women's issues and demands? What were the obstacles in this process? Who were the agents and what were the factors that supported demands for the incorporation of WGS in academia? How has the field evolved in the last few decades? What were the phases of this development? Which fields were the forerunners, which were the late-comers and which are still left aside? What are the thematic scopes taught in WGS courses? In which degrees are the courses offered and what are their modules? Who teaches them? The mapping in this paper is mainly based on primary sources of university programmes and their curricula at faculties of the University of Ljubljana, as well as on interviews with important agents in the field.

Keywords: women's studies, gender studies, institutionalisation, mapping, academia, course

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Mapiranje ženskih študijev in študijev spola v akademskem polju v Sloveniji

MILICA ATNIĆ GABER

≈ Namen prispevka je mapirati razvoj ženskih študijev in študijev spola (ŽŠŠS), v akademskem polju v Sloveniji. Slovenija je prva med nekdanjimi jugoslovanskimi republikami, zdaj državami, v katerih je ŽŠŠS uspelo vstopiti v to polje in postati del institucionaliziranih univerzitetnih študijev. V tem prispevku se sprašujem: kako, kdaj in zakaj se je to zgodilo? Kako je to povezano z ženskim in feminističnim gibanjem in politikami do vprašanj in zahtev žensk? Kakšne so bile ovire v tem procesu? Kdo so bile_i akterke_ji in kateri so bili dejavniki, ki so podpirali zahteve za vključevanje ŽŠŠS v akademski prostor? Kako se je to področje razvilo v zadnjih nekaj desetletjih? Katere so faze tega razvoja? Katera področja so delala prodore in katera so zamujala in katera so še vedno zunaj tega procesa? Katera tematska področja se poučujejo pri teh predmetih na ŽŠŠS? Na kateri stopinji in kakšni so moduli, ki jih ponujajo? Kdo predava?

Mapiranje v tem prispevku temelji predvsem na primarnih virih o univerzitetnih programih in njihovih učnih načrtih fakultet Univerze v Ljubljani in na intervjujih s pomembnimi akterkami na tem področju.

Ključne besede: ženske študije, študiji spola, institucionalizacija, mapiranje, akademija, predmet

Introduction

Maca Jogan, one of the professors in Slovenia who, in the field of sociology, undertook pioneering work in WGS, recalls how male professors in the 1970s reacted to her as she started to work on women's issues in academia:

“A science existed or it did not exist, asserted my colleagues. Of course I principally agreed with this statement, but I had always in mind the question: What kind of science? When, at the end of the 1970s, I wished to make a systematic investigation of the changes in the position of women, one of my colleagues, an eminent Professor, said to me: ‘You are known as a really serious woman but you are entering into this very unserious field!’ Nonetheless, I entered the field, though I was often very lonely” (Jogan, 2006, p. 35).

This recollection of Prof. Jogan refers to events at a time when, in the USA as well as in some Nordic countries, women's studies had already started entering university programmes. Alice E. Ginsberg, editor of the book *The Evolution of American Women's Studies: Reflections on Triumphs, Controversies and Change* (2008) writes in the introductory chapter that the first entries of women's studies into American universities date from the 1960s and 1970s (Ginsberg, 2008, p. 1). In her analysis of the birth of women's studies in Nordic countries, Drude Dahlerup similarly writes that they developed as a discipline in that part of the world in the 1970s and 1980s (Dahlerup, 2015, p. 1). Both authors agree that women's studies courses emerged from the women's movement. They refer to the critique of the male dominance and gender blindness of the university as it privileged the study of white middleclass heterosexual men, and they ask how this can be changed.

Comparative research on the *Impact of Women's Studies Training on Women's Employment in Europe* from 2003² shows that women's studies developed unevenly throughout the nine participating countries (Finland, France, Germany, Hungary, Italy, Netherlands, Spain Slovenia, UK), starting from 1974 in Italy to 1995 in Spain (39). It was also found that these studies were initially mostly situated in social science and humanities programmes. They were largely established as master's programmes, but it was also possible to take modules as part of other disciplines. In the majority of these countries, it was also possible to gain a PhD in women's studies (38). The research discusses, inter alia, the processes of institutionalisation of women's studies in the respective countries. In so doing, it traces factors that promoted the process of institutionalisation and factors that hindered it. As developed by Harriet Silius (2002), these factors

2 A report on this project, in which a Slovenian team of researchers was led by Prof. Eva D. Bahovec, is available on http://cordis.europa.eu/docs/publications/1001/100124171-6_en.pdf.

were: a high degree of university autonomy in developing curricula, modularity, support or neutrality of the women's movement regarding institutionalisation, state support for the subject and the counter effects that slow down or obstruct the process. The authors of the research agree with Silius that the institutionalisation of women's studies went through six phases: activist (individual optional modules appear in traditional degrees); establishment (generic and thematic modules are introduced, interdisciplinary co-teaching units are established); integration (women's studies modules became part of the core compulsory provision of traditional disciplines); professionalisation (women's studies degrees are introduced and women's studies staff, including professors, are appointed); disciplinisation (department-like centres for teaching, research and documentation are established); and autonomy (women's studies function like any other discipline, with accreditation, funding and degree-awarding rights) (41). Based on the reported data, the institutionalisation phase of women's studies in the countries analysed was rated as high, low or medium. Slovenia appears in the lower part of the ranking table with a low institutionalisation rate, accompanied by Italy and France, where the women's movement was strongly against institutionalisation (42) and Hungary, where the wider political culture embodied prevailing traditional attitudes towards gender equality.

Not long ago, one of my third-year students at the Faculty of Arts who had chosen my course *Sociology of Gender* told me that it was the first course on gender available to her during her entire three years of study (not in the Sociology Department, but in another social science department) in her BA programme. We can therefore envisage that overall there have been no fundamental changes in this respect. This is why we would like to document and delineate the process of the institutionalisation of women's and gender studies at selected faculties of the University of Ljubljana in the last few decades (from the time when a renowned professor was faced with the remark that dealing with women's issues was not a job for a serious sociologist) and try to answer several questions. When, how and under what social circumstances did the development of women's and gender studies (WGS) occur? Were there any obstacles in this process? How was this connected to the women's and feminist movement and politics regarding women's issues and demands? Who were the agents and what were the factors that supported demands for the incorporation of WGS in academia? How has the field evolved in the last few decades? Which academic fields (disciplines) were the forerunners, which were the latecomers, and which are still left aside? What is the thematic scope being taught in WGS courses? What thematic courses are offered and in which degrees? Who teaches them? What were the phases of this development?

Methodology and sources

The mapping of the development of WGS in the present paper is primarily based on an examination of the university programmes of faculties of the University of Ljubljana and their curricula, as well as on interviews with or reports of the important agents in the field: the informants. Structured interviews were carried out in spring 2016 and were approximately 30–40 minutes long. Some informants chose a written form of interview or preferred to submit their own written reports.³

The knowledge and courses that have been developed in other institutions in Slovenia – Institutum Stidorum Humanitatis or the Peace Institute, as well as certain feminist NGOs such as *Lezbično feministična akademija (Lesbian-Feminist Academy)* or, in the last few years, *Rdeče zore (Red Downs)* and *Zavod Transfeministična iniciativa – TransAkcija (Transfeminist Initiative Institute – TransAction)*, to name just a few – will be left aside in the present paper. We are aware that some of these contributions are a very important part of knowledge production and knowledge dissemination on gender and sexuality, and that they have paved the way to a better understanding of gender and gender relations in society; in this paper, however, we would like to concentrate on the narrowly understood institutionalised part of knowledge production in the field of WGS that gives officially recognised diplomas or other certificates to participants.

In this sense, we understand WGS as a discipline that is based on the assumption that gender is a defining category that influences our experience and knowledge (Bowles & Klein, 1983; Humm, 1989). It is a critical project that examines “how science perpetuates forms of discrimination and even of exclusion, but it is also a creative field in that it opens up alternative spaces to women’s self-representation and intellectual self-determination” (Braidotti, 2003, p. 33). It is by definition a political project that has a transformative agenda and an inter- and trans-disciplinarily orientation, despite being predominantly based in social sciences (Silius, 2002) and included in the post-secondary education system (Griffin, 2006). If there is a difference between women’s and gender studies, we can

3 The informants (eight in total) are lecturers in WGS from the Faculty of Social Sciences, the Faculty of Arts, the Faculty of Social Work, and the Faculty of Education of the University of Ljubljana. Some of them were interviewed, while others gave the author written answers or unpublished papers (speeches) or provided the curricula of the programmes of their faculties. Some of the informants requested anonymity, which is why the paper does not disclose their names. I would like to thank all of them, especially those who were active in the first decades. Without their peer help and sharing of their rich information, the present analysis would not have been possible. The author of this paper is herself one of these actors. Although this could represent an important advantage, it could also be a hindrance to the objectivity of the presented data and its analysis. For this reason, the author has decided to document the majority of the information and facts included in the paper in footnotes, so that readers can check them.

understand women's studies as studies that "show how white western men were treated as (gender neutral) generalized human, and put the emphasis on the missing part of humanity – women – their experiences, interests and needs and especially create a new knowledge from the women's perspective" (Davis, Evans, & Lorber, 2006, p. 2), while gender studies are studies that "put an emphasis on the relation between women and men, especially power relation, domination and oppression. Their emphasis was on organisation and structures of society as well as on cultural and knowledge production" (ibid.).⁴

As is evident, our theoretical starting point is connected to the Western theoretical tradition and the WGS that were developed at European and American universities. This is not to say that there was no specific knowledge regarding this issue in Central Eastern Europe; however, such knowledge was not explicit, coordinated and organised in the academic field, but scattered in various arenas of society.

In our analysis, we therefore only include courses that have the following terms in their names: "women", "man", "masculinity", "femininity", "feminism", "gay", "lesbian" or "gender". This enables us to conclude that the courses belong to the field widely recognised as Women's or Gender Studies.⁵

We are aware that there may be other courses that partly touch upon the issues of women or gender, and that their titles contain terms other than those mentioned above. Nonetheless, if they do not clearly display a focus on the terms mentioned above, we did not include them in the analysis, as, to the best of our knowledge, they cannot be understood as part of the gender-sensitive curricula.

In the following section, we will try to identify the phases of the development of WGS at the University of Ljubljana and determine the characteristics of their development.

The times of "smuggling" women's issues into "serious" courses (the late 1980s)

There is a great deal of truth – and it can be found in numerous reflections of the pioneering time of women studies – in a recollection of Ginsberg in an interview about the development of women's studies in the USA:

"One of the key challenges to women's studies in the early years was most certainly that it was intimately connected to the feminist movement for

4 The author of the present paper is aware that there are not only two genders, and that this awareness has entered WGS with transgender studies. The focus of this paper is, however, only on WGS.

5 The only exception to this rule is in the first decade. The reason for this is explained later in the text.

social change. It was, in fact, referred to as the ‘academic arm’ of the women’s movement. These first courses, and the brave women who taught them, made no bones about the fact that knowledge was political” (...) “Women’s studies also distinguished itself by claiming that the personal was political, and thus making a place within courses for women to talk about their own experiences, expectations, and socialization.” (Jaschik, 2009).

Let us therefore see what connections can be found between feminist attempts and women’s studies in the Slovenian context. In a diagram from the book *Kako smo hodile v feministično gimnazijo (How We Attended a Feminist Grammar School)*, one can trace the formation of feminist groups in Slovenia and see the lively chain of historical events from the mid 1980s on (Jalušič, 2002, pp. 290–291). First among them is *Ženska sekcija Društva sociologov Slovenije* (The Women’s Section of Association of Slovene Sociologists) established in 1984. It was followed by the activist group *Lilit* in 1985, *Lezbična lilit (Lesbian Lilith)* in 1987, and *SOS telefon za ženske žrtve nasilja (SOS Helpline for Women Victims of Violence)* in 1989, to list only a few. From the different types, content and orientations of the groups, one can conclude that there was a widespread need for gathering, discussing issues and offering mutual assistance, as well as for collective actions. A desire for gender-sensitive knowledge and understanding of women’s lives can also be traced, as there were working groups that dealt with the women’s movement, women’s everyday lives or politics, such as *Skupina Ženske za politiko (Group Women for Politics, 1990)*.

In the 1980s – despite the fact that we recall these times as the most beautiful times of our lives under socialism – due to a loosening of the power of the League of Communists in all spheres of life, the academic field was not so open to these new topics. There were a few feminist-oriented academics, mostly in social sciences and humanities departments, but they were mainly younger, less powerful and/or not highly positioned in the field in comparison with their male colleagues, which prevented them from initiating substantial changes with regard to introducing special courses and women’s studies programmes. They were, however, smart, and, as one of our informants said, they started “smuggling” women’s issues into the already established courses and disciplines.

Nevertheless, it is worth mentioning that the first course that bears the word “women” in its title was the course *Žensko pismo (Women’s Writings)* at the Department of Slavic Languages of the Faculty of Arts, taught by the then Belgrade professor, Svetlana Slapšak in 1986.

Only a year later, at the Faculty of Sociology, Political Sciences and Journalism, now known as the Faculty of Social Sciences, one of our informant reports⁶ that courses in which women's issues were taught commenced in the 1987/88 academic year.⁷ The titles of these courses did not refer to women's issues, which were concealed within broader topics such as "public and private" or "the family", thus providing a good example of the aforementioned smuggling strategy. Apart from this, there were also courses⁸ touching upon social inequalities of women and men offered as research seminars.⁹ These courses already bear the word "women" and even "femininity and masculinity" in their names, but they were in fact research seminars rather than "real" courses; they nonetheless attracted many students and broadened their interest in women's issues.

All but one of the lecturers at that time were female professors, and one of our informants – the lecturer who taught these subjects – recalls that, in the process of introducing these courses, the argument was that famous universities such as Oxford, Cambridge, Paris, Milan and others already had WGS courses and even entire programmes, and that it was therefore inconceivable that we would not start introducing such courses at our university. As teachers, they nevertheless met with the remarks from their male colleagues such as: "OK then, but where are the men?" or: "What do you do there – crochet?" They did, of course, disregard this response and continued doing what they had planned to do. In terms of Silius's (2002) institutionalisation phases, this phase could be considered an activist phase.

In this initial phase of the development of WGS, we see two parallel processes: on the one hand, we witness the mimicry and masking the new courses concerning women's issues with more "scientific" titles in order to hide the real

6 Almost all of the data about the courses in the decades before the new Bologna programmes at the Faculty of Social Sciences has been obtained from an unpublished paper by Maca Jogan entitled *1961-2011: Spol, spola, spolna neenakost in znanost na FDV (Spremnino besedilo k razstavi ob 50-letnici FDV) (1961–2011: Gender, Two Genders, Gender Inequality and Science at the Faculty of Social Sciences (Accompanying Text for an Exhibition on the 50th Anniversary of the Faculty of Social Sciences))*. I would like to thank Prof. Jogan for her selfless assistance in the attempt to gather the important historical facts and other data for this early period of the development of WGS in Slovenia, as well as other colleagues and professors from the Faculty of Social Sciences, Tanja Rener, Alenka Švab and Zdenka Šadl, who shared their recollection of this process in the later phases of development. I would also like to thank Neli Babič and Prof. Monika Kalin Golob for further clarifications concerning recent developments.

7 *Teorije zasebnost - razvoj in kriza dialektike zasebno - javno (Theories of Privacy - Development and Crisis of the Dialectics of Private-Public)* and *Socialna zgodovina družine (Social History of the Family)* were two such research seminars, both executed by Tanja Rener.

8 These were: *Žensko vprašanje v preteklosti in sodobnosti (Women's Questions in the Past and Present)*, M. Jogan; *Lik ženske v množičnih občilih, (The Figure of Woman in the Media)*, M. Jogan, Z. šadl; *Politična participacija žensk v Sloveniji (Political Participation of Women in Slovenia)*, T. Rener; *Ženskost in moškost (Femininity and Masculinity)*, S. Južnič.

9 Research seminars differ from (optional) courses in that the emphasis is on independent research undertaken by students lead by a professor, resulting in a joint research project.

content and avoid potential opposition to their introduction to the curricula; almost simultaneously, there was the introduction of courses that openly thematise gender relations, connecting them with social and economic inequalities. Although the courses were not numerous, they were almost exclusively linked to the field of sociology. We can therefore consider sociology – and not literary or English or American studies departments as in some other East Central European countries¹⁰ – as the discipline most open to women's and gender issues in Slovenia. Although this warrants thorough consideration and recognition, it will be left to our future research. Despite the fact that all but one of the courses were offered as research seminars (which can be different each year and are not part of core academic curricula) rather than as obligatory or optional courses, and therefore remained on the margins of the academic field, they were important harbingers of change, especially due to the fact that they were all connected to the research activities of teaching staff who would, in the near future, also influence and enlarge knowledge production in this field. Needless to say, this was done by professors (all but one female) whose professional careers had been developed around one or other of the “serious” sociological questions (work, family, theoretical approaches, etc.)

Expansion and upgrading of women's studies courses in the 1990s

In the early 1990s, activities in civil society and women's groups intensified. In addition to the aforementioned groups, new ones arose, including various self-help groups, Ženska svetovalnica (Women's Counselling), Prenner Club, Ženske v črnem (Women in Black), etc., each dealing with specific issues. Women's sections were established in the formal politics of left-wing parties. Their activities influenced changes on the institution-building side of the newly established nation state: *Parlamentarna komisija za žensko politiko* (Parliamentary Commission for Women's Politics, 1991) and *Urad za žensko politiko* (Office for Women's Politics, 1992) were very proactive and, at that time, oriented towards opening public discussion of the new feminist agenda. It became increasingly obvious that what was missing was an organised women/feminist research and knowledge production initiative/centre/organisation. One attempt to interconnect feminist research, knowledge production and the problems that women face in everyday life was a special issue on abortion *Abortus – Pravica do izbire!?* (Abortion!?! The Right to Choose!?, 1991), as these were the times when

10 Cf. Mlinarevic et. al. (2010) and the results of Tuning Educational Structures in Europe, Reference Points for the Design and Delivery of Degree Programs in Gender Studies, Athena.

the new right wing wanted to annul the constitutional article that guaranteed the right of abortion on demand.

This issue was also in the air at the first international colloquium on women's studies in 1991, in which two prominent feminist scholars from the UK participated as the keynote speakers: Denise Riley and Lynne Segal. Papers from this gathering were published in a special issue of *Časopis za kritiko znanosti (Journal of Critique of Science, ČKZ)* in 1993. The goal of feminist knowledge production was partly fulfilled with the establishment of the first scientific feminist journal *Delta* (1995), whose driving force was Eva D. Bahovec.

These events show how lively the beginning of 1990s was in terms of women's groups, and how many different initiatives emerged from small circles of feminist scholars and NGO activists. It is true that some of them were more scholarly and others more practically oriented (Jalušič, 2002), but they all wanted to initiate changes in women's lives and empowerment, as well as to be actively involved in the vast structural modification of society in that important transitional period.

Women in the academic field successfully initiated new courses at the undergraduate and postgraduate levels. In the Sociology Department of the Faculty of Social Sciences in 1993/94, one optional course¹¹ was given and several optional seminars¹² were offered to the students (Jogan, 2011).

The next important step in the development of WGS at this faculty was made when a new master's level¹³ programme entitled *Seksizem kot (sodobna) tradicija (Sexism as (Contemporary) Tradition)*, coordinated by Maca Jogan, was launched in the 1992/93 academic year with several distinct courses¹⁴ aimed at theorising gender inequality (Jogan, 2011).

At the Sociology Department of the Faculty of Arts,¹⁵ several optional

11 This was: *Sociologija odnosov med spoloma (Sociology of Gender Relations)*. The name was later changed to *Sociologija spolov (Sociology of Gender)*, first taught by M. Jogan.

12 These were the following: *Seksizem, telesnost, čustvenost (Sexism, Embodiment, Emotionality)*, M. Jogan, Z. Šadl); *Socialna zgodovina žensk v Sloveniji v prvi polovici 20. Stoletja (A Social History of Women in the First Half of the 20th Century)*, T. Renner; and *Feminizem in sociologija (Feminism and Sociology)*, T. Renner.

13 Apart from this programme, several subjects in the two master's programmes Sociology of Everyday Life and Anthropology had a number of courses in which gender issues were included, such as: *Socialna konstrukcija spolne/etnične identitete (Social Construction of Gender and Ethnic Identity)*, S. Mežnarič; *Antropologija spola (Anthropology of Gender)*, S. Južnič, V. Godina, I. Šumi; *Antropologija in feminizem (Anthropology and Feminism)*, Boškovič.

14 These were: *Feministična teologija (Feminist Theology)*, A. Grünfelder; *Evropska integracija in antiseksistična politika (Feminist Integration and Antisexist Politics)*, A. Barbič, T. Renner; *Seksizem, telesnost, čustvenost (Sexism, Embodiment, Emotionality)*, M. Jogan, M. Kožuh Novak, Z. Šadl; *Socialno razlikovanje v prostem čas (Gender Differentiation in Free Time)*, N. Černigoj Sadar.

15 The data about the development of WGS at the Faculty of Arts were gathered by Mirna Berberović with the assistance of Andreja Končan, Janja Sešek and Tanja Hribar, to whom the author of the present paper owes thanks. Many thanks are also due to all of the lecturers of specific courses who helped clarify the ambiguities and uncertainties related to these developments.

courses devoted to women's or gender issues started to be taught in 1992/93.¹⁶ However, the real demarcation lane at this department was drawn in 1999, when *Sociologija spola (Sociology of Gender)* was introduced as a mandatory course.¹⁷ With this step, "sociology of gender" was accepted as an "equal among equals" and as a serious sub-discipline in sociology that all of the students had to be acquainted with. In addition, the course *Antropologija spola (Anthropology of Gender)* was introduced at the Department of Anthropology in 1993/1994.¹⁸

At master's and doctoral level, a new interdisciplinary programme entitled Women Studies and Feminist Theory commenced in 1997/1998. It was coordinated by three departments (Philosophy – Eva D. Bahovec; German Language Department – Neva Šlibar, and Sociology – Milica Antić Gaber) and had four distinct modules: Feminist Theory and Philosophy, Women's Studies in the Field of Literature and Literary Theory; Feminist Theory and Cultural Studies, and Feminism and Political Theory, each with several specific courses in their fields. Students graduating from this programme could also continue their studies at PhD level.

In this decade, the two pioneering faculties had been joined by a third, the Faculty of Social Work,¹⁹ where the first course on gender issues²⁰ started to be given in 1993. To the best of our knowledge, it remained the only course until the new Bologna programmes were introduced.

As can be seen, the field that remained the leading force in developing WGS was sociology, but anthropology, philosophy and social work joined it in the common goal of widening the scope of the issues that had to be taught in their fields. The lecturers were still predominantly female (with only one male among them). The same can be said about the students who chose to take these courses: there were very few male students, if any.

The course titles that were introduced in this decade openly concentrated on the gender perspective and no longer masked the content with more

16 These were: *Žensko pisanje (Women's Writings)*, S. Slapšak; *Zgodovina in teorija spolov (History and Theory of Gender)*, I. Saksida, Z. Skušek, N. Pagon; followed in the subsequent years by *Ženske- zasebno, javno, politično (Women – Private, Public, Political)*, later renamed as *Uvod v ženske študije (Introduction to Women's Studies)*, M. Antić Gaber and *Medkulturni vidiki koncepta spola (Intercultural Perspectives of the Concept of Gender)*, J. Rošker; *Balkanske ženske (Balkan Women)*, S. Slapšak; *Ženske študije in feministična teorija (Women's Studies and Feminist Theory)*, D. Bahovec, E. Šlibar, M. Antić Gaber, also given at the Department of Philosophy and the Department of German Language; *Zgodovina žensk (History of Women)*, M. Verginella.

17 This course was transformed from the optional course *Introduction to Women's Studies* and renamed as *Sociology of Gender* (lectured by M. Antić Gaber), which could be offered to all of the students at the department.

18 Prof. B. Jezernik started to teach it as a mandatory course.

19 The data about the WGS courses at this faculty were provided by D. Zaviršek and V. Leskošek, to whom the author is very grateful.

20 The course entitled *Ženske in moški v socialnem delu (Women and Men in Social Work)* was lectured by D. Zaviršek.

“acceptable”, “neutral” or “scientific” terms as they had a decade earlier. The feminist theoretical orientation and standpoint of the new courses offered to the students in this decade was disclosed and displayed in the names of the programmes themselves, and the critical focus was oriented towards sociology as a discipline, not only to the social circumstances as such. Two master’s programmes in particular widened the scope of the issues under scrutiny to sexist politics, attitudes towards women’s bodies, the media, emotions and everyday life. At the Faculty of Social Sciences, several informants recollect that it was much easier for the second generation of lecturers teaching these courses in this decade, as their “founding mothers” had done the important work to make a room for them and save them from the conflicts and clashes in the academic field.

It seems that the 1990s were prosperous years of public and academic openness to innovations, including WGS. This could be attributed to several factors: Slovenia was, at that time, a newly established independent state that had commenced broad structural changes in society (universities included); openness towards Europe and the Western world increased; liberalisation spread to many spheres of society; academic freedom was taken seriously; women’s demands (led by women’s and feminist NGOs) for equality in various arenas of life were more and more vocal; and female feminist academics, although small in number, became increasingly persistent in their demands for gender-sensitive knowledge production in academia.

However, in characterising the content of the development we could conclude that, in this decade, women’s studies were located somewhere between the establishment and the integration phase.

Between the integration and professionalisation of WGS (the times of the Bologna process)

On closer examination of the *zeitgeist* at the beginning of new millennium, it is increasingly obvious that the forces of re-traditionalism became stronger and were more publicly visible. Furthermore, there was no visible improvement of the position of women in some important areas. Several examples clearly illustrate this: the share of women in politics (in key bodies) was much below the critical mass; the new NGOs established during these years were preoccupied with issues that had been marginalised by the state and its institutions (mostly social issues, violence against women, sexual harassment in the workplace, etc.); and there were some institutional changes from which we could conclude that the emphasis on women was no longer politically convenient (two examples are particularly telling: the Parliamentary Commission for

Women's Politics and the Governmental Office for Women's Politics changed their names to more "neutral expressions": the Commission for Equal Opportunities (1997) and later to the Commission for Petitions, Human Rights and Equal Opportunities (2004) and the Governmental Office for Equal Opportunities (2001). It seems that all of these issues – as well as many other issues, such as gender inequalities at work, the gender pay gap, the unequal distribution of tasks at home and in private life – were circulating among the publicly active women at that time. These issues were also reflected in the academic production of papers and books, and in the scope of the content of the courses given at some of the faculties offering WGS courses.

At the Faculty of Social Sciences at the beginning of the new millennium, several new courses were introduced in various programmes in sociology, political science, journalism and cultural studies. New optional courses were added to the (previous) list from which the students could choose at undergraduate level²¹ and several new optional seminars were added at master's level,²² thus broadening the scope of issues with which the students were acquainted, such as: work, the economy, human development and organisations, on the one hand, as well as identity politics, media, consumerism and politics, on the other (Jogan, 2011).

However, the new Bologna master's programmes introduced at the same faculty in 2010 did not have the words "women" in their titles. One module at the Sociology Department was entitled *Študije spola in seksualnosti (Studies of Gender and Sexuality)*, which included two obligatory and two optional courses.²³ As one of the informant reports, however, this module was faced with a lack of available lecturers, and for several years was not offered.

At the Department of Sociology of the Faculty of Arts, two new optional courses were introduced in the first half of this decade.²⁴ This reflects changes

21 These were: *Spolna dimenzija človekovega razvoja (The Gender Dimension of Human Development)*, Renner, 2004/05; *Uvod v gejvske in lezbične študije (Introduction to Gay and Lesbian Studies)*, T. Renner, Mencin-Čeplak, R. Kuhar; *Ženski žanri in politike spolov (Women Genres and Gender Politics)*, B. Luthar, M. Pušnik; *Politika, spol in emocije (Politics, Gender and Emotions)*, Z. Šadl; *Ženske in politika (Women and Politics)*, Alenka Krašovec; *Politologija seksuacije (Politology of Sexuation)*, M. Balažic. There were also several research seminars on women's lives, one of which was entitled *Ne-evropske ženske (Non-European Women)*, T. Renner.

22 *Religija in seksizem (Religion and Sexism)*, M. Jogan; *Spol, delo in organizacije (Gender, Work and Organisations)*, A. Kanjuro-Mrčela; *Potrošniška kultura in spol (Consumer Culture and Gender)*, B. Luthar; *Ženske, delo in ekonomija v ZDA (Women, Work and the Economy in the USA)*, A. Kanjuro Mrčela.

23 There were two: *Sociologija spolnosti (Sociology of Sexuality)* and *Feministična teorija in študiji spola (Feminist Theory and Gender Studies)*, A. Švab; and two optional courses *Družbena organizacija, zasebnost in spol (Social Organisation, Privacy and Gender)*, T. Renner; *Feminizem in kulturne politike emocij (Feminism and Cultural Politics of Emotions)*, Z. Šadl.

24 *Gejvske in lezbične študije (Gay and Lesbian Studies)* was introduced in 2003, as the first course addressing this issue at the University of Ljubljana (M. Antič Gaber, Roman Kuhar). One year later, *Gender and Discourse* (K. Vidmar Horvat, K. Mihurko Poniž and M. Antič Gaber) was added.

in Slovenian society, in which dealing with identity policies and media as well as other discourses became important not only scientific but also political issues in the state, which had recently become a new member of the European Union. After the Bologna programmes were introduced, several new master's courses were launched in the Sociology Department, with a special module being offered entitled *Sociologija spola (Sociology of Gender)*.²⁵ The wide variety of courses offered extended from body politics, queer and masculinity studies, everyday life, history, film, visual culture, to nationalism, globalisation and psychoanalysis. At this faculty, several new departments joined in the effort to introduce gender into their curricula (in languages and history), with new optional courses at the master's level.²⁶ On the other hand, there were departments in which one would expect gender courses – as they could be beneficial in the attempt to understand gender relations and gender differences in their fields – that still failed to offer even a single course with the words “women” or “gender” in its title, such as the Pedagogy and Psychology Departments.

At the Faculty of Social Work, one obligatory course was given at the undergraduate level and there were several optional courses at the master's level.²⁷

It seems that the Bologna process itself brought new opportunities for the introduction of changes in this respect, as, among other innovations, a comparative approach with similar programmes in Europe was expected. At the

25 *Sociologija spola in spolnosti (Sociology of Gender and Sexuality)*, M. Antič Gaber, R. Kuhar; as an obligatory course and several optional courses: *Spol in telo (Gender and Body)*, *Spol in politika v primerjalni perspektivi (Gender and Politics in Comparative Perspective)*, *Spol in identitetne politike (Gender and Identity Politics)*, M. Mencin Čeplak; *Spol in religija (Gender and Religion)*, A. Zalta; *Spol in globalizacija (Gender and Globalisation)*, K. Vidmar Horvat and M. Antič Gaber; *Kvir perspektive spola, spolnosti in identitete (Queer Perspective of Gender, Sexuality and Identity)*; R. Kuhar; *Kritične študije moških in moškosti (Critical Studies of Men and Masculinities)*, R. Kuhar; *Zgodovina vsakdanjega življenje žensk (History of the Every Day Life of Women)*, M. Verginella; *Nacionalizem, rasizem in politike spola (Nationalism, Racism and Gender Politics)*, V. Jalušič; *Psihoanaliza in tudiji spola (Psychoanalysis and Gender Studies)*, R. Salecl; *Feministična literarna teorija (Feminist Literary Theory)*, A. Vogrinčič Čepič; *Vizualna kultura in spol (Visual Culture and Gender)*, K. Vidmar Hrvat; *Feministična teorija filma in televizije (Feminist Film and Television Theory)*, K. Vidmar Horvat.

26 At the Slovene Language and Literature Department, an optional course *Spol in slovenska literatura (Gender and Slovenian Literature)*, A. Zupan Sosič; at the German Language Department *Literatura in spolna razlika (Literature and Gender Difference)*, I. Samide and Ženski diskurzi na prelomu iz 19. v 20. stoletje (Women's Discourses at the Turn of the 20th Century), I. Samide; in the American Studies Programme, the course *Anglo-ameriške feministične literarne študije (Anglo-American Feminist Literary Studies)*, L. Burcar as a literary optional seminar; at the History Department, the optional course *Zgodovina žensk (History of Women)*, I. Selišnik.

27 The obligatory course was *Spol in nasilje (Gender and Violence)*, V. Leskošek; and the optional courses were: *Gejevske in lezbične študije za socialno delo (Gay and Lesbian Studies for Social Work)*, M. Urek and A. Zorn; *Nasilje nad ženskami in otroci v javni sferi (Violence against Women and Children in the Public Sphere)*, D. Zaviršek; and *Zdravje in družbene neenakosti s perspektive spola, etnije in hendikepa (Health and Social Inequalities from the Perspective of Gender, Ethnicity and Handicap)*, D. Zaviršek.

Faculty of Education,²⁸ there were previously no specifically gender and women's issues courses; only after Bologna programmes had been introduced were several optional courses given at the undergraduate level and higher levels.²⁹

Prior to the introduction of the new Bologna doctoral programme at the PhD level at the Faculty of Social Work, students could choose between two courses on gender.³⁰ According to the latest information (2015/16), after the introduction of the Bologna programme, two new courses are now offered at this level.³¹

It seems that the most important developments were made at the doctoral level, with a new programme titled Humanistic and Social Sciences being initiated by two faculties (the Faculty of Arts and the Faculty of Social Sciences) in 2009/2010. A special interdisciplinary programme entitled Gender Studies was coordinated by both faculties but also included professors from other faculties of the University of Ljubljana and from abroad. The individual student's curriculum at the Faculty of Arts depends on the scientific field to which gender is connected; however, the basic courses are Theory and Epistemology of Gender, and Methodology of Gender Research. There are several professors for each of the courses, with selection again depending on the study field. In this way, the programme seeks to adjust to the specific needs of the doctoral students.

The development of WGS at the analysed faculties seems to depend on the topics that the lecturers themselves research, and on the main curriculum to which the topics are connected: sociology, cultural studies, anthropology, social work, pedagogy or languages and literature. Thus lecturers integrate important topics connected to gender into the main curricula and widen the student's knowledge from the gender perspective, as well. Only at two faculties (the Faculty of Social Science and the Faculty of Arts) are special modules offered at the master's level and a special programme conducted at the doctoral level. We can conclude that this outcome is the result of wider consideration of the importance of the professionalisation of WGS.

28 The data about WGS courses at this faculty was gathered by Veronika Tašner and kindly shared with the author of this paper. I am also grateful to V.Tašner for her comments and suggestions in the earlier phases of writing this paper.

29 These were: *Spolno specifična socializacija (Gender Specific Socialisation)*, D. Zorc Maver, and *Edukacija in spol (Education and Gender)*, S. Gaber, at the undergraduate level; *Spol in edukacija (Gender and Education)*, M. Antić Gaber and L. Marjanovič Umek, at the master's level; and *Študije spola in edukacije (Studies in Gender and Education)*, M. Antić Gaber, Š. Razpotnik at the doctoral level.

30 These were: *Socialne politike in spol (Social Politics and Gender)*, V. Leskošek, and *Ženske in mentalno zdravje (Women and Mental Health)*, D. Zaviršek.

31 *Gender and the Social State* (V. Leskošek) and *Studies of Handicap from the Gender Perspective: The Historical and Comparative Perspective* (D. Zaviršek).

The latest changes: Instead of a step forward, times of diminishing

Informants report about the renovation of the “Bologna programmes” over the last two years, which is still not complete. As this has been influenced by the financial crisis and the consequent reduction in funding provided by the state, the rationalisation expected from the faculties related to the employment of lecturers and the subsequent reduction of programmes and courses has also had an impact on the curricula in WGS.

At the Faculty of Social Science and the Faculty of Arts, there are no more WGS modules at the master's level, only a wide list of optional courses from which students can choose, among others many courses on gender. The rationalisation behind this development is geared towards the topic of gender now being included in many other courses, resulting in less need to have special modules or so many special courses only on gender. An informant from the Faculty of Social Science also pointed out that there were tensions between two different approaches in sociology – macro and micro – with the macro approach seeming to be more powerful at a time when gender, which (according to the sociological mainstream) belongs to the micro perspective, also has a lower status and is less centrally positioned. On the other hand, a few new courses have been introduced that are closely connected to WGS – Lesbian and Gay Studies, Queer Studies, Sociology of Sexuality – which leads us to believe that there are not only backwards steps in these developments.

Conclusions and limitations

From the remarks of one informant, it is also possible to conclude that there is a lack of coordination, cooperation and support between lecturers in WGS themselves, and of support from other colleagues at the departments in which these studies are part of the curriculum. Almost all of the informants (the author of the present paper included) express their anxiety that they can expect further marginalisation of the field within academia, as well as in the wider public, as it is obvious that, in these neoliberal times when only hard science is valued, and in times of economic crisis when ordinary people think that we do not need soft knowledge such as that of the humanities, which cannot produce measurable results in terms of public spending, WGS can only expect a backlash in many directions.

Facing a backlash in women's rights in many fields of social life, lacking the support of strong political agents, strong anti-feminist sentiment, public misunderstanding of the feminist movements and feminist theory, wide

media coverage of the “new femininity”, an almost total absence of debate on transgender issues, “normalisation” of sexism in everyday life and in public debates, trans-European coalition of opponents to so-called “gender theory” with the leading proponent being the Catholic Church, to name only a few of the most visible trends, create the need for more carefully organised, financed and widely accessible WGS, and not for their shrinking or diminishing.

In closing, we would like to refer to the connection of WGS with women’s and feminist movements, with NGOs’ activities and academia, as we are firmly convinced that these studies were, are, and will be a political project; political in the most noble sense of the word. Without a wide coalition of support from all of the aforementioned agents (and with the support of so-called femocrats in parliamentary and governmental positions), this project can even be stopped or interrupted, as has emerged from our mapping, as our process of the institutionalisation of WGS is at least interrupted, if not endangered.

For effective policies in this respect, among other factors, ongoing analyses and critical questioning of achievements in this process are needed. The present paper is only a small contribution to this process. Its intention is to stimulate others in the field for further collective actions, support and critical contributions, as our mapping of WGS in the academic field in Slovenia has several limitations.

As this is one of the first attempts (if not *the* first) to cover this issue, the author has only gathered the information from the University of Ljubljana and not from the other three state universities (Maribor, Koper and Nova Gorica). Besides the limited time available for executing this task, the rationale behind this decision was that the University of Ljubljana is the oldest university in Slovenia and the one where these studies originate. For a more complete picture, however, this mapping would have to include all of the universities, and even other organisations where knowledge of WGS is produced and reproduced.

A further limitation is that (with one exception) we collected data for our mapping based on courses that contain in their names the words “women” or “men” (“femininity” and “masculinity”) or “gender”, and not based on all of the courses that include women’s and gender issues in their course programmes but do not indicate this in their names. Including such programmes would broaden the scope of the research, but it would also make the research more complex. It would be additionally problematic because our aim was to map the development of WGS and not all of the possible courses that in any way deal with women or gender.

We also limited our research to the introduction (and lecturing) of these courses, modules or programmes in WGS, and not other issues connected to

their development, such as: research, resources, financing, staff positions, habilitation processes, etc. These issues would definitely enrich the knowledge and improve the picture, but they would take more time and demand broader research in the preparation of this kind of mapping. We will therefore leave this for further endeavours.

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The Anti-Gender Movement in Europe and the Educational Process in Public Schools

ROMAN KUHAR^{*1} AND ALEŠ ZOBEC²

∞ Mass protests across Europe against marriage equality, reproductive rights, gender mainstreaming and sexual education have centralised in the past few years around so-called “gender theory”. This theory is explained as a new threat to the “traditional family” and “natural masculinity and femininity”, as it allegedly aims at cultural revolution: a post-binary gender world. Many of these debates (and concrete actions) are targeted at schools and the educational process. It is believed that “gender theory” is already being taught in schools, which will have detrimental consequences for pupils. Agents of the anti-gender movement claim that children are being sexualised and brainwashed by “gender theory”.

Taking this debate as the starting point, we first examine the roots of the term “gender theory” and point to its nature as an “empty signifier”. We then analyse the types of anti-gender actions across Europe that interfere with the educational process in public schools. Finally, we consider the role of parents and their right to intervene (or not) in the educational process. On the basis of the existing rulings of the European Court of Human Rights, we argue that the provision that parents are entitled to educate their children in accordance with their religious and moral beliefs does not mean that teachers in schools should avoid issues that might “morally distress” pupils or their parents, as long as schools avoid indoctrination, and providing the topics (like any other topics) are conveyed in an objective, critical and pluralistic manner.

Keywords: gender theory, gender ideology, public schools, educational process

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Gibanje proti “teoriji spola” v Evropi in izobraževalni proces v javnih šolah

ROMAN KUCHAR IN ALEŠ ZOBEC

~ Množični protesti po Evropi proti istospolnim porokam, reproduktivnim pravicam, politiki *gender mainstreaming* in spolni vzgoji so se v zadnjih letih osredičili okrog tako imenovane »teorije spola«. Razumejo jo kot novo grožnjo »tradicionalni družini« ter »naravni moškosti in ženskosti«, ker naj bi domnevno vodila v kulturno revolucijo – v postbitnarni spolni svet. Veliko teh razprav (in konkretnih akcij) je usmerjenih v šolski prostor in izobraževalni proces. Akterke_ji teh protestov trdijo, da se »teorija spola« že poučuje v šolah, kar naj bi imelo škodljive posledice za učenke_ce. Prav tako trdijo, da »teorija spola« otroke v šolah seksualizira in jim pere možgane.

Razpravo o »teoriji spola« v tem članku postavljamo v izhodišče naše razprave in najprej pokažemo na izvore tega termina, ki ga razumemo kot prazni označevalec. Nato analiziramo tipe intervencij akterk_jev tega gibanja v šolski prostor javnih šol v Evropi ter nazadnje razpravljamo o vlogi staršev in njihovi pravici, da posegajo (ali ne) v izobraževalni proces. Na osnovi obstoječih sodb Evropskega sodišča za človekove pravice trdimo, da pravica staršev, da svoje otroke vzgajajo skladno s svojimi verskimi in moralnimi prepričanji, ne pomeni, da naj se učiteljice_i v šolah izogibajo temam, ki bodo mogoče »moralno pretresle« učenke_ce ali njihove starše, dokler se šole pri obravnavi teh tem izogibajo indoktrinaciji in so te teme (ali katere koli druge) prikazane na objektivni, kritični in pluralni način.

Ključne besede: teorija spola, ideologija spola, javna šola, vzgojni proces

Introduction

In the recent years – particularly since the mass protests by *Manif pour tous* in France against marriage equality in 2013 – an increasing number of groups and initiatives have been organised in resistance to what previously appeared to be an irreversible process of achievement of gender equality and sexual rights in the Western world (but also elsewhere). Their targets include anything from marriage and gender equality, abortion, reproductive rights, sex education, gender mainstreaming and transgender rights, to antidiscrimination policies and even the notion of gender itself. The basic idea that connects all of these actors is the notion of “gender theory” or “gender ideology”,³ which functions as an empty signifier (Mayer & Sauer, 2017), as symbolic glue (Kováts & Pöim, 2015), or simply as a multi-purpose enemy, which can be shaped in different ways to fit into the concrete goal of a political protest.

This resistance across Europe should not be understood merely as a continuation of previous forms of (conservative) opposition to the human rights pertaining to intimate (Plummer, 2003) and sexual citizenship (Richardson, 2000) policy debates; they are new manifestations of resistance, shaped by new forms of organisation, new types of mobilisation and new discourses that seek to address wider audiences and not only traditional circles of conservative groups.

Despite the fact that the term “gender theory” has emerged only recently, its ideological background has been in the making since the mid 1990s, primarily in the context of the Roman Catholic Church. As shown by recent investigations into the roots of the anti-gender movement, the Vatican has been instrumental in manufacturing the notion itself and in spreading it around Europe and globally (Paternotte, 2015).

One of the most important targets of the anti-gender movement in Europe is public schools and the educational process. It is believed that “gender theory” has “leaked” into public schools and that pupils are being sexualised and brainwashed by radical feminist ideology and homosexual propaganda. For these reasons, groups of concerned parents are being organised across Europe to protest against the alleged infringement of their right to educate their children in accordance with their religious and philosophical convictions (Paternotte & Kuhar, 2017b).

Taking these developments as the starting point, the aim of the present article is threefold. First, we examine the emergence and interpretation of the term “gender theory” and why it has such a strong mobilising effect. We then

3 Both terms are used by anti-gender activists. In this article we use them interchangeably.

discuss the types of protests anti-gender movements across Europe use to protest against “gender theory” in the educational process in public schools. These two sections are based on a research project comparing these movements in twelve European countries, carried out between 2014 and 2017 (Kuhar & Paternotte, 2017). The research focused on a critical analysis of the movement’s discourse, mobilisation strategies and actors. Empirically, it was based on an analysis of the movements’ webpages, public statements and debates, leaflets, media articles, YouTube videos, etc. in each national context.⁴

Finally, we consider the role of parents and their right to intervene (or not) in the educational process when “difficult topics” such as gender equality or sexuality are discussed. In reality, these protests are not a totally new phenomenon: parents have complained about certain topics – particularly sex education – in the past, with some of the cases ending up at the European Court of Human Rights. What is new is the magnitude of the protests, such as the French or Italian appeals to “concerned parents” to keep their children out of school for a day in order to protest against “gender theory”. Such protests put immense pressure on school authorities and on teachers themselves.

Despite the aforementioned differences, we believe that the existing judgements of the European Court of Human Rights are still a valid interpretation of Article 2 of the Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms (1952), which compels the State to “respect the right of parents to ensure such education and teaching in conformity with their own religious and philosophical convictions”.

On the basis of an analysis of these rulings, we will argue that the provision that parents are entitled to educate their children in accordance with their religious and moral beliefs does not mean that teachers in schools should avoid issues that might “morally distress” pupils due to their particular value system. In this sense, public schools and especially teachers – while respecting the particularities of value systems – should strongly commit to the framework of shared values and norms that derive from human rights and should prevent mass populist attempts of anti-gender movements to intervene in the educational process.

4 We are indebted to the following researchers: Austria (Stefanie Mayer and Birgit Sauer), Belgium (Sarah Bracke, Wannes Dupont and David Paternotte), Croatia (Amir Hodžić and Aleksandar Štulhofer), France (Michael Stambolis-Ruhstorfer and Josselin Tricou), Germany (Paula-Irene Villa), Hungary (Eszter Kováts and Andrea Petó), Ireland (Mary McAuliffe and Sinead Kennedy), Italy (Sara Garbagnoli), Poland (Agnieszka Graff and Elżbieta Korolczuk), Russia (Kevin Moss), Spain (Monica Cornejo and J. Ignacio Pichardo).

The roots of “gender theory”

In January 2013, France saw one of the largest protests in recent history. According to some estimates, nearly one million people protested against the French government, which had opened up the institution of marriage for same-sex couples. Some of the protesters held banners saying “Stop gender” or “Stop gender ideology”. The notion of “gender ideology” was seen as a symbol of a moral crisis, represented by the fact that same-sex couples are treated equally to opposite-sex couples. However, “gender ideology” – which is in some countries worded as “gender theory” or, primarily in German-speaking countries, as “genderismus” (in an allusion to “kommunismus”) – represents much more than just resistance to marriage equality. As it is never clearly defined, its meaning is slippery. As such, it creates the impression of a conspiracy theory and functions as an “empty signifier” (Mayer & Sauer, 2017) that can represent everything and anything from marriage equality and sexual education to reproductive and adoption rights and abortion.

The emergence of the notion of “gender theory” and the related discourse can be traced back to developments after the 1994 UN *Conference on Population and Development* in Cairo and the *World Conference on Women* in Beijing in 1995. At that time, the term “gender” started to emerge in the official documents of these conferences, replacing the more essentialist term “sex”, in order to show that gender non-equality is not a result of biological differences, but rather primarily of socially constructed differences between genders (Buss, 2004).

During these conferences, however, the Holy See expressed explicit reservations about the term “gender” and insisted that the final documents of both conferences use the term “sex”. For the Holy See, gender, or the idea that male and female are socially constructed categories, goes against their ideas of the “natural family” in which both man and woman have their own distinct roles, as defined by their biological differences (primarily in terms of reproduction) (ibid., 2004). For these reasons, the Vatican tried to promote the idea of “equal dignity” of men and women, rather than equal rights regardless of gender (i.e., gender equality). Such an interpretation is built on John Paul II’s theology, which insists on sexual differences between men and women and on their complementarity. Similarly, Cardinal Ratzinger lamented the “trivialisation of sexual differences” as early as in 1985 (Paternotte, 2015).

In the aftermath of both conferences, the first discussions on gender as a hidden plan of radical feminists and LGBT activists emerged. Gender was interpreted not only as a social construction of the sexes, but also as a “strategic tool” to establish a post-gender society that would either dismiss the importance of

gender or would establish a gender order that goes beyond the binary gender system. These authors – such as American pro-life journalist Dale O’Leary (1997), French priest and psychoanalyst Tony Anatrella (2015) and later German sociologist Gabriele Kuby (2016) – all claimed that gender aims to destroy masculinity and femininity, to go beyond the “natural complementarity of men and women” and consequently to destroy the “natural family”. These interpretations are still at the core of what was later termed “gender theory”, which is now understood to be the ideological paradigm of more or less any gender equality and sexual citizenship policies (Paternotte, 2015).

“Gender theory” started to catch on as a new buzzword and received mainstream attention around 2012 and 2013, particularly during the French protests of *Manif pour tous*. Similar resistance had, however, occurred before, such as the protests against marriage equality in Spain in 2005, followed by the so-called Family Day in Italy in 2007, which was organised to protest against the Italian government’s intention to adopt civil partnership legislation (DiCo) for same-sex couples. Later, the “family day” became one of the protesting structures of anti-gender movements around Europe. Slovenia saw such protests against the new Family Code, including a Family Day, in 2010. In Croatia, protests against the sex education module took place around the same time. In Poland, the “gender ideology” debate emerged around deliberations on gender violence and the ratification of the Istanbul Convention, while in Slovakia gender was one of the key words during their referendum campaign in 2015 on the definition of the family and the rights of same-sex couples (Paternotte & Kuhar, 2017a).

During all of these protests, “gender theory” became denounced as the main ideological base of all of these progressive policies. In other words, “gender theory”, alluding to the idea that there is a coherent body of scientific work known as “gender theory” (which is not the case), became a synonym for some kind of conspiracy theory, aiming at a cultural revolution in which biological facts about men and women will be denied and fluidity of gender will be promoted. “Gender theory” is therefore constructed as a project of social engineering where men are no longer masculine and women are no longer feminine and one is free to choose one’s own gender and sexual orientation, even “several times a day” (Cestnik 2013; Debevec 2015; Hodžič & Bijelić, 2014).

Some Catholic intellectuals, such as Tony Anatrella (2015), claim that “gender ideology” is a new leftist ideology, which has succeeded Marxist ideology. The battle no longer exists “in the relation between the bourgeoisie and the capital against the working class, but rather in the relation between men and women” (Strehovec, 2013, p. 238). Primarily in the context of Eastern Europe, “gender ideology” is often explained as a neo-colonial project in which

the decadent West seeks to impose its gender delusion upon the rest of the world (Graff & Korolczuk, 2017b). This is one of the populist strategies of the anti-gender movement to revive the unpleasant memories of former totalitarian regimes. Polish Bishop Pieronek, for example, claimed “Gender ideology is worse than communism and Nazism put together” (Graff & Korolczuk, 2017a).

The term “gender theory” increasingly became a matter of fact: it was picked up by the mainstream media, politicians refer to it in their political speeches – either to denounce it or to frame their arguments in line with “gender theory” argumentation – and eventually it also became a household word among the general population. As it is simplistically explained as a theory that goes against the common-sense understanding of sex as a biological category, it counts on people’s deeply rooted anxieties about (homo)sexuality and gender roles, thus creating the desired populist effect: aversion, but also anger and moral panic.

The most fascinating aspect of this phenomenon is that the “boring scientific-sounding term” of “gender theory” has been able to become such a strong and effective mobilising tool. This can be partly explained by the fact that “gender theory” is said to be a product of the ruling elites. Just like “gender theory”, elites function as an empty signifier, representing either politicians, feminists, LGBT activists or just anyone who struggles for gender equality. These groups are seen as corrupt elites, who are producing such ideas in the ivory towers of universities and (trans)national political structures, and are entirely detached from ordinary people.

The fact that most of the aforementioned protests took place during the economic crisis, in the face of strict austerity measures and the rise of populism in Europe, helped strengthen the perception of a gap between elites and ordinary people. The movement is successful because it appeals – much like the populist parties and groups around Europe (Lazaridis et al., 2016) – to the anxieties of people about the future of their family, and particularly their children. The “innocent child” is at the centre of the anti-gender discourse, which is based on what Wodak (2015) calls the “politics of fear”.

With its focus on corrupt elites, the anti-gender movement has provided people with the promise of a better future. The future, however, is in the past: our societies, they claim, should return to the natural order of things, whereby men are men and women are women and both are equally respected, but are not equal.

The anti-gender movement includes actors who go beyond religious affiliations. In fact – as stressed by Kováts and Põim (2015) – the movement is a symbolic glue that makes cooperation between different actors possible, despite

the differences in their basic ideological framework. At the core of “gender ideology” as a glue that links and unites as diverse actors as family associations, pro-life groups, some religious gay actors and radical nationalist parties, is the image of the “innocent child”, and consequently family and nation. Furthermore, the joint actions of these actors are inspired by the same target: corrupt elites whose (gender) ideology is constructed as a new totalitarian ideology that aims to destroy masculinity and femininity, to go beyond the natural complementarity of men and women, thus weakening the basis of the “natural family” and, by consequence, the nation itself (Hodžič & Bijelić, 2014; Paternotte & Kuhar, 2017b).

Groups and actors who are united in their struggle against “gender ideology” find gender to be a common, unifying ground, as gender is constructed as an attack on either nature (religious actors), nation (nationalistic actors) or normality (conservative actors). Despite some convergences between the actors, these are the main distinct entrance points for anti-gender groups. In other words, “gender ideology” is a common framework that squeezes different discourse into one big threat to which different actors can connect (Paternotte & Kuhar, 2017b).

The anti-gender movement presents itself as modern, young and hip. In most cases, the movement tries to hide its religious connections and create a secularising self-image that cannot be reduced to previous forms of conservative resistance against gender equality and sexual rights. They also increasingly create international coalitions, such as in the case of the European citizens’ initiative to protect marriage and the family: Mum, Dad & Kids.⁵

The anti-gender movement and public schools

One of the important targets of the anti-gender movement is knowledge production. This is a struggle over the legitimacy of academic work, particularly of gender and related studies. In Poland (Graff & Korolczuk, 2017a) and France (Stambolis-Ruhstorfer & Tricou, 2017), but also elsewhere, gender departments and gender studies courses at universities have been attacked and denounced as nests of “gender ideology” and non-scientific work. Gender studies are criticised as being non-academic, ideological and in conflict with the allegedly unquestionable findings of biology, such as differences between male and female brains. The anti-gender movement therefore has ambitions to become an alternative field of knowledge production.

Similarly, one of the targets of the anti-gender movement in Europe is public schools, which are said to already include “gender theory” in their

5 Initiative Mum, Dad and Kids, see: <http://www.mumdadandkids.eu/>.

curricula. Different types of actions have been organised to resist teaching on gender equality in schools. Civil initiatives of so-called “concerned parents” have tried to put pressure on school authorities and teachers to not address certain topics, such as same-sex families, the social construction of gender roles, sex education, homosexuality and similar. In France, for example, they organised an online petition against an animated film for primary schools entitled *Baiser de la lune*, which showed two male fish in love (Stambolis-Ruhstorfer & Tricou, 2017), while in Italy they succeeded in withdrawing books that address family diversity from some public primary schools (Garbagnoli, 2017).

In some countries, such as Poland and Croatia, where religious education is an important part of the public school system and the Catholic Church has been an important actor within it, the anti-gender backlash can also be understood as a reaction to the interpretation that Church values and teaching about the complementarity of the sexes and the “natural family” are being questioned, and the role of the Church is being diminished (cf. Grabowska 2014).

Research into anti-gender campaigns in Europe (Kuhar & Paternotte, 2017) has found three types of resistance against public schools, attempting either to put pressure on school authorities and ministries of education to prohibit certain topics from being discussed in schools, or to concretely intervene in the educational process itself. These types of resistances include: (1) general protests against sexual education, (2) denouncement of certain textbooks as promoting “gender ideology”, and (3) organised mass protests to keep children home from school.

The opposition to sex education in school is not new. Opponents claim that such education sexualises children at an early age and normalises homosexuality, particularly in cases where sexuality is not presented only in a negative way (i.e., prevention of sexually transmitted diseases), but also in a positive way (i.e., enjoyment of sexuality). Furthermore, their efforts are based on the idea that children should be prevented from access to any kind of information on sexuality. It is believed that talking about sexuality would be detrimental to them, as children are understood as being without sexuality. Robinson (2008) points out that such “protection” makes children even more vulnerable, as they are prevented from access to relevant information about sexuality that would help them to become competent adults.

One of the most visible examples of this is Croatia, where the Croatian anti-gender movement came into being precisely around the debates on health education (which includes a module on sex education), which started as early as in 2006. Besides the clash of the approaches to sex education – abstinence-based programmes vs. holistic protection-based programmes – some claim

that sex education negatively affects pupils' sexuality and increases teenage pregnancies (Bijelić 2008; Kuhar 2015). The most contentious issues in these debates, however, seem to be gender equality and positive representations of homosexuality (Hodžič & Štulhofer, 2017).

Similar protests, organised by the anti-gender movement, can be seen in other European countries, too. In 2015 in Austria, the *Initiative wertvolle Sexualerziehung* (Initiative for Valuable Sexual Education), in close cooperation with political parties and pro-life activists, organised a petition protesting against sex education and gender-sensitive language in Austrian schools (Mayer & Sauer, 2017). Demonstrations against sex education in school were also organised in Germany, where some groups promote homeschooling in order to avoid "gender theory" and to "weaken public (state driven) interference in what they consider 'private' matters" (Villa, 2007). Similarly, in Poland, sex education is presented as an unwanted intervention in the individual's privacy and often compared to the previous political regime, which tried to gain full control over people's private lives. A huge rally labelled "Stop Depravation in Education" was organised in 2015 to prevent changes in the existing sex education curricula (Graff & Korolczuk, 2017a).

The second type of protests are organised around the creation of episodes of moral panic, in which certain textbooks that address gender equality or promote analysis through gender lenses are scrutinised and accused of indoctrinating children in schools from an early age, usually without the knowledge of parents. Such interventions are usually publicly declared by certain MPs who are close to the anti-gender movement, in order to put pressure on ministries of education to prohibit these books in school.

Anti-gender groups also call on "concerned parents" to investigate textbooks and school curricula and identify where "gender ideology" has leaked into "our schools". They are asked to report such examples to anti-gender groups, who then react by putting pressure on schools or a particular teacher to degender their teachings. In Italy, special "anti-gender phone lines" were introduced by public authorities to enable parents to report instances of "gender ideology" found in education programmes (Garbagnoli, 2017).

One example of the "anti-gender examination of textbooks" is a Hungarian history textbook that presents history through the lens of gender. A Fidesz MP denounced the textbook as promoting "gender ideology" during a parliamentary debate (Kováts & Pető, 2017).

The French parliament saw identical concerns in 2011, when a conservative MP warned against the intention of the French Ministry of Education to include the difference between sex and gender in high school biological

textbooks. This was seen as a penetration of foreign (i.e., American) theory into French textbooks, and as such was regarded as damaging for pupils (Stambolis-Ruhstorfer & Tricou, 2017).

In Slovenia, the booklet *Ljubezen je ljubezen* (Love is Love), which was used by Amnesty International during their extracurricular workshops in schools on human rights on the basis of “gender identity” and sexual orientation, was discussed in parliament as evidence that “gender theory” is being spread among “our children in schools” without parents’ consent, and even without parents being informed. Pressure was put on the Minister of Education to prevent the use of the booklet, which is, according to the anti-gender movement, “aimed at the re-education of children in accordance with ‘gender theory’, which does not recognise the existence of natural female and male sexes” (24kul, 2016).

Similarly, in Poland, some anti-gender activists organised themselves around a protest against a handbook called *Równościowe przedszkole* (Equality Kindergarten), which is based on feminist ideas of gender equality. The handbook is interpreted as promoting masturbation, while sex educators are rumoured to force boys to wear dresses (Graff & Korolczuk, 2017). Much like in Slovenia, the handbook is seen as evidence of a plan to destroy innocent children, who are to be confused about gender roles at an early age (Korolczuk, 2014).

Finally, in addition to (online) petitions and public protests against addressing diversity and gender equality in schools and textbooks, anti-gender activists have also organised concrete actions that have interfered with the educational process itself. In 2014, the French anti-gender movement organised the action *Journée de Retrait de l'École* (Keep Your Child Home from School Day) in order to protest against the Ministry of Education and its intention to introduce an experimental curriculum on gender equality in schools. They used social media to call on parents – particularly in working class families of colour – not to allow their children to go to school. This created a kind of moral panic and some pupils stayed at home for several days (Stambolis-Ruhstorfer & Tricou, 2017).

Inspired by the French protests, the Italian anti-gender movement organised a similar action in 2014. Using *WhatsApp* and other social media, the Italian Association of Catholic School Parents called on parents to withdraw their children from public schools once a month in order to protest against colonisation by “gender ideology” in Italian schools (Garbagnoli, 2017).

The rights of parents and the educational process

The increasing anti-gender resistance targeting of public schools exceeds previous occasional protests by some parents who wanted their particular value system to be installed in public school curricula. The magnitude of the resistance, and particularly the convergence of resisting anti-gender strategies across Europe, inevitably gives rise to the question of how to reconcile the specific and particular value system of some parents (and their children) and the educational process in public schools.

We assume that this question can be answered by an evaluation of the existing court rulings of the European Court on Human Rights, which has previously dealt with similar examples of parents who have tried to prevent – or have even successfully prevented – their children from attending school due to their particular value system, despite the fact that the anti-gender movement is generally aiming at the exclusion of some topics for all pupils, not just for their own.

Our starting point is the *Resolution on the European dimension of education: teaming and curriculum content* (1991), which stipulates that human rights, plural democracy, tolerance, solidarity and rule of law are the most basic values enabling human coexistence. This means that this framework, particularly the human rights framework, should be the most general and basic framework of the public education system in Europe, or generally in a postmodern society, which is characterised by the co-existence of different value and belief systems, but which must welcome all pupils in public schools equally.

As demonstrated by Lefort (2001), human rights do not determine and define the concrete form of an “ideal life”; on the contrary, they represent one of the conditions for coexistence in postmodern diversity. The answer to the question, what is “the ideal life” is therefore left to be determined by each individual him/herself.

The adoption of human rights is a prerequisite for the coexistence of particularities in our value systems, whereby it should be noted that the predominant value system is still a particular one. For example, even if, in a given society, there is a perception of the “ideal life” that is accepted by the majority, this idea cannot be understood as applying to all, despite the fact that it is supported by the majority. In short, it is necessary to distinguish between the concept of particular, which includes some majority beliefs and values, and the concept of common, which we all share and is defined as such by international treaties, resolutions and legislation, such as those pertaining to human rights.

This is precisely the key distinction established by the idea of human rights. Once we adopt it as a common basis, it creates a legitimate distinction

between what is understood as common and what is particular. Such a distinction is also a helpful tool enabling teachers and school authorities to make decisions in the context of conflicts rooted in values and morals, such as that initiated by the anti-gender movement. Since one of the basic human rights is the principle of non-discrimination, irrespective of any personal circumstances, human rights demand tolerance and respect for diversity. This means that teachers are required to provide information and knowledge that is based on scientific findings, while at the same time striving for the implementation of the principle of non-discrimination and respect for diversity, even if this results in some pupils being “morally distressed” by new information or knowledge (Kovač Šebart & Krek, 2009).

In the past, some parents appealed to the European Court of Human Rights, claiming that their right to education, as defined by Article 2 of the Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms (1952), had been infringed: “No person shall be denied the right to education. In the exercise of any functions which it assumes in relation to education and to teaching, the State shall respect the right of parents to ensure such education and teaching in conformity with their own religious and philosophical convictions.”

But what exactly does this provision mean for public schools in Europe? Does it mean that the State is required to provide education that is in line with parents’ religious and philosophical convictions?

The most important ruling in this context is the case of *Kjeldsen, Busk Madsen and Pedersen v. Denmark* from 1976. In 1970, Denmark introduced compulsory sex education in order to “reduce the increased prevalence of unwanted pregnancies and promote respect for others”. Some parents, including the complainants, believed that compulsory sex education was not in accordance with their Christian beliefs. “They considered that sex education raised moral questions and so preferred to instruct their children in this sphere. They petitioned on multiple occasions to get their children exempted from sex education. However these requests were not met, resulting in some of the applicants withdrawing their children from their respective State schools” (Right to Education Project, 2013).

In a more recent case – *Willi, Anna and David Dojan v. Germany and four other applications* – the applicants (members of the Christian Evangelical Baptist Church) requested that their children should be exempted from sex education, which is part of the curricula of primary school. The applicants stated that their children “had been used to modest and chaste sexual behaviour at home and did thus not have the necessary maturity to receive the envisaged sex

education”, which would lead to the “premature sexualisation” of the children (ECHR, 2011). A couple of years later, the applicants prevented some of their children from attending a school theatre workshop entitled “My Body is Mine”, which was organised for the purpose of preventing sexual abuse. Parents stated “that it was incompatible with their religious convictions to make a child’s own feelings and will the basis of his or her sexual behaviour, as this would encourage them to act according to their sexual desire like an adult, lose their sense of shame and engage in sexual acts with adults. The biblical doctrine of chastity, limiting sexuality to matrimony, constituted sufficient protection against sexual abuse” (ibid.).

In both cases described above, the European Court of Human Rights came to the same conclusion. The Court ruled that compulsory sex education in public schools as such does not violate parental freedom to educate their children according to their religious and philosophical convictions. In the latter case, it reiterated that Article 2 of the Protocol “aims at safeguarding the possibility of pluralism in education, a possibility which is essential for the preservation of the ‘democratic society’ as conceived by the Convention” (ibid.). Article 2 as a whole does not prevent States from disseminating objective information “for otherwise all institutionalised teaching would run the risk of proving impracticable” because “it seems very difficult for many subjects taught at school not to have [...] some philosophical complexion or implications” (ibid.). However, the knowledge must be conveyed in an “objective, critical and pluralistic manner”, without pursuing the aim of indoctrination. The Court also stated that the applicants “were free to educate their children after school and at weekends and thus their right to educate their children in conformity with their religious convictions was not restricted in a disproportionate manner” (ibid.).

Both rulings stipulate that parents do not have the right to prevent those issues that might be in conflict with their personal beliefs from being discussed in schools: “The Convention does not guarantee the right not to be confronted with opinions that are opposed to one’s own convictions” (ibid.). Identical court decisions were ruled in many other similar cases, as well (Appel-Irrgang and others v. Germany, 2009; Folgero and others v. Germany, 2007; Hasan and Eylem Zengin v. Turkey, 2007).

Another decision of the European Court of Human Rights from 1982 (X. and Y. v. the UK) is also important in this context. In this case, the complainants claimed that the State should financially support a private school (Waldorf school) that they had chosen due to their personal philosophical convictions. The court decision stipulates that the State is not obliged to either found or finance private schools that serve particular religious or philosophical beliefs.

Public schools must, however, respect the particular beliefs of parents. According to the interpretation of the European Court, the latter means that public schools may not indoctrinate children contrary to the beliefs of their parents; at the same time, the educational process must comply with the principles of criticism, objectivity and pluralism. Following this judgment, particular religious or philosophical beliefs must be respected in public schools, but that certainly does not mean that the educational concept of public schools should follow the particular belief systems of (some) parents (Cf. Kodelja 1995; Kovač Šebart 2015; Kovač Šebart & Kuhar, 2017).

Conclusion

According to the rulings of the European Court of Human Rights, the “moral distress” experienced by some pupils when faced with topics such as gender equality or homosexuality does not mean that the teaching of such topics in public schools is in violation of Article 2 of the Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms, nor does it mean that public schools should avoid dealing with issues that have a philosophical or religious foundation. Pupils can be confronted with facts and opinions that differ from their beliefs (and as a rule this inevitably happens) and teachers should not avoid such topics; they should, however, respect the diversity of beliefs in school.

There is another reason why “morally controversial” topics should not be avoided. If the fundamental educational goals of public schools are apparent from the European Convention on Human Rights (1994), which establishes pluralistic democratic society and respect for diversity as an ideal, avoidance of “morally controversial” topics may be in direct conflict with this objective. If teachers avoid these topics, pluralism is turned into nothing more than “monism”. The “moral shock” that may follow confrontation with facts that oppose one’s own particular beliefs is precisely the ground on which it is possible to pursue the objective of tolerance for diversity and life in a pluralistic democratic society. In other words, “moral distress” leads to an awareness of one’s own particularity in relation to another particularity.

Following the European Court of Justice’s rulings, the aim of public education should not be indoctrination, but rather the acquisition of scientific knowledge that can ultimately also lead to a change in beliefs.

The rulings presented in the present article provide clear instructions regarding the role of public schools and teachers in the context of particular religious and philosophical convictions. As the public educational process must

be based on the framework of human rights and respect for diversity, the anti-gender movement should prove that gender equality is an infringement of the idea of equal human rights. Furthermore, it should prove that understanding gender as socially constructed is a false and non-scientific approach to social roles and identities based in gender, as public schools are obliged to base their educational process on scientific findings. It comes as no surprise, therefore, that in many ways – as we have shown in the present article – the anti-gender movement is a struggle over the legitimacy of academic work and – in the populist world of “alternative facts” – an attempt to create “alternative science”.

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Gender in the Teaching Profession: University Students' Views of Teaching as a Career¹

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METKA MENCIN ČEPLAK⁴

∞ The purpose of our research is to gain a better insight into what encourages young adults, in particular young women, to enter the teaching profession. The empirical part of the article is based on a pilot study including 132 students, with data collection being based on a survey approach using a questionnaire. The research attempts to address the context from which the desired characteristics of pre-service teachers with regard to their future employment arise. We have therefore tried to single out factors influencing the choice of teaching as a career, and to examine pre-service teachers' attitudes towards the reputation of female and male teachers. The data obtained confirm the thesis that the predominance of women in the teaching profession(s) is an effect of the harmonisation of the female respondents' habitus and their perception of the field they are entering. The perception of the teaching profession as a vocation (calling) that can be linked to the concepts of caring, giving and helping also proves to be very important. The data also confirms the thesis that the orientation towards life and work balance is important to our respondents of both genders.

Keywords: gender, habitus, field, teaching as a career, vocation

1 In our paper we address the so-called feminisation of the teaching profession, which presupposes a binary gender classification. We therefore use the wording "both genders", although we are aware of the plurality of genders that reaches beyond the socially dominant gender binarism.

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Spol in učiteljstvo: pogledi univerzitetnih študentk_ov na učiteljski poklic⁵

VERONIKA TAŠNER, MOJCA ŽVEGLIČ MIHELIČ IN METKA MENCIN ČEPLAK

☞ Namen naše raziskave je zagotoviti boljši vpogled v razloge, zaradi katerih se mladi odrasli, predvsem mlade ženske, odločajo za učiteljski poklic. Empirični del članka temelji na pilotni študiji, ki vključuje 132 študentk_ov pedagoške fakultete, podatki pa so zbrani s pomočjo vprašalnika. Z raziskavo smo poskušale analizirati, katere značilnosti bodočega poklica so za anketirane najbolj zaželeni. S pomočjo tega smo poskušale identificirati dejavnike izbire učiteljskega poklica, posebej pa smo ugotavljale, kako repondentke_i percipirajo ugled učiteljic_ev. Rezultati so potrdili hipotezo, da je številčna prevlada žensk v učiteljskih poklicih učinek harmonizacije percepcije polja, v katerega stopajo respondentke (tj. učiteljskega poklica) s svojim habitusom. Pri tem se je kot posebej pomembna izkazala percepcija učiteljskega poklica kot poklicanosti, ki jo je mogoče povezati s koncepti skrbi, dajanja in pomoči. Rezultati potrjujejo tudi tezo, da je možnost usklajevanja zasebnega življenja in poklicnega dela pomembna za vse repondentke_e ne glede na spol.

Ključne besede: spol, habitus, polje, poučevanje kot poklic

5 Tema našega prispevka se nanaša na t.i. feminizacijo učiteljskega poklica, ki predpostavlja binarno spolno delitev, zato uporabljamo konvencionalni termin "oba spola", a se zavedamo pluralnosti oziroma mnogoterosti spolov, ki presegajo družbeno prevladujoč spolni binarizem.

Introduction

In the literature on gender and education, the theme of the teaching profession as a highly gendered profession has a significant place. One of the topical subjects in current debates remains the question of why the decision to enter teaching as a career remains so gendered, just as it does in certain others professions (Asimaki & Vergidis, 2013; Bourdieu, 2001; Drudy, 2008; Richardson & Watt, 2006; Riddell & Tett, 2006). International data for EU countries show that in most European countries women continue to (numerically) dominate primary teaching. In lower secondary education (ISCED level 2) in the EU as a whole, the great majority of teachers are still women, with less than one third being men. “In individual countries, the proportional gender imbalance is highest in Bulgaria, Estonia, Latvia, and Lithuania, in which less than 20% of teachers are men. Only in the Netherlands are the proportions of women and men teachers roughly the same, while in Spain and Luxembourg the percentage point difference between them is 15.5 and 13.6, respectively” (European Commission/EACEA/Eurydice, 2015, p. 19).

In Slovenia, the highest proportional gender imbalance is generally in primary schools and primary schools with an adapted programme: at the end of the 2014/15 school year, 16,014 teachers took part in the pedagogical process, 88% of whom were women. In secondary schools, the ratio between men and women is more balanced: 6,088 teachers were employed in the 2013/14 school year, 66% of whom were women. Men still prevail among tertiary (higher) education teachers, while the ratio between men and women is equal among teachers at short-cycle college. In the 2015/16 academic year, the percentage of men (59.7%) among higher education teachers was higher than women (40.3%). The percentage of women teachers in higher education is, however, slowly increasing (in the 2007/08 academic year, only 33.8 % of higher education teachers were female). In higher vocational colleges, the ratio between men and women is almost equal (48% women and 52% men) (SORS, 2017).

Analyses of the historical conditions for the entry of women to the teaching profession in Europe, USA and Canada present several factors explaining why the teaching profession, which was, until the second half of the nineteenth century, reserved for men (with rare exceptions in convents), opened up for women:

- numerous new professions developed with the onset of industrialisation;
- the extension of obligatory primary education demanded a greater number of teachers;
- women, especially unmarried women, were a cheaper labour force than

men, which was one of the reasons for the enactment of celibacy in many countries (e.g., Acker, 1995), including Slovenia (Milharčič Hladnik, 1995; Mrgole Jukić, 1998);

- after “human nature” became an object of scientific enquiry in the nineteenth century, the female intellect was “discovered”, which at least conditionally allowed women to “compete” with men (Walkerdine, 1989; 1990).

In Slovenia, as in many countries, the teaching profession was one of the first to become accessible to women, who were allowed to enter the labour market. In 1869, the Habsburg Monarchy passed the Primary Education Act, which prolonged obligatory primary schooling to eight years and declared the formal equality of female and male teachers paid by the state. Some years after this Act came into force, the first female college of education was established (1871), which was at the same time the first public education institution that allowed women a higher education (Milharčič Hladnik, 1995). Only a few decades later, women already prevailed among primary teachers. However, despite their statutorily defined equality, the status of women was essentially different to that of men: they were not only paid less, but were also more highly supervised than men (until 1918, they were obliged by law to practise celibacy) (ibid.). Despite this (or better: partly because of this), female teachers were the bearers of important social changes in the field of political and other rights of women and girls, not only in the teaching profession. Female teachers were the most educated women and were aware of the position of women in society. It therefore comes as no surprise that they were the first to strive for the right of female teachers to vote. After the demand of the Catholic journal *Slovenian Teacher* in 1901, the Society of Slovenian Female Teachers followed suit later the same year. The demand for the right of female teachers to vote later grew into the demand for voting rights to for all women (Antić Gaber, Rožman & Selišnik, 2009). As Milharčič Hladnik (1995) stresses, although female teachers in the nineteenth century were respected, they were also subject to suspicion and resistance, as education was presented as a threat to the fulfilment of the natural roles of women, and to the earnings of men: at that time, women were still employed mainly because their work was cheaper.

Today, women still prevail in teaching professions, which could be attributed to a number of demographic, economic, political and cultural factors: the need for teachers due to demographical factors, the accessibility of education, meritocracy, the general employment possibilities, the possibility of reconciling professional and family work, the regulation of maternity leave and leave for childcare, etc. (Acker, 1995). In Slovenia, another factor is that teaching represents relative secure employment due to the vast network of public nursery

schools and schools, and to the relatively small gap between the needs of employers and the number of adequately educated candidates.

Theoretical Framework

The purpose of the present study is to gain a better insight into the reasons for young adults deciding to enter the teaching profession. The empirical part of the article is based on a pilot study that included 132 students. The study tried to answer questions regarding who decides to become a teacher and why. It is assumed that the answers to these questions enable further reflection on the social reproduction of the gendering of the teaching profession. At this point, we are particularly intrigued by the fact that women, despite the wider spectrum of available choice, choose gender-marked professions. Statistical data suggest that young women are more successful in finishing secondary and tertiary education, while also confirming the hypothesis on the breakthrough of women into prestigious scientific disciplines such as medicine and law. At the same time, a thorough survey of the data confirms the old hypothesis of the gender-specific educational paths of men and women. The majority of women still decide for “typically female” fields of study, such as education, the humanities, social sciences, social welfare and healthcare, while men remain prevalent in “traditionally male” programmes, such as computer science, mathematics, natural sciences, technical sciences, construction, and production and processing technology (Tašner & Rožman, 2015). On these grounds, we follow the hypothesis that choices of study programmes, which exist within the framework of conventional images of femininity and masculinity, result from habitus and practices (Bourdieu, 2001) that still control the processes of their identification and subjectivation. We must stress that the fact that women still prevail numerically in the teaching profession is not a social problem. It would, however, be a social problem if it demonstrated that their choice is gender determined or the result of “a voluntary subjection” (Beauvois, 2000) to the social expectations and possibilities of the labour market. Feminist analyses explain the predominance of women in most of the lower stages of education and teaching with the interpretation that these professions, to some extent, represent an extension of the work women traditionally perform at home. The younger the children are, the more working with them is associated with caring and the less with teaching (e.g., Skelton, 2009), while caring professions are still regarded as female-adequate professions (e.g., Acker, 1995; Walkerdine, 1994). In her extensive inquiry of discourses and studies on the “conflation of teaching and mothering”, Acker reminds readers of the discussion that, as early as in the nineteenth century in the USA, promoted the

realisation of “natural mothering” in the classroom (Dehli, 1994 and Steedman, 1984 in Acker, 1995, p. 121). The conviction about the conflation of teaching and mothering does not only control everyday, patriarchal common sense discourses, but also (feminist) scientific discussions, especially discussions on the ethics of care, which essentially focus on care for dependent and vulnerable human beings and support of social relations in a way that ensures the wellbeing of caregivers and care-receivers. The ethics of care had already been discussed by Mary Wollstonecraft, and in the works of Carol Gilligan and Nel Noddings at the beginning of the 1980s it became one of the widespread “truths about women”, as it was above all believed to be characteristic of them (Acker, 1995). Some female authors ascribe this to female “nature”, while others present it as a survival strategy, and thus as a response to the subordination of women (Hare-Mustin and Marecek, 1990 in Acker, 1995, p. 120). Caring as a “fundamental female characteristic” also finds expression in teaching, which, especially in the earliest period, protects the child, his or her needs and demands, and contributes to his or her wellbeing. The (female) teacher’s task is to respect the child’s or pupil’s freedom, creativity and spontaneity (e.g., Noddings, 1992; 1996). These principles and practices are close to those of the (still) current child-centred pedagogy that treats the child/pupil as a self-regulating and rational individual and promotes democracy and freedom. All of this demands from the teacher a tutoring, stimulating and directing role, and presupposes his or her understanding of and loving reaction to the child’s/pupil’s needs. As Walkerdine (1990) warns, child-centred pedagogy primarily addresses women, as it presupposes an active, free, autonomous, omnipotent and essentially male child, and a passive female teacher. This “motherhood imagery” (Acker, 1995) thus addresses mainly women and structures their representations of professions and teachings appropriate for them. Acker summarises the results of research on “motherhood imagery” in teaching practices, which indicate that it is mainly female teachers, obliged to “their” community (older teachers, teachers from marginalised groups) who are bound to this imaginary. The warning that this imaginary is “embedded in the nature of elementary school teaching” is therefore highly pertinent: the imagery is embodied by the one-teacher-to-one-classroom system that is typical for the first years of schooling, as it stimulates “motherlike intense attachments and dedication elementary teachers show for their classes” (Kidder, 1989 and McPherson, 1972 in Acker, 1995, p. 121).

To conclude with Acker (1995, pp. 123–124):

Teachers’ caring activities, then, have from one perspective been seen as derived from their teacher identities and the nature of their work; from another, as a valued part of “women’s ways”; from a third, as a means to improve children’s futures; and, from a fourth, as a consequence of the social

expectations that women's caring work should blur the distinction between labour and love. The place of caring in teachers' work remains deeply contradictory, simultaneously the moral high ground of the teaching task and a prime site of women's oppression.

It is possible to link Acker's thematisations with Bourdieu's categorical apparatus, which enables us to consider the relations of the social world, as it surpasses the divide objective/subjective, individual/society, structure/action. According to Bourdieu, it is relationism and not substantialism that enables us to think and understand social phenomena. In the present paper, we search for the reasons why it is mainly young women who still decide to enter professions in the field of education *en masse*, despite many other options being open to them. We also search for reasons for the choice of this profession among men. In answering these questions, we will refer to Bourdieu's concepts of field, (gender) habitus and practices.

The concept of habitus is one of the key concepts in Bourdieu's reflexive approach to social life. Habitus represents "systems of durable, transposable dispositions, structured structures predisposed to function as structuring structures (...) principles which generate and organize practices and representations" (Bourdieu, 1990, p. 53). We could say that habitus functions as the agent's second nature: it enables the individual to be, to feel, to think, to (re)act in the social world, etc. On the one hand, habitus is influenced by the social realm, but it also structures the world of each individual. In other words, Bourdieu treats social life as "a mutually constituting interaction of structures, dispositions, and actions whereby social structures and embodied (therefore situated) knowledge of those structures produce enduring orientations to action which, in turn, are constitutive of social structures" (Postone, Calhun & LiPuma, 1993, p. 4).

With the notion of gender habitus, Bourdieu (2001) explains differences between men and women. These differences are made through female and male bodies, which are socially constructed; the differences are then naturalised, which is where masculine domination draws its legitimation from (ibid.). For Bourdieu, gender is a social construct and gender habitus is far from only a biological category; it represents an entity that is "complex, historical and fundamentally cultural in form" (Dillabough, 2004, p. 496). According to Bourdieu, the social reality is constructed by a division of things and activities in line with binary classifications, of which sex division (male and female) is one of the crucial ones. These arbitrary divisions are then naturalised and understood as "normal, natural, inevitable" (Bourdieu 2001, p. 8). In this way, we can talk about female habitus, which takes a personal form and shapes each individual from her (his) earliest beginnings.

Gender habitus thus ranks among the “fundamental elements of the individual’s identity” (Krais, 2006, p. 121). It significantly defines the individual self; it is seen as “pure nature”. If we try to explain sexual identity with Bourdieu’s concepts, we can say that it represents far more than incorporated representations of the outside world in the agent. The process goes on at the pre-reflexive level: it presents incorporation as practical adaptation. Sexual identity is not a mechanical and deterministic structure; it is an open system of dispositions, of regulated freedoms, which are “durable but not eternal” (Bourdieu & Wacquant, 1996, p. 133).

Discussing gender issues, the concept of field, by which social agents are defined in “terms of the positions and interests that arise from the different distribution of specific resources in each field and in the global social field” (Costa, 2006, p. 876), is also significant. Field as a system of positions and relationships between positions is as crucial for the social agent as habitus. In the practice of the social agent, they are not separated. The relationship between field and habitus is the relationship between “social structures and mental structures” (Bourdieu & Wacquant, 1996, p. 140). The social cosmos is sub-structured by fields or micro-cosms (political, economic, educational, religious, etc.) and may be defined as “a network, or configuration, of objective relations between positions” (Bourdieu & Wacquant, 1996, p. 97). Each field is characterised by its determinate agents (politicians, students, journalists, scientists, teachers, etc.), accumulation of history, logic of action, and forms of capital. Fields are not completely autonomous; they are only relatively delineated and they position themselves in relation to each other. Just as it takes place between fields, struggle and positioning also occurs within the specific field on the part of the agents. The position of an agent in a field is defined by the quantity and quality of different forms of capital linked to the habitus. Capital acquired in one field is transferable to another field. The quantity of capital changes in time, depending on the habitus of the agents and their life trajectories.

When discussing women’s choices of profession, in our case teaching, it is therefore important to have in mind relations between the logic of and positioning in the specific field and dispositions of women. Or, as Asimaki and Vergidis point: “based on the shaped habitus of women which are compatible with the dominant social theory, women seek, in the world of work, ‘small professions’ avoiding positions of power and prestige, fully in harmony with ‘their natural inclinations’ in professional fields where men usually exercise power and women are restricted to offering service” (2013, p. 143). All with the help of symbolic violence, “a gentle violence, imperceptible and invisible even to its victims” (Bourdieu, 2001, p. 1) exercised through the means of “communication and cognition (...) recognition, or even feeling” (ibid., p. 2).

Subject of the Research

The present research focuses on pre-service teachers (to be referred to as “students”) and addresses the following contexts: (i) the desirable characteristics of their future employment; (ii) the factors influencing their choice of teaching as a career; and (iii) their attitudes towards the reputation of female and male teachers. We aim to answer the following research questions:

1. What are the desirable characteristics of students’ future employment?
2. Which deciding factors are at play in students’ choice of a teaching profession?
3. What are students’ attitudes towards the reputation of female and male teachers?
4. Are there significant differences between female and male students in terms of the answers to questions 1–3?
5. Are there significant differences between Primary Education students and Two-Subject Teacher students in terms of the answers to questions 1–3?

Method

The research reported in the present paper is a pilot study and as such prepares the ground for the further development of the instruments and data collection strategies. Data collection in our pilot study was based on a survey approach using a questionnaire.

Sample: The research was conducted on 132 students at the Faculty of Education of the University of Ljubljana in the 2015/16 academic year. Of these students, 67 were fourth-year students of the first-cycle study programme Primary Education (75.3% of the whole generation at the faculty) and 65 were third-year students of the first-cycle study programme Two-Subject Teacher (80.2% of the whole generation at the faculty). All of the Primary Education students were females, while the group of Two-Subject Teacher students consisted of 72.3% females and 27.3% males.⁶ The students participating in the research were aged 21–26 years (mean = 22.29, SD = 0.99), and predominantly resided in the Central Slovenian region (31.1%), the South-Eastern Slovenian region (20.5%) and the Gorenjska (North-Western Slovenian) region; 17.4%). The largest share resided in village-size settlements with up to 3,000 residents (48.1%), almost a quarter lived in a town with 3,000–15,000 residents (23.7%), and the third largest group was those residing in cities with 15,000–100,000 residents (21.4%). Only 6.9% of

6 In the questionnaire, the students were offered three categories to express their gender: “female”, “male” and “other”.

the participants resided in larger cities with more than 100,000 residents. The study programme they were enrolled in was the first choice for 67.4% of the participants, while the first choice of 14.5% of the students was another study programme at the same faculty. For the remainder of the students, their first choice was to study at another faculty.

The largest share of the students' fathers had completed vocational school (30.3%), or professional college or university (23.5%), followed by secondary technical school (22.7%). A quarter of the students' mothers had completed professional college or university (26.5%), 23.5% had completed vocational school, and a fifth had completed secondary technical school (20.5%). More than half of the students' fathers were employed in the fields of engineering, production technology and construction (54.0%), followed by the services sector (16.7%) and the field of social sciences, business or administrative sciences, or law (12.7%); the largest share of the fathers worked in the private sector (47.2%). The students' mothers' professions were typically from the field of social sciences, business or administrative sciences, or law (25.8%), followed by the services sector (20.3%) and the field of education (14.8%); more than half of the mothers worked in the public sector (52.3%).

Instrument: The questionnaire consists of two scales. The Desirable Employment scale is designed to measure students' desires in terms of their future employment. It consists of 11 statements, which are assessed using descriptive rating scales with five response anchors: "very important", "important", "neither important nor unimportant", "unimportant", "not at all important". The scale contains two sub-scales: Caring and Benefits. The Deciding Factors scale is meant to measure the students' perception of the importance of different reasons in choosing a teaching profession. It includes 18 statements assessed using descriptive rating scales with six response anchors: "very true of me", "true of me", "more true of me than untrue", "more untrue of me than true", "untrue of me", "very untrue of me". The scale is divided into four sub-scales: Advantages, Caring Tendency, Gender Advantage, and Employment Security. The students' attitudes towards the reputation of female and male teachers is measured with three statements assessed using a 5-point Likert scale with the response anchors: "strongly agree", "agree", "neither agree nor disagree", "disagree", "strongly disagree". In addition, questions regarding the student's personal characteristics, the context of their parents' place of birth and education, as well as the language used at home are included in the questionnaire.

Data Collection and Analysis: The questionnaire was first piloted with five students from the same faculty to receive their feedback on the clarity of the questions and scales, as well as to assess the amount of time required to complete

the questionnaire. The paper versions were than hand-delivered at faculty lectures, where they were completed and collected.

Exploratory factor analysis (EFA) was carried out on the data to establish the structural validity and reliability of the scales. Based on the EFA results, the scales were modified, aggregate variables were formed, and the final scales were tested for reliability.

Principal component analysis (PCA) was conducted separately on the groups of items from both scales with oblique rotation (oblimin). The Keiser-Meyer-Olkin measure (KMO) verified the sampling adequacy for the analysis, $KMO \geq .75$ (see Table 1), which is “good” according to Field (2009). All of the KMO values for individual items were above the acceptable limit of .5 in both analyses (ibid.). Bartlett’s test of sphericity for both analyses indicated that correlations between items were sufficiently large for the PCA. The components that had eigenvalues over Kaiser’s criterion of 1 in the initial analysis were retained in the final analysis.

Table 1: *Keiser-Meyer-Olkin measure, results of Bartlett’s test of sphericity and percentage of total variance explained by the components for the Desirable Employment scale and the Deciding factors scale.*

Scale	Keiser-Meyer-Olkin measure	Bartlett’s test of sphericity	% of total variance explained by the components
Desirable Employment	.75	$\chi^2 (28) = 271.81, p = 0.000$	57.94
Deciding Factors	.82	$\chi^2 (120) = 919.08, p = 0.000$	65.34

Table 2 presents the final loadings after rotation for the Desirable Employment scale. The items that cluster on the same components suggest that component 1 represents Caring and component 2 represents Benefits. Three items had to be removed from the model due to their lowering of the reliability of the sub-scales: “I want a highly paid job”, “I want employment that is not emotionally challenging”, and “I want employment with a high status in society”. The sub-scales of the final two-component model had acceptable reliabilities of .79 and .64.

Table 2. *Summary of exploratory factor analysis results for the Desirable Employment scale.*

I want employment...	Rotated factor loadings	
	Caring	Benefits
that will allow me to influence future generations.	.84	
that enables me to contribute to society.	.74	
that enables me to use the knowledge I gained in my study.	.71	
that enables me to work with people.	.70	
that is intellectually challenging.	.68	
that is safe.		.84
that does not interfere with family life.		.72
that provides a secure income.		.69
Eigenvalues	3.03	1.61
% of variance	37.84	20.09
α	.79	.64

Note: Principal Component Analysis, with oblimin rotation; factor loadings below .40 were omitted.

The factor analysis of the Deciding Factors scale showed the structure of four components: Advantages, Caring Tendency, Gender Advantage, and Employment Security. Two items were removed due to their low loading to any of the components (“I chose a teaching profession because of its high status in a society” and “I chose a teaching profession because my parents are teachers”). The sub-scales of the final four-component model had good reliabilities of .7 or above. The final loadings after rotation are presented in Table 3.

Table 3. *Summary of exploratory factor analysis results for the Deciding Factors scale.*

I chose a teaching profession because...	Rotated factor loadings			
	Advantages	Caring Tendency	Gender Advantage	Employment Security
teaching is a job that is appealing for lengthy holidays.	.85			
teaching is a job that is appealing for convenient working days.	.80			
teaching is a job that provides relatively good promotion opportunities.	.67			

I chose a teaching profession because...	Rotated factor loadings			
	Advantages	Caring Tendency	Gender Advantage	Employment Security
teaching is a job that is convenient for family life.	.59			
I will be able to contribute to better life in society.		.86		
I want to help others.		.83		
I like to learn and pass on knowledge to others.		.72		
I like working with children.		.69		
I will be able to influence the opinions of others.		.51		
it is recognised as typical for women.			.84	
I will be privileged because of my gender.			.83	
I want to become a head teacher one day.			.71	
teaching provides a secure job.				-.74
it provides a job for an indefinite period.				-.66
it provides good employment opportunities.				-.66
Eigenvalues	5.34	2.65	1.45	1.02
% of variance	33.37	16.55	9.03	6.38
α	.85	.77	.73	.79

Note: Principal Component Analysis, with oblimin rotation; factor loadings below .40 were omitted.

In order to ensure that the impact of the independent variables was as isolated as possible, we formed categories of the independent variables gender and study programme as follows. Since the Primary Education group of students consisted only of female students, only the data for the Two-Subject Teacher group were tested for differences in the sub-scale scores and individual items' scores according to gender. For the same reason, only data of the female participants were tested for differences related to study programme.

Sub-scale and individual items' average scores and standard deviations are presented along with the values of the Mann-Whitney test for the significant differences in scores related to gender and study programme ($p \leq .05$).

Results

Desirable characteristics of students' future employment

The students in our study expressed the high importance of the security of their future employment, as demonstrated by a high general score on the Benefits sub-scale (mean = 4.53, SD = .52). In general, students also want to get a job that allows them to serve society and impact future generations (Caring sub-scale mean = 4.05, SD = .64). There were no statistically significant differences between female and male students; however, the female students in our sample generally expressed a higher level of expression regarding both the desire for secure employment and for employment that will enable them to contribute to society (see Figure 1).

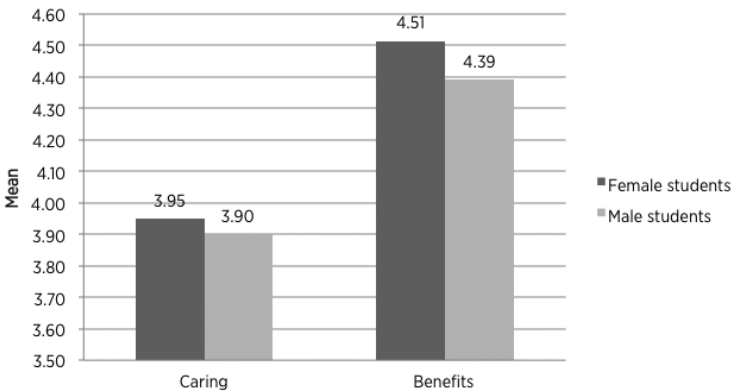


Figure 1: Desirable Employment 5-point sub-scale scores for female and male students.

With regard to study programme, the Primary Education students' scores on both sub-scales are higher than those of the Two-Subject Teacher students (see Figure 2). However, the differences in scores proved to be statistically insignificant.

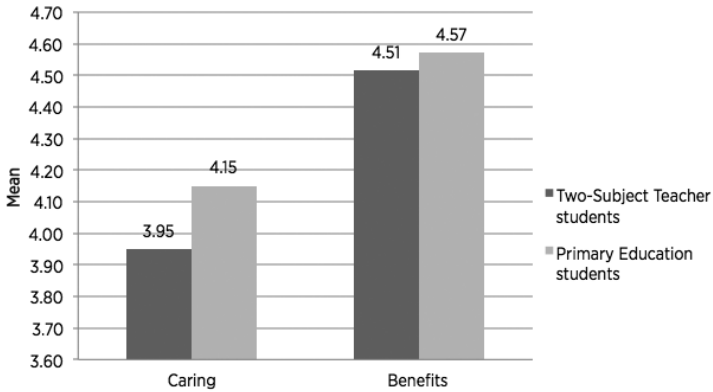


Figure 2: Desirable Employment 5-point sub-scale scores for Primary Education students and Two-Subject Teacher students.

Deciding factors in students' choice of a teaching profession

Impacting younger generations and being there for others proved to be the most widely expressed deciding factor for choosing a teaching profession among students (Caring Tendency sub-scale mean = 4.67, SD = .80). Employment Security appears to be a generally less important factor (mean = 3.38, SD = 1.13), followed by advantages (mean = 3.03, SD = 1.04), while the fact that teaching is a highly gendered profession is not among the deciding factors for choosing this profession (mean = 1.95, SD = .98).

There were no statistically significant differences in any of the sub-scales according to gender. However, male students in the sample though did score more highly on all four sub-scales (see Figure 3).

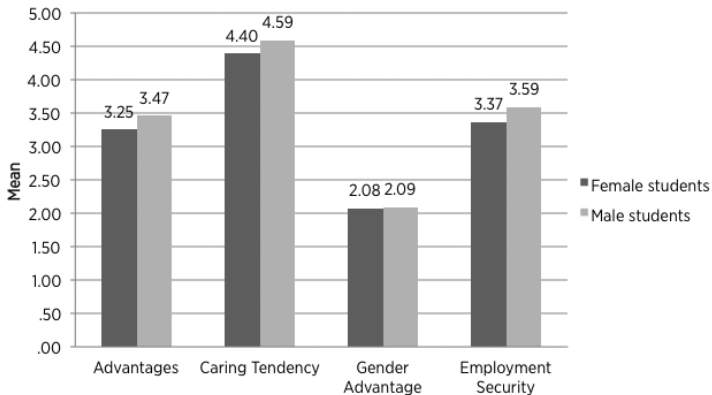


Figure 3: Deciding Factors 6-point sub-scale scores for female and male students.

On the other hand, Caring Tendency is generally a significantly more important reason for choosing a teaching profession among the Primary Education students (mean = 4.88) than among the Two-Subject Teacher students (mean = 4.40), $U = 934.00$, $z = -3.70$, $p < .001$. Advantages, however, are generally a significantly more important deciding factor for the Two-Subject Teacher students (mean = 3.25) than the Primary Education students (mean = 2.75), $U = 1116.50$, $z = -2.64$, $p < .01$ (see Figure 4). In terms of the sample, the same trend of differences applies to Employment Security (as well as Gender Advantage).

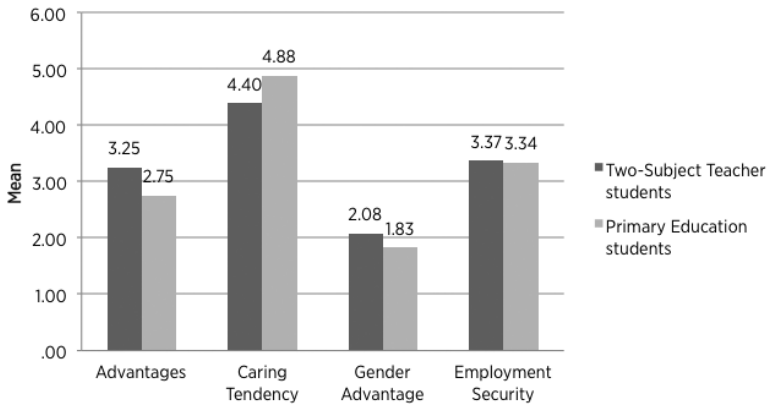
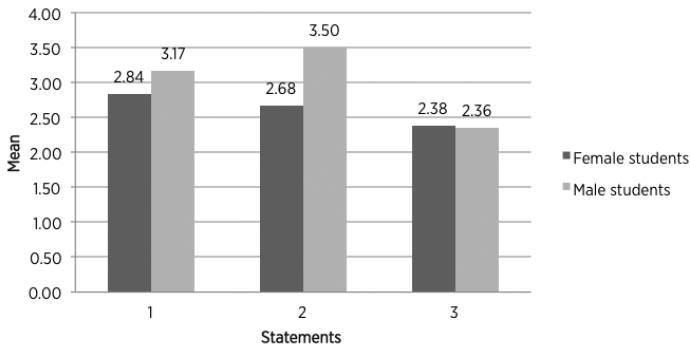


Figure 4: Deciding Factors 6-point sub-scale scores for Primary Education students and Two-Subject Teacher students.

Students on teachers' gender and reputation

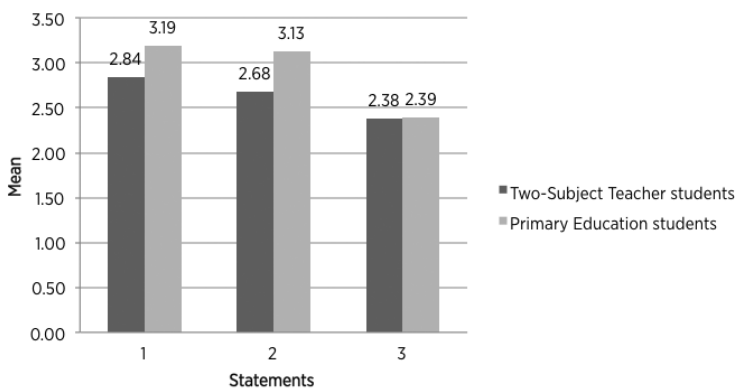
Male students agree significantly more with the statement "Male teachers enjoy more respect among their pupils than their female colleagues", mean = 3.50) than female students (mean = 2.68), $U = 208.50$, $z = -2.083$, $p < .05$. In terms of the sample, male students also agree more with statement "Male teachers enjoy more respect among their colleagues than female teachers" (mean = 3.17) than female students (mean = 2.84). Both male and female students in the sample generally disagree with the statement "The female teacher profession is less respected in society than the male teacher profession"; mean = 2.38).



Note: 1 - Male teachers enjoy more respect among their colleagues than female teachers; 2 - Male teachers enjoy more respect among their pupils than their female colleagues; 3 - The female teacher profession is less respected in society than the male teacher profession.

Figure 5: Teachers' gender and reputation 5-point Likert scale scores for female and male students.

The female students of both study programmes do not differ significantly in their agreement with any of the three statements. However, the Primary Education students generally agree more than the Two-Subject Teacher students with statements 1 and 2 regarding male teachers enjoying more respect among their colleagues and pupils in comparison to female teachers (see Figure 6). Finally, the students of the different study programmes in the sample do not differ in their agreement with statement 3; they generally disagree with the statement "The female teacher profession is less respected in society than the male teacher profession".



Note: 1 - Male teachers enjoy more respect among their colleagues than female teachers; 2 - Male teachers enjoy more respect among their pupils than their female colleagues; 3 - The female teacher profession is less respected in society than the male teacher profession.

Figure 6: Teachers' gender and reputation 5-point Likert scale scores for Primary Education students and Two-Subject Teacher students.

Discussion

The collected data confirmed the known fact that mainly women decide to enter the teacher profession, a pattern that is present in certain other professions in the field of arts, the humanities, services, healthcare and administrative sciences. This was reflected by the fact that there were no men in the Primary Education group. For the majority of the respondents, this was also their first choice of studies.

The numerical predominance of women in education professions, especially those designed for the youngest children, is usually explained as an effect of the conviction that teaching should be regarded as an extension of adults' work with their own children, which is still performed more often by women than men. The importance assigned to the possibility for harmonisation of professional and domestic work by the respondents in our survey is also related to the gender division of labour. Furthermore, it is precisely this characteristic of the occupation that is regarded as one of the most desirable characteristics of the students' future occupation, as well as one of the most important advantages of the teaching profession. Thus, the educational and professional choices made by our respondents are constituted in accordance with their habitus and the practices managed by it (Bourdieu, 1990; 2001). Asimaki and Verdigis conclude with regard to pedagogical studies in Greece – and it is similar in the case of Slovenia – that successful recruiting of a “suitable clientele” into pedagogical professions is taking place: “a clientele whose habitus harmoniously meet the gender character of the particular scientific field” (2013, p. 149).

The numerical predominance of women in education professions can partly be explained by social background, as well. The majority of the respondents came from comparatively small settlements or villages, their parents had mainly completed secondary or professional education, their fathers were mostly employed in the technical field in the private sector, while their mothers were active in the public sector. On this basis, one might conclude, as exposed by Key (2001) in Ferrie, Riddell and Stafford (2006, p. 43), that “middle-class women have moved into certain professional occupations such as law and medicine, whilst undergraduates from poorer backgrounds continue to pursue careers in traditionally female professions such as teaching”. It can perhaps be said that teaching offers the possibility of social mobility and security to male and, above all, female students originating from socially weaker surroundings. This conclusion is based on the fact that the teaching profession is a comparatively well-paid profession in Slovenia and the occupation itself is relatively secure, given that the vast majority of (primary and secondary) schools are state schools. The teaching profession is

perceived as secure despite the fact that we are witnessing an increase in precarious employment, as well as a decrease in public funding for education that has lasted several years. The fact that, on the scale investigating the most desirable characteristics of their future employment, the respondents (on average) ranked a regular income in first place – followed by the possibility of aligning profession life with family life and security of employment – implies that social security is a very important factor in the decision to enter a teaching profession. Although this sequence applies to all three categories of our respondents, it is indicative that these characteristics are most desired among female students of Primary Education, followed by female students of Two-Subject Teacher programmes, and only then by male students. It should, however, be pointed out that these characteristics are not among the most important factors influencing the choice of a teaching profession: all three categories of the respondents did, on average, state factors defined as caring (working with children, helping other people, contributing to the society) as the most important ones. The non-compliance of the results between the two scales could indicate that the choice of a teaching profession is mostly interpreted by the respondents in accordance with the prevailing perception of the teaching profession (especially in the first grades of primary school) as a vocation. In saying this, we are not aiming to manipulate the results, but rather to interpret them according to Beauvois (2000), who demonstrates that people do not have a direct insight into the assertions and causes of their deeds, and in fact do not evaluate the causes but the meanings and values of actions on the basis of social norms. This applies particularly to actions and choices of great social significance, which certainly applies to working with children.

Based on the above results, we can conclude that the idea of vocation (calling) controls the teaching professions to a particularly strong extent in primary education. In choosing the teaching profession, the female Primary Education students did, on average, assign a statistically significantly higher impact to so-called caring factors (i.e., preferences for working with children, contributing to community life, influencing other people's opinion, helping others) than their colleagues attending the Two-Subject Teacher programme, with the difference being even greater in comparison with their male coevals. Furthermore, the meaning attributed to the advantages of the profession (i.e., long vacations, favourable working schedule, opportunities of promotion) is significantly lower than in the case of their coevals of both genders attending the Two-Subject Teacher programme.

Attention should further be drawn to the difference between the male and female respondents (Two-Subject Teacher programme students), which was the only difference to prove statistically significant: male students agree to a

statistically significantly higher degree with the statement that “Male teachers enjoy more respect among their pupils than their female colleagues” than female students. In terms of the sample, the male students agreed more with the statement about male teachers having a higher status among colleagues, as well. Much like their male colleagues attending the Two-Subject Teacher programme, the female students of the Primary Education programme also agreed with this statement, which may imply a certain level of discomfort due to the symbolic status of their profession. On the other hand, the sample displays a trend that men, on average, feel better positioned in relation to women in the teachers’ profession overall, which could also influence the differences in their expectations with regard to their own status in a profession that is still regarded as a “female” profession.

Limitations

In this paper, we present the results of a pilot study among Primary Education and Two-Subject Teacher students. The study therefore has several obvious limitations. It was carried out at a faculty of education, which possibly triggered socially desirable responses to a certain extent. The second limitation originates from the structure of the sample. The participants from the group of Primary Education students were all female students, which means that the results for this group cannot be generalised to the whole generation of students from the Primary Education study programme at the faculty. On the other hand, the Two-Subject Teacher students were both male and female. This difference in structure of the two groups violated the grounds for comparing all of the participants according to gender as well as study programme.

The present study resulted in eliminating some of the items from the scales to ensure acceptable reliability. This suggests a need to rephrase some of the items, as well as to construct additional ones in the future development of the questionnaire in order to improve the validity and reliability of the scales.

The questionnaire provided a limited insight into the subject of the research; therefore, qualitative research is planned in order to explain this field in more depth.

Conclusions

The paper attempts to examine the attitudes of students at the Faculty of Education of the University of Ljubljana in the 2015/16 academic year regarding the desirable characteristics of their future employment as deciding factors influencing their choice of a teaching profession, as well as examining their views of the reputation of female and male teachers.

The collected data confirmed the thesis that women numerically dominate the analysed field. The reasons for this can be found in the harmonisation of the female respondents' habitus and the field they are entering. The perception, especially among female Primary Education students, of the teaching profession as a vocation (calling) that can be linked to the concepts caring, giving and help, also proved very important. These are activities that are attributed to the female habitus during the very earliest socialisation periods. Furthermore, the data confirm the thesis that the orientation towards life and work balance is closer to our respondents of both genders than the orientation towards the centrality of work (Ferrie, Riddell & Stafford, 2006). It therefore seems that the teaching profession will continue to be dominated by women for quite some time, which, in our eyes, does not represent a social problem. It could, however, become a problem if it is an enforced choice for women, an emergency exit, if such jobs are evaluated with a low symbolic value and if the working conditions deteriorate.

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Students' Gender-Related Choices and Achievement in Physics

IVANA JUGOVIĆ¹

≈ The goal of the research was to explore the role of motivation, gender roles and stereotypes in the explanation of students' educational outcomes in a stereotypically male educational domain: physics. Eccles and colleagues' expectancy-value model was used as a theoretical framework for the research.

The research sample included 736 grammar school students from Zagreb, Croatia. The variables explored were expectancy of success, self-concept of ability and subjective task values of physics, gender roles and stereotypes, and educational outcomes: academic achievement in physics, intention to choose physics at the high school leaving exam, and intention to choose a technical sciences university course.

The results showed that girls had a lower self-concept of ability and lower expectancies of success in physics compared to boys, in spite of their higher physics school grades. Hierarchical regression analyses showed that self-concept of physics ability was the strongest predictor of physics school grades, whereas the utility value of physics was the key predictor of educational intentions for both genders. Expectancy of success was one of the key predictors of girls' educational intentions, as well. Endorsement of a typically masculine gender role predicted girls' and boys' stronger intentions to choose a stereotypically male educational domain, whereas acceptance of the stereotype about the poorer talent of women in technical sciences occupations predicted girls' lower educational outcomes related to physics. The practical implication of the research is the need to create gender-sensitive intervention programmes aimed at deconstructing the gender stereotypes and traditional gender roles that restrain students from choosing gender-non-stereotypical careers.

Keywords: academic achievement, gender roles, gender stereotypes, vocational choice, physics

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Spolno povezane izbire in dosežki učenk_cev pri fiziki

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≈ Namen raziskave je bil raziskati vlogo motivacije, spolnih vlog in stereotipov pri pojasnjevanju izobraževalnih dosežkov učenk_cev na stereotipno moškem izobraževalnem področju, tj. pri fiziki. Za teoretični okvir raziskave smo uporabile_i pričakovano-vrednotni model po Eccles idr. V raziskovalni vzorec je bilo vključenih sedemsto šestintrideset osnovnošolk_cev iz Zagreba, Hrvaška. Preučevane spremenljivke so bile: pričakovanje uspeha, samopodoba o zmožnostih in subjektivne vrednote nalog v fiziki, spolne vloge in stereotipi ter izobraževalni dosežki: akademski dosežki v fiziki, namera za izbiro fizike na maturi in namera za izbiro univerzitetnega študija na tehniško-naravoslovnem področju. Izsledki so pokazali, da imajo deklice nižjo samopodobo o zmožnostih in nižja pričakovanja glede uspeha pri fiziki v primerjavi z dečki, in to kljub njihovim višjim šolskim ocenam pri fiziki. Hierarhična regresijska analiza je pokazala, da je samopodoba o zmožnostih pri fiziki najmočnejši napovedovalec šolskih ocen pri fiziki, medtem ko je bila uporabna vrednost fizike glavni napovedovalec izobraževalnih namer za oba spola. Pričakovanje uspeha je bilo prav tako eden izmed glavnih napovedovalcev izobraževalnih namer deklic. Podpora tipičnih moških spolnih vlog je napovedovala močnejše namere deklic in dečkov, da izberejo stereotipno moško izobraževalno področje, medtem ko je sprejetje stereotipov o slabšem talentu žensk v poklicih na področju tehničnih ved napovedovalo slabše izobraževalne dosežke v povezavi s fiziko. Praktične implikacije raziskave kažejo na potrebo po spolno občutljivih interventnih programih, ki merijo na dekonstrukcijo spolnih stereotipov, in tradicionalnih spolnih vlog, ki odvrtačajo učenke_ce od izbire spolno nestereotipnih karier.

Ključne besede: izobraževalni dosežki, spolne vloge, spolni stereotipi, izobraževalne izbire, fizika

Introduction

Girls and women are underrepresented in educational and career paths in the STEM (Science, Technology, Engineering and Mathematics) field in the EU and the US (European Commission, 2014; National Science Foundation, 2015), and similar trends are found in Croatia. In the 2016/2017 school year, for example, girls accounted for only 0.1% of enrolments in secondary vocational schools for naval architecture in Croatia, 2.4% in schools for mechanical engineering, 3.5% in schools for electrical engineering, and 29.1% in schools for civil engineering (unpublished data obtained from the Ministry of Science and Education, 2016). Furthermore, in 2014, women comprised 18.8% of graduates from higher education institutions in the field of engineering and engineering trades, 19.5% in computing, and 40.9% in architecture and building (Croatian Bureau of Statistics, 2015). This strong gender segregation in education and occupations reinforces gender stereotypes, contributes to the under-valuation of women's work and to lower incomes for women, and leads to skill shortages in certain domains of the labour market (Bettio & Verashchagin; 2009; European Commission, 2014; Grimshaw & Rubery, 2007).

Enrolment in technical sciences university courses in Croatia requires the choice of physics as an optional subject in the national high school leaving exam (the state *matura* exam). Only very good results in physics in the *matura* exam can enable enrolment in the most prestigious faculties or courses. However, girls are less motivated for physics in Croatia; they find it less useful and less interesting than boys in both primary and secondary schools (Jugović, 2010; Marušić, 2006). Similarly, in a UK study, boys reported enjoying their physics lessons more and found physics more interesting and useful than girls; it was also found that boys are more likely than girls to report that they are good at physics (Mujtaba & Reiss, 2012). Furthermore, studies have shown that students perceive physics as a masculine school subject (Archer & Freedman, 1989; Francis et al., 2017; Stewart, 1998). Given the gender gap in motivation and educational choices related to physics, as well as students' endorsement of gender stereotypes about physics, the goal of the present study was to explore the factors that contribute to gender differences in academic achievement and educational choices in this domain.

The expectancy-value theory

There are a number of factors that have been identified as key to explaining why young men and women differ in their academic achievement and

educational choices in the STEM field. These include girls' weaker motivation for this educational field (Jacobs, Lanza, Osgood, Eccles, & Wigfield, 2002; Lupart, Cannon, & Telfer, 2004; Murphy & Whitelegg, 2006); weaker social support for girls to pursue the STEM domain (Mujtaba & Reiss, 2013; Tenenbaum & Leaper, 2003); a lack of female scientists and engineers as role models for girls (Blickenstaff, 2005; Herrmann et al., 2016); stereotypes regarding STEM as a male domain (Davies, Spencer, Quinn, & Gerhardstein, 2002; Francis et al., 2017; Steele, 1997); and a discrepancy between the feminine gender role and the masculine image of STEM (Breakwell, Vignoles, & Robertson, 2003; Gonsalves, 2014). **Although valuable, these explanations tend to approach gender differences in educational choices in a fragmented manner rather than interrelating possible explanatory factors.** Eccles et al.'s (1983) expectancy-value theory of achievement motivation was chosen as a theoretical framework for this study because it is a social-psychological theory aimed specifically at explaining gender differences in educational achievement and choices. The theory acknowledges the importance of achievement-oriented motivation for choosing specific educational domains, while taking into account the contribution of students' gender roles and stereotypes in this process. The main premise of the theory is that girls' lower academic achievement in STEM, and their lower tendency to choose STEM in secondary and tertiary education courses compared to boys, can be explained by girls' lower self-perceptions of their ability in STEM, by the lower social support for girls to pursue STEM courses, and by the perceived conflict between feminine gender roles and the masculine image of the STEM field. Apart from STEM areas, the theory has often been used in other domains, such as languages and sports (Fredricks & Eccles, 2005; Gniewosz, Eccles & Noack, 2015).

More specifically, the theory hypothesises that students' academic achievement and educational choices in a particular domain are influenced by different types of motivation: their expectancy of success, subjective task values, and self-perception of ability in the domain (Eccles et al., 1983). Expectancy of success is defined as the individual's belief in how successful he/she will be in an activity in the future, while ability self-perception (or self-concept of ability) is understood as the individual's evaluations of his/her competence in a given domain. Task values are defined in terms of three components: a) intrinsic value (subjective interest or enjoyment in the activity), b) utility value (usefulness of the task in meeting current or future goals, such as career goals), and c) attainment value (personal importance of doing well in the task) (Eccles & Wigfield, 2002). Empirical studies based on this theoretical framework have shown that task values are the strongest predictors of educational choices (Eccles et al.,

1983; Updegraff et al., 1996), while expectations of success and students' perceptions of their own abilities are better predictors of academic achievement (Bong, 2001; DeBacker and Nelson, 1999; Greene et al., 1999). However, some studies have shown that both subjective task values and expectations of success are predictors of the intention to study mathematics and physics (Eccles et al., 1985; Simpkins, Davis-Kean & Eccles, 2006).

The gender dimension of the expectancy-value theory is encapsulated in concepts of gender roles and gender stereotypes regarding school subjects and occupations, which are assumed to influence students' motivation for a specific educational domain. Gender stereotypes are generalised beliefs about typical characteristics of women and men, e.g., about their physical characteristics, personality traits, emotional predispositions, occupational preferences and abilities (Archer & Lloyd, 2002; Deaux & LaFrance, 1998). Gender roles are the set of behaviours, traits and interests that are culturally defined as appropriate for one's gender (Galambos, 2004; Lips, 2006) and can be manifested in psychological traits of femininity and masculinity (Deaux & LaFrance, 1998). Femininity is often operationalised through expressive qualities like being emotional, kind and sympathetic, whereas masculinity is operationalised through instrumental qualities such as being dominant, independent and competitive (Bem, 1974; Spence, Helmreich & Stapp, 1975). It is expected that stereotypes about mathematics and sciences as male domains can have a negative effect on girls' educational outcomes (academic achievement, and educational choices and intentions) in these domains, especially if they perceive themselves as feminine. According to Eccles (1987), this is because individuals assess the match between their own self-images and possible educational paths and career choices. When the match is not good, e.g., in the case of a girl who perceives herself as feminine and who believes that mathematics and sciences are a masculine domain, it is less likely that the individual will choose these subjects or careers related to him or her.

It was also assumed that motivation mediates the effect of gender roles on students' educational outcomes, e.g., that masculinity increases and femininity decreases students' motivation to engage in a typically masculine activity, and that motivation further influences their educational outcomes. Empirical studies on gender stereotypes within the expectancy-value model have usually explored stereotypes about the talent or performance of boys and girls in mathematics, sciences or languages (Greene et al., 1999; DeBacker & Nelson, 1999; Jugović, Baranović, & Marušić, 2012). Gender roles are usually measured with the *Personal Attributes Questionnaire* (PAQ, Spence, Helmreich & Stapp, 1975) or the *Bem Sex Role Inventory* (BSRI, Bem, 1974) in studies using the

expectancy-value model. However, the authors of these studies have concluded that the PAQ is probably not an adequate measure of gender roles because its masculinity scale is more likely a measure of self-concept than of gender roles (Eccles, 1981; Eccles et al., 1983), and that the BSRI is an unsuitable measure of gender roles for the adolescent population and does not reflect contemporary notions of masculinity and femininity (DeBacker & Nelson, 1999). Despite the theoretical elaborations of this part of the expectancy-value model, the role of stereotypes and gender roles has not been sufficiently explored, and results regarding the role of these variables in explaining students' motivation and educational outcomes have not been consistent (e.g., DeBacker & Nelson, 1999; Greene et al., 1999; Guillet, Sarrazin, Fontayne & Brustad, 2006). The lack of research examining the impact of gender roles and stereotypes on educational outcomes, the dearth of studies focused specifically on physics (and not only on mathematics or sciences in general) within this model, and the use of gender role measures with questionable validity indicate the need for new research that will take these problems into account.

Research goal

The goal of the present study was to explore the effects of gender roles, stereotypes and motivation for physics in the explanation of educational outcomes in a stereotypically male educational domain, i.e., academic achievement in physics, intention to choose physics in the *matura* exam, and intention to choose a technical sciences university course. Eccles and colleagues' expectancy-value model was used as a theoretical framework for the research.

It was hypothesised that:

- a) motivation for physics is the strongest predictor of students' academic achievement and educational intentions in a stereotypically male educational domain;
- b) endorsing stereotypes about physics or technical sciences occupations as a male domain has a negative effect on girls' (but not boys') academic achievement and educational intentions in a stereotypically male educational domain; and
- c) more socially acceptable gender roles for girls (high femininity, low masculinity) have a negative effect on students' academic achievement and educational intentions in a stereotypically male educational domain.

Methods

Participants and procedure

The research sample consisted of 736 third-year general grammar school students from Zagreb, Croatia: 439 girls (59.6%) and 297 boys (40.4%). The students had an average age of 17 years.

The questionnaire was administrated in schools during one school hour (45 min). After the purpose of the study, the participants' rights and the confidentiality of the data were explained, the students gave their informed consent and filled in the questionnaires in their classrooms. Participation in the study was voluntary and confidential but not anonymous, because the students' school grades had to be matched with their questionnaires. The students' school grades were obtained from official school documentation at the end of the school year.

Instruments

The variables that were explored were academic achievement and educational intentions, motivation for physics, gender roles and stereotypes.

Academic achievement and educational intentions

School grades in physics. Final school grades in physics at the end of the year were obtained from the official school documentation. School grades in Croatia range from 1 (fail) to 5 (excellent).

Intention to choose physics at the state matura exam. Participants were asked: "How likely is it that you will choose physics as your optional subject in the state *matura* exam?" They could respond using a 5-point Likert-type scale (1 = I will certainly not do it, 2 = I will probably not do it, 3 = I am not sure, 4 = I will probably do it, 5 = I will certainly do it). The state *matura* exam is used both as a high school leaving exam and as an entry exam to university courses, and physics is typically a required subject for enrolment in technical sciences university courses.

Intention to choose a technical sciences university course. Participants were asked: "How likely is it that you will try to enrol in a university course in technical sciences, e.g., electrical engineering, computer science, mechanical engineering, naval architecture or civil engineering?" The answers were given on a 5-point Likert-type scale ranging from 1 = I will certainly not do it, to 5 = I will certainly do it.

Motivation for physics²

The *subjective task value of physics* was measured with five items about interest (e.g., “How interested are you in learning physics?”), five items about attainment value (e.g., “How important is it to you personally to get good grades in physics?”), and three items about utility value (e.g., “To what extent will what you learn in physics be useful for enrolling in the university course of your choice?”). Responses were positioned on a five-point bipolar scale (1 = not at all, 5 = fully). Factor analysis revealed an expected three-factor structure with the following factors: a) interest in physics ($\alpha = .85$), attainment value of physics ($\alpha = .85$), and utility value of physics ($\alpha = .94$).

Expectancy of success and perceived competence in physics. Factor analysis revealed two factors: a) perceived competence and expectancy of success in the near future, comprised of five items (e.g., “How successful were you in physics during schooling?”; “How well do you expect to do in the next oral exam in physics?”) ($\alpha = .87$), and b) expectancy of success in the distant future, comprised of three items (e.g., “How successful do you think you would be at a university course in which physics knowledge was important?”) ($\alpha = .90$). Responses were given on a five-point bipolar scale (1 = completely unsuccessful, 5 = completely successful).

Gender Roles in Adolescence Scale (Jugović & Kamenov, 2008). Femininity and masculinity were each measured with 16 items about behaviours, traits and interests in different aspects of adolescents' lives, such as family, school, leisure, **appearance and intimate relationships**. **Femininity was operationalised** with items about performing traditionally female housework, interest in fashion and cosmetics, taking care of one's own appearance, engaging in typically female sport activities such as aerobics and pilates, and being romantic, sensitive and caring about other people's feelings. Masculinity included items about performing traditionally male housework, interest in sports (especially team sports), interest in cars, caring about looking strong and athletic, taking risks, and being competitive and dominant. Participants assessed how typical each of the behaviours, traits and interests is for them on a **5-point Likert scale** (1 = not at all; 5 = fully). Factor analysis confirmed the expected two-factor structure ($\alpha_{\text{Femininity}} = .88$; $\alpha_{\text{Masculinity}} = .84$). Higher scores indicated a more feminine/masculine role.

2 Items for measuring subjective task values, expectancy of success, and perceived competence were modified from studies by Eccles et al. (e.g., Eccles, O'Neill, & Wigfield, 2005; Eccles & Wigfield, 1995), and some additional items were included for the purpose of this research (e.g., “Do you like watching TV shows about physics topics?”).

Gender stereotypes about talent in physics and occupations in technical sciences. Participants were asked to indicate who is more talented for: a) physics, and b) occupations in the domain of technical sciences (e.g., electrical engineering, computer science, mechanical engineering, naval architecture, civil engineering). The answers to the first question were: 1 = Girls, 2 = Girls and boys equally, 3 = Boys; and to the second: 1 = Women, 2 = Women and men equally, 3 = Men. The indicator of a gender stereotypical response was the answer Boys/Men.

Results

Descriptive statistics and gender differences

Table 1 shows gender differences in educational outcomes, academic motivation in physics and gender roles in adolescence.

Table 1. *Gender differences in students' educational outcomes, motivation for physics and gender roles.*

Variables	Total sample		Girls		Boys		t	p
	M	SD	M	SD	M	SD		
School grade in physics	2.90	0.99	2.98	1.01	2.78	0.96	2.597	.010
Intention to choose physics in the state <i>matura</i> exam	1.73	1.23	1.36	0.87	2.27	1.47	-9.610	.001
Intention to choose a technical sciences course	2.16	1.26	1.71	1.04	2.81	1.28	-12.295	.001
Interest in physics	2.33	0.94	2.11	0.84	2.64	0.98	-7.641	.001
Attainment value of physics	2.97	0.95	2.91	0.92	3.06	1.00	-2.115	.035
Utility value of physics	2.10	1.16	1.81	0.98	2.53	1.26	-8.298	.001
Perceived competence in physics	3.11	0.74	3.06	0.73	3.20	0.75	-2.518	.012
Expectancy of success in the distant future related to physics	2.36	0.99	2.12	0.87	2.73	1.03	-8.410	.001
Femininity	3.29	0.71	3.72	0.49	2.66	0.49	27.660	.001
Masculinity	3.11	0.61	2.85	0.49	3.48	0.57	-15.244	.001

Note. *M* = arithmetic mean; *SD* = standard deviation; *t* = t-test; *p* = significance level

Gender differences were statistically significant in all three educational outcomes. Girls had a higher school grade in physics at the end of the school year, but boys had stronger intentions of choosing physics at the state *matura* exam, and of enrolling in a technical sciences university course. The average school grade in physics for both boys and girls was “3” or “good” ($M_{\text{girls}} = 2.98$, $M_{\text{boys}} = 2.78$). Girls’ higher grades in physics, a subject that is considered as a stereotypically male school subject, are in line with the findings of other Croatian research about girls’ higher school grades in the majority of subjects, including physics, mathematics, Croatian and English (Jokić & Ristić Dedić, 2010; unpublished National Centre for External Evaluation of Education data for 2013/2014). On average, girls responses indicate that they will certainly not choose physics in the *matura* exam ($M = 1.36$), and that they will probably not choose a technical sciences course ($M = 1.71$), whereas boys state that they will probably not choose physics in the *matura* exam ($M = 2.27$) and that they are not sure whether they will choose technical sciences course or not ($M = 2.81$). If their intentions are expressed as percentages, we can see that 23.7% of boys and only 5% of girls planned to choose physics in the *matura* exam, whereas 33.6% of boys and 7.1% of girls planned to choose technical sciences course. Boys were also more interested in physics; they valued success in physics more than girls, and they perceived physics as more useful for them than girls did. In addition, boys perceived their own competencies in physics more positively and had higher expectancy of success in physics in the future than girls, despite the fact that they had lower school grades in physics. One of the explanations for girls’ lower ability self-perception and lower expectations of success in physics is their lower self-esteem in adolescence compared to boys; they have a more critical attitude towards their own abilities and achievements, especially in a stereotypically male domain (Bleidom, 2016; Feingold, 1994). As expected, boys and girls differed in gender roles: boys had higher results on the masculinity scale and girls on the femininity scale. The different gender roles of girls and boys could explain girls’ higher academic achievement compared to boys. Studies of the construction of femininity show that striving for and achieving high academic success are aspects of girls’ femininity. At the same time, however, many girls find it hard to speak confidently about their academic successes, and feel the need to minimise the importance of their achievements (Renold, 2001; Renold & Allan, 2004; Walkerdine, Lucey, & Melody, 2001). In addition, research on masculinity shows that a lack of (apparent) effort invested in learning and school work is an important aspect of masculinity among young men (Jackson, 2002; Jackson & Dempster, 2009; Morris, 2008), which can result in lower academic achievement (Kessels & Steinmayr, 2013).

Table 2. Acceptance of gender stereotypes about talent in physics and occupations in technical engineering.

Stereotypes	Total sample		Girls		Boys		χ^2	p
	f	%	f	%	f	%		
Stereotypes about boys being more talented in physics	394	53.5	214	48.7	180	60.6	10.015	.001
Stereotypes about men being more talented for occupations in technical engineering	567	77.0	324	73.8	243	81.8	6.432	.007

Note. f = frequency; % = percentage of participants that accept stereotypes; χ^2 = chi-square test; p = significance level

Over half of the participants thought that boys are more talented in physics (53.5%), and over three quarters (77%) believed that men are more talented for occupations in the technical sciences domain (Table 2). However, there were gender differences in the endorsement of these stereotypes, with boys being more inclined to believe that members of their own gender are more talented in these domains. These findings are not surprising given that previous studies have shown that natural sciences and technology are considered a male domain (Francis et al., 2017; Nosek, Banaji & Greenwald, 2002), and that young men are more likely to accept stereotypes about the superiority of men and boys in these domains (Brandella & Staberg, 2008; Hyde et al., 1990).

Predictors that explain school grades in physics and intentions to choose physics and a technical sciences course

In order to explore the predictors of school grades in physics and intentions to choose physics in the *matura* exam and a technical sciences course, hierarchical regression analyses were conducted. Correlations between all of the criterion variables and predictors were examined, followed by hierarchical regression analyses, conducted separately for each gender.

Table 3. Pearson's coefficients of correlation between educational outcomes, motivation for physics and gender roles and stereotypes, for boys and girls.

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. School grade in physics	-	.184***	.135**	.382***	.457***	.297***	.696***	.414***	.110*	.077	-.062	-.127**
2. Intention to choose physics in the state <i>matura</i> exam	.281***	-	.528***	.342***	.294***	.615***	.279***	.535***	-.120*	.112*	-.013	-.083
3. Intention to choose a technical sciences course	.149*	.650***	-	.285***	.237***	.411***	.217***	.416***	-.038	.210***	-.037	-.153**
4. Interest in physics	.309***	.525***	.407***	-	.545***	.459***	.563***	.603***	.054	.134**	-.072	-.028
5. Attainment value of physics	.307***	.523***	.441***	.537***	-	.477***	.609***	.504***	.211***	.159**	.024	-.017
6. Utility value of physics	.242***	.780***	.605***	.561***	.609***	-	.398***	.605***	-.026	.134**	-.044	-.093
7. Perceived competence in physics	.531***	.534***	.335***	.620***	.593***	.510***	-	.620***	.130**	.127*	-.059	-.086
8. Expectancy of future success in physics	.301***	.654***	.498***	.645***	.568***	.705***	.712***	-	.034	.173**	-.076	-.084
9. Femininity	-.068	-.130*	-.049	-.076	.035	-.118	-.089	-.136*	-	.229***	.109*	.088
10. Masculinity	-.017	.043	.180**	.021	.168**	.090	.089	.091	.384***	-	-.124*	-.041
11. Stereotypes about physics	.020	.091	.186**	.115*	.095	.147*	.140*	.118*	.055	.220***	-	.218***
12. Stereotypes about occupations in technical engineering	.009	.117*	.103	.053	.098	.141*	.045	.030	.004	.215***	.227***	-

Note: Values for girls are above the diagonal, and for boys under. Stereotypes: 1 = do not accept stereotype, 2 = accept stereotype. *** $p < .001$, ** $p < .01$, * $p < .05$

As Table 3 shows, school grades in physics had the highest and positive correlation with perceived competence in physics for both boys and girls. Intentions to choose physics and intentions to choose a technical sciences course had the highest (positive) correlations with the utility value of physics and the expectancy of future success in physics, again for both boys and girls. Gender roles and stereotypes had lower correlations with educational outcomes than academic motivation, and some of their correlations were not statistically significant. For both genders, masculinity was positively related to the choice of a technical sciences course and femininity negatively to the choice of physics. Stereotypes were negatively related to some of the girls' educational outcomes and positively to some of the boys' educational outcomes.

Table 4. Hierarchical regression analyses for variables predicting educational outcomes related to physics.

Predictors	School grade in physics						Intention to choose physics in the state matura exam						Intention to choose a technical sciences course					
	Girls		Boys		Girls		Boys		Girls		Boys		Girls		Boys			
	ΔR^2	beta	ΔR^2	beta	ΔR^2	beta	ΔR^2	beta	ΔR^2	beta	ΔR^2	beta	ΔR^2	beta	ΔR^2	beta		
1 - Gender roles and stereotypes	0.053**		0.006		0.049**		0.041*		0.081***		0.074**							
Femininity	.147**		-0.057		-.141**													
Masculinity	.015		-0.003		.131*													
Stereotypes about physics	-.043		.034		.060													
Stereotypes about occupations in technical engineering	-.174**		-.044		-.136*													
2 - Academic motivation for physics	0.440**		0.361***		0.459***		0.595***		0.199***		0.344***							
Femininity	.053		.017		-.109**													
Masculinity	-.038		-.070		.023													
Stereotypes about physics	-.010		-.052		.049													
Stereotypes about occupations in technical engineering	-.110**		-.009		-.057													
Interest in physics	-.037		-.019		.005													
Attainment value of physics	.038		.008		-.020													
Utility value of physics	.057		.018		.462***													
Perceived competence in physics	.697***		.702***		-.032													
Expectancy of future success in physics	-.075		-.144		.336***													
R^2 ; R_{Adj}^2	0.492; 0.479		0.366; 0.342		0.508; 0.459		0.635; 0.622		0.280; 0.261		0.419; 0.397							
F	(9/351) = 37.809, $p < .001$		(9/237) = 15.230, $p < .001$		(9/356) = 40.808, $p < .001$		(9/247) = 47.848, $p < .001$		(9/352) = 12.047, $p < .001$		(9/246) = 19.149, $p < .001$							

Note. Stereotypes: 1 = do not accept stereotype, 2 = accept stereotype. *** $p < .001$, ** $p < .01$, * $p < .05$

Hierarchical regression analyses were conducted in two steps, separately for each gender group. The first block of variables included gender roles and stereotypes, and the second block included motivation for physics. The chosen predictors explained 47.9% ($p < .001$) of the total variance of the school grades in physics for girls, and 34.2% ($p < .001$) for boys (Table 4). The first block, containing gender roles and stereotypes, explained 5.3% ($p < .01$) of the variance of girls' grades in physics, whereas it did not significantly contribute to the explanation of boys' physics grades. The block with motivational variables additionally explained 44.0% ($p < .001$) of the variance in the female sample and 36.1% ($p < .001$) in the male sample. These results show that more predictors were significant in explaining girls' school grades than boys'. In the first step of the regression analysis, no variable proved to be a significant predictor of the boys' school grades in physics, and in the second step, only perceived competence in physics was significant. On the other hand, femininity (positively) and stereotypes about technical sciences occupations (negatively) predicted grades in physics in the female sample. In the second step, after introducing motivation for physics, femininity lost its significance, whereas perceived competence became a significant (and the strongest) predictor of girls' school grades in physics, along with stereotypes. These results imply a possible mediating role of perceived competence in physics in the effect that femininity had on girls' grades in physics, given that femininity was correlated with perceived competence and school grades in physics, and that femininity lost its significance after adding perceived competence to the analysis. To conclude, the results of the last step of the regression analysis show that believing in one's own competence in physics contributed to higher physics grades for both genders, and that rejecting stereotypes about men's greater talent in technical sciences occupations contributed to higher physics grades only for girls. The hypothesis about motivation as a key predictor was confirmed, given that ability self-perception was the strongest predictor of school grades in physics. The second hypothesis about the negative effect of stereotypes on girls' (but not boys') academic achievement in a male-dominated field was also supported by the data. Contrary to the third hypothesis, girls with a stereotypically female gender role (higher femininity) had higher grades in physics.

The same predictors explained 49.5% ($p < .001$) of the total variance of girls' intentions and 62.2% ($p < .001$) of boys' intentions to choose physics in the *matura* exam (Table 4). Gender roles and stereotypes explained a similar amount of variance of girls' (4.9%, $p < .01$) and boys' intentions to choose physics (4.1%, $p < .05$), whereas motivational variables contributed more to the explanation of boys' intentions (59.5%, $p < .001$) than girls' (45.9%, $p < .001$).

However, fewer predictors contributed to the explanation of boys' intentions than girls' intentions. More specifically, only femininity was found to be a significant predictor of the boys' intentions in the first step, whereas perceived competence and utility value (which was the strongest predictor), significantly contributed to the explanation of boys' intentions in the second step. The results of the first step on the female sample show that lower femininity scores, higher masculinity scores, and rejection of stereotypes about men's greater talent in technical sciences occupations contributed to their stronger intentions of choosing physics. In the second step on the female sample, masculinity and stereotype lost their significance. Besides femininity, other significant predictors of girls' intentions were expectancy of future success in physics and the utility value of physics, which was also the strongest predictor, as in the male sample. Self-concept of physics ability contributed to boys' stronger intentions to choose physics, whereas lower femininity and higher expectancy of future success in physics contributed to girls' stronger intentions. The first hypothesis was confirmed by these analyses, given that perceived usefulness was the strongest predictor of the intention to choose physics, for both girls and boys. The second hypothesis was also confirmed, but only in the first step: girls who endorsed stereotypes about technical sciences occupations as a male domain were less likely to choose physics, whereas stereotypes were not important for boys. The third hypothesis about the positive effect of a stereotypically female gender role on the intention to choose physics was confirmed for both genders in the first step, and for girls in the second step.

Finally, the results of the regression analyses for the explanation of the intention to choose a technical sciences course show that more variance was explained on the sample of boys (39.7%, $p < .001$) than girls (26.1%, $p < .001$) (Table 4). This is largely due to the role of motivation, which explained more additional variance on the male sample (34.4%, $p < .001$) than the female sample (19.9%, $p < .001$). Gender roles and stereotypes explained a similar amount of variance of girls' (8.1%, $p < .01$) and boys' intentions (7.4%, $p < .05$) to choose a technical sciences course. Masculinity (positively) and stereotypes about technical sciences occupations (negatively) predicted girls' intentions to choose a technical sciences course in the first step. In the second step, these predictors remained significant, and the utility value and expectancy of future success in physics contributed to these intentions, as well. On the male sample, lower femininity, higher masculinity and acceptance of stereotypes about men's greater talent in physics contributed to stronger intentions to choose a technical sciences course (in the first step). In the second step, masculinity and the utility value of physics contributed to boys' stronger intentions. A comparison of the

results reveals that, for both boys and girls, higher masculinity self-perceptions and utility value of physics contributed to a greater likelihood of choosing a technical sciences course. In addition, rejecting stereotypes about men's greater talent in technical sciences occupations, and holding high expectations of one's own future success in physics additionally contributed to girls' stronger intentions. Given that motivational variables were the strongest predictors, the first hypothesis was confirmed. The second hypothesis about the negative effect of stereotypes on girls' choice of a typically male domain was confirmed, but in addition, stereotypes had a positive effect on boys' choice in the first step. As expected, stereotypically female gender roles (lower masculinity) had a negative effect on girls as well as boys' educational intentions in a male-dominated field.

Discussion and conclusion

The goal of the research was to explore predictors of academic achievement and educational intentions in a male-dominated field: physics. Motivation for physics had the most important role in explaining these educational outcomes, thus confirming the first hypothesis. More precisely, self-concept of physics ability had the key role in predicting school grades in physics for both genders. This is in line with previous studies concerning the greater contribution of ability self-perceptions or expectancy of success (compared to subjective task values) in predicting academic achievement (e.g., Bong, 2001; DeBacker & Nelson, 1999; Greene et al., 1999). Key predictors of educational intentions in physics and the technical sciences domain were the utility value of physics for boys, and utility value and expectancy of future success in physics for girls. This is in line with previous studies, which have shown that subjective task values are the strongest predictors of educational choices (e.g., Eccles et al., 1983; Updegraff et al., 1996).

Gender roles and stereotypes also contributed to the explanation of the variance of these educational outcomes, although to a lesser extent than motivation for physics. Higher endorsement of masculinity predicted girls' and boys' stronger intentions to choose a technical sciences course for both genders, and weaker endorsement of femininity predicted girls' stronger intention to choose physics in the *matura* exam. These findings might imply that endorsement of a socially expected boys' gender role is a preferable role for the choice of a stereotypically male educational or career domain. The findings can be explained by the expectancy-value model (Eccles et al., 1983), according to which the conflict between a feminine gender role and the educational choice of a stereotypically male domain is responsible for girls' weaker intentions to

choose that educational domain. An additional explanation of the findings can be found in poststructuralist theories about gender as performative (Butler, 1990). Paechter (2001), for example, described how adolescent girls and boys confirm their femininity or masculinity by exaggerated performance of gender roles. Thus, it can be assumed that adolescents confirm their gender roles by choosing activities or educational paths that are expected of their gender, or by refraining from choosing them, as can be seen in girls' underrepresentation in physics and technical sciences. Comparison of the results of previous American studies and the present Croatian study of the effects of gender roles on educational outcomes reveals that gender roles were less important in the explanation of educational outcomes on American samples (Eccles et al., 1985; DeBacker & Nelson, 1999; Greene et al., 1999). One of the reasons for this difference could be more traditional gender roles in Croatia than in the US (Frieze, Ferligoj, Kogošvek, Renner, Horvat & Šarlija, 2003), and possibly stronger socialisation of children and adolescents in more gender-typical behaviours, traits and interests in Croatian society, which further leads to gendered educational outcomes. The other explanation could be the validity of the gender-role scales used in these studies. The US studies use scales that either measure outdated notions of gender roles, scales that do not measure gender roles but expressivity and instrumentality, and scales that were not intended for the adolescent population, such as the *Bem Sex Role Inventory* (Bem, 1974), and the *Personal Attributes Questionnaire* (Spence, Helmreich & Stapp, 1975). The present Croatian research, on the other hand, employed a new scale for measuring gender roles specifically for adolescents, which reflects contemporary notions of femininity and masculinity in different domains of adolescent lives (and not just expressivity and instrumentality) (*Gender Roles in Adolescence Scale*, Jugović & Kamenov, 2008).

Endorsing stereotypes about technical sciences occupations predicted girls' lower grades in physics and lower intention to choose a technical sciences university course, which confirms the hypothesis proposed by the expectancy-value theory (Eccles et al., 1983). These findings can also be explained with the stereotype threat theory (Steele, 1997). For example, research shows that activation of negative stereotypes, such as stereotypes about women's lower abilities or weaker talent in mathematics or physics, can decrease their achievement and interest in choosing occupations in these domains (Davies et al., 2002; Inzlicht & Ben-Zeev, 2003; Marchand & Taasoobshirazi, 2013; Schmader & Johns, 2003; Smith & White, 2002). Although stereotypes did not significantly contribute to the explanation of boys' educational outcomes in the last step of the regression analyses in the present research, stereotypes about boys' greater talent in physics did have a positive effect on their intention to choose a technical sciences

course in the first step of the regression analysis. This is in line with research findings demonstrating that stereotypes about one's own group can have a positive effect on academic achievement (e.g., Ambady, Shih, Kim, & Pittinsky, 2001).

The results of the regression analyses also show that there is a wider range of statistically significant predictors on the female sample than on the male sample. It seems that, for boys to choose physics or technical courses, it is enough just to perceive physics as useful, whereas there are more requirements that have to be met for girls: they need to perceive physics as useful, but they also need to expect to be successful in a university course or occupation related to physics, to reject stereotypes in which most students believe, and to endorse a stereotypically male gender role. In addition, although girls have better academic achievement in physics than boys, they underestimate their abilities and the likelihood of their success in physics. Furthermore, girls' underrated ideas of their capabilities affect their educational intentions. Although these findings imply that girls need more support to choose a male-dominated field than boys, studies show that parents have more doubts in their daughters' abilities in a typically male domain (Tenenbaum & Leaper, 2003) and that girls receive less encouragement when choosing a stereotypically male educational domain (Baranović & Jugović, 2011; Mujtaba & Reiss, 2013).

The chosen predictors explained the most variance regarding the intention to choose physics in the *matura* exam, whereas the intention to choose a technical sciences course was the least explained on the female sample and physics grade on the male sample. It therefore seems that some other factors could also be relevant for the latter two educational outcomes. For example, previous studies have shown that boys have more negative attitudes towards learning and school than girls (Jarvis & Pell, 2002; Lupart, Cannon, & Telfer, 2004; Verešová & Malá, 2016). The importance of having children, bearing in mind balancing family life and work obligations, as well as the possibility of being discriminated against in a male-dominated working environment are important in explaining why women are less likely to decide for a career in a male-dominated field (Curry, Trew, Turner, & Hunter, 1994; Frome, Alfred, Eccles, & Barber, 2006; Steele, James, & Barnett, 2002). It is therefore fair to assume that attitudes towards learning and school could additionally explain boys' lower academic achievement, whereas perceived family obligations and possible gender discrimination in the workplace could additionally explain girls' hesitation to choose technical sciences.

One possible limitation of the present study was its correlational design, which does not enable a causal conclusion. Another limitation is that

only educational intentions were measured, and not actual educational choices. Therefore, a longitudinal design would be more suitable in order to explore the influence of gender roles, stereotypes and motivation on academic achievement and actual educational choices (not just intentions). There is also the question of whether our results, which were obtained on a sample of general grammar schools from Zagreb, can be generalised to a wider population of students from different types of schools and locations. Finally, it is important to point out that, although these results can be generalised to other typically male domains, there is a need to explore factors that are relevant for the choice of a stereotypically female domain, so that the underrepresentation of men in teaching, nursing, etc. is also addressed.

Analyses of policies regarding gender inequalities in education in different EU countries have shown that their most common goal is to overcome traditional gender roles and stereotypes, by either gender-sensitive career guidance, gender-sensitive teaching, or revisions of curricula (Eurydice, 2010). Similarly, one of the goals of the Croatian National Policy for Gender Equality 2011–2015 (Office for Gender Equality of the Government of the Republic of Croatia, 2011) was to achieve gender balance in educational choices in secondary schools and in higher education. The measure employed to achieve this goal was to develop a gender-sensitive programme of career guidance for students in their final year of primary schooling, in order to encourage female students' interest in enrolling in secondary schools where male students are predominant, and vice versa. However, the problem with this measure is that it focuses on students in their final years of schooling, when their stereotypical images of educational and career fields are already formed. The other limitation is that the activities conducted (e.g., organising Job Fairs and providing brochures that contain descriptions of occupations) did not necessarily include all students, but only those who were the most interested. Furthermore, they did not specifically focus on students' misperceptions regarding the gender dimension of career choices. It would therefore be more useful to start organising activities aimed at achieving gender balance in educational choices in early primary school, and not at the end of primary or secondary school (when gender stereotypes are already formed). It would also be useful to specifically focus on deconstructing gender stereotypes and traditional gender roles that restrain students from choosing gender non-stereotypical careers, despite their real interests and abilities.

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Biographical note

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Gender Differences in Children's Language: A Meta-Analysis of Slovenian Studies

LJUBICA MARJANOVIČ-UMEK*¹ AND URŠKA FEKONJA-PEKLJAJ²

∞ Child gender has been proved to affect toddlers'/children's language development in several studies, but its effect was not found to be stable across different ages or various aspects of language ability. The effect of gender on toddlers', children's and adolescents' language ability was examined in the present meta-analysis of ten Slovenian studies (nine cross-sectional studies and one longitudinal study). The ten studies were published between 2004 and 2016 and included a total of 3,657 toddlers, children and adolescents, aged from 8 months to 15 years. The language outcome measures refer to different aspects of language ability, including vocabulary, mean length of utterance, sentence complexity, language expression and comprehension, storytelling ability and metalinguistic awareness. Across the studies, language ability was assessed using different approaches and instruments, most of which were standardised on samples of Slovenian-speaking children. Based on the reported arithmetic means and standard deviations, the effect sizes of gender for each of the included studies were calculated, as well as the average effect size of gender across the different studies. The findings of the meta-analysis showed that the effect size of gender on toddlers'/children's/adolescents' language largely depended on their age and the aspect of language measured. The effect sizes increased with children's increasing age. All significant effects proved to be in favour of girls. The findings were interpreted in relation to the characteristics of language development and social cultural factors that can contribute to gender differences in language ability.

Keywords: meta-analysis, gender differences, language ability

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Razlike med spoloma v govoru otrok: Metaanaliza slovenskih študij

LJUBICA MARJANOVIČ-UMEK IN URŠKA FEKONJA-PEKLAJ

~ Rezultati več raziskav so pokazali, da ima spol otroka pomemben učinek na govorni razvoj malčkov in otrok, vendar učinek spola ni stabilen prek različnih razvojnih obdobjih in za različne vidike govorne kompetentnosti. V tej metaanalizi smo preučevale_i učinek spola na govorno kompetentnost malčic_kov, otrok in mladostnic_kov. Vključevala je 10 slovenskih študij (devet izmed njih je bilo prečnih, ena pa je bila vzdolžna), ki so bile objavljene med letoma 2004 in 2016; skupno so vključevale 3.657 malčic_kov, otrok in mladostnic_kov, starih od 8 mesecev do 15 let. Mere govorne kompetentnosti v vključenih raziskavah so bile različne in so vključevale: velikost besednjaka, povprečno dolžino izjave, zapletenost stavkov, govorno izražanje in razumevanje, pripovedovanje zgodbe, metajezikovno zavedanje. Govorna kompetentnost je bila ocenjena z uporabo različnih pristopov in pripomočkov, izmed katerih je bila večina standardizirana na vzorcih slovensko govorečih otrok. Na podlagi aritmetičnih sredin in standardnih odklonov, dobljenih v posamezni raziskavi, sva izračunali velikost učinka spola za vsako izmed njih ter povprečno velikost učinka spola prek vseh raziskav. Rezultati meta-raziskave so pokazali, da se je velikost učinka spola na govor malčic_kov, otrok, mladostnic_kov razlikovala glede na njihovo starost in glede na ocenjene mere govorne kompetentnosti. Velikost učinka je naraščala z naraščajočo starostjo otrok. Vsi pomembni učinki so bili v prid deklicam. Izsledke smo interpretirale_i v povezavi z značilnostmi govornega razvoja otrok in socialno-kulturnimi dejavniki okolja, ki lahko prispevajo k razlikam med spoloma v govorni kompetentnosti.

Ključne besede: metaanaliza, razlike med spoloma, govorna kompetentnost

Introduction

Despite many studies in which authors have investigated the effect of gender on children's language across different developmental periods, and notwithstanding certain observed differences in language development of boys and girls, the reported findings do not allow one general conclusion in favour of either gender. Although the findings of several studies suggest a small but consistent effect of gender on early language development in favour of girls, the size of this effect depends both on the girls'/boys' age and the aspect of language that was assessed (Bouchard, Trudeau, Sutton, Boudreault & Deneault, 2009; Fenson et al., 1994; Simonsen, Kristoffersen, Bleses, Wehberg & Jørgensen, 2014). Crawford (2001), for instance, argues that there are more similarities than differences between boys and girls in various aspects of their language ability.

Based on the assumption of the biological differences between males and females, research evidence shows that gender differences in language development to some extent reflect differences in the brain structure and function underlying language processes (e.g., Shaywitz et al., 1995), as well as differences in the speed of developmental processes (e.g., Huttenlocher, 1991). A number of functional imaging studies have reported a more bilateral pattern of activity during language processing in women compared to men (Wallentin, 2008). However, in their meta-analysis of 26 neuroimaging studies, Sommer and colleagues (Sommer, Aleman, Bouma & Kahn, 2004) found that, although several of the studies, particularly those with smaller samples, showed gender differences in brain functioning, there was no significant effect of gender on language lateralisation either in children or adults.

On the other hand, several authors (e.g., Barbu et al., 2015; Bornstein et al., 2004; Lovas, 2011) emphasise the importance of socialisation factors in gender differences, such as parental expectations about gender roles and parents' and children's gender-specific behaviour. Wallentin (2008) argues that cultural explanations should also be taken into account when researching possible gender differences in language ability. Research evidence shows the important effect of the interaction between a child's gender and various factors of the social environment that can contribute to differences in the language ability of boys and girls. For instance, one of the contextual factors contributing to gender differences in language proved to be gender typing in parents' language with their children (e.g., Gleason, 1987; Leaper, Anderson & Sanders, 1998). In their meta-analysis of studies comparing mothers' interactions with daughters versus with sons, Leaper and colleagues (Leaper et al., 1998) found that mothers tended to talk more and use more supportive speech with daughters than with sons. The differential use

of language with either girls or boys by their parents might also be reflected in the difference in the type of words spoken by girls and boys, which was found in several studies (e.g., Stennes, Burch, Sen & Bauer, 2005; Wehberg et al., 2008).

Research evidence also suggests that parents play differently with girls and boys, thus supporting their symbolic play and language to a different extent. For instance, Clearfield and Nelson (2006) found that, while there were no gender differences in infants' play behaviour (the frequency of initiating interaction with an adult and the direct responsiveness to mothers' verbal behaviour) at the age of 6–14 months, gender differences were found in mothers' verbal behaviour and level of engagement toward the child. The authors established that mothers interacted more with their daughters and made more interpretations and engaged in more conversation with them than with sons. On the other hand, mothers of sons made more comments and were more attentional, typified more by instructions than conversation. On a sample of 99 toddlers and children aged 1–5 years, Marjanovič-Umek and Fekonja-Peklaj (2017) found that parents used more symbolic transformations when playing with girls than with boys, thus providing more opportunities for the girls to engage in symbolic play, which is largely supported by the use of (meta)language and strongly related to more advanced language ability in children (e.g., Lyytinen, Poikkeus, & Laakso, 1997).

Boys' and girls' language across different age periods and various aspects of language ability

There are a number of studies indicating a small but consistent female advantage in early language development (Wallentin, 2008). The findings of several studies (e.g., Berk, 1997; Bornstein & Haynes, 1998; Bornstein, Haynes, O'Reilly & Painter, 1996; Fenson et al., 1994; Eriksson et al., 2012) on gender differences in language development suggest that girls develop language faster than boys: girls are found to speak earlier, acquire the grammar of the language faster, use longer utterances and express a larger vocabulary throughout infancy, toddlerhood and early childhood. In a study including 2,500 English-speaking toddlers aged 8–30 months, Fenson and colleagues (Fenson et al., 1994) found that girls were reported by their parents (using *Communicative Development Inventories (CDI)*) to use more communicative and symbolic gestures and to express a higher comprehensive and expressive vocabulary than boys. However, the authors emphasise that the gender differences were small, accounting only for 1–2 percent of the variance in language ability. In their research, which included ten studies and a sample of 13,783 non-English-speaking infants and toddlers, Eriksson and colleagues (Eriksson et al., 2012) found significant differences between girls and

boys aged 8–30 months in their language ability, as assessed with *CDI* (Fenson et al., 1994). The authors found that girls aged 8–16 months³ were reported by their parents to use more types of communicative gestures and more types of words than boys, although the effect size of gender was small. There were no significant gender differences in infants'/toddlers' comprehensive vocabulary. On a sample of older toddlers aged 16–30 months,⁴ the authors found significant gender differences in word production (Eriksson et al., 2012). In a study including a sample of Swedish toddlers aged 8–24 months, Andersson and colleagues (Andersson et al., 2011) found small differences between boys and girls in their vocabulary size, appearing at the end of the second year. Their findings indicated that girls had a more even distribution of vocabulary scores, while boys had a wider range of scores. Furthermore, on a sample of two-year-old English-speaking twins, Galsworthy and colleagues (Galsworthy, Dionne, Dale & Plomin, 2000) established that girls achieved higher scores in both verbal and non-verbal cognitive ability. However, the authors argue that gender only accounted for approximately 3 percent of the variance in toddlers' verbal ability and 1 percent of the variance in toddlers' non-verbal cognitive ability. In addition, boys generally achieved the highest and the lowest scores, while girls had the highest mean score. In their study, Bornstein and colleagues (Bornstein et al., 2004) established that, in the second through fifth year of age but not before or after, girls expressed a higher language ability than boys of the same age.

Apostolos and Napoleon (2001) argue that gender differences in vocabulary development are not constant across different ages. In their study of 162 Greek-speaking children aged 4–12 years, they found that girls tended to express a larger vocabulary than boys, but only at certain ages (for instance, they found no gender differences in vocabulary size between ages 4 and 5, as well as between 11 and 12 years of age). According to several studies, however, the gender differences in language ability persist through childhood and adolescence (e.g., Golombok & Fivush, 1994; Hedges & Novell, 1995; Marjanovič-Umek, 2007): girls were found to read at an earlier age than boys, make fewer mistakes while reading, achieve higher scores in tests of written language, express a larger vocabulary and more advanced language comprehension, and achieve higher school grades in language than boys.

In their meta-analysis of 165 studies including samples of children and adults and measuring different aspects of language abilities (e.g., vocabulary, reading comprehension, verbal communication), Hyde and Linn (1988) found that 27 percent of the studies reported that females perform significantly better

3 Their language was assessed with *CDI: Words and Gestures*.

4 Their language was assessed with *CDI: Words and Sentences*.

than males, while 66 percent reported no significant effect of gender on language ability and 7 percent reported males outperforming females. In spite of the small female advantage, Hyde and Linn (1988) argue that the size of the gender difference in language ability was small and could be considered to be zero.

The aim of the study

In recent years, several instruments for assessing language ability in Slovenian-speaking children of different ages have been developed. In line with the development of these instruments, which include language scales, parental questionnaires and semi-structured storytelling tests, several studies have been published analysing the characteristics of language development of Slovenian-speaking toddlers/children/adolescents, as well as establishing possible gender differences in their language ability. As the findings on gender effects on children's language are not consistent across different studies, a meta-analysis of ten different Slovenian studies was conducted in order to analyse the effect sizes of gender on the language ability of Slovenian-speaking children of different ages (infants, toddlers, children in early and middle childhood and adolescents). The present study represents the first meta-analysis of gender differences carried out on Slovenian speaking samples.

Method

Retrieval of studies

The studies used in the present meta-analysis were quantitative studies in which gender differences in language ability were assessed on independent samples of Slovenian-speaking children. The studies were published in scientific journals or monographs between 2004 and 2016. The criteria for the retrieval of the studies were that the effect size of gender on child language ability could be calculated from the reported findings and that the language ability was assessed using an objective, valid and reliable measure. Only studies with the normative samples of children were included.

Thus, ten studies were selected, including a total of 3,657 Slovenian-speaking children of different ages (from 8 months to 15 years). The children's language ability was assessed using various instruments, all of which were designed for or adapted to the Slovenian language: *Communicative Development Inventory: Words and Sentences (CDI: Words and Sentences)* and *Communicative Development Inventory: Words and Gestures (CDI: Words and Gestures)*

(Marjanovič-Umek, Fekonja-Pekljaj, Sočan & Komidar, 2011a); *Storytelling Test: Glove (STT: Glove)* (Marjanovič-Umek et al., 2011b); *Test of General Language Ability: Written Language (TGLA-WL)* (Marjanovič-Umek et al., 2011c); *Scales of General Language Development – LJ (SGLD – LJ)* (Marjanovič-Umek, Fekonja, Podlesek, Kranjc & Bajc, 2008); *Language Development Scale (LDS)* (Marjanovič-Umek & Fekonja, 2006); *Test of Written Language - Third Edition (TOWL-3)* (Hammill & Larsen, 1996); *Storytelling by a Wordless Picture Book* (Marjanovič-Umek, Fekonja & Kranjc, 2004). Within the selected studies, various aspects of language ability were assessed (e.g., vocabulary, mean length of utterance, sentence complexity, storytelling ability, general language ability) using different assessment approaches (e.g., parental reports, standardised language scales, semi-structured storytelling test).

Calculation and interpretation of effect sizes

The effect size d was calculated by dividing the difference between the male and female means by the pooled within-sex standard deviation (Cohen, 1977).

$$\frac{M(\text{girls}) - M(\text{boys})}{SD(\text{polled})}$$

Positive d values indicated girls' higher language ability and negative d values indicated boys' higher language ability. Effect sizes of 0.20, 0.50 and 0.80 were interpreted as small, medium and large effects, respectively, based on Cohen (1977). Effect size of 0.15 was interpreted as very small and effect sizes smaller than 0.15 were interpreted and negligible. The total effect size was calculated across all ten studies.

Results and discussion

Effect sizes (Cohen's d) were calculated for each of the collected studies. Thus, 28 effect sizes were calculated within the ten studies, relating to the different measures of language ability and different age groups included in the studies. The sample sizes, children's age, instruments used and language ability measured in each separate study are shown in Table 1.

Table 1. *Effect sizes of gender on language ability in the selected studies.*

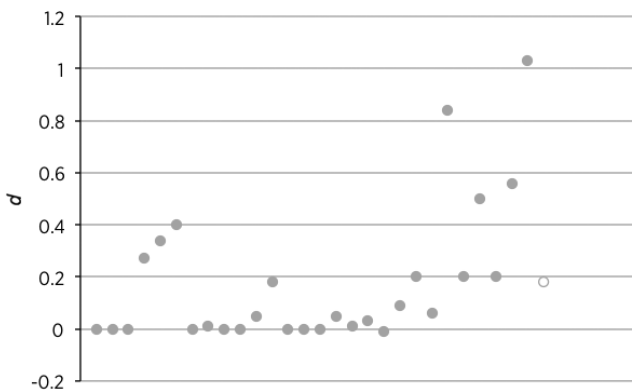
Study	N	N (M)	N (F)	Age	Instrument	Language ability	<i>d</i>
Marjanovič-Umek, Fekonja-Peklaj, Sočan & Komidar (2011a)	152	72	80	8-16 m	<i>CDI: Words and Gestures</i>	Vocabulary (c)	0.00
	358	186	172	16-30 m	<i>CDI: Words and Sentences</i>	Vocabulary (e) SC	0.00 0.00
Marjanovič-Umek, Fekonja, Kranjc & Bajc (2008)	953	457	496	16-30 m	<i>CDI: Words and Sentences</i>	Vocabulary (e) MLU SC	0.27* 0.34* 0.40*
Marjanovič-Umek, Fekonja-Peklaj, Podlesek & Kranjc (2011)	83	45	38	16-30 m	<i>CDI: Words and Sentences</i>	Vocabulary (e) MLU SC	0.00* 0.01 0.00
Marjanovič-Umek, Božin, Čermak, Štiglic, Bajc & Fekonja-Peklaj (2016)	51	28	23	31 m	<i>CDI: Words and Sentences</i>	Vocabulary (e) MLU SC	0.00 0.05 0.18
Marjanovič-Umek, Fekonja, Podlesek, Kranjc & Bajc (2008)	494	245	249	2-6 y	<i>SGLD-LJ</i>	Language comprehension Language expression Metalinguistic awareness	0.00 0.00 0.00
Fekonja, Marjanovič-Umek & Kranjc (2005)	80	41	39	3-4 y	<i>LDS</i>	General language ability	0.05
Marjanovič-Umek, Fekonja-Peklaj & Podlesek (2010)	156	85	71	3-6 y	<i>STT</i>	Vocabulary (e) MLU Number of events Mental states	0.01* 0.03 - 0.01 0.09
Marjanovič-Umek, Fekonja & Kranjc (2004)	123	60	63	4;3-9;3 y	<i>Storytelling by a Picture Book</i>	Story coherence Story cohesion	0.20 0.06
Marjanovič-Umek, Fekonja-Peklaj, Sočan & Komidar (2011b)	310	150	160	8-14 y	<i>TGLA-WL</i>	General language ability	0.84*
Marjanovič-Umek, Kranjc, Fekonja & Bajc (2007)	127	60	67	4;9-6;3 y	<i>SGLD-LJ</i>	Language comprehension Language expression Metalinguistic awareness	0.20 0.53 0.20
	358	179	179	9 y	<i>TOWL-3</i>	General language ability	0.56*
	412	198	214	15 y	<i>TOWL-3</i>	General language ability	1.03*

Note. * ... significant gender differences between girls and boys were found in the study (by t-test or ANOVA); *d*... Cohen's *d*; m... months; y... years; N(M)... number of males included in the study; N(F)... number of females included in the study. MLU... mean length of utterance; SC... sentence complexity; Vocabulary (c)... comprehensive Vocabulary; Vocabulary (e)... expressive Vocabulary. The studies are presented by the increasing age of the sample.

The effect sizes within the different studies ranged from no effect ($d = 0.00$) to a large effect ($d = 1.03$) of gender on different aspects of children's language ability. Negligible or zero effect sizes were found in seven studies that included infants, toddlers and children in early childhood, relating to 17 measures

of language ability (e.g., comprehensive and expressive vocabulary, MLU and sentence complexity, storytelling ability). Very small effect sizes were found in one study in favour of girls, relating to sentence complexity as assessed by their parents at 31 months, while small effect sizes were found in three studies, all in favour of girls, relating to 6 measures of language ability (e.g., vocabulary, MLU, story coherence, language comprehension). Medium to large effect sizes were found in two studies, relating to general language ability, as assessed by written communication and language expression. All of these were found in samples of children and adolescents aged from 4;9 to 15 years, and were all positive, indicating that girls expressed higher language ability than boys.

In the next step, we calculated the average effect size across all of the studies. The total d was 0.18, indicating a small effect size of gender on language ability across all of the studies in favour of girls. As presented in Figure 1, the majority of effect sizes were close to zero, indicating a negligible effect of gender on children's language or no effect at all. The increase of the effect sizes of gender with children's age is also evident from Figure 1.



Note. d values are presented in the same order as in Table 1. The effect sizes calculated within the selected studies are shown in black; the total effect size calculated across studies is shown in white.

Figure 1. Graphical representation of the effect sizes of gender on toddlers'/ children's/adolescents' language ability across the ten selected studies.

The findings do not allow a single general conclusion about the effect of gender on language ability in favour of either boys or girls, as it seems that the effect size of gender largely depends on the age of the children and the aspect of language ability measured.

Similar to several other studies (e.g., Bornstein et al., 2004; Hyde & Linn,

1988), it was found that gender differences in children's language ability were not consistent across the ten studies. In fact, the calculated effect sizes ranged from none to high and depended on the age of the sample as well as on the language ability being assessed. In the studies that included infants and toddlers, the effect sizes were mostly negligible, very small or small (on the samples of infants and toddlers aged 8–30 months, where vocabulary, sentence complexity and MLU were assessed by parents using *CDI*, and on the samples of children aged 2–6 years, where the cohesion of their stories and their general language ability were assessed using a semi-structured storytelling test and standardised scales of language). Although research evidence shows that gender differences exist in the early language ability of infants and toddlers (e.g., Eriksson et al., 2012; Fenson et al., 1994), we found that the effect sizes were either small, very small or close to zero. Our findings showed that the largest effect sizes of gender were typical for the studies that included large samples of children in late childhood and adolescents, aged 8–15 years, where their general language ability was assessed by their written language ability. A medium effect size was also found in a study that included children aged 4–6 years and measured their language expression. These findings are in line with studies in which authors establish significant gender differences in the language ability of children in early and middle childhood, as well as in adolescents (e.g., Apostolos & Napoleon, 2001; Hedges & Novell, 1995; Marjanovič-Umek, 2007).

All significant effects, whether small or large, were found in favour of girls, suggesting that girls expressed a higher language ability than boys at different ages and regarding different aspects of language. In this respect, our findings are similar to those of Hyde and Linn (1988), who established that the majority of significant gender differences found in their meta-analysis were in favour of girls. The authors did, however, report that males outperformed females in 7 percent of the studies included in their meta-analysis, while the present study found no significant effects of gender on language ability in favour of boys. It should be noted that the number of studies included in our meta-analysis was small, and that several of the studies included small samples of children. We should therefore be cautious in drawing general conclusions about gender differences in language ability based on our findings.

In general, our findings support those of several other authors who argue that although gender differences in early language ability exist, they are predominantly small and account for a small share of variance in children's language (e.g., Fenson et al., 1994; Galsworthy et al., 2000). In addition, the average effect size calculated across all of the studies was small and in favour of girls; the majority of effect sizes were close to zero, thus supporting Crawford's (2001) thesis that

more similarities than differences exist between boys and girls in their language ability. On the other hand, it seems that the effect sizes of gender on language ability increased with the age of children included in the studies, suggesting that the gender differences in early language ability, which proved to be rather small, increased throughout childhood and adolescence. In our meta-analysis, we did not consider the effects of social factors on children's language development and possible gender differences, but the findings of several studies suggest that such effects should be taken into account when interpreting the effect of gender on children's language ability (e.g., Barbu et al, 2015; Gleason, 1987; Wallentin, 2008). Both parents, preschool teachers and school teachers all play an important role in supporting the language ability of both boys and girls across different developmental periods and may increase the gender differences in language ability with their differential behaviour towards boys and girls. Several studies suggest that parents talk differently with boys and girls (e.g., Gleason, 1987; Leaper et al., 1998), thus providing different learning environments for them to develop their language and possibly increasing the existing gender differences in language ability. With the increasing gender differences in language ability found in our study, special emphasis should be placed on providing efficient support for boys' language development both within the family as well as within different levels of the school system, while encouraging girls to develop their language, as well.

Conclusions

The findings of our meta-analysis in general indicate small gender differences in language ability, which, however, increase with children's increasing age. One important finding, which also contributes to the research field, is that gender differences depend on the aspect of language ability being measured (e.g., the largest gender differences were found in the oldest samples of children and adolescents with written language as a measure of language ability). In our opinion, special emphasis should be placed on providing equal opportunities and support for language development of both genders, both in the home environment as well as within institutions (e.g., preschools, primary and secondary schools), so that the small gender differences in early language ability are not multiplied and increased throughout the child's development and influenced by stereotypical differential behaviour and implicit theories of adults.

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Adolescent Boys, Embodied Heteromasculinities and Sexual Violence

JAMES W. MESSERSCHMIDT¹

∞ In this paper the author summarizes several life history case studies of adolescent boys who were identified at school as “wimps” and who eventually engaged in various forms of sexual violence. Such boys rarely are—if at all—discussed in the childhood, education and feminist literatures on sexual violence. The life stories reveal the interrelationship among in-school bullying, reflexivity, embodied structured action, and the social construction of heteromasculinities in the commission of sexual violence by subordinated boys. The author concludes by considering the implications the research has to the evolving discourses on social scientific conceptualizations of reflexive embodiment and heteromasculinities.

Keywords: bullying, reflexivity, embodiment, heteromasculinities, sexual violence

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Najstniki, utelešene heteromaskulinosti in spolno nasilje

JAMES W. MESSERSCHMIDT

☞ V prispevku avtor povzema nekaj študij primerov življenjskih zgodb najstnikov, ki so bili deležni različnih oblik spolnega nasilja. Življenjske zgodbe razkrivajo povezanost med ustrahovanjem v šolah, reflektivnostjo, utelešenjem in družbenim konstruktom heteromaskulinosti pri izvajanju najstniškega spolnega nasilja. Avtor prispevek sklene z razpravo o implikacijah, ki jih ima raziskava na vse širšo razpravo o konceptualizacijah reflektivnega utelešenja in heteromaskulinosti v okviru družbenih ved.

Ključne besede: ustrahovanje, reflektivnost, utelešenje, heteromaskulinosti, spolno nasilje

Introduction

Since the 1990s, I have focused much of my research on life history interviews of adolescent boys and girls involved in violence and nonviolence (Messerschmidt, 2000, 2004, 2012, 2016). The life stories of adolescent boys—which are the subject of this paper—reveal a close relationship among in-school bullying, reflexivity, embodiment, and heteromasculinities in understanding their involvement in sexual violence. Before I begin summarizing two of the adolescent boy life history case studies, let me explain what I mean by “reflexivity,” because it may be an unfamiliar term to some readers. In reflexivity we exercise our conscious mental ability to consider ourselves in relation to the particular social context and circumstances we experience (Archer, 2007). This conscious mental capacity in reflexivity involves engaging in internal conversations with ourselves about particular social experiences and then deciding how to respond appropriately. In reflexivity we internally mull over specific social events, interactions, structures and discourses, we consider how such social circumstances make us feel, we prioritize what matters most by defining our immediate concerns, and then we plan and decide how to respond (Archer, 2007). Although we internally deliberate and eventually make reflexive choices to act in particular ways, reflexivity is based on the situational and socially structured practices, discourses and interactions that we confront. Reflexivity mediates the role that social circumstances play in influencing social action and thus is indispensable in explaining particular social actions, such as sexual violence. Although individuals often engage in routine and habitual social actions (Bourdieu, 1980), I emphasize here conscious and deliberate practices that necessarily involve reflexivity.

In what follows, I first briefly explain the life history methodology used in the study. I then turn to two white working-class adolescent boys that I interviewed, both of whom ended up engaging in sexual violence. The partial synopses of these two boys’ life histories serve as examples of what in-school bullying, reflexivity, embodiment, heteromasculinities and sexual violence by certain adolescent boys *looks like in practice*. Finally, I conclude by reflecting upon what we learn from these life stories, in particular the relationship among reflexive embodiment, heteromasculinities, and sexual violence.

The Life History Method

The paper focuses on two white working-class teenage boys from New England, USA—Sam and Zack (both pseudonyms)—who were both bullied as

wimps. It examines how this bullying victimization is related to their specific constructions of localized heteromasculinities and eventual sexual violence. In the late 1990s, I completed life history interviews of teenage boys and girls to examine the construction and formation of gender and sexual practices through violent and nonviolent social action. Thirty youth (fifteen boys and fifteen girls) were interviewed after obtaining informed consent from each participant and their parent/guardian. A “maximum-variation” sampling procedure was used to ensure a selection of interviewees from a wide range of home life and other background situations. Although not a representative sample, the thirty life history case studies revealed the more elusive elements of teenage life that are often difficult to capture in quantifiable variables. Each life story deepens and augments our understanding of how eventual sex/gender/sexuality construction is related to personal life history.

The life history method implemented in this study involved voluntary and confidential one-on-one tape-recorded “informal conversational interviews” (Patton, 1990, pp. 280–282). These conversations were completed in two meetings of approximately three hours each. The conversations were fluid, allowing each interviewee to take the lead rather than merely respond to topical questions. The goal was to grasp each individual’s unique viewpoint and thus personal vision of the world. This interview method involved attempting to foster collaboration (rather than hierarchy) in the research process by judiciously engaging each interviewee, “working interactionally to establish the discursive bases from which the respondent can articulate his or her relevant experiences” (Holstein & Gubrium, 1995, p. 47).

This does not mean, however, that the conversations were unstructured. On the contrary, each conversation attempted to unearth the situational interactions and accomplishment of embodied practices in particular contexts and as related to personal life history. As such, the interviews sought detailed descriptions of practices (both what interviewees did in terms of practices and how they reflexively deliberated about particular social interactions and future social actions) and accounts of structured interaction in families, peer/leisure groups, schools and workplaces. The conversations touched on intimate and sensitive areas of personal life and relationships. Thus, the interviews reveal individual agentic trajectories through an assemblage of social structures in institutions and organizations.

The “data analysis” for the study had two stages. First, the tape-recorded conversations were transcribed and second, individual case studies were prepared. Here I dissect two of the life histories and define the similarities and differences between their pathways to particular forms of heteromasculinities and

sexual violence. The goal is to capture embodied experience for each interviewee in his words. By comparing the two individual life stories of Sam and Zack I establish links between the two teenage boys who construct heteromascularity both similarly and differently. In other words, I discover the interconnections between the two boys as well as the differences between them. Accordingly, the life history methodology helps to register patterns in lives that in other methodologies remain invisible.

Sam and Zack

In this section I present a synopsis of the two life stories, concentrating on their experiences of bullying at school and how this impacted their reflexivity and eventual embodiment of heteromascularities and sexual violence. I begin with Sam.

Sam

Sam was a short, overweight, boyish-looking eighteen-year-old with short blonde hair. He lived with his two adoptive parents and his younger biological sister. From elementary to high school, Sam was subjected to consistent verbal bullying from the dominant “popular” boys because of his physical size and shape (he was shorter and heavier than the other boys), for his inability to respond to the bullying as the masculine culture of the school dictated—that is, to physically fight back—and for his lack of participation in sports. Sam was consistently labeled a “wimp” and was thus feminized through abusive comments made by the dominant popular boys about his inability to fight back, his nonmuscular “fat” and “wimpish” body, and his complete lack of participation in sports. Sam told me that internally: “I felt like I was a girl” (Messerschmidt, 2016, p. 69).

Sam’s major concern was to be like the dominant popular boys—tough, sporty, and muscular—but he internally reasoned that his body hindered that construction; he concluded that he was bodily ill-prepared to construct this in-school dominant form of masculinity. Thus Sam’s body served as an antagonist in his construction of masculinity.

At the same time that Sam was confronting this dominant-subordinate structural and discursive hegemonic masculine relationship and interaction between the bullies and himself, he simultaneously began to sexually objectify and desire girls. He learned to objectify and desire girls from interaction at school and not from his parents. Sam constantly heard the dominant popular

boys' "sex talk" about sexual objectification of girls, as well as their alleged heterosexual exploits and experiences. He therefore began to reflexively desire to participate in heterosexuality, but he was unable to meet any girls his age. As Sam told me, he constantly had internal thoughts that centered on the bullying, which made him think, "I wasn't good enough. I didn't have the trust enough to gain access to a girl. I didn't think any girl would be interested in me" (Messerschmidt, 2016, p. 73).

Nevertheless, Sam concluded during his internal conversations that he very much desired to participate in heterosexuality because, "well, I'm a guy, so this is something that every guy does, that I want to be part of this. I want to be like the other guys. I want to know what it feels like, I want to know what goes on" (p. 72). In other words, Sam reflexively defined having sexual contact with girls as his major concern at this time in his life in order to be "like the other guys," but through his internal conversations he determined he was unable to fulfill this situationally defined dominant masculine criteria; he reflexively concluded he was unable to construct a dominant heteromascularity at school, a construct he wholly coveted. Instead, Sam reflexively chose to turn to a masculine behavior that was available to him: expressing physical control and power over younger girls through sexuality outside the confines of school.

Sam reflexively decided that babysitting in his basement at home would be a means to satisfy his deep concern to be heteromasculine, and his parents thought babysitting was a splendid idea. He internally decided that he "wanted to have some kind of sexual experience" and he thought that through babysitting he would come into contact with "innocent" and "vulnerable" girls whom he would "be able to take advantage of easily." Sam stated that during his internal conversations he discussed with himself "how my life was, how I feared the people at school, so I figured I could get a girl I was babysitting easier. That's why I wanted to babysit" (p. 74). Consequently, Sam began babysitting a few neighborhood girls (6–8 years old) in his house after school.

In other words, Sam reflexively decided to babysit because he thought he could both physically control and gain bodily access to "vulnerable" and "innocent" girls. Once he began to babysit, he reflexively devised ways to manipulate two of the girls into fondling him and performing oral sex on him for two years. Sam internally decided upon specific strategies to gain access to the girls. As he told me: "I kept gaining ways to manipulate, ways to like bribe, like act like I was helping them, act like I was doing good things for them, like playing games with them."

In this partial synopsis of Sam's interview, then, the bullies-Sam hegemonic masculine structural relationship (Messerschmidt, 2016) and its

co-existing feminizing discourse, as well as the culturally influential discourse at school that emphasized masculine and heterosexual objectification, desire and exploits, objectively shaped the particular social situation that Sam confronted involuntarily. During his reflexive deliberations about this situation, Sam developed and defined his major concern and what he cared about above all: to construct a heteromascularity like the dominant popular boys at school. However, he reflexively perceived that he was unable to do this at school, and therefore subjectively developed a course of action to realize this concern; he acted to advance what he cared about above all. In so doing, Sam internally responded to the objective structures, discourses, and interactions at school by reflexively designing the course of action he pursued. Reflexivity was an emergent personal power possessed by Sam, he was an “active agent” who internally developed and determined his particular response to the social circumstances that he experienced at school. Although Sam was unable to construct heteromascularity at school, he did not give up and become a passive victim of his circumstances. Instead, he actively used his reflexivity to devise a particular practice for himself—sexual violence—whereby he could now claim heteromascularity as his own. And Sam saw himself as successful. In this regard, I would like to include an extended excerpt in which Sam expresses his inner thoughts on what the sexual violence accomplished for him (pp. 75–77):

I was getting away with something that nobody else that I saw was getting away with. I felt that I was number one. I didn't feel like I was small anymore, because in my own grade, my own school, with people my own age, I felt like I was a wimp, the person that wasn't worth anything. But when I did this to the girls, I felt like I was big, I was in control of everything. And that's why it was hard for me to stop, because I'd have to return to that old me of being small and not being anything. I wasn't good at sports, and tough and strong and stuff, so I wasn't fitting in with anybody that was really popular. I was like a small person, someone that nobody really paid attention to. I was the doormat at school. People walked all over me and I couldn't fight back. [And then I thought], well, I'm a guy. I'm supposed to have sex. I'm supposed to be like every other guy. And so I'm like them, but [when I did this to the girls I thought] I'm even better than them [dominant popular boys], because I can manipulate. They don't get the power and the excitement. They have a sexual relationship with a girl. She can say what she wants and she has the choice. But the girls I babysat didn't have the choice. It was like I made it look like they had a choice, but when they stated their choice, if they said no, I like bugged them and bugged them until they didn't say no. I was like better than every other guy, because there was no

way I could get rejected. It was like, okay, they can have their relationships, I'm gonna do whatever I want. I'm better than they are.

We will now turn our attention to Zack, the second interviewee.

Zack

Zack was a short, overweight, white fifteen-year-old with short black hair who lived with his Aunt and Uncle and his two younger female cousins. Initially, he liked school and did quite well. From kindergarten to second grade, he “really excelled in school,” was “doing awesome” schoolwork and had lots of friends (Messerschmidt, 2000, p. 42). In third grade, however, circumstances at school began to change. By this time, he had gained a considerable amount of weight and the other students considered him “fat,” as he did himself. As Zack states, “I was really chubby and large, and I wasn't very athletic. I dressed funny. I'd wear sweat pants and the shirts with little alligators – so I wasn't popular” (p. 42). The “cool guys” at school would consistently verbally and physically bully Zack: “They'd call me ‘fatty,’ ‘chubby cheeks,’ ‘wimp,’ and stuff like that. I got pushed down a lot and stuff. I got beat up a lot in the schoolyard” (p. 42).

The bullying for being short and overweight, as well as the constant physical assault, continued through grade school and middle school, especially feminizing Zack for his inability to respond to the bullying as the masculine culture of the school dictated: to physically fight back. Unlike some other boys at school, Zack did not respond physically to the bullying because he internally concluded he would be “beat up.” Zack told me that he reflexively surmised that he was bodily ill-prepared to fight back because of the size and shape of his body.

In the fifth grade, however, the bullying escalated. So Zack internally decided to discuss the bullying with his uncle (whom he was very close to), and his uncle told him “you have to fight back or they'll keep it up” (pp. 42–43). So Zack reflexively decided to follow his uncle's advice because simply attempting to avoid the provoking students was not working and his major goal remained to be like the “cool guys.” Consequently, during one major bullying incident in which he was persistently pushed around by a “cool guy,” Zack attempted to “fight back” physically but was beaten severely: “He pile drove me into the ground.” At the end of the “fight” (which took place on the playground while a large group watched), several students shouted “names at me like ‘fatty,’ ‘fatty can't fight,’ ‘you're a wimp,’ stuff like that.” I asked Zack how that made him feel and he answered, “Like I was fat, weird, and a wimp. It really bothered me

that the cool guys at school didn't like me" (p. 43). Consequently, Zack internally decided to stop discussing the bullying with his uncle and he never again attempted to respond physically to the bullying. Like Sam, then, Zack's body served as an antagonist in his quest to construct masculinity.

Nevertheless, Zack did not give up entirely and reflexively began thinking about what he could do that would allow him to be a "cool guy." After much reflexive deliberation, he decided to try out for the junior high football team, not only because of his love of football but also to show people that he was "somebody," that he could be a "cool guy" (p. 43).

However, during the summer between fifth and sixth grades, Zack broke his wrist while attempting to "get in shape." He remained overweight and although he tried out for the team in his sixth-grade year, he was soon cut, and the verbal and physical bullying continued unabated. So Zack reflexively decided to avoid the "cool guys" as much as possible. According to Zack, the only classmates who would have anything to do with him were from a group of boys he called "the misfits." His interaction with the misfits took place only during school lunch, when they all sat together at the same lunch table. Apart from this, Zack did not "hang out" with other kids. It was through interaction with "the misfits" that he first developed a sexual interest in girls. As Zack states: "Me and the other misfits at the lunch table talked about sex and stuff. We'd see a girl sitting in the lunchroom and we'd just talk about some girls that we liked and stuff. What kind of reputation she had, what we thought about her. Nothing too gross or out of line, you know" (p. 44).

While the misfits were somewhat restrained in their discussions of sexuality at the lunch table, the dominant popular boys were extremely boisterous. As Zack told me: "They talked about it all the time. They talked about it a lot more at their table. They'd be right out loud about it, talking about 'getting laid,' and oral sex, and stuff. They always bragged about having a lot of sex and stuff" (p. 44).

Due to the frequent "sex talk" at school, Zack internally decided that he wanted to experience sex like all the other boys. Many popular boys and some of the "misfits" had allegedly engaged in intercourse, so Zack felt extremely "left out," especially since he had never been able to arrange a date. He identified himself as a "virgin," a status other boys – including numerous "misfits" – had long ago surpassed. Zack reflexively then decided to approach a few girls at school but they all, as he put it, "didn't want to go out with me because I was fat. I just didn't seem to fit in. Like I'm the only virgin in the school" (p. 45).

By age eleven, Zack had endured serious and continuous forms of bullying at school regarding his physical size and shape and for not physically

fighting back. He reflexively defined his major concern at that time to “fit in” by adopting certain situationally accountable masculine practices: fighting back, playing football and obtaining heterosexual dates; he wanted to be a “cool guy.” He failed miserably at each and had no one with whom to discuss this terribly bothersome situation. The result was that he experienced frequent internal conversations about how unhappy he was at school: “I felt really bad about myself. I thought there must be something wrong with me. I couldn’t do anything right and everybody thought I was a misfit. I didn’t want to be a misfit and I needed something to cheer me up” (p. 46).

Accordingly, like Sam, Zack reflexively decided to overcome his masculine dilemma by turning to controlling and dominating behaviors involving the use of sexual power. Unable to construct a heteromascularity like the “cool guys,” Zack reflexively turned to an available masculine practice: expressing control and power over his youngest female cousin through sexuality. During his sixth-grade year – a time when he experienced the distressing events just described and “discovered” heterosexuality – Zack internally decided to seek out his youngest cousin: “I wanted to experience sex, like what other boys were doing. I wanted to do what they were talking about but I was rejected by girls at school.” I asked Zack to elaborate on why he turned to his youngest cousin (pp. 46–47):

She always aimed to please everyone else, so I took advantage of that. And if I let her play my [computer games], she wouldn’t tell anybody. It was in the sixth grade. Me and my younger cousin, who was six at the time, we started to play this game Truth or Dare. And we just dared each other to do something. It started out pretty normal, just like standing on your head and stuff like that. But it just progressed into sexual stuff, until it was just sexual contact like oral sex and touching and stuff like that. She’d say, “No, I don’t really want to,” and then I’d force her into it. Like I’d say, “Oh, I’ll let you play my [computer games],” because I had a [computer] and she used to always want to come and play. It started just touching over my clothing, and then it progressed to taking off each other’s clothes and touching each other and stuff like that.

To satisfy his deep concern to be heteromasculine, then, Zack sexually assaulted (fondling and oral penetration) his youngest cousin over a three-year period (until he was 14 and she was 9) by using the manipulative strategy just described.

In this partial synopsis of Zack’s life story, much like in Sam’s story—the bullies-Zack hegemonic masculine structural relationship and its co-existing

feminizing discourse, as well as the culturally influential discourse at school that emphasized masculine heterosexual desire and exploits, objectively shaped the particular social situation that Zack confronted involuntarily. During his reflexive deliberations about this situation, Zack (like Sam) developed and defined his major concern and what he cared about above all; to construct a heteromascularity like the dominant “cool guys” at school so he could “fit in.” However, he reflexively perceived that he was unable to do this at school and so subjectively developed a course of action to realize this concern; he acted to advance what he cared about above all. In so doing, he internally responded to the objective structures, discourses and interactions at school by reflexively designing the course of action he pursued. Like Sam, reflexivity was an emergent personal power possessed by Zack; he was an “active agent” who internally developed and determined his particular response to the social circumstances that he experienced at school. Although Zack was unable to construct heteromascularity at school, he (again like Sam) did not give up and become a passive victim of his circumstances. *Unlike* Sam, he actively used his reflexivity to devise a number of particular practices – from attempting to fight back, play football and obtain heterosexual dates – but each of these strategies failed. He therefore continued to use his agency to formulate a new practice for himself – sexual violence – whereby he could claim heteromascularity as his own. And Zack, like Sam, saw himself as successful.

In that regard, I would like to include an extended excerpt in which Zack reveals his inner thoughts as to what the sexual violence accomplished for him (p. 47):

It made me feel real good. I just felt like finally I was in control over somebody. I forgot about being fat and ugly. She was someone looking up to me, you know. If I needed sexual contact, then I had it. I wasn't a virgin anymore. I wanted control over something in my life, and this gave it to me. I finally felt like one of the guys. I was just really down because I had a rough day at school. Just a lot of teasing, being called names and being pushed around a lot. Not having any friends that meant anything. Kind of depressed about school. Not able to do things like everybody else. That made me sad. [And then I'd come home and play the game with my cousin] and that would cheer me up, make me feel better. Plus I would be sexually satisfied and feeling like I have affection. No one ever said good things about me and I never did things that the other guys did. But now I did, and it was really cool. I could now talk about sex with them if I had to. I knew what it looked like and how it felt now, that kind of thing. So I felt I fit in more.

Reflection

The life history interviews presented here allow us to “see” genuine gendered projects as trajectories through time, as patterns of agency. Sam’s and Zack’s reflexivity mediated their particular social experiences at school, and it is this subjective deliberation that is essential to understanding their decision to engage in sexual violence to solve their masculine dilemma. The life history interviews with Sam and Zack recorded the particular structural, discursive and situational social conditions impacting them, they recorded the specific reflexive deliberations that mediated and negotiated those social conditions, they recorded how those social conditions made each boy feel, they recorded what each defined as their immediate concern, and they recorded how each planned and ultimately decided to engage in the crime of sexual violence. For Sam and Zack, then, it was through reflexivity that they defined their major concerns and their sense of self, that is, their perception of who they were and who they wanted to be. Reflexivity is not separate from the social but rather a dimension of it – Sam and Zack literally brought the social inside – and it is through their reflexivity that they located themselves in relation to others. Sam and Zack were not, however, free to make and remake their gendered selves as they choose; they were constrained (and enabled) by the social structures, discourses and interactions situationally available to them.

In particular, what we “see” in these life stories is both Sam and Zack attempting to practice complicity with the in-school dominant and hegemonic masculinities (Messerschmidt, 2016) and thereby – however unwittingly – reproducing gender inequality. Each case of sexual violence produced an unequal masculine/feminine relationship because it inscribed the young girls, who embody weakness and vulnerability, as feminine, and Sam and Zack, who embody strength and invulnerability, as masculine, thereby constructing “inferior” feminine survivors and “superior” masculine perpetrators. Gender difference and inequality, then, are established through Sam’s and Zack’s heterosexual violent practices, and we have the intersection of gender, sexuality, age and inequality through the same practice. By engaging in sexual violence, Sam and Zack simultaneously attempted to align themselves with what they reflexively perceived as the “cool guys” and their accompanying dominant and hegemonic masculinities. This process of attempted alignment resulted in both Sam and Zack constructing a dominating hegemonic masculinity whereby they were commanding and controlling the violent interaction, they were exercising aggressive and dominating power over the girls and the situation, they were calling the shots and running the show. Neither boy viewed their behavior as

sexual violence, but rather as a legitimate and permissible way to “do” heteromascularity: a dominating and controlling form that centered on sexual conquest. Both Sam and Zack felt entitled to sexual access and entitled to use as much manipulative coercion as necessary to succeed.

Finally, it is important to note that the bodies of Sam and Zack were reflexively scrutinized by each of them, and therefore became party to a surrogate heteromasculine practice that directed them toward a course of social action that was bodily realizable. Sam and Zack had a desperate need to abandon their feminized position and to align themselves with dominant and hegemonic masculinities (Messerschmidt, 2016). Their feminization at school was deliberated reflexively and they decided to fixate on a specific site – the home – and a specific form of body deployment – sexual violence – where such surrogate practices could be realized. At home, both Sam and Zack had access to less-powerful children, and therefore had the means through which their bodies could attain what they perceived as dominant and hegemonic masculine expressions. The contrast primarily in age and body size created a power differential that was agentic for both Sam and Zack but offensive to the young girls, who were physically, mentally and socially weaker. The available “sexual” opportunity at the home site was therefore especially attractive, became obsessive, and provided a powerful and exclusive means of doing heteromascularity. It was in the site of the home that Sam’s and Zack’s bodies took on a relatively new size and shape (both were physically larger and stronger than their victims) and their bodies moved in a different way than at school (both were physically bold, competent and dominant in the home). By reflexively concentrating their interactional efforts outside the context of the school, Sam and Zack were able to transform how they interacted with and through their bodies. Both Sam and Zack were now living through their bodies in a new way and therefore they became, in their own eyes, super-heteromasculine “cool guys.”

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The Teacher as One of the Factors Influencing Students' Perception of Biology as a School Subject

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∞ The main aim of our research was to determine whether the teacher is one of the factors influencing students' perception of biology as a school subject. The study also aimed to identify the influence of certain other factors in this regard, specifically: students' gender and place of residence, the number of biology teachers who have taught the students, and the teachers' gender. The sample consisted of 261 lower secondary school students (ISCED 2) in Slovakia, aged 14 and 15 years. A questionnaire with Likert-type items was used as a research instrument. The findings confirm the impact of the biology teacher on students' perception of the subject. After removing the influence of the teacher, the students' gender and place of residence did not have any significant influence on their perception of the subject. Two additional significant variables were the number of biology teachers who had taught the students and the teachers' gender. The research confirmed that the teacher's personality is one of the significant factors that can influence students' perception of school subjects.

Keywords: biology, perception, school subject, teacher, lower secondary school students

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Učitelji_ce kot en od vplivnih dejavnikov učenčeve_kine percepcije predmeta biologija

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≈ Glavni namen naše raziskave je bil ugotoviti ali je učitelj_ica en od dejavnikov, ki vpliva na percepcijo biologije kot šolskega predmeta. Namen raziskave je identificirati tudi nekatere druge vplivne dejavnike, kot so: spol učenk_cev, kraj bivanja, število učiteljic_jev biologije, ki so poučevale_i učenko_ca, ter spol učitelja_ice. Vzorec sestavlja 261 slovaških učenk_cev (dijakinj_ov nižje srednje šole) (ISCED 2), starih med 14 in 15 let. Uporabljen je bil vprašalnik s trditvami Likertovega tipa. Rezultati raziskave potrjujejo vpliv učitelja_ice biologije na učenčevo_kino percepcijo predmeta biologija. Po izločitvi vpliva učitelja_ice, spol učenk_cev in kraj bivanja nista imela signifikantnega vpliva na njihovo percepcijo predmeta. Za signifikantna vpliva pa sta se izkazala število učiteljic_ev biologije, ki so poučevale_i učenko_ca, ter spol učitelja_ice. Raziskava torej potrjuje, da je učiteljičina_eva osebnost pomemben dejavnik, ki vpliva na učenčevo_kino percepcijo šolskih predmetov.

Ključne besede: biologija, percepcija, šolski predmet, učitelj, učenci

Introduction

Science subjects are not considered to be among the favourite subjects of lower secondary school students. Francis et al. (2003), for example, reported that 14-year-old students had negative attitudes to science subjects and positive attitudes to their native language. Colley and Comber (2003) found that age and gender had no significant influence on students' attitudes to science subjects. Many studies have shown that teachers have a substantial effect on how students learn. Luyten and Snijders (1996) reported some positive long-term effects of teachers' teaching efficiency, their knowledge of students' needs and their motivation on students' perception of a school subject. In addition, the length of teaching by the same teacher proved to be relevant factor. Godhaber and Brewer (1997, 2000) and Wayne and Young (2003) found that students had a more positive perception of mathematics if their teachers had a higher qualification. Two other factors influencing students' perception of school subjects and their academic achievement are teachers' pedagogical mastery and effective use of teaching methods. These two factors have a greater impact on students' attitudes than pedagogical content knowledge (Darlin-Hammond, 1999). Feng and Ha (2016) investigated the impact of teachers' information literacy on lifelong learning and school effectiveness, finding that it can improve students' perception of teaching and teachers. Similarly, Byrne (1983) found that, in addition to good content knowledge, the way of presenting content to students is an important predictor of good teaching. The use of appropriate analogies, illustrations, practical examples, explanations and demonstrative examples are important for the perception of school subjects. Juttner et al. (2013) claimed that a good and effective teacher possesses a mix of good content knowledge, knowledge of students' prior content knowledge, and a mastery of different teaching strategies and methods. As Schreerens (2007, 2008) indicated, the teaching process is influenced by six factors: the school curriculum, team-work of the class and the teacher, a traditional teaching strategy, a constructivist teaching strategy, the school climate and evaluation. An effective teaching process can lead to a positive perception of a subject among students.

The teaching process in biology can vary greatly in terms of teaching approaches and strategies. It can take place in the classroom, in a natural environment, in the laboratory, in a museum, etc. George and Kaplan (1998) found that non-formal learning situations (i.e., museums, libraries, zoos, etc.) positively influence students' attitudes towards science subjects. Similar findings were reported by Haladyna, Olsen and Shaughnessy (1983) and Myers and Fouts (1992). A biology teacher has many opportunities to make the subject more interesting for students, thus contributing to the formation of students' positive attitudes

towards biology. Singh, Granville and Dika (2002) studied different factors influencing students' perception of mathematics and biology. They found that when a teacher presented subject content during school lessons in an understandable and meaningful form and tried to apply the content to real-life situations, he or she encouraged more positive student attitudes towards biology and mathematics. If the students were convinced about the benefits of the subject for their future career, they had positive attitudes towards the subject. The authors also found a significant positive relationship between students' attitudes towards the subject and their academic achievement. Teppo and Rannikmäe (2003) found that students' interest in a school subject was improved if the teacher was able to present the curriculum in a way that was interesting to them, if they regarded the information presented as useful, and if they were able to identify a connection with real life. The authors also compared the results by gender. They found that female students preferred teachers who presented information about the human body and human health, whereas male students preferred teachers who were interested in the curriculum focused on inanimate objects.

Cohen (2005) reported a positive relationship between the teacher's personality and the preferences for elective school subjects among students. The majority of students chose the subject according to the teacher.

Trumper (2006) analysed changes in the science subject curriculum in Israel. Among other factors, the author mentioned the influence of the teacher on attitudes towards the subject. Zeidan (2010) analysed students' attitudes toward biology according to the social and political context in which the teaching process was realised. Female students perceived biology in a more positive way than male students. The author explained that this could partly be a result of the positive relationship of female students with the teacher. In Palestine, men are typically more focused on political questions, while women are more focused on education.

The number of studies focusing on the influence of the teacher on the perception of biology or other school subjects is relatively low. The main aim of the present research was to determine whether the teacher is one of the influential factors that shapes lower secondary school students' perception of biology as a school subject (ISCED 2) in Slovakia. The study also aimed to identify the influence of certain other factors in this regard, specifically: students' gender and place of residence, the number of biology teachers who have taught the students, and the teachers' gender.

Methods

Respondents

The sample consisted of 261 lower secondary school students (ISCED 2) in Slovakia, aged 14 and 15 years. A total of 125 male students (47.89%) and 136 female students (52.11%) participated in the research. There were 153 students from towns (58.62%) and 108 from villages (41.38%). The maximum number of teachers who taught the students biology was three ($n = 82$; 31.80%). Of the participating students, 27 were taught by male teachers (10.34%) and 234 by female teachers (89.66%).

Research instrument

A questionnaire created by the authors of the present research was used as a research instrument. It contained Likert-type items and was divided into two parts. The first part included demographic variables such as gender, residence, number of teachers who taught the students biology, and gender of the biology teachers. The second part of the questionnaire included 27 items: 8 items focused on the students' perception of the biology teacher (a dimension in the factor analysis), while the other 19 items focused on the students' perception of biology. The items had a positive ($n = 16$) or negative orientation ($n = 11$). The positive items were coded from 1 (strongly disagree) to 5 (strongly agree), while the negative items were coded in the reverse order.

Data analysis

The reliability and validity of the questionnaire was determined after data coding. The reliability was determined with Cronbach's alpha coefficient (α). The boundary value for a reliable research instrument is $\alpha = .70$ (Cronbach, 1951), and the questionnaire used in the research achieved a value of $\alpha = .83$. The construct validity was determined using factor analysis. The relevance of the factor analysis was determined through the KMO index and the Bartlett test of sphericity. The value of the KMO test was .80 and the value of the Bartlett test was $\chi^2 = 2399.12$, $p < .001$. Both values indicated the relevance of the factor analysis. The factor analysis divided the items into four dimensions and no item used in the instrument was deleted. The results of the factor analysis are presented in Table 1. The value of Cronbach's alpha for the dimensions was higher than $\alpha = .50$ in all four cases, which is suitable for dimensions (Ferketich, 1991; Kline, 1993). The items were

not always well connected with the title of the particular dimension. The titles of the dimensions are only indicative. Adequately naming dimensions is a common problem in research, as it is very likely that not every item will correctly match the title of the dimension. Problems with naming dimensions extracted using factor analysis have been discussed by Thompson (2004) and Osborne and Costello (2009). Thompson (2004) suggested that it is feasible to name dimensions only approximately, according to the items in the dimension, whereas Osborne and Costello (2009) claimed that the title of a dimension is unnecessary, as factor analysis is a statistical technique to determine construct validity. The instrument was used for the first time in the present research, and the items will be revised in future studies. This procedure was also suggested by Bryant and Yarnold (1999).

Table 1. *Results of factor analysis.*

I. Difficulty of biology		$\alpha = 0.82$
1.*	I like biology.	0.64
2.	Biology is one of the easiest school subjects for me.	0.63
10.	We realise some experiments in biology classes.	0.56
13.	I have a feeling of disgust when I hear the word "biology".	0.70
14.	I feel nervous during biology experiments.	0.53
16.	I hate biology.	0.64
19.	I would like to have biology class as often as possible.	0.49
20.	I am bored by biology classes.	0.46
22.	Biology classes are demanding for me.	0.79
23.	I have to try very hard to understand biology.	0.74
26.	I am not interested in biology.	0.55
II. Interest in biology		$\alpha = 0.51$
9.	Biology classes are a lot of fun for me.	0.66
12.	I am tense during biology classes.	0.45
18.	I always learn interesting information during biology classes.	0.50
21.	I would like to be a biology teacher in the future.	0.43
III. Aids and experiments in biology classes		$\alpha = 0.60$
6.	The aids used in biology classes are interesting.	0.58
7.	Biology experiments are helpful in developing my skills.	0.54
17.	Biology is a useless school subject.	0.52
24.	The work with live materials in biology classes is interesting.	0.68

IV. Biology teacher perception					$\alpha = 0.74$
3.	I am interested in biology only due to our biology teacher.				0.78
4.	My biology teacher is teaching me a lot.				0.71
5.	I hate my biology teacher.				0.62
8.	My biology teacher has a very interesting way of interpreting things.				0.77
11.	My biology teacher gives us very interesting project tasks.				0.62
15.	My biology teacher organises very interesting excursions.				6.66
25.	My biology teacher does not teach me anything.				0.71
27.	My biology teacher often organises excursions in the natural environment.				0.68
Eigenvalue		6.13	3.12	2.11	0.65
% of variance		22.71	11.55	7.83	7.12

α - Cronbach's alpha

* The numbering of the items is the same as in the questionnaire.

An analysis of covariance (ANCOVA) was used to determine the influence of the teacher on the students' perception of biology as a school subject. The demographic variables (student gender, student place of residence, number of teachers who have taught the students, and gender of the teachers) were used as independent variables. The mean scores for all items and for the dimensions were dependent variables. The covariable was the mean score for the dimension regarding biology teacher perception (the fourth dimension extracted in the factor analysis; see Table 1). Before conducting ANCOVA, it was necessary to determine whether a significant relationship exists between the covariate and the dependent variable. The relationship was significant ($r = .35$; $p < .001$), so it was possible to use ANCOVA.

Results

Table 2 presents the results of ANCOVA and the mean scores for the students' gender differences. The influence of student gender on the perception of biology was insignificant ($F = 2.71$; $p = .10$), while the influence of the covariable (i.e., biology teacher perception) was significant ($F = 37.87$; $p < .001$). After removing the influence of the covariable on the results, no statistically significant difference was detected between male and female students.

Table 2. *Values of ANCOVA and mean score with respect to gender.*

	<i>F</i> (biology teacher perception)	<i>F</i> (gender)	<i>x</i> (male)	<i>x</i> (female)
overall score	37.87***	2.71	3.25	3.32
difficulty of biology	25.37***	3.01	3.24	3.35
interest in biology	63.92***	.08	3.13	3.09
aids and experiments	7.35**	1.30	3.41	3.49

** $p < .01$ *** $p < .001$

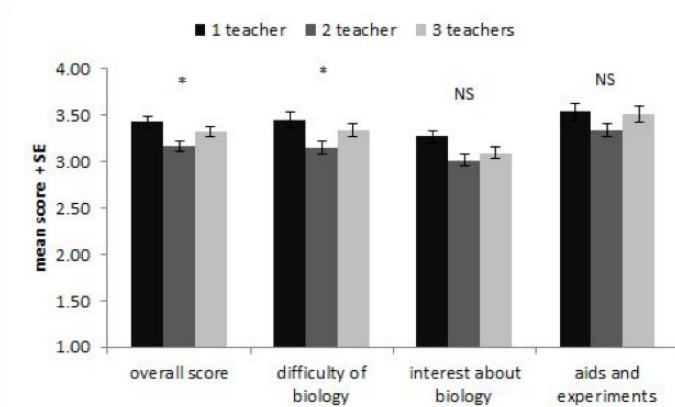
Similarly, for the independent variable student's residence, the differences between groups were insignificant ($F = 1.09$; $p = .30$), while the influence of the covariable (i.e., biology teacher perception) was significant ($F = 35.92$; $p < .001$) (Table 3).

Table 3. *Values of ANCOVA and mean score with respect to residence.*

	<i>F</i> (biology teacher perception)	<i>F</i> (residence)	<i>x</i> (village)	<i>x</i> (town)
overall score	35.92***	1.09	3.34	3.26
difficulty of biology	23.65***	1.07	3.35	3.25
interest in biology	64.05***	0.72	3.15	3.08
aids and experiments	6.78**	0.17	3.48	3.43

** $p < .01$ *** $p < .001$

The number of teachers who have taught the students biology was the next variable investigated (Figure 1). In this case, the difference was statistically significant ($F = 4.17$; $p < .05$) and the covariable had a significant influence ($F = 35.03$; $p < .001$). A significant difference was detected in the dimension "difficulty of biology" ($F = 3.38$; $p < .05$).

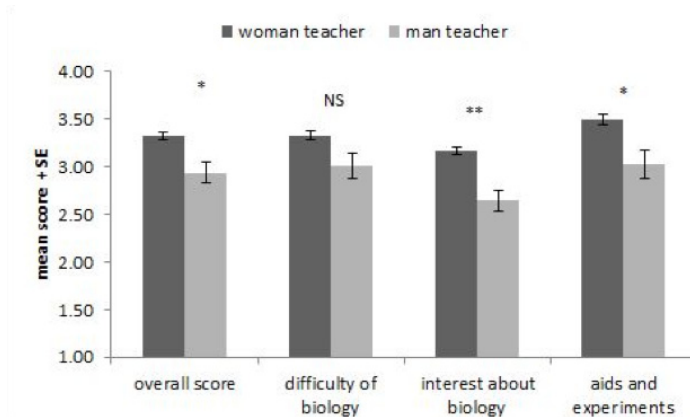


* $p < .05$

NS - not significant difference

Figure 1. Mean score and SE regarding the number of teachers who have taught the students biology.

The influence of the teachers' gender was statistically significant ($F = 5.09$; $p < .05$), and the covariable was significant ($F = 29.68$; $p < .05$). A significant difference was detected in the dimension "interest in biology" ($F = 7.97$; $p < .01$) and in the dimension "aids and experiments" ($F = 6.17$; $p < .05$) (Figure 2).



* $p < .05$

** $p < .01$

NS - not significant difference

Figure 2. Mean score with respect to the teachers' gender.

Discussion

The main aim of the present research was to determine whether the teacher is an influential factor regarding lower secondary school students' perception of biology as a school subject. The results showed that female students had a more positive perception of biology than male students, but without significant effect. The influence of student gender was insignificant, but the influence of the covariable (i.e., students' perception of the biology teacher) was significant. Similar findings were reported in certain prior studies (Weinburgh & Englehard, 1994; Utito, 2014). Utito (2014) found that female students were more interested in biology topics such as the human body and human behaviour, while male students prioritised school subjects that included the manipulation of objects, such as physics. The author found a statistically significant difference between male and female students in their attitudes to biology, in favour of the latter. Komarraju (2013) found that students preferred teachers who were more creative and used more than one teaching approach. This can be related to a higher preference for a school subject. The findings of the present research indicate that the biology teacher has a positive influence on male and female students' perception of biology.

The second observed independent variable was the respondents' place of residence. The difference was not significant. Similarly, Zeidan and Jayosi (2015) did not find a significant difference between respondents from villages and towns regarding their perception of science subjects. On the other hand, Sekar and Mani (2013) found that students from towns perceived science subjects more positively than students living in villages. In the present research, a significant influence of the biology teacher on results was found. This could be explained by the differing roles a teacher can play in villages and towns. A teacher in a more rural environment probably works with fewer students at a time, has more time and opportunities to work individually with students, and may also know the student privately. This could, to a certain extent, explain the positive perception of a school subject. Similar findings were discussed in studies by Berenguer, Corraliza and Martin (2005) and Glenn and Hill (1977).

Students taught only by one biology teacher had the most positive perception of biology, while students taught by two teachers had the most negative attitudes. A review of the research literature revealed no research focused on this variable. The assumption is that the participating students perceived a school subject more positively when taught by only one teacher because they were accustomed to his or her teaching style. The reverse effect could be explained when two teachers taught students: students had difficulties adapting to the new (changed) teaching style of the second teacher. There are still some questions that

need to be answered in future studies. For example, why did the students who had been taught by three different teachers have a more positive perception than the students who had been taught by two teachers? One possibility is the indirect influence of the second teacher. If the second teacher had a negative effect on students' attitudes, the third teacher could have the reverse effect.

The last studied variable was teachers' gender. The students' perception of biology was significantly more positive when taught by a female teacher than a male teacher. There are, however, some limitations to this conclusion, as only a very small number of the participating students had a male teacher. Opdenakker and Van Damme (2006) reported that male teachers are more focused on the school subject, whereas female teachers are more focused on students, on their needs and behaviour. Similar findings were reported by Good, Sikes and Brophy (1973). Jones and Wheatley (1990) found that male teachers were stricter than female teachers, which could also have an effect on the perception of the school subject.

Conclusion

In the present study, students' perception of the teacher had an important influence on their attitudes towards biology as a school subject. After removing the influence of the teacher, students' gender and place of residence did not have any significant influence on their perception of the subject. Significant differences were detected in two variables: the number of teachers who had taught the students biology, and the teachers' gender. Based on the results of the research, it is possible to suggest some further areas of research. It would be important to study teachers' influences on other school subjects. For a thorough understanding of how class dynamics work with respect to the teacher, it would be important to use other research methods, as well; class observations of a biology teacher, for example, could confirm possible gender differences during the teaching process. As mentioned in the section regarding the research methods used, there are some relevant issues related to the distribution of items into dimensions (not all items matched the names given to the dimensions). This could be revised in future research, as suggested by Bryant and Yarnold (1999).

Based on the present findings, it is possible to suggest some practical implications for education.

1. More emphasis should be given to the selection processes of student teachers when entering universities and colleges (e.g., more information regarding their personality traits, interests and motivation) and to pre-service and in-service professional development of teachers (i.e., teachers need to achieve pedagogical mastery, and to acquire good subject content

- knowledge and pedagogical-content knowledge). This will help to make school subjects more interesting and meaningful to students.
2. The circulation of subject teachers (e.g., biology teachers) during primary and secondary school education should be minimised in order to reduce the negative impacts of changing teachers on students' perception of the school subject.
 3. In order to create a positive school climate, a variety of teaching and learning approaches should be practised (e.g., different teaching strategies and methods supporting creative and heuristic activity of students, cooperative learning, etc.). Biology teaching should take place outdoors as well as indoors in order to achieve maximum meaning for the students.

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To what Extent Do School Leaders in Slovenia Understand Physical School Environments as a Learning Factor?

MAJDA CENCIČ¹

☞ School leaders are a central factor of the quality of learning and teaching in schools. It is generally believed that the staff model their behaviour on leaders, which means if school leaders understand the physical school environment to be an important factor of learning, school staff (teachers and other professional staff) will also do so. To discover how school leaders assess the school environment as a factor of learning, 150 school leaders in primary education in Slovenia were invited to complete an online questionnaire. They were asked about their views regarding to what extent their school as physical environment encouraged certain factors. Fourteen listed factors were assessed on five-point numeric scales. The results show that in their school environment, school leaders assessed ecology, movement, and respect the highest, and feelings, imagination, and space the lowest. Their estimates of the assessed factors differ depending on the type of school building (new, old, renovated) only on the factors of movement, creativity, and logic and mathematics in favour of old schools. The results provide interesting information especially for school policy and everyone involved in the planning, building, or renewal of school premises.

Keywords: leadership, basic education, schools, physical environment, learning, Slovenia

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Kako ravnatelj_i_ce zaznavajo fizični učni prostor kot dejavnik pouka?

MAJDA CENCIČ

≈ Ravnatelj_i_ce imajo velik vpliv na kakovost učenja in poučevanja na svojih šolah. Splošno razširjeno je tudi mnenje, da delujejo kot model ali vzor za zaposlene in učenke_ce. Če npr. vodstvo ocenjuje fizično ali grajeno učno okolje kot pomemben dejavnik učenja, bodo učitelj_i_ce in učenke_ci tudi sprejele_i tak pogled na fizično učno okolje. Da bi ugotovili, kako ravnatelj_i_ce ocenjujejo notranje in zunanje okolje svoje šole, smo ravnatelj_e_ice slovenskih osnovnih šol povabile_i k sodelovanju in izpolnitvi spletnega vprašalnika. Zanimalo nas je, kako ocenjujejo fizično ali grajeno notranje in zunanje okolje svoje šole kot spodbujevalca nekaterih dejavnikov, ki smo jih oblikovale_i na osnovi Gardnerjeve teorije o več inteligencah. Na spletni vprašalnik se je odzvalo le 150 ravnatelj_ev_ic osnovnih šol (od tega je bilo več kot 70 % ravnatelj_ic), ti_e pa niso vedno odgovorili_e na vsa vprašanja. Ravnatelj_i_ce so dejavnike ocenjevali_e na petstopenjski številčni ocenjevalni lestvici z ocenami od 1 (najnižja ocena) do 5 (najvišja ocena). Rezultati so pokazali, da so ravnatelj_i_ce ocenili_e, da notranje in zunanje okolje šole najbolj spodbujata ekologijo, gibanje in spoštovanje, malo pa čustva, domišljijo in prostor. Na osnovi tujih raziskav smo pričakovale_i, da bodo bolje ocenjene nove in obnovljene šole. Rezultati neparametričnega Kruskal-Walisovega preizkusa pa so pokazali statistično značilne razlike glede na vrsto šole (nova, stara, obnovljena) le pri dejavnikih gibanje, ustvarjalnost in logičnost ter matematika. V prednosti so se pokazale starejše šole, čeprav je bilo v Sloveniji zgrajenih veliko inovativnih in arhitekturno dobrih šol. Izpostavljamo le arhitekta Emila Navinška, ki je v sedemdesetih letih prejšnjega stoletja z inovacijo šol brez hodnikov spodbudil zanimanje arhitektov po vsem svetu za »brezkoridorne« stavbe. Rezultati, ki smo jih dobile_i in jih zaradi nereprezentativnega vzorca ravnatelj_ev_ic ne moremo posploševati, saj se je odzvalo le malo ravnatelj_ev_ic iz novih šol, zato dajejo le neko grobo sliko pogleda ravnatelj_ev_ic na nekatere dejavnike, ki jih spodbujata notranje in zunanje okolje šole, saj nas tudi okolje uči oz. tudi iz notranjega in zunanjega okolja sprejemamo številna sporočila. Rezultati pa tudi kažejo, da

je treba področje grajenega šolskega prostora naprej raziskovati tudi na osnovi neposrednega opazovanja na terenu ter v raziskovanje vključiti različne deležnike_ce, ne le ravnateljev_ic, ampak tudi učitelje_ice, učenke_ce, starše in predstavnice_ke lokalne skupnosti.

Ključne besede: ravnatelji, osnovne šole, fizično učno okolje, učenje, Slovenija

Introduction

School leaders have demanding and responsible roles, tasks, and responsibilities. They act as models, both for the staff and the students (Cencič & Štemberger, 2014). If, for example, school heads understand the school environment to be an important factor in learning and teaching, the staff will also accept this view, because school space is not just space adapted for teaching (Ivanuš Grmek, 2003), but also a factor of learning, as it conveys many non-verbal messages (Day & Midbjer, 2007).

It is not only the natural environment (e.g. forests, seaside) that exerts great influence on us, the built environment (e.g. internal and external school environments) also have significant influence, whether we are aware of this or not (Playce, 2012). Thus, the impact of the built environment on school climate, on health and on learning performance (Woolner, 2010) has been determined in the literature, which suggests that the school building acts as a third teacher (Nicholson, 2005), and educates (Ivanič, 2009), that schools themselves (building, playgrounds, rooms, and corridors) teach; they are passive lessons or silent lessons (Day & Midbjer, 2007), hidden curriculum (Bida, 2012; Bregar Golobič, 2012; Taylor, 2009), and they can serve as three-dimensional textbooks for learning (Taylor, 2009). The school environment is becoming an additional factor of learning, as pupils accept the symbolic messages communicated by the school building and its surroundings.

Given that school heads function as models, we were interested in knowing how school heads in Slovenia assess their school environment as a factor of teaching and learning, which factors they rank the highest, and which lower, and whether the school heads' assessments differ depending on how old their school is. We created the factors based on Taylor's (2009, p. 153) presentation of how school environments can support Gardner's theory of multiple intelligences.

Different roles and/or competences of school leaders

School heads assume different roles in school today: '[P]rincipals are not only the educational leaders of their schools but managers who are responsible for financing, personnel, and the results of their institutions.' (Alava, Halttunen & Risku, 2012, p. 16).

In Slovenia school heads' roles, tasks, and responsibilities are defined by law. It is emphasised among their roles that the school head is the person who takes care of the legality of school's functioning, taking account of school governing board's guidance and decisions, and that she/he is the coordinator of the work in the school (Roncelli Vaupot, 2001).

In addition to the formally declared and defined roles, however, school heads also perform a number of various other roles they are expected to perform, despite the fact that they are not explicitly listed.² Among such roles,³ we would like to mention that of a role model for teachers, because leaders act as a model for the staff, and that the staff tend to uncritically follow the example of school leaders. If the school head is also a model or example for the employees, for a good school head this represents an additional obligation.

In current discourse, the term 'school head's role(s)' has been increasingly replaced by the term school head's competences (e.g. Schratz et al., 2013). With reference to school head's competences, various more or less extensive lists of competences have been constructed (e.g. Schratz et al., 2013), which include various areas of knowledge, skills and attitudes. At present, however, the existing lists of competences do not include one that would indicate school head's competences in relation to the physical learning environment as an important factor of learning, although, as Tomšič Čerkez and Zupančič state: 'Physical space plays an important role in our everyday life. It determines us, and at the same time we define it' (2001, p. 5).

Physical or built school environment as an additional learning factor

According to Sigurðardóttir and Hjartarson (2011, p. 28):

Educational facilities and their surroundings can be a useful resource for teaching and learning in many ways. The shape of a building, lighting and facilities can serve as a subject for students in their studies. By making the building itself environmentally friendly, students can be taught to understand an environmentally friendly lifestyle. Architects might also consider opportunities to introduce interesting aspects of core subjects like maths, science and arts for teachers and students to reflect upon in different contexts. Patterns and lighting on the floor and ceiling might, for example, represent stars and galaxies, which then become a part of everyday life, and elements like doors, windows, light and shadows can be used to demonstrate colours, shapes, sizes and patterns.

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- 2 In a qualitative study on creativity in pre-school institutions, the teachers highlighted the leadership, which in certain cases acts as a positive impulse for the creativity of the staff, or an impediment to it in other cases (Štemberger, 2013).
 - 3 We understand the term 'role' to be the part someone assumes in any part of interaction (Richards & Lockhart, 2007). Roles are not determined in advance, but change in relation to the changes in society and are culturally conditioned (ibid.).

Anne Taylor (2009) presents similar opinions. She thinks that the school environment must be tailored to the individual learner and that this requires an awareness of the existence of different learning styles. Moreover, the school environment can also stimulate the expression of pupils' various intelligences, but only if it is varied and enables pupils to take part in different activities, such as reading, listening to music, solving problems, etc. She explains pupils' potential and possibilities with Gardner's theory of multiple intelligences, which discusses the existence of several equal and relatively independent intelligences (verbal/linguistic, logical/mathematical, visual/spatial, bodily/kinaesthetic, musical/rhythmic, interpersonal, intrapersonal and naturalistic).

Taylor (*ibid.*, p. 153) also presents a few ways that environments can support the identified intelligences, for example:

- verbal/linguistic: with a theatre in every school, multimedia communication centres;
- logical/mathematical: patterns built into the floor or walls, structural features revealed, places for technology, geometric form;
- visual/spatial: through a variety of spaces, sculptures, and wall graphics; galleries in schools, hallway museums; windows and interior views;
- bodily/kinaesthetic: with fitness trails, gymnasiums, dance studios, tools to use;
- musical/rhythmic: with acoustics, music practice rooms, performance venues;
- interpersonal: deployable and movable furniture, places for teamwork, large horizontal work surfaces versus individual desks, gathering spaces indoors and outdoors, conference rooms;
- intrapersonal: outdoor seating, study alcoves, private areas, quiet rooms;
- naturalistic: with habitats, recycling venues, nature trails, green architecture, etc.

Some researchers (e.g. Woolner, 2010) mention the influence of the environment not only on learning but also on the motivation of teachers and pupils. They discuss the influence of the environment on pupils' nonattendance at school, on their academic achievements, on bad discipline in worn out and inappropriately maintained school premises and argue that 'how one feels in school premises influences his/her relation to everything connected with education' (*ibid.*, p. 15). These findings were supported by an analysis of the negative influence that neglected school premises have on pupils' behaviour and achievements (Burke & Grosvenor, 2003). Taylor (2009) adds that ergodynamic furniture reduces the negative consequences of a sedentary lifestyle, which can include damaged posture,

back pain, and even concentration problems. After comparing old schools with little natural light, poor views, built from inappropriate materials and with bad air circulation, etc. with newer, ecological schools with lots of daylight, good natural air circulation, a relaxing view etc., the researchers determined that learning achievements of pupils in newer, ecological schools were higher compared to the achievements of those pupils who attend schools with older and out-dated premises (LPA, 2009, p. 8). According to them, an appropriate learning environment also has a positive influence on work organisation, relations in the classroom, and motivation (Barret & Zhang, 2009). The research results have proven the considerable importance and influence of the physical school environment.

The physical school environment functions as a learning factor or learning tool (Sigurðardóttir & Hjartarson, 2011, p. 28) or 'passive lessons' taught every day (Day & Midbjer, 2007). They (*ibid.*, p. 147) add that lessons are absorbed from all places. Some are deliberate: for example, labelled cluster-bins encourage waste separation; some are unconsidered: for example overflowing litter bins encourage littering. The aforementioned authors argue that less conscious lessons include those about values, self-worth, behaviour, expectations, and responsibilities. All buildings and all places teach, but few have been planned with lessons in mind, because some devalue and demoralise us, while some enrich and inspire us (*ibid.*). Furthermore, Nicholson (2005, p. 44) presents evidence that children and pupils are extremely aware of the symbolic messages that buildings transmit. Therefore, she sees the building, the landscape of the school, the space and places within, the décor, furnishing and features as 'the third teacher': a tripartite alliance between teachers, parents and the environment in which the building takes place. She (*ibid.*) thinks that the very fabric of the school building can teach children and pupils about many things that will be important ideas they can grasp and hold onto throughout their lives.

Similarly, Pit Li Phan (in: OECD Programme on Educational Building and Department for Education and Skills, 2006, p. 44) explained: 'The shape, size and pattern of windows can demonstrate music, the pattern of light fittings can illustrate star constellations, and staircases can act as a sundial or a play structure.'

With regard to the mentioned influence, which the physical interior and exterior school environment exert on everyone participating in the learning process, we were interested to discover in what ways school heads perceive the physical environment (interior and exterior) of their schools as a factor of learning. We prepared the questionnaire according to Gardner's theory of multiple intelligences, which Taylor (2009) adapted to the physical or built school environment. With a questionnaire for school heads we also wished to stimulate their reflection and sensibility for the theme (Horvat, 2013), because we agree that data,

like a mirror, give school leadership feedback about their schools (Conzemius & O'Neill, 2001, p. 41).

Survey

The study took place in 2013. Only those parts of the results referring to the discussed theme are presented in the article. We were interested in how the surveyed school heads assess some of the factors in the environment of their schools and in what ways their estimates differ depending on how old the school building is (new building: less than five years; old building: more than five years; or renovated school). We expected that new and renovated schools would be assessed the best, according to the abovementioned LPA (2009) study in which the researchers found that learning achievements of pupils in newer, environmentally friendly school buildings were higher compared to the achievements of pupils who attend schools with older and outdated premises.

Questionnaire

In May 2013, heads of primary schools in Slovenia received an e-mail with the request to complete the questionnaire.

The questionnaire included a numerical rating scale, with which the school heads were asked to assess to what extent in their view their school as a physical environment encouraged certain factors (imagination, creativity, feelings, language, music, logic and mathematics, space, movement, ecology, aesthetics, cooperation among students, respect, ethics and attitude towards the broader community). The influence was assessed on a five-point scale: 1 (weak influence) to 5 (strong influence).

Sample

After repeating the invitation to participate three times, 150 school heads⁴ responded to the request; 40 male (26.7%) and 109 female (72.7%) school heads completed the questionnaire; one of the respondents did not indicate gender.

As for the education level, one respondent had concluded a higher vocational study programme, 20 (13.3%) a higher education professional study programme, 99 (66.0%) a university study programme, one had a Bologna master's degree, and 29 (19.3%) have concluded a specialisation, master of science or doctor of science degree.

4 The questionnaire was dispatched to 787 addresses of school heads in primary education.

The age of 91 (60.7%), of the school heads who responded to the questionnaire was between 51 and 60 years; 51 (34.0%) were in the age range between 41 and 50 years, 6 (4.0%) between 31 and 40; only two (1.3%) of the school heads who responded to the internet questionnaire were older than 61 years .

One respondent did not select an answer to the question about job experience in leadership; 38 respondents (25.3%) had up to four years of professional experience in school leadership; 73 (48.7%) had been in leadership for 5 to 14 years, and 38 (25.3%) for more than 15 years.

Most numerous (66 or 44%) among the respondents were school heads of rural schools, followed by 56 (37.3%) heads of urban and 28 (18.7%) heads of suburban schools.

As stated in the responses, only three (2.0%) of the school heads worked in new (up to 5 years old) school buildings. Most of them, i.e. 92 or 61.3% school heads worked in school buildings more than five years old; the rest of the surveyed school heads (55 or 37.7%) worked in renovated schools.

Data processing

The data were processed at the level of descriptive and inferential statistics. The school leaders' answers were first ranked according to their calculated mean values, from the factors with the highest mean value to the factors that on average were graded as less important. Descriptive statistics of the responses include the minimum result, the maximum result, the mean, the standard deviation, the coefficient of skewness and the coefficient of kurtosis. Nonparametric statistics: Spearman's rho correlations were used for connections between factors, and the Kruskal-Wallis test for the comparison of school heads' assessments with regard to the type of their school (new, renovated, or old).⁵

⁵ The Kruskal-Wallis test was applied because of the non-normal distribution of assessed factors and because of the small number of school heads in new (less than five years old) schools.

Results and interpretations

Table 1: *Descriptive statistics of graded factors that are, according to school leaders in basic education, stimulated by the physical school environment.*

Factors	N	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis
Ecology	147	2	5	4.13	.870	-.824	.053
Movement	146	1	5	4.09	.813	-.712	.555
Respect	146	1	5	4.03	.805	-.614	.479
Cooperation among pupils	147	2	5	4.02	.716	-.257	-.356
Language	148	1	5	3.99	.782	-.754	1.536
Ethics	148	1	5	3.97	.833	-.738	.992
Attitude towards broader community	148	1	5	3.96	.848	-.736	.859
Music	148	2	5	3.87	.767	-.143	-.536
Creativity	148	2	5	3.86	.822	-.340	-.387
Logic and mathematics	147	1	5	3.85	.753	-.430	.652
Aesthetics	148	2	5	3.64	.881	-.199	-.629
Feelings	149	1	5	3.48	.768	.012	.145
Imagination	149	1	5	3.44	.791	-.119	-.030
Space	145	2	5	3.43	.814	.081	-.465

The participating school heads assessed all the factors as relevant, as the average of all ratings exceeds 3 on the five-point assessment scale. With the average exceeding 4, distribution asymmetrically skewed to the left, prevalence of ratings 4 (40.7% of all ratings) and 5 (38.0% of all school heads' ratings) they rated ecology the highest in their schools. No one rated ecology in her/his school 1, which indicates the school heads estimate the factor of ecology highly and also dedicate the largest amount of attention in the environment to this theme (e.g. waste sorting).

Furthermore, the factor movement reached a high average rating (above 4) with rating 4 or strong influence also prevailing in this case (44.0% of all school heads' ratings). Schools with gym(s), sport grounds, and play facilities develop the factor movement very intensively. Navodila za graditev osnovnih šol v Republiki Sloveniji (Instructions for the Construction of Primary Schools in the Republic of Slovenia (2007) explicitly state that the school ground also includes the school yard, with or without playing facilities, and sport grounds. They list indoor training facilities (e.g. dance workshop, table-tennis room, sports games halls, swimming pool, fitness room) and outdoor sport grounds for basic school

(e.g. platform for sports games, a four-lane running track, a shot-put facility, a runway for the long jump, etc.).

Considering the results, school heads are mainly satisfied with the facilities in their schools intended for movement, as only one school head selecting the rating 1 here, which indicates the school does not have suitable and adequate facilities (such as a gym), which would motivate the students to movement, at its disposal.

We also obtained rather unexpectedly high ratings regarding the factor respect (average exceeding 4 with nearly half (46.0%) of the school heads rating this factor at 4). Ciaccio (2004) stresses the importance of respect in schools; he (*ibid.*, p. 3-4) thinks that respect fulfils the child's emotional need and that treating pupils with respect is a practice that most educators would embrace. Meador (2013) states respect denotes both positive feelings of esteem for a person and also specific actions and conduct representative of such esteem. He adds that respect can be defined as allowing oneself and others to do and be their best. According to Meador (*ibid.*), it is important to create a mutually respectful atmosphere between all individuals involved within a school; all entities are expected to remain respectful to each other at all time and to greet each other with kind words. I believe it is the wish, ambition and, endeavour of every school head the their school would demonstrate respect to all and everyone. In schools, respect is also shown through the esteem of each student's characteristics including the adaptations necessary for children with special needs, such as ramps, adapted toilet rooms, etc.

Cooperation among pupils also achieved an average slightly exceeding a rating of 4, with that rating having the largest (52.0%) share of ratings. Taylor (2009) argues that the school environment with its surroundings can stimulate cooperation among pupils with outdoor seating, study alcoves, private areas, quiet room, with deployable and movable furniture, places for teamwork, large horizontal work surfaces versus individual desks, gathering spaces indoors and out, conference rooms, etc. School heads promote cooperation among pupils very much and probably they also place such furniture and equipment in their schools that support cooperation among students.

As previously noted, Taylor (2009) also thinks that the school environment with its surroundings can stimulate language with a theatre in every school or with multimedia communication centres. In the *Navodila za graditev osnovnih šol v Republiki Sloveniji* (Instructions for the Construction of Primary Schools in the Republic of Slovenia) (2007) a theatre is not explicitly mentioned. In the group 'functional rooms', a multipurpose room, with club spaces for students suitable for cultural events, lectures, art exhibitions, literary events, celebrations, etc. is mentioned among 'other rooms'.

Furthermore, the corridors of Slovenian basic schools are usually decorated with various posters with visual and/or verbal messages, so more than half (51.3%) of the school heads rated this factor in their schools at 4.

School heads are probably aware that the Slovenian language needs to be cultivated and paid particular attention, also because we are in the era of globalisation, when English as the lingua franca is gaining prevalence in Slovenia.

Ethics in society is a theme much discussed in Slovenian daily press and on TV; a lack or crisis of values are mentioned, especially emphasised in religious periodicals (e.g. Žajdela, 2013, p. 1). Similarly, it is also stated elsewhere that lack of ethics and ethical conduct has received a great deal of attention by the media (Humphrey, Janosik & Creamer, 2004, p. 675), and also that ethics is part of every interaction (Lampkin & Gibson, 1999, in: *ibid.*, p. 677). Therefore, in the evaluation of their school environment, school heads were able to put much emphasis on this aspect of school: in this case, the rating of 4 was also prevalent (47.3% of all).

The attitude towards the broader community received quite high ratings and the prevalence rating of 4 (46.7% of all respondents). We can assume the reason behind this is that emphasis on cooperation and partnership is often present in Slovenian educational literature, but also the school practice, because schools often work together with local communities in organising and performing various celebrations. In the afternoon and in the evening, they lend school facilities, especially gyms, to be used for the recreation of the local people.

Furthermore, music was awarded a high average and here, too, a rating of 4 prevailed (47.3% of the investigated school heads). Music is developed with acoustics, with music practice rooms, performance venues, etc. (Taylor, 2009, p. 153). Among specialised classrooms in Slovenian schools, there are also music rooms with various musical instruments, which school heads evaluated highly.

Creativity received a high average rating, and the rating 4 prevailed also in this factor (46.7% rated creativity 4). Taylor (2009, p. 315) understands creativity very broadly, as an aspect of human behaviour that encompasses more than the creativity of an artist or a composer. According to her, creativity is also the way you form a word as you speak, to imagine an image in your mind, or to recognise the smell of a flower – everything that did not exist before. Creativity can also be promoted through flexible furniture, various corners, such as a puppet corner and similar, in primary schools.

Furthermore, the factor of logic and mathematics received a high average rating and the prevalence rating of 4, which was selected by more than half (52.0%) of school heads. Taylor (2009) thinks that the school environment with its surroundings can stimulate logic and mathematics with patterns built into the floor or walls, structural features revealed, places for technology, geometric

forms, etc. Probably also school heads are aware of this factor, but I am not sure whether during the construction of premises they had considered including special patterns in the floors and on school walls. In Slovenian schools, however, a great number of various geometrical models and other mathematical learning aids are exhibited.

With regard to aesthetics, the ratings of 4 (strong influence), selected by 42.0% of school heads and 3 (medium), selected by 30.0% of school heads, prevailed. In the *Navodila za graditev osnovnih šol v Republiki Sloveniji* (Instructions for the Construction of Primary Schools in the Republic of Slovenia) (2007), a special classroom for arts is mentioned, which should preferably be located on the ground floor to allow performing activities outside the building. Aesthetics, of course, cannot be developed just through a special classroom for arts; the whole school must participate in this. As high ratings prevailed, the ratings given by the school heads that evaluated the aesthetics (interior and exterior) of their schools indicate they are quite satisfied. This is also shown in the appearance of schools and their surroundings, which usually are quite tidy and carefully maintained. Furthermore, Taylor (2009, p. 79), who combines education with architecture, wrote: 'Can't learn in ugly.' She thinks children demonstrate an intuitive sense of beauty and an innate ability to read and respond to the environment. Woolner (2010) argues that poor school premises seem to be associated with poor outcomes and that, even though the relationship is not simple, there are likely to be benefits for improving an inadequate environment.

The factor of emotions was predominantly awarded a rating of 3 (medium) with 46.0% of the investigated school heads and a rating of 4 (strong influence) selected by 38.0% of respondents. Feelings are an integral part of life in schools, too. As Rudolf Steiner in 1919 said (in: Day & Midbjer, 2007, p. 8), infants also absorb the quality of their environment, and older children respond to how places feel.

With regard to average ratings, the factor imagination is ranked below emotions. Here, too, a rating of 3 (medium) with 42.7% of school heads and a rating of 4 (strong) with 39.3% of school heads prevailed. Rodari (1996, p. 126) argues that imagination is based on real life materials and that it is important for children to live in an environment full of impulses and stimulation. According to Rodari (1996, p. 128), the main characteristics of learning premises should be their changeability and the possibility of giving its users enough opportunities not to accept it passively, but to actively and with creativity influence the space itself.

In comparison to other factors, space received the lowest average rating, although still above the average of 3 (medium influence) selected by 41.3% of the investigated school heads and with a rating of 4 ticked by 35.3% of them. By 'space',

we mean architectural design, and it is one of the fields introduced to pupils as a part of art education (Tomšič Čerkez & Zupančič, 2011, p. 8). Pupils experience space and relationship within it through their own movement, their senses and in a real environment (ibid.). Taylor (2009) thinks that the school environment with its surroundings can stimulate visual or spatial factors through a variety of spaces, sculptures, and wall graphics; galleries in schools, hallway museums; windows and interior views. Slovenian schools do not usually possess works of art by renowned artists; they exhibit their students' works instead. It might be useful both for the development of arts and of the students if also here the practice that has been established in Austria were active, where it is stipulated by law that every newly built school must earmark part of the investment for purchasing works of art (Kuhar, 2009). In this way, the students who do not have opportunities to encounter arts at home can compensate for this in school, where they spend much of their time.

As already mentioned, all the listed factors received high average ratings, which means school heads had ascribed all of them a strong influence and also evaluated them well as factors of learning in their schools. The listed factors also correlate to each other, for all the enumerated factors a positive and statistically significant correlation (Spearman's rho coefficient) ranging between 0.187 ($2P=0.023$) for the relation between imagination and music,⁶ and 0.86 ($2P=0.000$) for the relation between respect and ethics was present.

With regard to the social climate, which puts emphasis on the ecological aspect and the importance of movement, it is not surprising that the two factors received the highest average ratings. More unexpected are the high ratings for respect in school, which we accept as positive, and the high correlation coefficients for respect and cooperation among pupils ($\rho=0.653$, $2P=0.000$) respect and ethics ($\rho=0.786$, $2P=0.000$), which, as mentioned, is the highest, and respect and attitudes towards broader community ($\rho=0.645$, $2P=0.000$). Probably, this interpersonal factor should also receive more attention in the literature, although some authors emphasise (e.g. Ciaccio, 2004) respect. Close links between the listed factors are also mentioned by others, namely that e.g. only sound imagination can be the driving force behind the creation of something new as well as being important for learning as real knowledge only grows out of one's own creativity (Hanus, in: Bizjak, 1996). A close link between imagination and creativity was also determined in our study ($\rho=0.668$, $2P=0.000$).

Despite statements like: 'There can be no movement or activity on any scale where there is no room to move,' (Woolner, 2010, p. 21) the ratings for space,

6 The results of Spearman's rho between music and imagination surprised us. Since it is stated all great achievement in the areas of music, arts, architecture, and science represent a leap in imagination (Beuermann, 2011, p. 33) we had expected a higher correlation coefficient.

though still above the medium rating, were the lowest. Perhaps school heads had perceived a lack of space in their schools. If the factor of space is significant, it should be aesthetically pleasing ($\rho=0.442$, $2P=0.000$), it should develop imagination ($\rho=0.358$, $2P=0.000$), creativity ($\rho=0.342$, $2P=0.000$), cooperation among students ($\rho=0.317$, $2P=0.000$), and cooperation with the environment ($\rho=0.268$, $2P=0.001$), as well as positive emotions ($\rho=0.392$, $2P=0.000$) and respect ($\rho=0.247$, $2P=0.003$). Space should also be ecologically oriented ($\rho=0.417$, $2P=0.000$) and should promote movement ($\rho=0.472$, $2P=0.000$), as it is commonly known that students do not currently move enough.

We complement the described evaluation by school heads and the correlation of the presented factors with a comparison regarding the time of the construction of the school building: new, old, renovated (Table 2).

Table 2: Results of Kruskal-Wallis test for the listed factors in relation to the time of construction.

Factors	School	N	Mean Rank	Kruskal Wallis Test		
				Chi-Square	df	Asymp. Sig.
Ecology	New	3	79.67	2.989	2	.224
	Old	90	78.26			
	Renovated	54	66.58			
	Total	147				
Movement	New	3	49.00	8.074	2	.018
	Old	89	80.73			
	Renovated	54	62.94			
	Total	146				
Respect	New	3	69.00	1.607	2	.448
	Old	89	76.79			
	Renovated	54	68.32			
	Total	146				
Cooperation among pupils	New	3	71.50	1.936	2	.380
	Old	90	77.52			
	Renovated	54	68.28			
	Total	147				
Language	New	3	74.00	4.044	2	.132
	Old	90	79.62			
	Renovated	55	66.15			
	Total	148				
Ethics	New	3	73.00	.647	2	.724
	Old	90	76.60			
	Renovated	55	71.15			
	Total	148				

Factors	School	N	Mean Rank	Kruskal Wallis Test		
				Chi-Square	df	Asymp. Sig.
Attitude towards broader community	New	3	91.83	.610	2	.737
	Old	90	73.69			
	Renovated	55	74.88			
	Total	148				
Music	New	3	80.17	4.031	2	.133
	Old	90	79.52			
	Renovated	55	65.98			
	Total	148				
Creativity	New	3	79.83	8.095	2	.017
	Old	91	81.63			
	Renovated	54	62.19			
	Total	148				
Logic and mathematics	New	3	63.00	8.920	2	.012
	Old	89	81.70			
	Renovated	55	62.15			
	Total	147				
Aesthetics	New	3	107.50	2.097	2	.351
	Old	90	74.44			
	Renovated	55	72.80			
	Total	148				
Feelings	New	3	87.00	.288	2	.866
	Old	91	74.54			
	Renovated	55	75.11			
	Total	149				
Imagination	New	3	88.50	.357	2	.836
	Old	91	74.49			
	Renovated	55	75.10			
	Total	149				
Space	New	2	106.00	4.548	2	.103
	Old	88	77.11			
	Renovated	55	65.23			
	Total	145				

Since the number of school heads in new schools and of primary schools, in general, participating in the survey was not sufficient, the results of the study can only serve for deliberation. As the results in Table 2 indicate, the differences in school heads' evaluations were statistically significant in just three of the factors listed: movement, creativity, and logic and mathematics. In all the three factors, the average ratings were higher for old schools (schools older than five years), which achieved the highest ratings.

'Old schools' also achieved the highest average ratings, although without statistically significant differences, also in the factors, movement, respect, cooperation among pupils, language, and ethics.

In contrast, 'new schools' have the highest average of rankings, although without statistically significant differences in evaluations, with the factors ecology, attitude towards broader community, music, aesthetics, feelings, imagination, and space. With regard to the results that speak in favour of 'old schools', we can nevertheless ask a few questions about 'new schools'. In relation to our expectations, in our case, new schools did not receive ratings statistically higher than old and renovated schools, although in Slovenia there are the Navodila za graditev osnovnih šol v Republiki Sloveniji (Instructions for the Construction of Primary Schools in the Republic of Slovenia) (2007) and in literature there is much discussion about schools for the 21st century or about schools for the future (e.g. Dudek, 2005; LPA, 2009; PEB Exchange... 2002; Sigurðardóttir & Hjartarson, 2011). Slovenian architects also underscore that since World War II a large number of schools have been built with well-considered spatial solutions, innovative construction concepts, new materials, colours, and lighting elements (Filipič et al., 2004, p. 26). We can highlight Navinšek's 'corridor-less schools' which 'became a term and a concept for designing schools' (Bregar Golobič, 2012, p. 76).

I would like to stress that we do not wish to generalise the results, because only the evaluations of a modest number of school heads of 'new schools' were available to us. They indicate, however, that this area needs to be analysed and studied further, also with the help of direct observation and evaluations from the field and to include different stakeholders: besides school heads, also teachers, other school staff, students, parents and the wider community (Woolner, 2010).

The results also indicate the designing of new and of renovating existing schools needs to be given special attention. All stakeholders need to be involved in the designing of new and renovation of old buildings. Kenkmann (2011) states that children could monitor, arrange, and be involved in the maintenance of the school. They could take the initiative on how to decorate the classroom or the school and put up displays that are important to them rather than having educational posters chosen by the teacher. He (ibid.) adds that changing the space around us does not necessarily involve high costs and that what is needed is only some creativity and democratic structure in the school. With the participation of students, school heads can also serve as a model to teachers for cooperation in and joint planning of the school facility as a factor of learning. They state pupils learn by observing and participating (Day & Midbjer, 2007.) Therefore, school leaders must take care that the learners receive a variety of positive messages from the interior as well as from the exterior environments of their school.

Conclusion

We have found that school heads perceive the physical school environment to be factors of learning in their schools. The school heads participating in the study attributed the strongest influence to ecology, movement, and respect. They also perceive other factors, such as cooperation among pupils, language, ethics, attitude towards the broader community, etc., as important in their physical school environment, as all the factors mentioned received average ratings above the mean rating of 3 on the five-point rating scale.

With reference to how old the school is (new, old, renovated) statistically significant differences were acquired only with the factors of movement, creativity, and logic and mathematics, where, in comparison with new and renovated school buildings, they scored the lowest. We were surprised by this result, because old buildings were given preference over new and renovated schools in the factors respect, cooperation among pupils, language, and ethics, although with no statistically significant differences. New schools only scored slightly higher than old and renovated buildings did in the factors of ecology, attitudes towards broader community, music, aesthetics, feelings, imagination, and space. We would like to stress again that only a very small number of school heads from new schools were included in the sample and that we cannot consequently generalise the results. We might have achieved different results if more school heads of new schools had participated. Therefore, this area should be researched further. However, the findings do convey important messages to architects and all others involved in shaping school policy and planning the building or renewal of school premises. As Vodopivec (2014) puts it, architecture is a collective work, deserving of several collaborators in the production of the plan, in building, furnishing, etc. and the work of an architect should be broadly 'socially' accepted to be able to appear at all and also to meet the client's desires. In our paper, we have focused only on the pedagogical aspect, from the perspectives of school heads.

Moreover, in planning, 'consensus design' (Day & Parnell, 2003) is discussed, which is a socially inclusive process that includes different stakeholders. Only joint planning, implementation, and then evaluation of the creation can have positive effects on everyone, especially on users, as architects (e.g. Vodopivec, 2014) also believe some spaces have 'special power' or 'soul', which Day (2004) discusses in the book titled 'Places of the Soul'.

In addition to what has been stated so far, we wished, by filling in the questionnaire, school leaders would be encouraged to reflect on the nonverbal communication of their schools and to foster environmental and social awareness and responsibility (Day & Midbjer, 2007) for the built environment of their

school, which is an important learning factor. We suppose the questionnaire has stimulated school heads to think about what their schools look like, and that attention needs to be paid the school building (interior and exterior school environment) itself. As emphasised in literature (e.g. Day & Parnell, 2003), all stakeholders (besides architects and builders, also school heads, teachers, other school staff, pupils, parents, and representatives of the local community), need to be involved in the designing of new or the renovation of old buildings.

This paper could also be informative for the architects who think that architecture matters (Day, 2004). To architects, we would like to convey not only the general negative message that many people complain about modern architecture (ibid.). Architects could become familiar with the perspective of school leaders, how they assess their school environment, because adults, and not only children, behave differently in different environments and feel, think, and act differently in different surroundings (ibid.). As Vodopivec (2014) also says, the process of designing and building even of a quite modest facility requires increasingly more diverse skills, which in our time an individual can no longer master.

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Biographical note

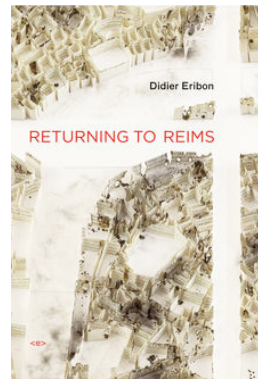
Professor **MAJDA CENCIČ**, PhD, works at the University of Primorska, Faculty of Education. She is engaged in different pedagogical topics; her interest have been in a wide range of areas — from the development of teacher education; educational research, assessment, evaluation; quality of physical learning environment; teacher as a reflective practitioner; and inclusive education — to the most recent issue of management of educational institutions and innovative learning environment.

Eribon, Didier (2013). *Returning to Reims*. Los Angeles: MIT Press, 256 pp. ISBN 978-1-58435-123-8.

Reviewed by NINA PERGER¹

Eribon's work *Returning to Reims* is an attempt at social self-analysis, that is, an analysis of one's own biographical trajectory in relation to the social factors that have influenced it. The work follows Bourdieu's steps in his own social self-analysis in *Sketch for a Self-Analysis* (2008), although Eribon takes a more direct step towards an analysis of his own experiences of his life trajectory. Whereas Bourdieu (ibid.) limits himself to a somehow depersonalised account of his trajectory, more or less strictly addressing the position-takings, objective structures and rules of the specific field games that have shaped this trajectory, thus remaining – paradoxically – somehow “absent” from his own self-analysis, Eribon takes into account the experiential and affective side of rupturing one's habitus by wilfully distancing oneself from the primary social environment and its di-visions of the social world, thus entering a process of resubjectivation, as also elaborated in Eribon's earlier work (2004). As such, *Returning to Reims* represents an important elaboration of Bourdieu's self-analysis, as it steers it in a more phenomenological direction with its focus on the level of micro-experiences in local life-worlds that are themselves shaped, but not determined, by objective structures. In this sense, it also represents a work that can serve as a response to criticisms levelled at Bourdieu regarding his presumed determinism. Eribon's self-analysis, his life trajectory, shows how it is possible to escape from one's social destiny, from the fate, the social verdict one is given based on one's social location: “Verdicts have been handed down before it's even possible to be aware of it” (2008, p. 53).

In his self-analysis, Eribon mainly focuses on social categorisation of class: his working class membership and his attempts to escape it, to re-shape himself by re-shaping his schemes of classification, including taste, as well as the bodily hexis that orient him, that direct him towards certain social practices and accomplishments that are constitutive of one's own space of possibilities, of



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that which seems reachable, probable and at the same time desirable, and that which is limited by being seemingly unrealisable, out of one's reach, that which presents itself as a more improbable object of one's desires and aspirations.

Eribon's analysis of such breakage, of the transformation of that which was inscribed into his body through his specific working class membership, shaping his primary habitus, also points to another important element; namely, how such transformations, escaping from one's primary habitus, can be "triggered", influenced, or at least "experienced" at the level of feeling, by a non-rational, affective, bodily dimension that itself cannot (completely) escape the hold of the social, although it also cannot be reduced to a body as a pure medium of social structures. This dimension can then be a first "sign" of one's disaffection with socially inscribed affective investments, one's disillusion with social *illusio*, felt as the bodily discomfort of not being able to take a doxic attitude towards the world, taking one's path, given by a social verdict, as taken-for-granted: "The surrounding culture offers us those rules both as the only way life can be lived and as an ideal we must strive for" (ibid., 72). As he elaborates, his breakage with the primary social environment was motivated by a specific intersection of class order and sexual order: two orders that, in their interplay, looked almost un-survivable or un-liveable. Eribon felt his gay sexual identity, which already marked his breakage from a doxic heterosexualised trajectory, as being threatened by the incorporated objective structures present in the working class environment, invested in aggressive and homophobic masculinity, thereby uncomfortably motivating his alternative – affective and cognitive – investments that would enable him to escape such an aggressive, at times even hostile, social environment.

Such distancing from one's primary habitus is not inherent in one's disorientation from the socially expected heterosexualised trajectory, nor in its specific intersection with a working class background. As Eribon himself emphasises, the possibility of his re-working and re-shaping was also enabled by the possibility of his alternative re-grounding in and through alternative resources present in the existing heterogeneity of intersubjectivities in his school environment, presenting itself as a condensed plurality of various local life-worlds in one system that otherwise dominantly works to reproduce existing power relations by unequally distributing cultural capital and the possibilities and opportunities for its accumulation: "A war is going on against the underdogs and schools are one of the battlefields" (ibid., 121). But this environment can, by condensed heterogeneity, also and at times function as the possibility of alternative re-subjectivations, if the principle of homophily is successfully transcended, as it was – momentarily but nonetheless crucially – in Eribon's

friendship with one of his schoolmates from the upper class:

“He not only taught me about all these things, he also taught me to want to know about all of them. He fascinated me, and since I wanted to be like him, I too began talking about Godard, having never seen anything of his, and about Beckett, having never read a word” (ibid., pp. 170–171).

Eribon’s social self-analysis thus serves as an important contribution to Bourdieusian theorisations by taking up new perspectives grounded in everyday life and its experiential dimension, perspectives that were neglected in Bourdieu’s theoretical framework. These include affect and embodiment, not only in the sense of their submission to objective structures as is mostly characteristic for Bourdieu, but also as a complex and intersectional mechanism of potential distancing from one’s own bodily incorporated structures, as it is evident in Eribon’s case. Thereby, Eribon’s self-analysis through his consideration of the social factors that have influenced his life trajectory, takes an important step towards reconsidering the Bourdieusian theoretical framework in terms of its potential application to addressing not only social reproduction, which was Bourdieu’s primary focus, but also potentialities for social and subjective transformations, and the price that may have to be paid along the way.

The concept of *habitus clivé* or cleft habitus, which remains undertheorised in Bourdieu’s work, is here enriched by the subjective experiential dimension, showing how breaking free from incorporated objective structures and incorporated doxa at times demands breaking free from one’s primary social environment, and even if a social agent manages to distance herself, the primary schemes of classifications, although reconfigured, still remain present in her embodiment: “Whatever you have uprooted yourself from or been uprooted from still endures as an integral part of who or what you are” (ibid., p. 18), creating tensions and discomfort, derived from not being recognised as a legitimate member of either the primary or secondary social environment or class: tensions derived from being a fish *out* of water, from being a class and sexual traitor, a defector. The position of a defector is one in which a social actor needs to re-shape, to re-train, their bodily hexis and re-configure their schemes of (self-)classification that are no longer in harmony with the dominant rules in a specific field. The agent, being a defector, has managed or – better said – is *still* trying to (almost miraculously) escape the hold of a verdict passed by the court of the social world and its doxic, unquestioned hegemonic norms, working through shaping one’s aspirations and desires, motivating individuals to be (affectively) invested in a verdict that is not recognised as such; the verdict is lost in the background of doxa, what remains is a path that is felt and perceived

as available and at the same time desirable, a path that is so clear only because many people have already walked in the same direction. This very “same direction” closes down the view of the extended space of possibilities that are almost unthinkable, or are unthinkable, although still present in one’s absence. Such presence – as evident in Eribon’s work – may be revealed through the specific interplay of the conditions that enable or even force one to question the seemingly unquestionable.

Although Eribon’s self-analysis is primarily an analysis of transcending objective conditions, loosely translated into subjective conditions, which are supposed to keep the agent in her assigned social place, his successful story of entering an academic field that, despite the meritocratic myth that masks itself as an already-realised idea, is strongly resistant towards such processes of deserting one’s social class, is clearly not set as a lived example of an individual miracle of subjective capacities and skills. Rather, it is a sociological analysis that uncovers objective structures functioning to reproduce relations of position-takings and fields, that is, functioning to preserve existing asymmetrical power relations and the unequal distribution of opportunities and resources, as well as the unequal distribution of possibilities for various modes of living, whereas certain modes of living (e.g., being gay in a working class background) appear to be less possible, less desirable and thus more punishable. Thereby, straying from the unquestionable or doxic, from that which is assumed and expected based on one’s social location, comes at its price: Eribon’s work *Returning to Reims* gives an intimate and precise insight into how *personal* is always already *structural*.

As such, it serves as an important work in numerous perspectives. It enables us a sociologically important insight into how relationality between objective structures and everyday life on a subjective level is played out not through a relation of causal determination, but through a dynamic in which there is a space for creative innovation that, at the same time, requires creative destruction of the unquestionable. Through intimate descriptions of affective and experiential dimensions, it enables a re-working and re-configuring of Bourdieu’s theoretical framework, opening it up in a new possible direction of thinking social transformations and the importance of recognising the heterogeneity of intersubjectivities not only through their conformist character, but also through their potential functioning as supportive systems in the processes of building alternative di-visions that become more tangible, more in-reach when one recognises the plurality of local life-worlds, their intermeshing character, and the potentialities of various modes of living beyond the Bourdieusian principle of homophily.

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