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STUDIES

Challenges and Curriculum Transformation in the Higher Education Sector in South Africa: A Case Study in WASH to Improve the Training of Pharmacists

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Abstract:
Introduction: South Africa is a member state of the "BRICS" bloc (BRICS2017.org, 2017) and the G20 group of the 20 nations/economic blocs, which between them account for the majority of the world's trade and economic activity. It faces many developmental challenges which are mirrored in its higher education sector. In this article, the authors seek to provide an overview of the challenges that South African higher education faces in the achievement of the developmental goals of the country. The focus of this paper is a case study in WASH (water, sanitation and hygiene) to improve context-specific responses that trains pharmacists on knowledge and skills.
Methods: The study was performed as a combination of calculations and a literature review to obtain the background or current status of the higher education sector and developmental planning in South Africa. For this, data were extracted from the Statistics South Africa reports, relevant professional articles on South African higher education sector and results of postgraduate research. Workshop results which were obtained as a collaboration between a public and a private higher education institution and results of postgraduate research were used as the paradigm for transformation and decolonisation of the curriculum for a professional degree in South Africa.

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Results and discussion: Challenges exist in the South African tertiary education sector and the graduation rate currently stands at 65.1% of the target set by the National Development Plan. Around 58.1% of all students do not complete their university/post-secondary education, which could provide a partial explanation for the skills shortage in South Africa. Decolonisation and transformation of the tertiary education curriculum are major topics in the discourse on higher education in South Africa. The authors propose that one way to achieve this would be inclusion of research results and group activities in the area of water, sanitation and hygiene as a topic for possible and partial transformation of the Bachelor of Pharmacy curriculum.
Conclusions: The current article summarises some of topics and challenges that drive the current discourse, developmental and curriculum debate in higher education in South Africa. Student access and through put at tertiary institutions need to be improved and the curriculum needs to be transformed.

Key words: H2S test kit, lifelong learning, Bachelor of Pharmacy, university stakeholder interaction, sanitation.

1 Introduction

The total population of South Africa was estimated at 55 908 900 in 2016, with the annual rate of growth of 1.19 – 1.24 % (Stats SA, 2016a, Tables 1 and 5). The country has reached a medium level of human development, as the human development index was equal to 0.666 in 2015 (UNHDI, 2016). South Africa has the most advanced economy on the African continent, but unemployment remains high and this is a source of major developmental and social challenges in the country (Keeton, 2014). The Gini coefficient/index for South Africa ranged from 63.0 to 64.8 between 2006 and 2011, making it the country with the highest inequality with respect to the population's income distribution in the world (WB, 2017a). Besides income, the inequality in South Africa has also been demonstrated by the fact that the majority of the population has not been achieving their educational potential (Keeton, 2014). Human capital and structure of spending on R&D are challenges faced by the country (Blankley & Booyens, 2010).

South Africa has a well-developed system for knowledge generation, science and technology. At the national level of government, there is a dedicated Ministry of Science and Technology which is responsible for the government's agenda in the field of scientific research and development in the country (DST, 2018). Execution of this agenda is then carried out by grant-making bodies such as the National Research Foundation of South Africa (NRF, 2018). Various sectors, such as water and sanitation, have further designated funding agencies such as the Water Research Commission (WRC, 2018). Technology development and research is run through a legislated system of state-funded institutions, such the Council for Scientific and Industrial Research (CSIR-Health, 2018), Human Sciences Research Council (HSRC, 2018) and similar organisations. Significant research and development takes place in the higher education sector. Innovation and launch of products into the market can be achieved using designated funding mechanisms, such as the Technology Innovation Agency (TIA, 2008-2018).

The structure of the system that drives science and technology, and research in South Africa is interlinked with the complexity of the world today. This complexity is a reflection of the fact that the world is changing at an exponential rate, and this has highlighted the importance of lifelong learning (Visser & Berg, 1999). Information

literacy is key to the realization of lifelong learning activities and those who actively learn all the time are able to access information easily (Demirel, 2009). In the information age, learners need to interpret and use scientific data to produce new data and solve problems. Important aims of lifelong learners are to improve the quality of their lives by striving to reach their greatest potential and adjusting to changes. Gaining correct and proficient learning experiences are important for personal growth. A fundamental component of lifelong learning requires that educators themselves be lifelong learners (Demirel, 2009). Many educators work in universities and vocational/technology sectors in South Africa and are involved in research and development of new knowledge. Therefore, research generated in the country provide another dimension in lifelong learning and knowledge society.

In the 21st century, tertiary education plays various societal roles and it helps to provide solutions to challenges in the ever-changing landscape of transforming countries (Janeček, 2006). Knowledge society or knowledge economy encompasses settings where knowledge generated or adopted in a particular country is used as a "tool to derive economic benefits" (Vadra, 2017), for the good of the said country and its population. Realisation of a knowledge economy in a particular country indicates the stage of human development where high value-added products and services are major sources of the overall economic activity, employment and personal income of citizens and tax revenue for the government (Chen & Dahlman, 2005). Higher education in a knowledge economy can also be used as a tool to decrease unemployment (Hužovičová & Jakúbek, 2014). To achieve the development of a knowledge society, tertiary education needs to contribute to fulfilling of a "nation's economic and social goals", and to be the source of "innovation and skills development" (OECD, 2008-2017). Therefore, tertiary education plays and will continue to play a key role in accomplishing the development of a knowledge economy in South Africa. In this article, the authors seek to provide an overview of the challenges that the South African higher education faces in the achievement of the developmental goals of the country.

South Africa is a water scarce country and is ranked 143rd in the world in terms of annual precipitation levels (as summarised in Index Mundi, undated). Part of the National Development Plan is to decrease mortality among children under 5 years to 30 per 1000 live births by 2030 (SADOH, 2015). In order to achieve these goals, South Africa needs to reduce the disease burden and improve health. Numerous communicable diseases are related to water, sanitation and hygiene (collectively termed WASH) in the country. Factors influencing the WASH situation in South Africa will include access to improved drinking water and improved sanitation facilities. As pharmacists are part of the health workforce in South Africa, the Bachelor of Pharmacy curriculum must include coverage of WASH and its relation to disease spread/burden in the country. At Rhodes University, many Bachelor of Pharmacy students come from areas where water and sanitation service delivery are a problem. Therefore, challenges associated with WASH are familiar to the student body. WASH and water supply/public health issues water provide a platform to connect the students to a professional-health degree curriculum and initiate potential transformation of the curriculum. A case study in WASH is provided as evidence that changes to the curriculum in response to societal challenges can improve the training of pharmacists.

2 Methodology

The authors used a combination of calculations and a literature review to obtain the background or current status of the higher education sector and developmental planning in South Africa. For this, data were extracted from the Statistics South Africa reports, relevant professional articles on South African higher education sector and results of postgraduate research. Cooperation between public and private higher education institutions provides another angle for the transformation of the curriculum. Results of the workshop run at Stenden South Africa is used as an example. The workshop was run with the first-year students enrolled in the Bachelor of Business Administration in Disaster Management degree at the School of Disaster Management at Stenden South Africa in October 2014. The first part was a lecture-based introduction to disaster management risks and dimensions of water, sanitation and hygiene (WASH). Disaster risk was explained in terms of the infectious dose of particular pathogens, the types of pathogens that can be encountered in faecally-contaminated water resources; and how sanitation wastes from improved sanitation, such as the ventilated improved pit latrines, can pose risks to the public health and disaster risk management in South Africa.

In the second part of the workshop, the students were split into small groups of 3 to 4 students and asked to design an information material/checklist for the disaster management professionals to be able to deal with WASH-related aspects of disaster situations and public health. The principle of the disaster management cycle was used as the paradigm and the ventilated improved pit latrines were used as a model. The student groups worked independently for about three hours. Each group was assisted by postgraduate students from the Faculty of Pharmacy at Rhodes University, who were studying towards Master of Science in Pharmacy and Doctor of Philosophy in Pharmacy. Their theses were focused on topics related to WASH. After the three-hour breakaway sessions, each group of the first-year disaster management students presented their version of the leaflet to the entire class at the end of the workshop. The final version of this tool/checklist was summarised as the overlap between the individual student group's tools and was compiled by the authors (see Appendix). The final leaflet was given to the students who participated in the workshop. The authors applied for ethical clearance for the involvement of human subjects in research to the Faculty of Pharmacy Ethics Committee and the approval was granted under the tracking number PHARM 2014-36.

3 Results and discussion

3.1. Developmental planning and tertiary education in South Africa

The focus on a knowledge economy is indirectly mentioned in South Africa's National Development Plan 2030 (NDP; NPC, 2013). Chapter 1 contains a clear commitment/understanding by the national government that places education and skills development at the core of development in South Africa, reduction of unemployment in the country and the achievement of a more equitable society (NPC, 2013, Chapter 1). Reduction of poverty and the elimination of obstacles to tertiary education and vocational training play a crucial role in this context (NPC, 2013, Chapter 1). One of the targets in this regard is to increase the proportion of the South African population that is enrolled and educated at the technical and vocational colleges (TVET colleges) to 25% of the population by 2030 (NPC, 2013, Chapter 1). From these enrolled students, 75% should graduate (NPC, 2013, Chapter 1). Financial assistance should be provided to the

students in the TVET colleges to cover all the costs associated with their studies (NPC, 2013, Chapter 1).

The knowledge economy status of a given society/country can be assessed using the KAM methodology of the World Bank. The KAM contains four "pillars" that must be in place for the "successful transition of a country to a knowledge economy" (Chen & Dahlman, 2005). The individual pillars include the "educated and skilled workforce", efficient framework for creation and dissemination of knowledge, highly developed ICT infrastructure and sufficient R&D infrastructure – government and private, industrial and academic, etc. (Chen & Dahlman, 2005). This is at the core of the suggested improvements to "education, training and innovation" in South Africa (NPC, 2013, Chapter 9). Improvement in education and skills levels, as well as R&D, must be the focus, along with meeting the health challenges facing South Africa (NPC, 2013, Chapter 9, p. 297). A sufficient pool of healthcare professionals and researchers is necessary to achieve these goals (NPC, 2013, Chapter 9, p. 297). Some data are provided below to assess the current status of achieving the NDP goals for tertiary education.

The words enrol and attend, as well as the related nouns/adjectives, will be considered synonymous in further text. Tertiary education and post-secondary education will also be considered mutually synonymous in the text below. The segment will represent the segment of the South African population aged 18 to 29. Finally, public university will represent any public university or public university of technology in South Africa. In 2016, between 7.5 and 34.9% of the segment was enrolled in post-secondary education (see Figure 3.3 on page 52 in Stats SA, 2017a). The authors calculated the average enrolment rate for this segment to be equal to 19.8%. The calculation was based on equal weighting of enrolment rates for each year of age in the segment (see Figure 3.3 on page 52 in Stats SA, 2017a). Between 2002 and 2016, the percentage of the segment who attended public universities ranged from 4.0 to 4.5% (see Figure 11 on page 16 in Stats SA, 2017b). The percentage of the South African population 20 years of age or older that attained post-secondary education, i.e. graduated from a TVET college or a public university, was estimated at 14.0 % in 2016 (see Figure 13 on page 18 in Stats SA, 2017b).

The student graduation rates from public universities can be calculated based on the data compiled by van Broekhuizen et al. (2016). Table 3.1 on page 18 of this publication contains the enrolment of the 2008 matric class who passed their final examination, i.e. the National Senior Certificate, into public universities. Data in column 3 indicate that the total number of first-time enrolments and/or delayed enrolment into public universities was equal to 112042 between 2009 and 2014 (van Broekhuizen et al., 2016). The total number of those students who graduated or graduated with a degree between 2009 and 2014 ranged from 38 229 to 55 721 (see columns 6 and 7 in Table 3.1 in van Broekhuizen et al., 2016). This includes students who completed a certificate course, national diploma or graduated with a bachelor's degree. Taking all this information into account, the undergraduate graduation rates from public universities (UGR) can be estimated using these data as calculated and shown in Equation (1) below.

$$UGR\ (\%) = \frac{46975}{\lceil 112042 \rceil} \times 100 = 41.9\ \% \qquad (1)$$

In Equation (1), the numerator represents the average number of students from the 2008 matric class who enrolled and graduated from a public university between 2009 and

2014, i.e. the average of 33 229 and 55 721. The denominator of Equation (1) represents the total number of 2008 matric class pupils who enrolled in a public university between 2009 and 2014. The result of the calculation in Equation (1) indicates that the UGR value was equal to 41.9% between 2009 and 2014. The total percentage of the South African population who have graduated from a public university between 2009 and 2014 (PPUD) can be estimated using Equation (2).

$$\text{PPUD (\%)} = 0.419 \times 0.0425 \times 100 = 1.8\ \% \quad (2)$$

In Equation (2), the number 0.0425 is the dimensionless fraction of the South African population who were enrolled in a public university between 2009 and 2014. It was assumed to be equal to the average of the attendance rates between 2002 and 2016 (see Figure 11 on page 16 in Stats SA, 2017b). As a result of the calculation in Equation (2), the PPUD value was calculated as equal to 1.8% between 2009 and 2014. This estimate will be assumed to be equal to the PPUD value for 2016.

Taking the data from the previous several paragraphs into account, the following conclusions can be made about the current status of the achievement of the National Development Plan 2030 goals. The goal for enrolment of 25% of the population into TVET colleges (NPC, 2013, Chapter 1) has been partially achieved for selected age groups of enrolled students. However, the average rates are still below the target as indicated by the weighted average for the segment of the South African population, i.e. 19.8 %. With respect to the graduation rate for the TVET college-enrolled students, the following calculation can be made as shown in Equation (3).

$$\text{GTVET (\%)} = (14.0 - 1.8)/[25 \times 0.75] \times 100 = 65.1\ \% \quad (3)$$

In Equation (3), the numerator represents the percentage of the population which attained a TVET qualification and this parameter is calculated as the difference between the total percentage of the South African population segment, which is 20 years or older, and those that have attained a post-secondary qualification; and the percentage of the population which has attained a tertiary qualification from a public university. The denominator represents the NDP target. As it can be seen, 65.1% of the NDP target for TVET graduation has been achieved by 2016. The enrolment rates of eligible students/pupils in post-secondary education in South Africa are lower or comparable to other BRICS countries, with the exception of Russia, which ranged from 15 to 35% of the "university-aged population" (Carnoy et al., 2013, p. 37).

3.2 Transformation of the South African higher education sector after 1994

Prior to 1994, the South African higher education sector was not representative of the demographics of the country. Therefore, one of the main transformation goals, between 1994 and present day, has been to increase access and enrolment of Black South African students at the tertiary education institutions. This goal has largely been achieved as demonstrated by the fact that an estimated 766812 students were enrolled in public universities in 2016, with about two thirds being Black South Africans (see page 16 in Stats SA, 2017b). The "bachelor pass" data indicate the proportion of matriculants that qualify/are eligible for enrolment into public universities based on their matric results (van Broekhuizen et al., 2016, pp. i-viii). The "bachelor pass" data for the 2008

matriculants and their enrolment in public universities between 2009 and 2014 showed that the following results. Approximately 63.2% of White South African students enrolled in a public university, compared to 71.2% of Black South African students (van Broekhuizen et al., 2016, pp. i-viii).

More recent data on post-secondary school education are available for the 17 – 24-year-old South Africans for 2016. For White South Africans, the attendance rates ranged from 6.8 to 55.2% in this academic year (see Figure 3.5 on page 54 in Stats SA, 2017a). At the same time, the enrolment rates for Black South Africans ranged from 7.9 to 33.8% in 2016 (see Figure 3.5 on page 54 in Stats SA, 2017a). The university drop-out rates ranged from 17 to 33% between 2009 and 2014, with the lowest percentage of White South African students and the highest of Black South Africans (van Broekhuizen et al., 2016, pp i-viii). Therefore, the available data used by the authors indicate that the transformation of the student body, in terms of access to black students, in the post-secondary education in South Africa has been achieved, but the statistics show that drop-out rates still disproportionately affect the Black African students.

The estimated UGR of 41.9% of the enrolled students indicates that 58.1 % of all enrolled students never finish the degrees they started, i.e. any types of university qualification which could be a bachelor's degree, national diploma or post-matric certification courses run at public universities. At least part of these types of qualifications will be skills driven, i.e. will be targeted to provide graduates with skills to work in specific industries. As a result, if more than half of the enrolled students drop out then this could provide a partial explanation for the shortages of skills in the South African R&D and various industries. The fraction of the South African population with a university qualification was estimated at 1.8%. This number is lower of comparable to the BRICS level, such as the data for Russia (OECD, 2015). Based on the above information, challenges remain in the South African higher education sector.

These challenges could have been among the triggers of the "fees-must-fall protests" by students at public university campuses across South Africa between 2015 (Luescher et al., 2017) and 2017 (News24.com, 2017). The contributing factors were recently analysed and proposed by Badat (2015, pp. 74-76). They include general underfunding of the public higher education sector by the South African government, declining government contribution as a relative percentage of the budgets of individual public universities and thus the need for annual tuition fee increases, insufficient financial assistance for students from poor and low-middle income backgrounds, limited resources for running of the foundation studies programmes at public universities and under-spending by the government on higher education infrastructure (Badat, 2015, pp. 74-76). In summary, Badat's analysis points to financial challenges in the institutions of higher education in South Africa. However, there is a limit to the amount that can be spent on public funded universities due to national budget constraints.

Another trigger for the "fees-must-fall protests" could be the current discourse in the tertiary education sector in South Africa. This discourse has recently been re-focused on the notion of "decolonisation of the curricula and knowledge" taught at the public universities (Heleta, 2016). It has been argued that focus on colonial knowledge may result in a lack of development of the students' "analytical and critical skills" (Heleta, 2016). However, caution needs to be exercised in science-driven subjects and degrees as scientific knowledge is acquired through validated scientific methods; and curriculum

transformation should include problem solving approaches to meet specific societal challenges in the South African context.

Curriculum transformation of higher education will be subject-specific and must be carefully carried out to comply with the SAQA requirements, especially for professional degrees (SAQA, 2015-2018). Adhering to the fundamental and applied knowledge that students have to master a particular degree cannot be compromised. Therefore, after understanding the regulatory framework in which a particular degree has been accredited, the next step is to identify and clearly define the learning outcomes, followed by the identification of appropriate teaching and learning activities to support the learning process and finding appropriate assessment tasks (Jůvová, 2017). Next, these outcomes and methods can be examined in the context of the students' experiences and perceptions about the tertiary education environment. Students should be able to relate to the societal challenges and learn how science can support the society. Below is a potential paradigm for a professional university degree in South Africa.

3.3 Bachelor of Pharmacy as a professional degree in South Africa

Lifelong learning is active learning that takes place throughout a person's lifetime in both formal and informal contexts. It is not limited to university education, but rather includes all forms of learning. It is an essential concept in the thinking about education and training worldwide. The notion of lifelong learning is characterised by the desire to retain the development of knowledge and skills and also to maintain an interest in learning opportunities. A basic principle of lifelong learning is the continuous attainment and development of capabilities and aptitudes in formal, non-formal and informal ways during a person's lifespan (Steffens, 2015). The four pillars of lifelong learning can be summarized by Delors (1996) as learning to know, learning to do, learning to live together and learning to be a complete person. These are also relevant at tertiary education institutions.

Once at a tertiary institution, students are exposed to novel subject matter which builds on the foundation of previously acquired knowledge. Previously acquired knowledge comes from instruction at the secondary level of education and/or from instruction during lower university years. Through various educational activities, university students are guided and work towards achieving formal tertiary qualifications, i.e. meeting the requirements of the certificate course, national diploma or degree they are studying towards. In South Africa, all university degrees are accredited by the South African Qualifications Authority (SAQA, 2014). Professional degrees, such as qualifications in pharmacy, also have to conform to the standards set by professional bodies (SAPC, 2017a-c). After completion of these degrees, professionals need to register with professional bodies to be able to practice (SAPC, 2017a-c). One of the prerequisites for registration as a pharmacist in South Africa is the completion of the undergraduate degree of Bachelor of Pharmacy (B. Pharm.; SAPC, 2017a-c).

The B. Pharm. degree curriculum is at the interface of pharmacology, biochemistry, medicinal chemistry, microbiology, pharmacy practice and public health (SAPC, 2017). The B. Pharm. degree curriculum is at the interface of biochemistry, medicinal chemistry, microbiology, pharmacy practice and public health (e.g. Tandlich et al., 2013). The public health dimension is related to the challenges of South Africa's healthcare system (SADOH, 2015): the HIV/AIDS epidemic, non-communicable and communicable diseases; and injuries/trauma. The total expenditure on healthcare

amounted to 8.5% of South Africa's gross domestic product in 2015 (SADOH, 2015), which is in line with the country's international commitments as part of the Abuja Declaration (e.g. WHO, 2011). The life expectancy at birth stood at 62 years in 2015 (WB, 2016a). To further improve the public health situation in South Africa, its country cooperation strategy with the World Health Organisation (WHO) for 2016-2020 outlines the need to "prevent disease, reduce disease burden and promote health"; and also to "improve human resources for health" (WHO, 2016, p. 2).

The provision of water and sanitation in South Africa is governed in the first instance by the Water Services Act no. 108 of 1997 (South African Government, 1997). Chapter 1 section 1 xvii of the act defines the water services as "water supply services and sanitation services" (South African Government, 1997). "Sanitation services" are defined in the Water Services Act as "the collection, removal, disposal or purification of human excreta, domestic waste-water, sewage and effluent resulting from the use of water for commercial purposes" (South African Government, 1997, Chapter 1 section 1xvi). At the same time, the "water supply services" are defined as "the abstraction, conveyance, treatment and distribution of potable water, water intended to be converted to potable water or water for commercial use but not water for industrial use" (South African Government, 1997, Chapter 1 section 1xxiv). Local government generally functions as a "water services authority", i.e. which is "any municipality, including a district or rural council as defined in the Local Government Transition Act, 1993 (Act No. 209 of 1993) and that is responsible for ensuring access to water services" (South African Government, 1997, Chapter 1 section 1xix).

These factors will play a critical role in the achievement of the public health goals of the National Development Plan, e.g. the decrease in the mortality among children under 5 years to 30 per 1000 live births by 2030 (see summary in Chapter 1, section 1.2.2 point 43, SADOH, 2015). The B. Pharm. curriculum should include knowledge of WASH and its influence on the spread of disease in the country. Water scarcity and problems with supply are on the border between human rights and science. Passions about the subject generally run high in South Africa, especially if infrastructure and supply are compromised. As such, WASH and health issues relating to water provide a platform to connect the students to a professional-health degree curriculum and initiate transformation of the curriculum.

This is further supported by WASH as an education topic and the related focus on citizenship in education (Hager, 2012). Active citizenship and its interlinking with higher education provide an ideal platform for transformation of the tertiary education curriculum. WASH as a topic has potential for ongoing, continuous and reflective learning. An emerging focus of lifelong learning is the health of society's citizens as this plays a role in self-governance and health improvement (Talati, 2014). Lifelong learning and reflective learning also entails an awareness of the environment and structures of society; and feedback between the two should be considered when formulating rational health strategies (Talati, 2014). WASH and a possible paradigm for the partial transformation of B. Pharm. curriculum is provided below.

3.4 WASH background of South Africa

According to data from the United Nations, a country is water-scarce if the renewable/available water volume per capita per year is below 1000 m^3 (UN, 2014). Between 2002 and 2014, the annual water volume per capita decreased from 976.982 to

827.381 m^3 in South Africa (WB, 2017b). The average annual precipitation has been reported to be around 495 mm in South Africa in 2014 (WB, 2017c). In that calendar year, the worldwide data for the total annual precipitation were recorded for 185 countries (as summarised in Index Mundi, undated). The highest annual precipitation was recorded in Colombia, namely 3240 mm per annum, while the lowest annual precipitation of 51 mm per annum was reported for Egypt (as summarised in Index Mundi, undated). South Africa was ranked 143rd in the world, i.e. therefore the annual precipitation in South Africa was probably below the global average in 2014.

Water scarcity of South Africa has recently been exacerbated by the 2015 El-Niño-related drought. Major metropolitan areas have been running out of drinking water and might reach the so-called "day zero" when the municipal drinking water supply will be completely stopped. Since the onset of the El-Niño drought, the city of Cape Town has been implementing water restrictions or supply rationing. Level 6 water restrictions were implemented on 1st January 2018. Under these restrictions, each household in the metropolitan area of Cape Town is obliged to consume no more than 10500 litres of municipal drinking water per month, i.e. 87 litres/capita/day. A further cut to 50 litres/capita/day has since been implemented (The South African, 2018). All non-potable uses of municipal drinking water by households, such as lawn and garden irrigation, are strictly prohibited. Business users in the metropolitan areas must decrease their water consumption from municipal drinking water by 45% in comparison to the pre-2015 drought levels, while a 60% compulsory cut applies to all agricultural users. Similar water restrictions are in place in other parts of South Africa, e.g. the Nelson Mandela Metropolitan Municipality in the Eastern Cape Province.

The South African government has long been implementing strategies to help deal with water scarcity in the country (WRC, 2016). The combination of all these and other strategies helped the country achieve the Millennium Development Goal (MDG) 7C of access to improved drinking water. This can be demonstrated by the results of recent surveys which indicate that percentage of the South African households with access to improved drinking water ranged from 87.1 to 97.7% of the population and the access increased with increasing household income (quintile) in 2015 (Stats SA, 2016b, Figure 6.7, p. 35). Investment of 1 USD into the provision of access to safe drinking water and the achievement of the MDG 7, has been estimated to result in approximately 4 USD in public health returns.

On the sanitation front, every 1 USD invested in achieving the MDG 7 for access to improved sanitation resulted in improved public health benefits and other benefits to the extent of 9 USD. Investment in South Africa by the government has led to an increase in the percentage of South African households with access to improved sanitation facilities. In 2015, this parameter ranged from 71.0 to 93.6% of households as a function of the household income (Stats SA, 2016b, Figure 7.16, pp. 78). Investment and implementation of strategies to improve the population's access to improved drinking water and sanitation have contributed to a drop in the number of cases of diarrhoea among children under the age of 5 from 168.1 per 1000 children in 2000 to 90.3 per 1000 children in 2012 (HST, 2017).

However, despite all of these improvements in WASH situation in the country, challenges still seem to persist and at least some of the NDP goals remain out of reach (HST, 2017). The percentage of South African households who experienced pollution in the supplied drinking water ranged from 9.4 to 21.4% of all households in 2015

(Statistics Stats SA, 2016b, Figure 6.43, pp. 64). In the same year, up to 87.3% of households in South Africa used an improved sanitation facility outside of their yard/dwelling (Stats SA, 2016b, Figure 7.22, pp. 83). This indicates that problems with the drinking water supply in South Africa remain or the population perceives that they do. At the same time, the sanitation facilities pose a problem with privacy during use and are in danger in falling into disrepair in public places (Hoossein et al., 2016).

These are problems that will contribute to the types of public health challenges that pharmacists in South Africa will face as part of practising their profession. As WASH is part of the practice of their future careers in South Africa, understanding of the context and underlying factors should therefore form an important component in the education of the B. Pharm. students. Water supply and sanitation, as well as the common lack of relevant service delivery, are not removed from the African context, but form a crucial part of it. Education of B. Pharm. students and the WASH context in South Africa must therefore be interlinked. These interlinks provide opportunities for curricular intervention, changes and transformation as desired currently by various stakeholders in the South African higher education sector. An example of a proposed paradigm for practical execution of such an intervention is outlined in the next section of this article.

3.5 Proposed paradigm for transformation of the Bachelor of Pharmacy degree

In the context of WASH and public health, one of the fundamental activities is the monitoring of microbial water quality which is to be carried out by the local government in South Africa (Luyt et al, 2012). Many local government authorities in South Africa face the problem of relative geographical isolation and financial challenges in the performance of regular compliance monitoring in their jurisdictions. Long distances between the water sampling sites and the laboratory result in the non-adherence with holding times for standard indicator microorganisms (Luyt et al., 2012). Non-governmental stakeholders may step in to provide at least a partial solution to the problem (e.g. Tandlich et al., 2015). In this context, authors of the current paper have been extensively involved in the development of strategies for adaptation and low-cost solution to the problems in the WASH at the local government level in South Africa. This tool is the improved version of the H2S test kit (referred to as test kit in further text), which was originally developed in India and with the support of the WHO (Manja et al., 1982).

The test kit is available as a presence/absence or qualitative indication of faecal pollution in a drinking water supply (Mosley & Sharp, 2005). A positive signal is detected by the production of black colour which can be visually read (Mosley & Sharp, 2005). The medium is prepared by trained personnel in a laboratory in dehydrated form, and the individual sampling bottles are then distributed to inhabitants of households in the geographical areas where compliance monitoring should be performed. Laypersons can perform on-site tests and on a continuous basis by trained personnel with a microbiology background after a short introduction. The samples are stored at room temperature and must be shielded from direct sunlight. They are then visually checked for positive reaction, i.e. black colour development from the precipitation of iron sulphides, once every 12-24 hours for a total time of 72 hours (Manja et al., 1982). This provides an efficient visual test (Genthe & Jagals, 2003). If the black colour develops within 72 hours, then there is likelihood of faecal contamination of the drinking water. If this does not occur, then no faecal contamination is present.

The kits have been used in postgraduate teaching in the B. Pharm. degree in South Africa (Nhokodi et al., 2016). The learning process is a complex phenomenon, and there is no doubt that assessment can promote learning. By using a range of assessment tasks, it is also possible to cater for diversity. Assessment is a form of communication i.e. feedback to students on their learning and feedback to lecturers on their teaching (McAlpine, 2002). Assessment is the most significant tool that can be used to influence learning and appropriate changes can dramatically improve student performance (Gibbs, 1999). It should be viewed as a means to promote learning. Boud (1990) emphasized the link between assessment and learning when he wrote "learning is so driven by assessment that the form and nature of assessment often swamps the effect of any other aspect of the curriculum." Academics and educators at tertiary institutions spend considerable time on assessment. Despite the amount of time spent on assessment, many educators dislike the task and often do not do it properly (Snowman & Biehler, 1997).

Lifelong learners actively assess their own learning; learn in both formal and informal situations; learn from their peers and teachers; integrate knowledge successfully and can successfully adapt to different circumstances. Assessment of learning is an important component of lifelong learning. Constructive alignment was a term first coined by Biggs (1999). "Constructive" refers to the notion that students construct meaning through relevant learning activities for themselves, and "alignment" refers to the teaching and learning environment provided by the educator (Biggs, 2005). Important components to consider are the curriculum, teaching methods, assessment procedures, student-teacher interaction and the institutional environment (Biggs, 1999). Educators should ideally design the curriculum so that the learning activities and assessment tasks are aligned with the learning outcomes that are intended for the particular course. Constructive alignment is more than criterion-reference assessment, which aligns assessment to the objectives (Biggs, 2005). Constructive alignment is a teaching system aimed at supporting learning, with the emphasis on the process rather than content (Reaburn et al., 2009).

The kit is relatively simple water-testing tool, where only qualitative nature of the output signal is read. However, it is an item which integrates various aspects of the B. Pharm. curriculum. Firstly, the role of packaging in the maintenance of integrity of the pharmaceutical product can easily be demonstrated. This comes from the fact that a dehydrated form of the incubation medium is stored inside a sterile urine jar. Secondly, the adherence to a simple quality-assurance protocol is necessary for the compliance monitoring using the kit. At the end of the day, the kit is however a scientific tool. Even though simple, the use and application of the kit will require the B. Pharm. students to integrate the knowledge from chemistry due to the redox nature of the process responsible for the positive signal, microbiology as the technique of the kit is sterile and based on the use/detection of microorganisms, pharmaceutical chemistry where packaging is taught, and students are introduced to it. Therefore, the kit should be introduced to the second-year students in the B. Pharm. curriculum, e.g. as the project at the interface of Quality of drugs module (Tandlich & Moyo, 2016) and microbiology. The application to citizen science should provide context for the students to connect with the topic (Tandlich et al., 2015).

Disaster management approaches can be used to fast-track sanitation service delivery in South Africa (Hoossein et al, 2016). The leaflet developed in the workshop with Stenden South Africa students (see in Appendix I) provides a tool which can be used to monitor

the status of ventilated improved pit latrines, a very common form of improved sanitation in South Africa, and to prevent compromised hygiene at the site of operation. This integrates research into disaster management and pharmacy into teaching and learning. The structure of the leaflet resembles the way that public health interventions should be run, i.e. they are based on the steps or delivered in phases which resemble the disaster management cycle. Incorporation of such activities into the B. Pharm. curriculum would integrate the principles of WASH, occupational safety and hygiene, similar to the study of Ižová (2011). This is based on the introduction and strengthening of the students' knowledge about the significance of faecal contamination of water, the significance of the respective monitoring in public health and also build on the everyday experience of the students from their lives.

In this way, the links between real-world problems and the pharmacy profession could be strengthened and the transformation of the B. Pharm. curriculum accomplished in part. Group work, which the students will be involved in during the assignment, will simulate the interaction with other stakeholders, e.g. other healthcare professionals, thus contributing to the achievement of cross-field outcomes of the B. Pharm. degree (SAQA, 2015-2018). In this way, the work situation will be simulated allowing B. Pharm. students to be introduced to what to expect in the practice of their professions. Co-ordination between the group members will require the pharmacists to learn and work effectively as members of a team and take the necessary action, similar to taking therapeutic decisions in the practice of pharmacy. Correct design of tools similar to that listed in Appendix I can be done on several topics. It is a task which the B. Pharm. students are familiar with from subjects such as Pharmacy Practice. They resemble a public health or health education communication tool such as health information leaflets. The design of leaflets, such as that listed in Appendix, will require B. Pharm. students to have prior knowledge as a foundation for the development of novel knowledge and is most likely to fall into the category of analyse and evaluate of Bloom's taxonomy (ISU, 1995-2018). Reflective practice involves thoughtfully considering one's own experiences in the application of knowledge to practice while being tutored by professionals in the discipline (Schon, 1996). The purpose of reflection is to learn through both positive and negative experiences, and to create a habit of examining experiences (Amulya, 2003-2011). Reflexivity, on the other hand, is an interactive process that requires an examination of priorities before a reaction (Newman & Darling, 1998-2009). An important distinction between reflection and reflexivity is that reflection happens after completion of a task and is focussed in the future, while reflexivity incorporates introspection into each interaction and can have an immediate impact on teaching (Newman & Darling, 1998-2009). Reflection has an effect on the development of reflexive practice. Reflexive lifelong learning often requires disruption or upheaval in the routines of life, such as a natural disaster, before they become part of social practice (Edwards et al., 2002). Therefore, design of leaflets and similar tools should form part of subjects in higher grades of the B. Pharm. degree, such as the final year elective module on Public Health and Disaster Management.

Validity and reliability define the overall quality of the assessment (McAlpine, 2002). For an assessment to be valid, it should accurately assess the outcome or measure what it is supposed to measure. Reliability is concerned with consistency and should be reproducible. The requirements for reliability over validity may vary for different assessment methods. Assessment can also be final or continuous. Final assessment is

summative and happens only at the end of the course and is not used for formative purposes. Continuous assessment should take place throughout the course and allows students and lecturers to obtain feedback from the process, which can in turn be used to improve teaching and learning based on evidence gathered over the period of learning (McAlpine, 2002).

Summative assessment tasks include practical reports, tutorials, tests and examinations. An important role of assessment is to generate appropriate learning activities and to also provide prompt feedback that is taken notice of by the learner (Gibbs, 1999). Assessment is critical for the determination of whether the learning outcomes have been achieved. The reasons for assessment include: to provide a summary of learning, provide evidence of learning progress, to diagnose learners' strengths and weaknesses and to motivate further learning (Snowman & Biehler, 1997). Assessment provides a summary of how well a student has met the objectives and summative assessment sums up a students' ability to perform a variety of tasks over a particular point in time (Snowman & Biehler, 1997). Recently, assessment has appeared to obscure the pursuit of knowledge, but the pursuit of disciplinary knowledge should be at the centre of assessment (Shay, 2008).

Assessment can also be used to monitor progress of a particular student and formative assessment facilitates learning without assigning a grade (Snowman & Biehler, 1997). Formative assessment is interactive feedback between student and educator that should enhance learning. This type of assessment provides feedback and requires that students reveal their shortcoming and is a long-term dynamic process to improve and react to the learning (Knight, 2001). This is associated with class discussions, tutorials and feedback on essays or practical assignments. This type of assessment could allow students to react to learning faster than summative assessment, which traditionally happens at the end of a course. It is focussed on the learning process.

4 Conclusion

The current article summarises some of topics and challenges that drive the current discourse, developmental and curriculum debate in higher education in South Africa. These challenges need to be addressed as matter of urgency. Student access and pass rates at tertiary institutions need to be improved and the curriculum needs to be transformed. Using a topic such as WASH might provide a way to address some of these challenges, and some strategies are proposed in this paper.

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Appendix - Sanitation Infrastructure Assessment Tool

Disaster Management Aspects of Sanitation

This pamphlet seeks to inform you as disaster management professionals about the possible disaster management risks from inadequately working sanitation infrastructure and the role of sanitation in disasters in general. It is designed to provide guidance on actions to be undertaken during the individual stages of the disaster management cycle and in term of sanitation.

1. Disaster Health Risks and Hazards Register from Sanitation

- Hygiene is also essential in the prevention of disease outbreaks spread.
- Provision of safe drinking water and improved sanitation are essential to hygiene.
- Provision of sanitation and safe drinking water in the disaster areas are among the first recovery operations that need to be undertaken.
- Improved sanitation in South Africa is provided in one of two forms, i.e. waterborne toilets or the ventilated improved pit latrines (VIPs).
- VIPs have a more significant role in disaster management in South Africa as they form the minimum standard of sanitation according to the South African government and legislation.
- VIPs must be maintained by your local municipality, e.g. the municipal officials are responsible for emptying and checking of physical integrity of the VIPs.

- A VIP that is not maintained, then it is a source of disaster risk from injuries as people can fall into the pit.
- Incorrect construction of the toilet can lead to side-walls of the toilet leaking the stored material out of the VIP.
- Use of improperly functioning communal toilet can lead to the spread of infectious diseases, i.e. cholera and typhoid.
- If water leaks from a sanitation facility pools of water form provides breeding ground for mosquito growth.
- If malaria is endemic in a given area, then this could cause an outbreak.
- Pooling can lead to exposure of children and other immune-compromised patients to faecal material, i.e. leading to transmission of waterborne diseases.
- These can be prevented dispensing bleach and other water purification items to the disaster-affected population. This is even more important in areas with high degree of immune-compromised character, e.g. HIV-prevalence is high in townships.
- If a member of the community is HIV-positive, then a properly working toilet is a must!
- Special focus must be put on the privacy of the community members.
- Privacy is best protected by consulting the community before any disaster about the preferred type of sanitation.
- Increased requirements for sanitation must be assessed based on the data on HIV prevalence in the (disaster) area. Respective data can be obtained from the district or sub-district office of the provincial department of health.
- Hygiene is a pre-requisite of good maternal health and eliminates the spread of bladder infections among women.
- Adequate sanitation is also critical to protection of physical safety of women. Therefore, special attention should be paid to it in disaster management consideration by you and your staff.
- Sanitation and maternal health are of critical importance in rural areas of South Africa where they have direct links to the households' vulnerability.

2. *Response*

- Maintain an active taskforce of relevant stakeholders and perform an ongoing sanitation facilities audit to establish a baseline reference or pre-disaster starting point.
- Gather as much information as possible on the ground once a sanitation-related disaster has taken place.
- In collaboration with as many stakeholders as possible as collect the following information:
  a) What type of damage took place?
  b) What is the extent of injuries?
  c) What are the fatalities in any?
  d) How many people are affected and without sanitation as a result of the disaster?
  e) How can local stakeholders that are members of the relevant disaster management advisory forum help in providing emergency facilities?

- You as local disaster management professionals should, in collaboration with local district or sub-district office of the provincial department of health and NGOs, take lead in putting together a register of human casualties and infrastructure damage.
- You must also coordinate the provision of emergency water supply and sanitation for the affected communities and areas.
- You must contain any spills of faecal material using technologies such as Floodsax.
- Cholera and waterborne diseases: contact emergency medical personnel and Provincial Department of Health for assistance.
- Take lead in putting place quarantine if necessary.
- Using the municipal resources or the resources of the volunteer unit or the local disaster management advisory forums to maintain the most efficient disaster management operations.

3. Mitigation

- Using local forums, such as the local disaster management advisory forums, women's groups, NGOs and community meeting awareness campaigns should be run in areas prone to sanitation-related disasters.
- These activities should educate people on how improved sanitation is properly built and what are the signs of dysfunction and you as the local disaster management official must take a lead in them.
- Take time to translate as many awareness materials as possible into local languages, e.g. isiXhosa, isiZulu and isiNdebele.
- When making presentations, recruit a staff member from your office who speak local languages e.g. isiXhosa, isiZulu and isiNdebele to assist with awareness workshops.
- Maintenance and the responsibilities of the local government should be explained to the population in detail.
- This is meant to empower the community and manage public risks from sanitation-related disasters.
- Awareness campaigns have no punitive aims and this must be understood by all stakeholders.
- If financial resources are limited, then the local disaster management staff should pay special attention to establishing volunteer units to fill the skill's gap.
- Use your authority and local contractors to fence of hazards and sources of risk. Platforms for this include the National Environmental Management Act and the Disaster Management Act.
- Hold regular meeting with the water and sanitation department personnel from your area of jurisdiction about the status of sanitation facilities and the challenges at hand.

4. Preparedness

- Educating people on how to deal with situations, infrastructure and how to build the pit latrines. The importance of using the right equipment.
- Perform regular check on the emergency equipment, e.g. pumps, and maintain technical workshop with your staff on their proper operation.

- Use freely available resources, e.g. the website of the Water Research Commission and the South African National Department of Water and Sanitation, to keep abreast about the latest local research into sanitation.
- Use this information to procure the best-available technique equipment in the areas of water and sanitation provision under disaster conditions.
- Maintain a database of skills and contact details of the local non-governmental stakeholders to assist in disaster recovery.

5. *Disaster Recovery*

- Rebuilding of improved sanitation facilities with properly trained and certified contractors to eliminate future problems.
- Medical attention should be provided to any community members showing symptoms of sanitation-related diseases.
- The follow-up visits to affects communities must be regular and follow the principles of a two-way communication, i.e. you get the information needed to eliminate disaster risk and the communities get the feeling of being consulted and included.
- Approach to recovery and follow-up visits will have a positive impact on the relationship between the disaster management professionals, i.e. YOURSELF, and the community members during future disasters.
- You as local disaster management professionals should help facilitate counselling for the community members who might be affected by the loss of privacy while using sanitation facilities.
- Counselling and other necessary public health services must be provided in coordination with the local district or sub-district office of the provincial department of health and NGOs.

6. *Members of the disaster management advisory forums and potential volunteers*

- Hospital and clinics;
- Emergency personnel such as police and fire department;
- Municipality involved (volunteers);
- Professionals involved in hygiene;
- Councillors;
- Farmers;
- Local Business (for relief).

Communication must be a two-way exchange of information and must be regular, e.g. monthly meeting in churches, schools or community centres. Community members must feel and be included in all decisions about sanitation and development of new sanitation infrastructure in their communities. The involvement of traditional leaders and community organisation representatives must be implemented as much as possible in the sanitation service provision.

7. Examples of visual VIP fault detection

a) Blocked pit extraction pipe as the arrow points in the picture below – extraction of the toilet contents is impossible and public health compromised as the continued use of the facility by the occupants is impossible.

b) Ingress of soil into the VIP pit, i.e. soil particles are visible in the VIP pit – point to the compromised side walls of the toilet facility and possible collapse.

c) Signs of soil erosion and the potential for the total collapse of the VIP.

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Considerations on Intellectual and Academic Leadership of a Scholar in Higher Education: The Descriptive Literature Review

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Abstract:
Introduction: The search for solutions to the issue of leadership leads to hundreds of leadership studies, most of which are contradictory and inconclusive. The scientific literature on leadership in higher education is focused mainly on educational, academic, managerial or thought leadership. This literature provides the opinion that the intellectual leadership in higher education is directed towards building social and intellectual capital through a scholar's involvement in decision-making and performance of leadership roles in ways that support the scholar's collaborative decision-making and empowerment. Scholars see intellectual leadership as the scope of challenging processes, which incorporate ideas, values, understandings, solutions, beliefs, visions, knowledge, approaches, purpose and actions. These aspects must be accepted through collectively-shared understanding and generated contextually for organizational development in higher education. With growth in administrative demands, it becomes difficult for intellectual leaders to achieve an appropriate balance of leadership, teaching and research in higher education.
Purpose: To explore and describe the conceptual contents of intellectual leadership and academic leadership by providing their similarities and differences.
Methods: In the research, a descriptive literature review (Yang & Tate, 2012) was applied. The sample was mainly based on academic publications; the articles included are all refereed journal articles.
Conclusions: The literature review covered wide range of aspects, which reveal that intellectual leadership consists of roles that have several orientations, but the intellectual leadership is not related to the formal administrational or managerial positions. The roles of a scholar in relation to the concept of "intellectual leadership" maybe seen through the following activity spheres: mentor represents educational sphere, guardian – moral sphere, enabler – managerial and administrative spheres, and ambassador – political and communication sphere (Zydziunaite, 2016). The importance of personal characteristics and academic achievements in the formation of intellectual leaders' reputation is also highlighted in the article. Despite the limitations of definitions on intellectual leadership it is argued that this concept is related to the organic personality of an intellectual leader (scholar) who acts as organizer of ideas, carries responsibility for academic development and direction in higher education.

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Key words: academic leadership; higher education; intellectual leadership; leader; scholar.

1 Introduction

Leadership is not a simple concept. In the higher education context, the several types of leadership (intellectual, thought, educational, and academic) overlap. As much as anything, leadership is about creating a vision of what might be and fostering a culture that supports and can achieve that vision. A leader does not have to do it all but must articulate an inspiring vision that compels others to "buy in" (Yielder & Codling, 2004, p. 319; Szczepańska-Woszczyna, 2014). In today's academic environment of continually decreasing resources, it is important for all members of the scientific community to have a clear understanding of their leadership roles and responsibilities and to step up to the challenges they face to help the higher education institution (HEI) to progress toward mission fulfillment (Rowley & Sherman, 2003). Four elements of intellectual leadership are inherent to the scholar as intellectual leader in higher education: a passion for transformation, possessing a balance of personal virtues, a commitment to service, and overcoming adversity (Macfarlane & Chan, 2014).

A leader in the academic context is engaged with the "center" of the HEI, and committed to the attainment of its institutional objectives, but must be able to articulate a reasoned alternative view about the processes that will help to achieve them and demonstrate the ability to critique the objectives if necessary (Blackmore & Blackwell, 2006). In using the term leader, it is essential to acknowledge the inspirational effect that a leader should have. Academic leaders have gravitated into managerial roles at the expense of any real leadership. Given that when translated into an academic setting, the roles of management and academic leadership can be seen to be quite different, and some of the roles' performance creates confusion, because the scholar must be good at all roles. Some scholars combine the necessary traits of academic leader and manager, nevertheless these roles are quite distinct, and need different foci and abilities. It could be considered that combining the two roles or allowing one to become the other by default or force of circumstances, is not an appropriate way to develop the culture of intellectual leadership in HEI (Yielder & Codling, 2004). However, personal characteristics and achievements are important in the formation of reputation of the scholar as intellectual leader in higher education (Macfarlane & Chan, 2014). Unfortunately, chairs often see themselves as scholars who, out of duty, temporarily accept responsibility for the administrative tasks while other scholars can continue their teaching and scholarly pursuits. They come to the position without leadership training, prior administrative experience, a clear understanding of the ambiguity and complexity of their role, recognition of the metamorphic changes that occur as one transforms from a scholar or professor to a chair, without an awareness of the cost to their academic career and personal lives (Gmelch, 1991).

Academic leaders are seen traditionally through their expertise and particular scope of knowledge. The role of an academic, scholar or professor in a traditional HEI incorporates academic leadership, with management occurring almost incidentally depending on the personal qualities of the researcher and administrative staff (Yielder & Codling, 2004). Excellent academic leaders may or may not be also the intellectual leaders. Academic leaders perform the academic leadership, which interplay with the managerial leadership and the organizational structure in HEI and its departments. The

intellectual leadership cannot be strictly defined as a role or function, because it is both and at the same time it is more than the role and function. It is the mission, purpose within other purposes, component of leadership and outcome of well-managed intellectual capital in academic setting, and the autonomous concept with dimensions and orientations. Intellectual leadership is within the higher education organizational structure and can be captured intuitively, but it is not related to managerial rules or structures. Intellectual leadership is rather symbolic metaphor and expectation towards HEI scholar, nevertheless his/her administrational or research position in particular institution (Macfarlane, 2012).

Literature on higher education and leadership has been growing rapidly, treating intellectual leadership as a natural function, mission or role of the researcher (Yielder & Codling, 2004). There is lack of scientific literature on the specific characteristics of intellectual leadership and the essential aspects of scholars' roles in higher education. The scientific literature on leadership in higher education focuses mainly on educational, academic, managerial or thought leadership; intellectual leadership is not seen as a leadership type for scholars in higher education. However, the scientific literature covers a wide range of aspects at various levels of completeness and comprehensiveness regarding the concept of "intellectual leadership".

The aim of the research was to explore and describe the conceptual contents of intellectual leadership and academic leadership by providing its similarities and differences. The following research questions were addressed: What is the scope of processes within the concept of intellectual leadership? What are differences between the concept of intellectual leadership and other related concepts such as intellectual capital, academic leadership and managerial leadership in higher education?

The descriptive literature review (Yang & Tate, 2012) was applied to analyze conceptually and thematically the concept of intellectual leadership and narrate the descriptive text about this term by comparing and differentiating with academic leadership and intellectual capital. Literature review in this research covered a wide range of concepts and subjects at various levels and completeness and comprehensiveness (Grant & Booth, 2009). In the article the terms "scholar", "researcher" or "professor" are not differentiated according their semantic, content or institutional position/status meaning. All these terms here are used alternately and mean generally the academic, named in the article as a "scholar".

2 Intellectual leadership in higher education school: the scope of processes and activities

HEI present challenges for scholars who seek to better understand and/or practice it, because leadership has to be applied in a variety of different settings including administrative and academic departments, in student and faculty organizations (Rowley & Sherman, 2003). The concept of leadership must be moved onwards and upwards into a knowledge and learning based dimension beyond that of group dynamics and project management, to a level that engages with the charismatic effects of intellectual leadership (El-Tannir, 2002).

Intellectual leadership is discussed, but not defined in the scientific literature. Dealtry (2001, p. 119) argues that it is the quality of overall intellectual performance and the quality and quantity of mental rather than physical energy that redefines activity potential and competitive reality of the activity entity. Researchers see the phenomenon

of intellectual leadership as the scope of challenging processes, for example, ensuring, critiquing, questioning, generating (Stevenson, 2012), envisioning, advocating, encouraging, re-imagining (Roy et al., 2008), managing, achieving, evaluating, acting, and providing (Dealtry, 2001). In these explanations are the general unifying components: ideas, values, understandings, and solutions (Stevenson, 2012), beliefs and visions (Roy et al., 2008), knowledge, approaches, purpose, and actions (Dealtry, 2001). These mentioned aspects must be accepted through collectively shared understanding and generated contextually for organizational development in higher education. The literature review shows that intellectual leadership is a complex process towards new visions and relevant solutions.

The intellectual leader is the key actor in intellectual leadership and the intellectual architect (Tseng et al., 2010). His/her task is to create intellectual environment where people, working together, contribute, as individuals, toward attainment of purposes (Koontz, 1963). Intellectual leadership is performed by intellectuals. Stevenson (2012, p. 349) names them as "organic intellectuals who fulfill the roles of constructor, organizer, permanent persuader". Intellectual leaders challenge the traditional forms of knowledge, create the conditions for emerging answers, organize ideas around an alternative to the status quo and hold out the possibility of transformation (Stevenson, 2012) (see Figure 1). Intellectual leadership is a knowledge networks in terms of its intellectual architects (who), their respective contributions (what), and the time and place in which they published them (when and where) (Tseng et al., 2010).

Intellectual leadership in different educational institutions is characterized by particular similarities and differences. At school the intellectual leader is a teacher. Intellectual stimulation works for teachers as intellectual leaders to encourage thoughtful, creative and effortful problem solving through careful contemplation (Bolkan et al., 2011). His/her leadership is focused towards two practices: i) teaching practice in the classroom, which is related to student outcomes, and ii) instructional support to teachers (colleagues), which impacts teachers' classroom practices (Heck, 2008). At university, the intellectual leader is a scholar and his/her main concern is research excellence, which is shown and proved through publications (articles, books, monographs), grant getting, and textbooks written, and reflects national and/or international reputation in a disciplinary or professional field (Macfarlane, 2011).

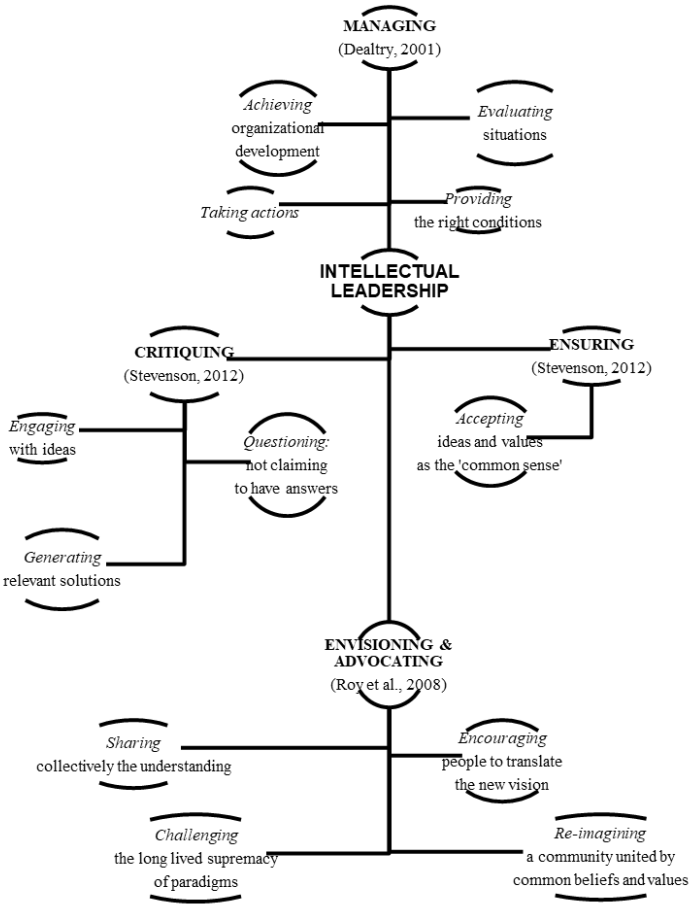

Figure 1. The scope of processes of intellectual leadership in higher education.

The intellectual leadership of a scholar in higher education is characterized by similarities and differences regarding his/her educational leadership. Both leadership types are similar as they are focused on a scholar's practices in working with students. Gunter (2006) argues that educational leadership is the practice of the practitioner (scholar as a teacher or lecturer by performing the pedagogical role) in working with students in developing their learning, and it is the practice of enquiry (as a researcher) into how and why the practitioner (scholar) works with students. According to this author, educational leadership is strongly related to controlling mechanisms of teaching by scholars within the pedagogical role, higher education institutional culture, students, academic and non-academic communities, and public policy. Then in educational leadership exists the radical understanding of how educational leadership processes embedded within teaching and learning take place. Intellectual leadership by the scholar is not related to controlling mechanisms. Here the scholar is openly oriented to students and colleague scholars in order to seek quality in teaching and influence as much as

possible the achievements of students through learning support (Heck, 2008). Thus, educational leadership is related to controlling and keeping rules, and intellectual leadership is focused on improvements and support.

In the context of a scholar's intellectual leadership in higher education the "intellectual stimulation" emerges as an important component. The scholar as an intellectual leader directs his/her leadership to students through challenging them, encouraging their independent thought, empowering students to think deeply, critically, and to form their own conclusions about course material, using an interactive teaching style (Bolkan et al., 2011). The intellectual stimulation is related to both – intellectual and educational – leadership types in the institution. The component "teaching style" is related rather to educational than to intellectual leadership. Thus, both intellectual and educational leadership are interrelated in the higher education environment through promoting teaching and learning. Scholars as intellectual leaders are expected to demonstrate a basic level of competence in management and administrational services within the HEI (Heck, 2008; Macfarlane, 2011). But being an intellectual leader in higher education does not necessarily make a good academic manager. As well as being intellectual, a scholar is not equal to being an intellectual leader (Macfarlane, 2012).

The intellectual leader – scholar – directs his/her leadership towards i) students through teaching, advising, (co-)supervising; ii) colleague scholars or academics through being a role model and mentoring, co-authorship with inexperienced researchers and higher education teachers; iii) the HEI in an internal context through representing the department in the institution, influencing the work and its direction, and serving on its committees; iv) the HEI in an external context by influencing the public debate, and in the internal context (Macfarlane, 2011). Intellectual leaders are able to generate penetrating insights into complex issues, to make decisions and to take actions (El-Tannir, 2002). Table 1 shows that intellectual leadership by the scholar in higher education is expressed as an academic duty and commitment through such roles as mentor, guardian, enabler and ambassador.

Table 1

Activities related to intellectual leadership of the scholar in a HEI (according to Macfarlane, 2011; 2012)

Activity of scholar in HEI	*Content of the activity of a scholar in HEI*	*The role of a scholar*
Co-supervising ...	... PhD students …	MENTOR
Co-authorship ...	... Less experienced researchers and experienced scholars …	
Advising ...	...On sources funding … ...On publication outlets for research …	
Helping ...	... Colleagues to develop their intellectual ideas …	
Encouraging ...	... Colleagues to overcome challenges with paper … publications and applying for grants …	GUARDIAN
Researching and publishing ...	... Being an independent champion and a guardian (steward) of academic standards and	

	associated values …	
Nurturing	... Colleagues with potential …	ENABLER
Applying ...	... For research grants with less experienced colleagues …	
Participating ...	... In the external fellowship panel …	
Giving ...	... Colleague's confidence …	
Lobbying ...	... On behalf of the subject …	AMBASSADOR
Debating ...	... Issues …	
Promoting ...	... Explaining new key ideas …	

The concept of intellectual leadership includes two dimensions – *academic freedom* and *academic duty* that are related to the following orientations (Macfarlane, 2012):

- *Knowledge production,* which for the intellectual leader-scholar means seeking to have an impact on theory and/or practice through creation of knowledge (theories, frameworks, analyses, and models).
- *Academic citizenship* in intellectual leadership of a scholar with orientation represents the application of disciplinary specialism for the benefit of wider public perceiving and understanding (use of innovative teaching methods, engagement in public outreach work through activities with government and non-governmental organizations).
- *Boundary transgressing* is implemented when the intellectual leader-scholar treats as a challenging the norms of established disciplines and developing connections across fields through research and teaching.
- Representing the discipline, research topic, HEI and/or country as a *public intellectual* means a scholar's engagement with and seeking to influence public debate on social, moral and economic issues through speaking, writing and campaigning.

Intellectual leadership does not mean or guarantee *thought leadership* in higher education. Thought leadership is related to knowledge production innovation (value creation), excellence and recognition in order to have the transformative effect on educational market with a knowledge production or learning service that is resonated with stakeholders (Bontis & Nikitopoulos, 2001). Thought leadership involves tacit knowledge – knowledge that cannot be easily communicated and shared and that is highly personal, deeply rooted in action and in an individual scholar's involvement within a specific context (Gupta & Roos, 2001). From both descriptions about thought leadership is seen that here the focus is on personalized knowledge enactment and narrow specialty activities in a particular context. Intellectual leadership means the organic personality of an intellectual leader-scholar in order to displace the *status quo* through being not detached from their peers and acting as organizers of ideas (Stevenson, 2012). The task of the intellectual leader-scholar is to establish an environment for effective and efficient group operations, when the environment is characterized by intentional structure of roles and commonality of purpose (Koontz, 1963). In both intellectual and thought leadership the knowledge production is the focus in higher education arena. But intellectual leadership does not seek the triumph of one

form of knowledge over another, or one intellectual leader-scholar over another, but this is a process in which new forms of knowledge are generated contextually (Stevenson, 2012). The competition through knowledge production is the characteristic of both leaderships, but the purpose here is different: in thought leadership the aim is to sell the idea of knowledge over knowledge (Bontis & Nikitopoulos, 2001); in intellectual leadership the knowledge production means development, expansion, and improvement through focusing on knowledge-to-knowledge (Dealtry, 2001). Hence thought leadership is interested in marketization of knowledge, and intellectual leadership seeks the intellectual value of knowledge.

Intellectual leadership in higher education is directed towards *building social* and *intellectual capital* through the intellectual leader-scholar's involvement in decision-making and performance of leadership roles in ways that support, in a community of scholars, collaborative decision-making and empowerment. Here social capital means resources (power and information) to bind the scholars' community with a social relationship that can be used to leverage additional intellectual and other resources. The resources of both the individual scholar and the scholars' community can be used to obtain or maintain additional advantages by drawing on different resources within and beyond the scholars' immediate community (Bolivar & Chrispeels, 2011).

2.1 Interrelating characteristics of intellectual capital and intellectual leadership in higher education school

Intellectual capital (IC) in higher education is defined as such intellectual material as knowledge, information, intellectual property, and experience that can be put to use to create wealth (Isaac et al., 2009). That intellectual material is the collective scholars' brainpower in higher education (Müller & Raich, 2005). Swart (2006) supports the idea that IC is knowledge, and notes that this knowledge can be converted into value or intellectual material. Mayo (2000) differentiates two types of wealth in regard to IC, which may be created and/or generated: creating today's wealth and generating the capability of tomorrow's wealth. Marr and Moustaghfir (2005) also mentions future and wealth, but liberates the definition of intellectual material by saying that IC embraces any valuable intangible resource gained through experience and learning. But here the core potential is the proportion of scholars employed in higher education space and/or institution whose job it is to concentrate on the future rather than the present (Mayo, 2000). IC is the developmental phenomenon, but not the status quo: it is the dynamics of growth, rather than mere measurement for its own sake, that makes the difference (Mayo, 2000). Here the growth is seen through acting, creating, shaping, sharing or exchanging, networking and interacting in regard to wealth or HEI: the value creation is going to be in shaping new ideas, exchanging information globally, and interacting through networks with high organizational speed in order to take action (Edvinsson, 2000). The growth is dependent on the scholar's ability to motivate the self for individual creativity and to inspire the colleague scholars to creativity by sharing and/or proposing, and/or creating opportunities for participative decision-making in a trusting and respectful context (Isaac et al., 2009) of a HEI.

IC is a scope of knowledge, skills, experience, and information related to an individual scholar's and/or collective scholars' competence. Engström et al. (2003) highlight that competence is not the outcome, but it is premised to generate IC: employees generate IC through their competence, attitude and intellectual agility through enabling one to

change practice and to think of innovate solutions. IC is the function of competence, which is related to the scholars' commitment to the HEI and to scientific discipline (Nerdrum & Erikson, 2001). IC consists of several dimensions:

- *Human capital* (HC) or human intellectual capital (Savolainen & Lopez-Fresno, 2013) is the source of strategic innovation for higher education and constitutes both the broader human resource considerations and the specific requirements of an individual scholar's competence in the form of knowledge, skills and attributes (Nazari & Herremans, 2007). Roos et al. (2001) add the intellectual agility and Savolainen & Lopez-Fresno (2013) complement this list of components with competences, motivations, communication, sharing of knowledge and cooperation skills. Isaac et al. (2009) agree that human IC is concerned with skills, knowledge, innovativeness, capabilities and overall competence of scholars. Human IC represents the stock of knowledge within the higher education institution rather than in the minds of individual scholars.
- *Relationship* (Nazari & Herremans, 2007) or relational capital (RC) (Nazari & Herremans, 2007; Isaac et al., 2009; Savolainen & Lopez-Fresno, 2013) represents all the valuable relationships with scholars, students, social partners and other relevant stakeholders within the higher education space. It comprises the knowledge embedded in all the relationships, which HEI develops (Nazari & Herremans, 2007). The relational trust in RC emerges as an important aspect and means that it develops through interactions and reciprocal activities between individual scholars, and within scholars' groups and higher education institutions. It is also a managerial resource and skill in higher education for developing human IC (Savolainen & Lopez-Fresno, 2013). In relationship to IC the intellectual leadership is about relationships, interactions, communication and collaboration (Nazari & Herremans, 2007) and associations with others that lead to organizational wealth (Isaac et al., 2009) in HEIs.
- *Structural capital* (SC) deals with the structure and the information systems, which can lead to the activity intellect of both the scholar and the institution. SC comprises all kinds of "knowledge deposits", such as organizational routines, strategies, process handbooks, and databases (Nazari & Herremans, 2007) of a HEI.
- *The organizational capital* (OC) of higher education school is identified with technologies and supporting systems that help scholars to do the jobs and ultimately create revenues for the HEI that result in common wealth within both institution and the higher education space. OC includes databases, technical and communication systems, policies (Isaac et al., 2009), structures, brands, and intellectual property (Roos et al., 2001). The intellectual property here is seen as unique resources, capabilities, and endowments in order to create and sustain a competitive advantage (Bollen et al., 2005).

The roles of a scholar in intellectual leadership maybe seen through the following activity spheres in higher education school: mentor represents educational sphere; guardian – moral sphere; enabler – managerial and administrative spheres; and ambassador – political and communication spheres. The HC incorporates the scope of individual, community and organizational learning and working experiences. SC is focused on management and administration and cares about the present. OC is oriented towards the future and here marketing, communication and policy are important. The

intellectual or conceptual interrelationships between intellectual leadership and IC in higher education school are presented in Table 2.

Table 2

Interrelationships between the intellectual leadership and IC in HEI

IC dimension in HEI	*Interrelated content*	*The role of a scholar in intellectual leadership in HEI*
Human capital	... sharing of knowledge … ... competences …	MENTOR
Structural capital	...organizational routines, strategies and processes …	
Organizational capital	... supporting systems …	
Human capital	... intellectual agility …	GUARDIAN
Organizational capital	... intellectual property …	
Human capital	... cooperation skills … ... motivations …	ENABLER
Structural capital	...organizational routines, strategies and processes …	
Human capital	... communication …	AMBASSADOR
Organizational capital	... communication systems, policies … ... creating and sustaining competitive advantages …	

Human IC is related to all roles of intellectual leader in intellectual leadership. Only the mentor's role is related to all dimensions of IC. An organization's IC is attached to the guardian and ambassador roles in intellectual leadership. Structural IC is incorporated into the mentor's and enabler's roles. The mentor's role in intellectual leadership is the most complex.

2.2 Characteristics of academic leadership and intellectual leadership in higher education

Leadership or management? Academic leadership or intellectual leadership? A loose conceptual distinction is often made between them, where management refers to an orientation towards results and goals, organizing tasks and systems, while leadership alludes to an orientation towards human relations and organizing people (Yielder & Codling, 2004). The search for solutions to the leadership leads to variety of contradictory and inconclusive research on leadership. Leaders: are born, not made – made not born; pose distinctive traits – no special traits at all; must use power and influence – merely manage symbols and the academic culture. Rarely do we study what is perhaps the most important unit in the HEI, the administration of the academic department where most administrative decisions take place. What price does the scholar pay for academic leadership? (Gmelch, 1991).

Specific activities in higher education primarily focus on aspects such as responsibility for academic direction and priorities, teaching, scholarship and research, consultation with students, decision-making about academic programs, course delivery, content and scheduling (Yielder & Codling, 2004). Then it is not surprising that most scholars are in higher education school because they have been educated for, and want to, teach and/or do research.

Because HEI follow the principle of shared governance, decision-making involves both the central administration and the faculty and/or particular department members. To fulfill its role, the faculty and/or department must first supply, and then develop members scholars as leaders to help assure that scholars who have the expertise in the respective disciplines guide the academic programs. Many faculty and/or department members scholars thus end up in both managerial and leadership roles without ever having aspired to them (Rowley & Sherman, 2003). In the higher education context however, leadership and management functions have been closely integrated at departmental or higher education institutional level. At these levels both the academic leadership role and the management role require aspects of "leadership", which in this sense is not something that can be written into a job description as a "function". It may be more appropriately regarded as a quality that the scholar brings to the position (Yielder & Codling, 2004).

Department chairs deal with the tension of trying to be administrators (managerial leadership) and remaining faculty members (academic leadership), and continuing to do research (intellectual leadership). The two elements, continuing as faculty and conducting research, add a somewhat unique element to the department chair position. Department chairs, however, return to faculty status after serving in their administrative capacity and, therefore, face pressures to maintain personal research and, to a lesser extent, teaching agendas (Wolverton et al., 2005). This creates the unique challenge of academic and intellectual leadership, and academic management.

The terms academic leadership and managerial leadership are therefore ascribed to the fulfillment of different aspects of leading or decision-making. Both are involved in providing direction, purposes, visions and goals for the future but for different purposes (Yielder & Codling, 2004). Academic leadership is related to the scholar's expertise and knowledge. Such scholar is "an" authority "by virtue of … his/her knowledge … with respect to some particular field of inquiry or subject-matter … relative to a given group or community" (Kleinig, 1982, p. 212). Academic leadership is characterized by particular features (see Table 3).

Table 3

Features of the academic leadership (Blackmore, 2007)

Characteristics of academic leadership in HEI	*Content of academic leadership in higher education*
Fair and efficient management	Department, school, and HEI leaders need to decide freely about their input, processes, and output territories. These domains of authorities constitute student acceptance, staff recruitment, budget expenditure and interpretation of centralized rules. To act with autonomy about their processes and output with flexible and facilitated rules. To have the capacities to use power resources such as legitimate, referent, reward, coercive, and expert power.
Shared vision, goals, and strategies	Developing a vision by considering the scholars' and academic communities' and stakeholders' needs, demands, and expectations and by also looking at globalization changes.
Teaching and research leadership	Academic leaders are role models who oversee continuous improvement of research and teaching. Developing a human resource network inside and outside the department and HEI and at the local, national, and international levels.
Transformational and collaborative leadership	Emphasizing participation, delegation, and teamwork. At all levels enhance participation by delegating authorities and sharing responsibilities and decision making among heads of departments and faculty members.
Development and recognition performance	An effective and efficient reward system with appropriate and on time feedback should be able to improve output of academic work, according to possible results of an efficient evaluation system focusing on staffs, departments, and HEI performance.
Climate of mutual trust and respect	Utilizing the communication skills, organizational culture, and shared values in order to fulfill mutual trust. Leaders provide an effective communication network inside and outside of HEIs. Mutual trust and respect provide an appropriate context and move the HEI toward individual and collective goal attainments.

Managerial leadership in a higher education-based academic environment requires a clear and inevitably values-based view about purposes, ways of working and relationships with others in the HEI. Here, managerial leadership involves moving away from a person-centered orientation towards a systems orientation (Blackmore & Blackwell, 2006). Managerial leadership in higher education reflects organizational hierarchy through managerial positions. In this context a scholar is "in" authority. This kind of authority is linked with power or influence "by virtue of holding an office or position within an institutional structure … it is … the office or position which is invested with authority" (Kleinig, 1982, p. 212). Thus, managerial leadership in higher

education is focused on managerial, administrative aims and purposes, and its relationship with intellectual leadership has no the common focus. The same cannot be said about the interrelationships between academic and intellectual leaderships: both are interrelated through overlapped contents between the characteristics of academic leadership, roles and orientations within intellectual leadership. Table 4 shows that the same characteristics of academic leadership are related to different orientations in intellectual leadership. For example, the academic leadership characteristic "fair and efficient management" involves the boundary transgressor's, academic citizen's orientations in intellectual leadership, or characteristic "climate of mutual trust and respect" incorporates the boundary transgressor's, public intellectual's and academic citizen's orientations in intellectual leadership. The roles in intellectual leadership are interrelated with characteristics of academic leadership. Every role except that of guardian includes several characteristics of academic leadership. Table 4 also shows that every role within intellectual leadership consists of several orientations. Through relationships between the orientations of intellectual leadership and characteristics of academic leadership is seen that intellectual leadership incorporates the characteristics of academic leadership. These characteristics become practical reality in the academic environment when the intellectual leaders-scholars perform their intellectual leadership roles. The difference between academic leadership and intellectual leadership is only regarding the administrational job position. Intellectual leadership is not related to formal administrative or managerial positions. Nevertheless, scholars as intellectual leaders perform functions of academic leadership through being focused on research and expertise. They do it without a formal framework and they are not aware of the existence of such academic leadership functions. They do it for granted as recognized authority by communities, HEIs and/or society.

Academic leadership is directly interrelated with the administrative and managerial context and this is the limitation for academic leaders-scholars. This limitation could be narrowed if the academic leader-scholar has the authority. If management positions are invested with authority and status in the HEI, then the academic leaders-scholars may be marginalized, leading to a devaluing of the critical teaching-learning-research-practice nexus in higher education.

Table 4

Interrelationships between academic leadership and intellectual leadership in higher education (Blackmore, 2007; Macfarlane, 2011; 2012)

Orientations in intellectual leadership in higher education	*Academic leadership characteristics in higher education*	*Interrelated content*	*Roles of a scholar in intellectual leadership*
Boundary transgressor	Fair and efficient management	Free decisions about resources. Interpretation of centralized rules.	ENABLER
Academic citizen		Using the expert power.	

Knowledge producer	Teaching and research leadership	Creating networks inside and outside the HEIs, and nationally and internationally.	
Boundary transgressor	Development and recognition performance	Reward system and on time feedback towards improving the work at all levels.	
Academic citizen	Fair and efficient management	Autonomous acting in particular expertise-based processes.	AMBASSADOR
Public intellectual	Shared vision, goals, and strategies	Developing a vision by considering the needs of institution and its resources, and the global context out of HEI.	
Knowledge producer	Teaching and research leadership	Being a role model in research and teaching.	MENTOR
Academic citizen	Transformational and collaborative leadership	Participation, delegation, and teamwork.	
Boundary transgressor	Climate of mutual trust and respect	Sharing the values, organizational culture.	GUARDIAN
Public intellectual		Providing the communication network inside and outside the HEI.	
		Fulfilling the mutual trust and respect.	
Academic citizen		Moving the HEI toward collective goal and aim attainments.	

Academic leaders-scholars who bear responsibility for academic development and direction, without authority or status, may experience loss of job satisfaction and disillusionment. With growth in administrative demands, it becomes difficult to achieve an appropriate balance of leadership, teaching and research, which in turn limits the possibility of academic promotion, and hence status in the academic, as opposed to managerial sphere (Yielder & Codling, 2004).

3 Conclusion

Intellectual leadership is a complex concept or phenomenon, which does not take place in a vacuum: there are a number of important processes and activities related to a scholar's roles within which his/her intellectual leadership is also important. The HEI sees the scholar as intellectual leader in demonstrating expertise and knowledge and

shaping activities and processes through their roles in the institution and within the higher education space globally and locally. Being an intellectual leader requires or demands from the scholar a high level of expertise in his/her discipline, and a great deal of specific knowledge which places the scholar as intellectual leader at the forefront of the research field.

Intellectual leadership is not explicitly taught or easily controlled. It means the production of new knowledge or the reconstruction of old knowledge in new ways and the capacity to contribute to the future direction of intellectual currents in the realm of academic or public spaces. Intellectual leadership is not the same as academic or educational leadership and it seldom arises outside of HEI. Intellectual leadership can be formal and informal, and it may come from different sources outside and inside the HEI. Intellectual leadership is likely to be facilitated by enabling scholars to undertake innovative research, which in the changing conditions of financial constraints on public spending may prove challenging.

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Efficiency of Teaching Based on the Comparison of Textbooks

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Abstract:
Introduction: The paper's introduction contains a set of notes concerning high-quality preparation of pupils and students and doing best to achieve adequate efficiency related to the educational process, where pupils' or students' personality development and activation together with their key-competence and self-cultivation development, as well as preparation for the labour market, successful versatility plays a role of great importance. The pupils' or the students' capability to work with information included in the natural language test is considered to be of a great importance for their further professional or private life. Therefore, any school is responsible for the quality of education and teachers should work with adequate and up-to-date, high quality teaching and learning aids.
Purpose: The purpose of the study was to monitor and verify the didactic efficiency of the proposed chapters for the Economics textbook at a technical secondary school in Hlohovec, as well as to check the quality of the proposed textbook in relation to the outputs of the educational process.
Methods: The following methods and techniques related to the investigation of a developed Economics textbook have been applied: natural pedagogic experiment; questionnaire; cloze test; didactic test and statistical methods for data processing.
Conclusions: The research has shown that the created textbook for Economics is appropriate for students. We believe that introducing newly developed textbooks/teaching materials into the teaching process (despite modern types of media) may contribute to improving the quality and efficiency of the educational process.

Key words: textbook, educational process, efficiency of the educational process, quality of the educational process.

1 Introduction

Nowadays, the educational process aims at the student's personality development. In terms of education, we are currently experiencing continuous efforts to increase the quality of education and modernize schools. In schools, students should be provided with such education which would enable them to successfully integrate into practice and react flexibly to the changes in the labour market (Andress, 1911).
Technical and vocational education and training (TVET) makes a significant contribution to the economic competitiveness and welfare in a global knowledge-based economy. The main challenge for vocational education and training is to meet the requirement for new skills of individuals and respond to changes in the world of work in

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accordance with the principles of lifelong learning (Hrmo, Krištofiaková & Miština, 2015).

The most important prerequisite for achieving this goal is to provide high-quality preparation for individuals' future careers. This should be also accepted by teachers. A teacher, as an important factor in the educational process, may significantly contribute to the quality of education and its efficiency improvement by introducing new teaching aids, teaching methods, modern technologies etc. into the teaching process (Bajtoš & Kmecová, 2013, Dobrovská & Andres, 2016).

Khairutdinova, Selivanova and Abildina (2016) performed a research using an educational experiment. Students from different educational institutions were divided into groups based on their age. The main finding of this research was that there is a constant increase in the level of students' subjectivity. A similar research was mentioned by Avella, Kebritchi, Nunn and Kanai (2016). They provided an overview of the applied methods and the advantages of university education in LA.

Each school wishing to succeed in the competition must adjust to the new labour market conditions and make constant changes leading to the improvement in the quality of services provided.

2 Quality of education in schools

In today's world, quality and innovation are prerequisites for the competitiveness of states, businesses and schools. Quality is a condition for the existence of schools and we can agree with the argument that the future of a nation and mankind/people depends largely on the quality of education.

The quality of school can be evaluated based on two basic criteria (Bajtoš, 2010), the output criterion (amount of knowledge and experiences the student gains and their use in real life); and the criterion of affect (formation of the student's personality, his/her value system, motivation necessary for further education leading towards self-cultivation).

Lin-Siegler (2016) states in his article that students believe that success in science primarily depends on extraordinary talent, which has a negative impact on their motivation to learning. Deci, Ryan, Vallerand and Pelletier (1991) describe social-contextual factors, which are responsible for internal motivation and which support internalization leading to required results of education.

Schools, as educational institutions, should promote complex student personality development. It bears the primary responsibility for improving students' general and vocational knowledge, as well as the development of all components of their personalities and social roles the students are being prepared for. Education should be focused on the students' successful integration into the professional and social life. Following this aspect, we can say that schools play an extremely important role in the life of an individual (Bajtoš & Orosová., 2011).

It is essential for schools to provide the students with high-quality education that is a prerequisite for proper acquisition and development of competences (Turek & Albert, 2005). Richardson (2004) examined teaching and learning from the point of view of a student. He was interested in how to reveal the intricacy of language and educational requirements in the form of unknown discussion, genres and learning practices a student must be ware of as a participant of the educational culture of economics.

The primary objective of education is to prepare students for life, to prepare graduates who have a specific professional profile and are able to assert themselves in real life.

Therefore, it is important to apply both the theoretical and the practical components of education in schools. This is the only way we can prepare students for the labour market (Bajtoš, 2003).
Following this, it should be noted that teaching quality assessment is necessary. This is even more true when introducing new textbooks/teaching materials.

3 Quality evaluation of teaching materials

The term teaching material quality refers to its clarity, readability and complexity. Teaching materials should promote students' progress and provide them with everything necessary for effective learning.
The methods used for teaching quality evaluation may be divided into three basic groups: experimental method, expert methods, and statistical methods that examine various textbook parameters obtained by measuring the individual characteristics of the teaching content in the textbook. Such parameters include, for example, the average text size, its readability, and the difficulty level of the text. Text readability is determined by: Cloze test, Fog index and Gunning-Fog index (Kmecová, 2010; Turek, 2008).

A. *Experimental method* – is based on a pedagogical experiment, which is the most objective method for textbook quality evaluation. The independent variable is the textbook/teaching materials. In the experimental study group, the students and the teacher use a new textbook/teaching material and the control group uses the previous textbook. The intervening variables (objectives of the lessons, the teacher, students, classroom, teaching methods, timetable etc.) should be the same in both the experimental and the control group. After the experiment, the knowledge, skills and attitudes of the students in both groups is compared (Turek, 2008, as cited in Kmecová, 2010, p. 46);
B. *Expert methods* **–** assess the adequacy, methodology, attractiveness, complexity and other textbook parameters resulting from the statements of certain groups of observers – experts, teachers, students, etc. In this method, questionnaires have an irreplaceable role (Kmecová, 2010, p. 46);
C. *Statistical methods* – these methods examine various curriculum parameters obtained by examining individual characteristics of the teaching context in the textbook. Such parameters include (Turek, 2008, as cited in Kmecová, 2010, pp. 47-49):
    a) average text size – the number of words in the textbook within one teaching unit.
    b) text difficulty level – may be determined by:
    - *linguistic-quantitative methods* are based on measuring the textbook difficulty level, arrangement of measurable units of verbal text, such as terminology, sentence structure, etc. These methods include Flesch's or Pisarek's method for measuring text difficulty, Mistrík's formula of measuring text clarity, etc.
      As an example, Flesch's method for measuring text difficulty is given. Flesch created a formula which laid the groundwork for educational applications in this field. It refers to measuring text readability (Reading Ease - RE) for subjects with a certain level of skill. This is measured as follows: First, a sample from the text (extent – 100 words) is chosen systematically. Subsequently, the average number of syllables per word (SL) is counted. Finally, the average

sentence length in terms of the number of the words (WL) is counted and the gathered data are inserted into the following formula:
RE = 206.853 – 0.846 SL – 1.015 WL.

In this measurement, the scale ranges from 0 (the easiest texts) to 100 (the most difficult texts). In other words, texts are assigned a score on the Flesch's scale, which indicates the suitable level of education for understanding the particular text.

- *subject evaluation methods:* the difficulty level is determined through information obtained by questions from certain groups of subjects, such as experts or textbooks direct users (students and teachers).
  These methods include The Complex Measurement of Text Difficulty by Nestlerová, Průcha and Pluskala. 10 random text samples are taken from the textbook/teaching material, the extent of each sample is 200 words. From each thematic unit, 5 more samples are taken (the extent of the samples is 100 words). The words and terms in samples are counted, the average length of sentences and their parts is calculated, and on this basis, the parameters of the textbook are determined.
  In this measurement, the scale ranges from 0 (minimal difficulty) to 10 (maximum difficulty).
- *text readability* – is determined by cloze test, Fog index and Gunning-Fog indexem.

1) Cloze test – from the textbook/teaching material a random sample (250 words is taken). The first part of the text (35 words) is without any changes, but the 36th and then each tenth word (i.e. 46th, 56th, 66^{th,} etc,) is omitted, until 20 words are omitted. Then a selected group of students who the textbook is intended for, is asked to fill in the missing words or to replace them by synonyms. If they fail to complete at least 13 missing words, the text is too difficult for them. Cloze test is easy to implement by using computer technology (Kmecová, 2010, p. 328).
2) Fog index – from the textbook/teaching material, a sample (about 100 words) is taken. It is more efficient to work with more samples from one textbook. The average length of sentences in the sample is calculated through dividing the total number of words in the sample by the number of sentences. Using the formula

$$FI = \frac{(\text{average sentence length} + \text{number of long words}) \times 2}{5} + 5;$$

   it is possible to calculate Fog index. The ideal score is about 12. In good textbooks/teaching materials, the score is 11 or lower.
3) Gunning Fog index – a random sample, the extent is about 100 words, is taken from the textbook/teaching material. It is more efficient to take more than one sample. The average number of words in the selected samples and the percentage of long (3 or polysyllabic) words is calculated. Gunning Fog index is calculated as follows:

GFI = (ANW + %LW) x 0.4[1]

The calculated index represents the number of years of study necessary for comprehensive reading of the textbook/teaching material. The value of the index may be lowered by using simple vocabulary and short sentences (Kmecová, 2010, pp. 328-329).

4 Empirical verification of the didactic efficiency of the textbook

We present the preliminary results of the research on didactic efficiency of textbooks in vocational education. The research was implemented by the author at a technical secondary school in Hlohovec, Slovakia.

4.1 Research objectives

The main objectives of the research were:

- to monitor and verify the didactic efficiency of the proposed chapters of the Economics textbook at a technical secondary school in Hlohovec;
- to check the quality of the proposed textbook in relation to the outputs of the educational process of Economics.

4.2 Focus of the research

- content of the Economics textbook;
- students' satisfaction with teaching economics using the particular textbook / teaching material;
- findings about the students' attitudes and views on the quality of teaching Economics.

4.3 Research methodology

The following methods and techniques related to the evaluation of the created Economics textbook were applied:

a) natural pedagogic experiment;
b) questionnaire;
c) cloze test;
d) didactic test;
e) statistical methods for data processing.

4.4 Research hypotheses

H: Economics is taught more efficiently with the use of chapters contained in the developed textbook than with the use of the currently used textbook.
In order to verify the main hypothesis, 5 sub-hypotheses were formulated. In this paper, partial results obtained from the verification of three working hypotheses are presented:
H1: The students in the experimental class achieve better results, when writing the Economy didactic test, within cognitive area than the students in the reference class.

[1] GFI = Gunning-Fog Index;
ANW = average number of words per sentence;
LW = percentage of long words.

H2: At the end of experiment, an evaluation of learning process provided by students in the experimental group will be more positive than by the students in the control group.
H3: The clarity of the created test will be higher than 65%, while the evaluation will be done with the use of Cloze test.

4.5 Statistic verification of hypotheses
4.5.1 H1 hypothesis
In order to verify the partial hypothesis H1, the non-standardized test with objective score system (NR Test) was applied. The students' performance was comparable with the performance of other students.
In research, the statistical method of Mann-Whitney U-Test was used. Based on the calculated values, the null hypothesis was rejected at a significance level of 0.05 in favour of the alternative hypothesis. There were significant differences between the students' performance in the experimental and control study groups.

Table 1

Results of didactic test outputs in the experimental and control class – finishing with a school-leaving certificate

STUDY- Group	
EXP	*CON*
$n_1 = 16$	$n_2 = 10$
$\bar{x}_1 = 20.75$	$\bar{x}_2 = 16.60$
$s_1^2 = 1.96$	$s_2^2 = 12.71$

For a quantitative trait of final DT score, in the cognitive area, a non-parametric Mann-Whitney U-Test at high frequencies was used.

Table 2

Null and alternative hypothesis – H1 verification

H_0	There are no differences between the performance of the students in the experimental and control study groups.
H_1	There are differences between the performance of the students in the experimental and control study groups.

The calculated value 11.13 was compared with the critical value (1.96). The calculated value u > critical value, therefore the null hypothesis was rejected, and the alternative hypothesis was confirmed. Between the performance of the students of both groups (in the program finishing with a school-leaving certificate), at a significance level of 0.05, there were statistically significant differences (Kmecová, 2010, pp. 97-98).
For illustration purposes, the results of the measured parameters in the group finishing with a certificate of apprenticeship are presented. The results of measured parameters

(arithmetic mean, median, modus, standard deviation, variance, variation margin, variation coefficient, minimum, maximum) are shown in Table 3.

Table 3

Results of measured parameters in experimental and control group – finishing with a certificate of apprenticeship

	Apprenticeship–Group	
Measured parameters	*EXP [n_1=19]*	*CON [n_2=26]*
Arithmetic mean $\bar{x}$ [points]	19.25	17.35
Median $\tilde{x}$	19	17
Modus $\hat{x}$	17/22	17
Standard deviation s	1.94	3.05
Variance s^2	3.76	9.28
Variation margin R [%]	20.00%	48.00%
Variation margin R [points]	5	12
Variation coefficient V [%]	10 %	17 %
Maximum x_{max} [%]	88.00%	88.00%
Maximum x_{max} [points]	22	22
Minimum x_{min}[%]	68.00%	40.00%
Minimum x_{min} [points]	17	10

From the results shown in Table 3, we can see that in the final didactic test, the average score (arithmetic mean) of the experimental group is higher than the score of the students of the control group. As for the performance of the students in the control group, there were big differences. The difference between the highest and the lowest score was 12 points (48%). On the other hand, in the performance of the students of the experimental group, there were small differences. The sample was rather homogeneous. The difference between the highest and the lowest score was 5 points.
The working hypothesis H1 was confirmed both in the program finishing with a school-leaving certificate and the program finishing with a certificate of apprenticeship. Its probability is therefore 95%. Between the students' performance in both groups (in the program finishing with a certificate of apprenticeship) were, at a significance level of 0.05, there were statistically significant differences (Kmecová, 2010, pp. 98-99). The average score (arithmetic mean) of the final DT in the experimental group (finishing with a school-leaving certificate) was 20.75 points, in the control group (finishing with a school-leaving), the score was 16.60 points, which means that the students in the experimental group achieved better results than the students in the control group. Similarly, in the program finishing with a certificate of apprenticeship, the experimental group's arithmetic mean (19.25) was higher than the average score of the control group (17.35).

4.5.2 Hypothesis H2

In order to verify H2 hypothesis, Mann-Whitney U-Test at high frequencies was applied. The students filled in the questionnaire for teaching quality evaluation of and the questionnaire for evaluation of subject teaching quality in order to verify the H2 hypothesis.

The questionnaire comprised 23 questions (Kmecová, 2010, pp. 146-150). For illustration purposes, we present the answers to the questions related to the verification of H2 hypothesis in the program finishing with a school-leaving certificate.

Question 1

Was the Economics textbook motivating in various proportions and relationships, i.e. encouraged you to activity and increased your interest in learning from the textbook?

a) always; b) often; c) sometimes; d) not very often; e) never

Table 4

Results of measured parameters in experimental and control group – with a school-leaving certificate

	Experimental group		*Control group*	
Scale	*Number of responses*	*%*	*Number of responses*	*%*
a)	2	12.50	0	0.00
b)	11	68.75	0	0.00
c)	3	18.75	3	30.00
d)	0	0.00	5	50.00
e)	0	0.00	2	20.00
Σ/ [%]	16	100.00	10	100.00

Table 5

Null and alternative hypothesis – H2 verification, program finishing with a school-leaving certificate

H_0	In the opinions of students of the experimental and control group whether the Economics textbook was motivating, i.e. encouraged them to activity and increased the interest in learning, there were no differences.
H_2	In the opinions of students of the experimental and control group whether the Economics textbook was motivating, i.e. encouraged them to activity and increased the interest in learning, there were differences.

The calculated value 3.98 was higher than 1.96 (critical value), which means that the null hypothesis was rejected, and the alternative hypothesis was accepted.

H2 hypothesis (question 1, program finishing with a school-leaving certificate) was confirmed. In the opinions of the students in the experimental and control groups regarding the motivational aspect of the Economics textbook, i.e. whether it encouraged

their activity and increased the interest in learning, there were statistically significant differences (Kmecová, 2010, p. 109-110).
H2 (question 1) was also conformed in the program finishing with a certificate of apprenticeship.

Question 2
Were the topics in the Economics textbook easy to learn?

a) very easy; b) quite easy; c) some of them were easy, some of them were difficult; d) rather difficult; e) very difficult.

Table 6

Null and alternative hypothesis – H2 verification, program finishing with a school-leaving certificate

H_0	In the opinions of the students in the experimental and control groups (Were the topics in the Economics textbook easy to learn?) were no differences
H_2	In the opinions of the students in the experimental and control groups (Were the topics in the Economics textbook were easy to learn?) were differences.

The calculated value 2.69 is higher than the critical value (1.96), which means that the null hypothesis was rejected. Based on the analysis of the above-mentioned results, we can say that the H2 hypothesis was confirmed. At the end of the experiment, the students in the experimental group evaluated the teaching process more positively than the students in the control group. This finding was confirmed both in the program finishing with a school-leaving certificate and the program with a certificate of apprenticeship.

4.5.3 Hypothesis H3
The students' evaluation of the quality of the developed textbook/teaching material refers mainly to evaluating and comparing the clarity of the created teaching material and the currently used textbook in Cloze test.

The results of measuring the text clarity through Cloze test
Cloze test belongs to the statistical methods of textbook quality assessment. In the research, three samples of three units were randomly selected from the created teaching material for Economics. The same number of samples was taken from the currently used Economics textbook. The samples from both the developed and currently used textbook formed the topic of the experimental teaching unit, i.e. they were selected from the same thematic units. The students in the control group (both in the program finishing with a school-leaving certificate and a certificate of apprenticeship) completed the texts with missing words (in the currently used textbook) or replaced them by synonyms. To allow the clarity comparison of the currently used textbook and the developed teaching material, the same activity was done in the experimental group, where the students were asked to complete 20 missing words in three randomly selected samples in the created

teaching material. If students were unable to complete at least 13 missing words (65%), the teaching material was rated as difficult.
The total number of the correctly completed words in cloze test in percentage both in the program finishing with a school-leaving certificate and a certificate of apprenticeship is shown in Figure 1.

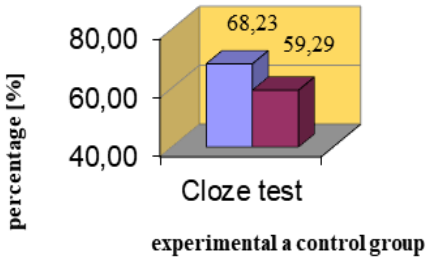

Figure 1. Total number of completed words in cloze test in percentage.

The students in the experimental group, both in the program finishing with a school-leaving certificate and a certificate of apprenticeship, achieved the average score of more than 13 completed words in each of the randomly selected samples. The students in the control group managed to complete less than 13 words in all three samples. The results in Figure 1 show that the average number of completed words in the experimental group accounts for 68.23%, which is more than 65%. The average number of words in the control group (in the program finishing with a school-leaving certificate and with a certificate of apprenticeship) provided the total of 59.09%, that is less than 65%, therefore, we can assume that the students find the proposed text understandable and easy to read. Based on this, we can conclude that the currently used textbook is incomprehensible and difficult to read for students.

Table 7

Cloze test results in the experimental and control group – finishing with a school-leaving certificate

STUDY-Group	
EXP	*CON*
$n_1 = 16$	$n_2 = 10$
$\bar{x}_1 = 43.00$	$\bar{x}_2 = 34.50$
$s_1^2 = 0.79$	$s_2^2 = 2.76$

To verify H3 hypothesis, Mann-Whitney U-test at high frequencies was applied.

Table 8

Null and alternative hypothesis – H3 verification

H_0	There are no differences between the experimental and control group in the number of points achieved in cloze test.
H_3	There are differences between the experimental and control group in the number of points achieved in cloze test.

The calculated value 29.09 was higher than $u_{krit\ (0.05)}$, which means that the null hypothesis was rejected and the alternative hypothesis H3 was accepted.
There were statistically significant differences in the number of points achieved in the cloze test in the compared classes.
H3 hypothesis (in the group finishing with a school-leaving certificate) was confirmed. The clarity of the created teaching material measured by cloze test was higher than 65 %. Based on the results obtained through cloze test, we may state that the clarity of the developed teaching material in the experimental group (both the program finishing with a school-leaving certificate and the program finishing with a certificate of apprenticeship) was higher than 65%. This means that the developed teaching material was not too difficult for the students, in other words it was appropriate for them. Having analysed the results, we argue that the sub-hypothesis H3 was confirmed. The students in the experimental group achieved 68.23% in cloze test, i.e. the clarity of the created text was higher than 65%.

5 Conclusions

In order to verify the main hypothesis, it was divided into 5 sub-hypotheses. In the paper there were presented the partial results of three working hypotheses.
The H1 hypothesis was confirmed at a significance level of 0.05. It was confirmed that at the end of the experiment, the students in the experimental group achieved better DT results in Economics than the students in the control group. The H2 hypothesis was also confirmed at a significance level of 0.05. At the end of the experiment, the students in the experimental group evaluated the teaching process more positively than the students in the control group. We can state that the H3 hypothesis was also confirmed. The clarity of the created teaching material assessed through cloze text was higher than 65%.
With respect to the above-mentioned results, we can assume that, in the Economics course, the teaching process is more efficient with the use of the proposed Economics textbook than the currently used textbook as the students working with it achieved better performance results in the didactic test than the students in the reference group. The same applies to teaching and learning quality – it was confirmed by the research findings that the proposed textbook enables:

- to improve the attractiveness of learning;
- to motivate students to work systematically;
- to set an individual studying tempo;
- to promote students' reading literacy and creative thinking;
- to make studying more interesting for students;
- to improve the students' results achieved in didactic tests.

The research has shown that the developed textbook for Economics was appropriate for students. The students in the experimental group were mostly satisfied with the textbook, saying that the content of the textbook attracted their attention and motivated them to activity. This resulted in a better final DT performance of the students in the experimental group, both in the program finishing with a school-leaving certificate and with a certificate of apprenticeship.

Providing schools with new textbooks created in accordance with the new knowledge from science and technology plays an important role in meeting the objectives of the educational process. In teaching vocational subjects, we recommend:

- to constantly evaluate the quality of textbooks in relation to the results of the educational process;
- to monitor the didactic efficiency of the textbooks and determine which educational function of certain textbooks fails to comply with them. Based on the findings, the missing components should be introduced into the newly created textbooks;
- to increase the quality and efficiency of the educational process by introducing newly created textbooks/teaching materials.

In conclusion, we believe that introducing newly created textbooks/teaching materials (despite modern types of media) may contribute to improving the quality and efficiency of the educational process.

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The Role of Education and Knowledge about Aging in Creating Young People's Attitudes to the Elderly

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Abstract:
Introduction: With the intensive growth in the number of older people and prolonged life span in the contemporary postmodern society, it has become increasingly important to build positive intergenerational cooperation and promote education on aging and older people, especially between younger and older generations. That is why the authors, on the basis of empirical research and scientific literature, examined knowledge about aging among young people and the connection between knowledge about aging and the formation of negative attitudes towards older people.
Methods: The study involved 609 secondary school students aged 15 to 19 years.
Results: The survey results showed that only one-fifth of the young population has good knowledge about aging. The relationship between knowledge about aging and ageism is negative, which means that young people with less knowledge about aging often have a negative attitude towards older people.
Conclusions: Based on the obtained results, the authors underline the importance of integrating gerontology content in all stages of education.

Key words: education, knowledge about aging, attitude to the elderly, ageism, gerontophobia, youth, elderly.

1 Introduction

In the last few decades, life expectancy has been intensively prolonged. This prolongation in the Western contemporary societies, especially in Europe, led to large and unexpected structural changes in the population. The number of elderly people is growing intensively, while there is a decrease in the number of children and adolescents. According to the UN (United Nations, 2015), in 1980, there was 6.4% of the population older than 65 years. By 2015, their number had increased to 10%. In the coming decades, an even greater disparity is expected, it is projected that in 2050 it will achieve 20.5%. Slovenia is confronted with circumstances similar to the ones found in the modern Western societies, mainly due to persistently low fertility and increased longevity. While the proportion of newborn babies is being reduced, the share of the elderly is growing. The forecast is that the most growing number of people is the number

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of people older than 85 years of age, and it should not be ignored. This is also the part of the population that needs a lot of social and medical care.

Thus, as never before, we are faced with an (im)balance between the young, middle and older generations regarding their number. Already Baldock (1993, as cited in Rener, 1997, p. 41) wondered whether we are, and how we are, as a society, prepared for the old age and aging society, as both the aging and old age, like childhood and youth, are largely a social construct, regulated by institutional processes. Dremelj (2003, p. 149) points out that the particular circumstances of modern society promote individualization, also chipping of the social family networks, relatives and friends. Above all, in developing young people's attitudes to the elderly population, solidarity within the family and the context of family life have at least two important implications. The first is the issue of care for the elderly, which focuses on the relationship between the state and the family, especially when it comes to their division of responsibilities for older people, since informal family care for the elderly also covers the sphere of family life and gender division of labour: care for the elderly, family and kinship ties, are all still considered typical women's roles. The second implication relates to the fact that older people play an important role in "providing assistance" in family life, primarily in providing child care. Thus, aging of the population plays a key role in the intergenerational relationships, relationships within the family, as well as the cooperation between generations (Hvalič Touzery, 2009, pp. 54-57).

Intensive aging and longevity requires the creation of new relationships between generations and a new type of positive intergenerational cooperation especially between the younger and the older generation. Social changes, including modernization, have not only resulted in a longer life, but also changed the attitude towards older people. Even to the extent that the elderly have become a social problem, the target of ageist behaviour of the younger generation, and the subject of gerontophobia (Goriup, Čagran, & Krošl, 2015). Beck (2007) in his "risk society" theory, realized that the transition to an industrial society created a society prone to productivity, and in accordance with its own interests, it creates the image of older people being not independent, but dependent on others, unproductive and inactive members of the society. The prevailing stereotypes about old age create a general negative attitude towards age in the society and has an influence on the perception of old age, which results in low self-esteem. Therefore, the expectations and requirements are low as well.

Although people are ageing, and we are also getting older (if we live long enough), this completely natural process has become a taboo. Older people are stereotyped with ageist and paternalistic views. When we talk about the old age as a taboo, we should not overlook the problem of ageism. The impact of ageism started to grow in the mid-80s of the last century, at a time when the Americans developed a set of prejudices and discrimination against older people (Palmore, 1998, p. 4). Ageism was first defined Butler as a "process of systematic stereotyping and discrimination against older people". The author noted that ageism consists of three constituent elements: prejudice against age, aging and older people; discrimination against older people, especially in the working environment, as well as in the social environment; institutional policies and procedures that perpetuate stereotyped beliefs about older people, and reduce opportunities for older generations to live satisfactory life, diminishing their personal dignity (Butler, 2005). Ageism is definitely discrimination based on calendar age, which determines an individual's ability and their role. It means stereotyping and

discrimination against older people simply because they are old. While Pečjak (2007) points out that ageism is deeply rooted in the human spirit, even though a lot of people are not aware of it, Schirrmacher (2007) adds that older people are not only discriminated by the younger generation, but also older people have a negative attitude towards the older.

Palmore (1998, p. 4) has expanded the definition of ageism, as he understands it "as any prejudice or discrimination against or in favor of any age group"; i.e. judging people based on age, and at the same time, highlighting its negative and/or positive aspects. Some authors (e.g. Butler, 2005) even conclude that ageism is a frequent and widespread phenomenon of the post-modern society, even among the young generation. Angus and Reeve (2006) add that despite the global aging of population and the introduction of positive terms such as "successful aging" and "active aging", ageism is in the 21st century still "a widespread and widely accepted and largely ignored" social phenomenon, which is very complex and hard to deal with, and difficult to understand.

Some authors (e.g. Palmore, 1998) find the reasons for the increase of ageism in the intensive growth of elderly population in the Western societies. Most people are becoming increasingly worried about the rise of the older generation in comparison with the rest of the population. The increasing number of old people increases the concern for the issues of retirement, income security, and provision of health care to this growing and vulnerable social group. Besides a growing political concern about ageism, there are also personal consequences of this socially undesirable process (demoralisation, loss of self-esteem, inactivity, physical and mental decline), therefore it becomes an important ethical and social issue. Not only is the age in postmodern society tabooed, but there could also be felt gerontophobia, which often causes feelings of anger towards aging, and fear and insecurity of individuals over their own aging and (even) hostility to older people. Even the elderly themselves often deny that they are old.

Most of the older people find it difficult to cope with their age due to the prevailing stereotypes and ageism in society. Instead of fighting against stereotypes, they prefer to live the lifestyle of the younger ones, as long as it is possible. Laymen's perceptions are full of stereotypes, presenting the older population as a uniform and homogeneous social group that is getting ill, completely dependent on other social groups, and is shortly before their death. Stereotypes and beliefs about aging affect not only the behaviour and handling of the elderly but may have a significant impact on an individual's experience of aging (Ward, 1979, pp. 128-156). Ward (1979) also believes that the individual state of health has a key role in experiencing the fear of aging and the elderly, with a specific reference to self-esteem. Also, because self-esteem in the old age is a complex phenomenon which depends on the interaction between personal integration, the self, as perceived by others, and socially constructed image of the old persons.

For prevention of ageism, but also maintaining a positive attitude towards older people and developing a positive acceptance of own aging, attitudes and knowledge regarding aging, especially in the case of children and young people, but also in other age groups, must be positive and without stereotypical views on the old age and older people.

To prevent ageism, different authors investigated the relationship between the knowledge about aging and the attitude towards the elderly. The findings of their studies are not consistent, since, on one hand, some authors found that knowledge has no direct influence on the attitude to the elderly and Palmore (1998) noticed a weak correlation between knowledge about aging and the level of education. On the other hand, the

research conducted by Alford et al. (2001), Allan and Johnson (2009, p. 9), Braithwaite (2002), Butler (2005), Damron-Rodriguez, Funderburk, Storms and Solomon (2006, p. 457), O'Hanlon, Camp and Osofsky (1993, p. 762), Stuart-Hamilton and Mahoney (2003) found out the exact opposite: a better understanding of the aging contributes to a more positive attitude towards older people. Braithwaite (2002, p. 331) adds that an appropriate educational approach with guidelines for the life quality improvements at every stage of the aging process, could help solving problems with aging, and help reduce the fear of aging throughout the life. Therefore, he suggests an appropriate model for education on aging and prevention of ageism with an accent on the improvement of inter-generational understanding and relationships. Even Alford et al. (2001) assume that the knowledge about aging itself is associated with attitudes towards aging and is considered as one of the most effective methods of changing the attitudes among individuals.

Due to the global aging population, there is also a growing need for qualified individuals with relevant knowledge about aging and thorough understanding of the aging process (Gellis, Sherman, & Lawrence, 2003). Therefore, Anderson (1999), Kaya et al. (2014) and Olson (2007) estimate that education on aging should be incorporated into the school curriculum at all levels of education, as it was already confirmed by the studies of Knapp and Stubblefield (2000), O'Hanlon and Brookover (2002), O'Hanlon, Camp and Osofsky (1993) and Stuart-Hamilton and Mahoney (2003), who all explored the changes in knowledge and attitudes towards the elderly as a result of curriculum interventions. The results of those studies showed a positive change in the knowledge and attitudes towards the elderly as a result of the participation in a course or workshop focused exclusively on the issues related to the elderly. The inclusion of such content in the curricula could improve both the knowledge about aging and older people, as well as the attitudes towards them, since we note that ageism (also) might be the consequence of a lack of understanding of individual aging.

Although, there are indications that the stereotypes about aging and older people can be reduced through education, it was found out that there is another effective way of combatting stereotypes, prejudices and discriminatory behaviour (besides other social factors), which is the establishment of permanent links between individuals from different social groups. This means that for the elimination of ageism, prejudice and stereotypes, it is of an essential importance to establish a stable and continuous interaction between the generations. As observed by Hagestad and Uhlenberg (2005), intergenerational programs which connect young and older people help resolve those adverse social phenomena. Also, appropriate early contacts between the children and the elderly can prevent the development of stereotypes and prejudices towards the elderly. As underlined by McGuire and Mefford (2007), it is always easier to learn than re-learn. Thus, it is easier to change the already adopted ageist observations in children when they are not so deeply rooted.

2 Methods

The primary purpose of the research is to consider the characteristics of knowledge about aging among young people. At the same time, we want to determine whether there is a negative correlation between knowledge about aging and attitudes toward elderly and also fear of aging (gerontophobia). We were also interested in the impact of the

gerontological content included in the curriculum in shaping the relationship between the youth and elderly[1].

2.1 Participants

The non-randomized convenience sample included 1228 adolescents in Maribor, aged 15 to 29 years; i.e. 612 secondary high school students and 616 university students; 57.1% female and 42.9% male.

The respondents were selected on the basis of probability. Due to the lack of cooperation and other "mistakes", the demographic characteristics of the selected sample slightly deviate from the characteristics of the target population. The representativeness of the sample was guaranteed on the basis of gender. Based on the data obtained before and after weighting shown in Table 1, we can assume that we chose a relatively appropriate sample. Deviations from the sample of the target population are relatively small, which was also confirmed by a small lag between weights (minimum weight is 0.76; maximum 1.72).

Table 1

A comparison of the characteristics of youth by gender with weighted case and non-weighted case

	The population of 15-19 years old[2]	*The selected sample without weights*	*The selected model with weights*
Male (%)	43	25	42.9
Female (%)	57	75	57.1
Total	100	100	100.0

2.2 Instruments

For the measurement of ageism we used 11 variables from the Fraboni Scale of Ageism (Fraboni et al., 1990; Rupp et al., 2005), namely: "A lot of older people are mean and accumulate their money and property"; "Many elderly people cannot be trusted to take care of the babies"; "Many older people are happier when they are in the company of people of their age"; "Many older people have poor personal hygiene"; "Teen suicide is more tragic than suicide among the elderly"; "Sometimes I avoid eye contact with older people"; "The best is that older people live there where they do not disturb anybody"; "It is sad to hear about suffering of older people in the Slovenian society"; "Older people should be encouraged to express their political points of view"; "Driving license should not be renewed to most elderly people!" "I would rather not live with an older person" and "Older people do not need a lot of money to meet their needs." The respondents expressed their agreement or disagreement with each of the 11 statements on the four-item scale (1 = strongly disagree to 4 = totally agree). The adequacy of this composite variable was confirmed to have a satisfactory level of internal consistency ($\alpha = 0.70$).

Fear of ageing was measured by a standardized unit of measure The Anxiety about Aging Scale (AAS) (Lasher & Faulkender, 1993). The respondents were asked to

[1] The elderly person is defined as a person aged 65 years and older.

[2] We gain the data at the Ministry of education, science and sport.

express their agreement or disagreement with the statements on a five-item Likert Scale (1 – strongly disagree, 2 – disagree; 3 – neither agree nor disagree; 4 – agree; 5 – strongly agree). The scale measured the level of fear of old people, fear of loss, psychological concerns and fear of physical appearance. For the purposes of the questionnaire, we used only 12 of the 20 claims (variables) from the source, but we nevertheless ensure the measurement of all components of the fear of aging. On the basis of factor analysis there are formed three factors, with a value of (eigenvalues) more than one, which total of explaining 61.99% variance.

Basis of the knowledge measurement about aging is Palmor's "Facts on Aging Quiz" (Palmore, 1977), containing 25 (correct and incorrect) statements, and measures actual level of knowledge about aging. Measurement scale was modified in accordance with the needs of the Slovenian population, out of which 10 relevant arguments were selected. For each correct answer, respondents get one point, so they can collect a maximum of 10 points. It was assumed that respondents who collected from 0 to 4 points have "poor" knowledge about aging; those with 5 to 7 points have 'average' knowledge, and respondents with 8 to 10 points, good knowledge about aging.

As correct answers are considered: "The aging brings some deterioration of all five senses (sight, hearing, taste, touch, and smell)", "Older people usually need more time to learn something new", "Elderly are prone to react slower than younger", "More than 15% of the Slovenian population is older than 65 years", and "Average net pension is less than € 570 in the year 2014, which is below the poverty line (as defined by the Slovenian government)". All other claims are incorrect. Internal consistency of the measurement scale is low ($\alpha = 0.62$), but still satisfactory.

2.3 Procedure

Data were collected through online survey (1KA). Measuring instrument was rationally and empirically tested and supplemented and amended in accordance with the findings. Before sampling, we sent principals of the secondary schools in Maribor a letter of consent and asked them for help in motivating students to complete the online surveys. School counsellors provided a link to e-classrooms, where students filled out online surveys.

We are also following the classic post applied for aid, most faculties in Maribor. Vice-deans for student[3] questions were provided by an online survey for students at the common email addresses sections. They also helped us in carrying out the survey to help some higher education teachers and collaborators who have made it possible for us to have the students fill out an online survey in the context of seminar lectures or tutorials.

We used quantitative survey research method, which contained questions of closed and open type and Likert Scale. The questionnaire was composed of four sets of questions relating to ageism, knowledge about aging, fear of aging and socio-demographic data.

2.4 Statistical Analyses

Data were statistically analyzed in accordance with the purposes and research predictions using statistical software package SPSS 21. Quantitative data analysis was based on descriptive statistics (frequencies, means, standard deviations), and bivariant

[3] Vice-dean student is a student representative, who is also president of the student council of the Faculty and the only member of the Board of the Faculty for the students.

analysis (Mann-Whitney U-test and Spearman's Correlation). Internal consistency of the scales was measured by Cronbach's Alpha.

3 Results

Firstly, the extent of knowledge about aging among the surveyed adolescents was determined. The data in Figure 1 show that only 26.3% of the respondents have "good" knowledge on aging, most of them (68%) have "average" knowledge about aging and 5.7% "poor" knowledge on aging.

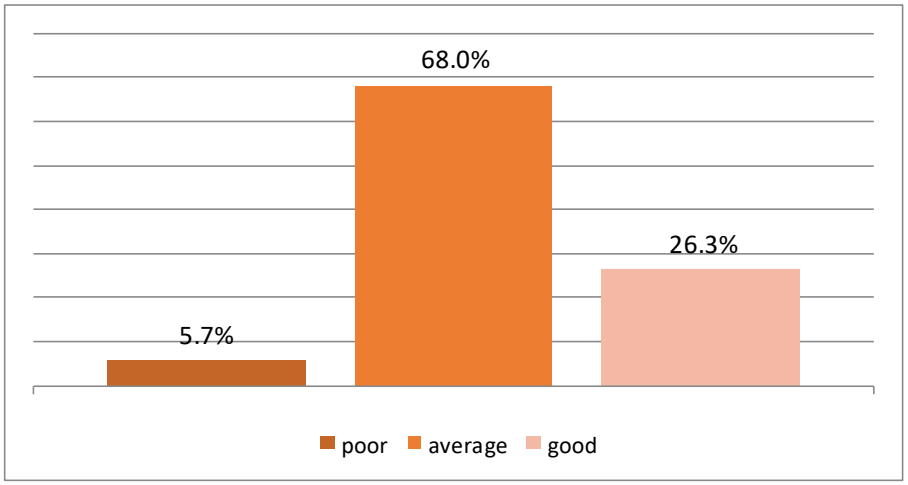

Figure 1. Scope of knowledge about aging among adolescents.

Regarding the quantity and characteristics of knowledge about aging among young people, unlike some previous studies (Allan & Johnson, 2009; Palmore, 1998; Scott, Minichiello, & Browning, 1998), who reported about young people's poor knowledge about the old age, we found out that the majority of surveyed young people (68%) have an average knowledge about aging.

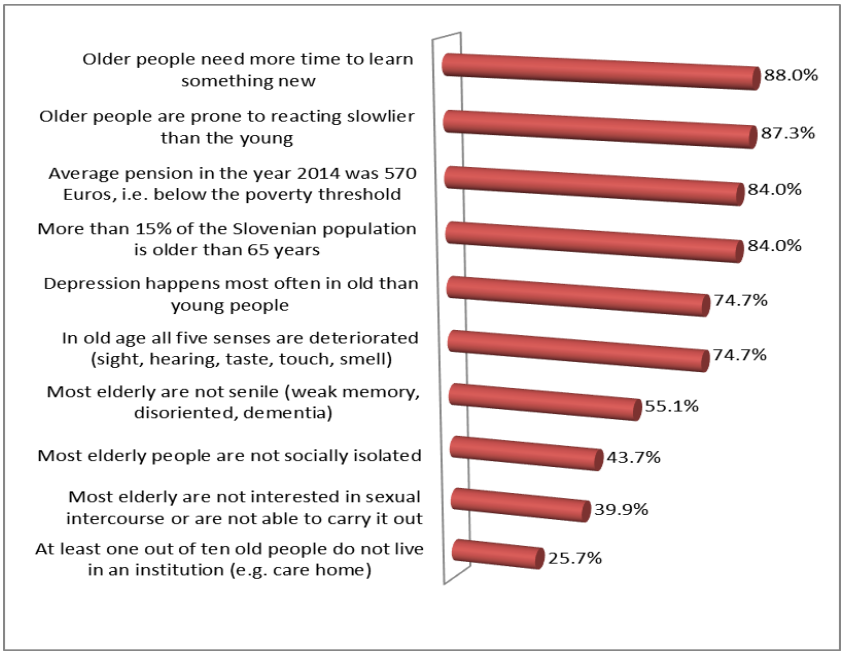

Figure 2. Proportion of knowledge of individual facts about older among adolescents.

At this point, we present the knowledge of the surveyed young people about the particular facts about the elderly (Figure 2). For better transparency, incorrect answers were recoded to correct answers.

Based on the obtained empirical data, we have found that the wrong beliefs of the surveyed high school students about the elderly relate primarily to the following statements: "At least one in ten older people lives for a longer time in an institution"; "Most older people are not interested or not able to have sex."; "Most of the elderly are socially isolated." and "Most elderly are senile.". The obtained data have to be considered in the school curriculum planning.

Regarding knowledge about aging, there are statistically significant differences between the genders ($U = 252353$, $p = 0.05$); females ($M = 6.66$, $SD = 1.37$) have, on average, a little more knowledge about aging than males ($M = 6.48$, $SD = 1.45$). Statistically significant differences ($U = 252437$, $p < 0.01$) were also found between high school students and university students; university students ($M = 6.71$, $SD = 1.42$) have more knowledge compared to the surveyed high school students ($M = 6.47$, $SD = 1.36$). On the basis of displayed results, we can conclude that knowledge increases with level of education and also with age ($rho = 0.105$ $p < 0.01$). The most knowledge about aging have female university students.

Spearman's coefficient showed a statistically significant negative correlation ($rho = -0.173$, $p < 0.01$) between knowledge about aging and ageism, which means that the lower the respondents' knowledge about aging is, the more often they develop negative attitudes towards older people. A statistically significant negative correlation can be found between knowledge about aging and the fear of elderly ($rho = -0.073$, $p < 0.01$),

fear of loss (rho = -0.121, $p < 0.01$) and fear of physical appearance and psychological concerns (rho = -0.134, $p < 0.01$), which means that the more knowledge of aging youth have, the less often they are afraid of aging.

We were also interested in the proportion of respondents whose curriculum contained topics on age and older people. Our attempt was to find out whether there are statistical differences in ageist observations regarding the presence or absence of these topics. U-test results showed that there are statistically significant differences ($U = 198299$, $p < 0.05$) among those respondents who have incorporated content on aging and older ($M = 6.64$, $SD = 0.75$) and those that did not have ($M = 6.52$, $SD = 0.54$).

The proportion of respondents (33.6%) whose curriculum contained topics on age and older people during their education was lower than the proportion of respondents (66.4%) who did not receive this kind of knowledge, because it was not included in the curriculum.

At this point we agree with the findings of Van Dussel and Weaver (2009, p. 343), who claim that young people have little opportunity to learn about the realities of aging and older people through formal teaching of gerontology content. Education should be carried out and highlighted on different levels of education, so that young people become equipped with proper knowledge, skills, resources and positive attitudes towards aging, to be able to better perceive and accept their own aging and the aging of the society as a whole.

The presumption of a negative correlation between ageism and knowledge about aging (rho = -0.173), which is partially derived from the theory of social development (Wisdom et al. 2014, p. 12), was confirmed. The lack of knowledge about the aging process among the interviewed secondary school students is significantly associated with their higher level of ageism. Similar findings were found by other researchers, for example: Allan and Johnson (2009, p. 9), Boswell (2012, p. 738), Harris and Dollinger (2001, p. 663), O'Hanlon and Brookover (2002, p. 721), Palmore (1998) and Wisdom et al. (2014, p. 17). Allan and Johnson (2009, p. 9) add that this is conditioned by the indirect effect of experiencing the fear of aging. Young people with more knowledge are less concerned about aging, which reduces their fear of aging and, albeit indirectly, reduces the negative attitude towards older people. That leads us to the conclusion that education about aging is extremely important for reducing ageism, though, not all participants in the education system are sufficiently aware of that fact. A better understanding of aging and age lowers stereotypes about older people and promote a positive attitude towards them, among children (Kroutil & Wasyliw, 2002; McGuire, 1993) and other age groups (Aday, Sims, & Evans, 1991; Goriup, 2014, p. 86; Meshel & McGlynn 2004, p. 476; Olson, 2007, p. 986; Randler, et al., 2014, p. 236). Similarly, Davis-Berman and Robinson (1989, as cited in Kalavar, 2001, p. 512) suggest that the best way to change the attitude towards the elderly and aging is information dissemination on aging and age, as well as ensuring opportunities to old people to expose themselves. If this is included in the educational process early enough, it will undoubtedly reflect on merit, diversity and the benefits of the third generation. In order to prevent the reduction of positive attitudes towards the elderly, Braithwaite (2002, p. 315) and Randler al (2014, p. 236) propose the implementation of intergenerational educational programs, which should start in primary school, as estimated by Gilbert and Ricketts (2008, p. 582).

4 Conclusion

Despite many improvements regarding the integration of older and elderly people into the society, many of them are still being faced with gerontophobia, stereotypes, age segregation, marginalization and social stigmatising. These factors enhance their helplessness, dependency and self-reliance/autonomy, as they largely affect their social inclusion or exclusion, which is conditioned by the knowledge of the young generation about aging and elderly population.

Acts of institutionalisation of the elderly in represent a product of social construction which contributes to the legitimacy of the social distance between the elderly and the young generation. Although the proportion of the elderly population have been growing rapidly and inevitably, leading to demographic aging, in the Slovenian society the cultural and social importance of aging is changing slowly, also because of myths about aging and the absence of teaching content on aging and elderly population in the curriculum. An intergenerational approach to education on aging and guidelines for improving the quality of life can significantly help overcome prejudices and reduce the fear of aging at every stage of the aging process.

The study confirmed the negative influence of ignorance about age and ageism and fear of aging, which means that the lack of knowledge about the aging process is significantly associated with a greater degree of ageism and fear of aging among young people. Since the relationship between knowledge and beliefs about aging have important implications for young people, it is necessary to include gerontology content in education (Anderson, 1999; Butler, 2005; Boswell, 2012; Kaya et al., 2014; Olson, 2007). Here, the importance and the role of intergenerational learning, which enables young people (and other members of different generations) to develop their interests and personality traits, (re)shape their values and attitudes towards themselves and others become the focus, as noted by Goriup (2014, p. 86).

According to the theory of social development (Vygotski, 1978), the basis for the development of ageism may occur very early in life, so it is important that the educational content on old age and aging is included in early childhood education. It must be added that the intergenerational programs are already underway in most Slovenian kindergartens (e.g. Program "Grandma tells"). Kindergarten educators, in cooperation with their executives, are trying to cultivate a sense of tolerance and understanding for the older generation and stimulate children's active and positive cooperation with them.

We propose the integration of educational content on age and aging in the first educational period within the lessons on Learning Environment, in the second educational period of primary school within the subject Society and in the third educational period within the subjects Biology, Patriotic and Civic Culture and Ethics. In secondary schools, we propose the integration of this content in the subjects of Sociology, Psychology and Biology, and on the tertiary level of education within the Social Sciences, Andragogy and bio-medical subjects. During their education, the young generation should have an opportunity to participate and build (quality) contacts with the older generation, as this is one of the ways leading to the establishment of education for tolerance, mutual understanding and developing a positive image of aging and older people in the society.

If we want pupils and students to receive enough knowledge about the old age and aging, we have to offer the educational programs providers (and, ultimately, the wider society)

enough quality content from the field of the social gerontology. In doing so, we have in mind primarily higher education institutions which should take more responsibility for providing the general public with more detailed technical information on aging and elderly population, and, ultimately, for the implementation of a greater share of gerontology content and the possibility of intergenerational cooperation, particularly between the younger and older population.

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Grammar as an "Art of Lettes" in Foreign Language Teaching (A Study of Teaching English Verb Tenses in Lower and Upper Secondary Schools)

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Abstract:
Introduction: This paper focuses on the issue of teaching verb tenses in Slovak lower and upper secondary schools – in particular, on teaching three grammatical tenses (Present Simple, Present Continuous, and Simple Present Perfect) and the learner's ability to use them. It also identifies the mistakes made by the learners in the research sample, causes of their mistakes, and suggests ways of eliminating these errors.
Methods: The paper presents the research data collected using quantitative (questionnaire and achievement test) and qualitative (lesson observation and semi-structured interview) methods. The data are analysed, compared, and conclusions for school practice are drawn.
Results: The main research findings show how the three tenses are taught, identify the impact of the ways they are taught on the ability of lower and upper secondary school learners to use them, and outline the errors they commit. The authors seek to explain the errors and suggest possible ways of eliminating them.
Discussion: The current study is compared to research data presented by Gadušová and Harťanská (2002), Hlava (2012) and Lojová (2016). All of them consider the practical application of grammatical functions significant in spontaneous and meaningful communication.
Limitations: Regarding the limitations of the research findings, the research sample of five interviewed teachers is too small either to make generalizations or to claim that the conducted research is fully reliable.
Conclusions: The research findings demonstrate that teaching the verb tenses in lower and upper secondary schools lacks sufficient contextualised communicative activities for practising the discussed grammar items.

Key words: grammar, comparative analysis, Present Simple Tense (PST), Present Continuous Tense PCT), Simple Present Perfect Tense (SPPT)

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1 Introduction

Grammar is a useful tool which structures our ideas in a logical, coherent and transparent way. It is one of the most controversial aspects of teaching a foreign language. Grammarians love it, teachers are hesitant, while for learners it may even be a nightmare. But without grammar, it is impossible for anyone to speak the language accurately and respect the standardized language norms and usage. Harper (2001-2016) in his etymological dictionary indicates that grammar is the "*art of letters"* meaning that it is not perceived as the letters on the paper but rather as a "*mental system that allows humans to form and interpret words and sentences of their language*" (Popping, 2000, p. 164). Schachl (2013) proposes several principles which may contribute to creating more long-lasting brain associations after gaining knowledge. These principles include mainly the necessity to interconnect a new grammar topic with the previous one maintaining a cyclical process of repetition and revision. As a result, information will be linked and stored in learner's long-term memory in the form of well-organised structures (Schachl, 2013, pp. 62-63). Similarly, Harťanská (2004) emphasizes that teaching foreign language grammar must involve not only the manipulation of the form or structure but also an orientation to its usage in order to develop the learner's internal (mental) grammatical system in full. During the process of acquiring grammar, the mistakes made by the learner give the teacher important feedback about the cognitive organization of the learner's grammar, and their way of thinking (Schachl, 2013, p. 79). There are other recognized applied linguists who deal with the issue from a similar perspective, including: Celce-Murcia (1988), Alexander (1990), Aitken (1992), Harmer (1994), Ur (1999), Eastwood (1999), Repka (2001), Gadušová and Harťanská (2002), Murphy (2004), Gower, Phillips and Walters (2005), Hewings (2005), Yule (2006), Turnbull et al. (2006), Bygrave (2012), and many others.

Another issue requiring clarification in foreign language teaching, as mentioned by Repka (1997), is the relationship between the development of grammatical, and communicative competences, as a preference for the latter is still quite noticeable in schools. Though the idea is often expressed that grammar is a communicative system directly participating in the creation of meanings and their distribution in a message organisation (both oral and written), the functions and meanings of grammatical structures, and the appropriateness of grammatical form with respect to contextualised communicative aims should definitely be in the foreground of teaching practices. Teachers usually consider that grammar rules, practising exercises and work with texts are primary aims of any foreign language lesson. However, tasks aimed at practising the introduced grammar items (structures and forms) together with the explanation of the meaning and functioning of the form in context both serve as the means of developing communicative skills which, in fact, are presumed to be the prior goal in teaching. Learners as well as teachers should realise that grammar not only groups its elements in order to be seen as grammatically correct, but also influences the meanings they convey (Gadušová & Harťanská, 2002). Just as in real life, grammar is a natural and inseparable part of communicative performance; it should not be separated into two different phases of a lesson in classroom teaching as observations of common practice show to be the case. Marks (2014) supports the importance of effective communication giving special emphasis on its simplicity and meaningfulness in a teaching process (any "specialised professional training" is required). He recommends to prepare at least three questions in advance which will serve as a feedback not only for the teacher but also for the learners.

The questions should be answered immediately at the lesson because of current grammar perception and further progress within the grammatical topic (Marks, 2014, pp. 49-50).
In this study, though, attention is focused on the teaching and learning of three tenses - Present Simple, Present Continuous and Simple Present Perfect, as they are the most frequent ones in everyday communicative acts and all of them should be acquired and practically used by the learners who have achieved A2 level of language proficiency. Before analysing and discussing the research data collected by the authors of three diploma theses (Bertóková, 2016; Horváthová, 2016; Pojezdalová, 2016) a brief outline will be presented of those functions of the three tenses (which in fact have much wider repertoire of use) that all learners are expected to learn and acquire (for A2 level of language proficiency) during their studies in primary and lower secondary schools.
The Present Simple Tense is perhaps the most essential grammatical tense, the form of which learners encounter on a regular basis. Slovak learners easily acquire its structure because it requires knowledge of just the basic form of the full verb except in the third person singular, but a problem arises when they have to use either its negative or interrogative forms.
As for its use, during the early stages of learning, learners of English are instructed that the Present Simple Tense is used to express:

- something that happens repeatedly and on an habitual basis, i.e. when somebody does something subconsciously and it is hard to stop doing (e.g. *I usually go out on Sundays.; He bites his nails.*);
- something that is generally and consistently true (e.g. *The earth goes around the sun.*);
- how often or how regularly things are done, i.e. activities which are frequently done having the same amount of space and time between each part or thing (e.g. *I have my breakfast at seven o'clock every morning.*).

Later, learners are introduced to the use of the Present Simple Tense for future activities which:

- are either timetabled or programmed (e.g. *We fly to Paris next month.*);
- express observations, declarations (e.g. *I work as a doctor.*), instructions (e.g. *Take two spoons of sugar.*), and sports commentaries (e.g. *Dominika serves to Petra.*);
- are introduced with conjunctions like *when*, *before*, *as soon as*, *if* and *whether*: (e.g. *We will come and pick you up as soon as you call. If you call me, I will tell you.)*

A characteristic linguistic feature which all continuous tenses, including PCT, share is the suffix *–ing* being added to a full verb. "*The morpheme –ing marks a verb as referring to* an *on-going process or activity rather than a stable, state or completed action, for example:* "*He is working.*" as opposed to "*He worked.*" Singleton (2000, p. 37). Though grammarians are aware of the fact that PCT does not refer only to actions taking place now, as e.g. Harmer (1994) who states: "*... a sentence in the Present Continuous Tense does not always refer to the present*" (Harmer, 1994, p. 9), and consider it overgeneralization or simplification, this is the first usage of the tense introduced in school teaching. The other usages of PCT introduced at level A1 and A2 are when describing:

- a temporary activity over a longer period (e.g. *Do you think I look any thinner? I'm slimming.*);
- an annoying habit (e.g. *She is always coming late.*);
- a fixed plan or diary note (e.g. *I am having an appointment with the dentist tomorrow at 10 a.m.*).

The Simple Present Perfect Tense is the tense which is neither exclusively associated with the present, nor with the past and therefore it may be misleading and difficult for Slovak learners to acquire, as there is no equivalent tense in the system of the Slovak language (Repka, 2001). The problem becomes even more difficult, as the incorrect use of a tense instead of the Present Perfect does not prevent appropriate perception of the communicated message. If a learner replaces SPPT, e.g. in the sentence *"I have lived here since 2009."*, with the PST, as in, "*I live here since 2009.*", an interlocutor will correctly comprehend the message semantically, but morphologically this grammatical tense remains incorrect.

For learners, the usage of the tense is usually defined as the one which refers mainly to:

- the "*past with present relevance or effect*" (Cunningsworth, 1995, p. 34) (e.g. *Look, I cannot pay for the dinner I have left my wallet at home.*);
- the past with specified and unspecified time continuing to the present or the future (Harmer, 2007) (e.g. *I have lived here since my birth.*);
- "*recently completed actions, personal experiences, changes which have happened or for accomplished past actions connected to the present with stated or unstated time reference*" (Evans & Dooley, 2009, p. 159) (e.g. *I have sent the letter this morning. They have seen the film and can tell you more details about it.*).

2 Methodology

The study analyses and interprets the data collected by three diploma students as part of their empirical research dealing with the efficiency of teaching three tenses - Present Simple, Present Continuous and Simple Present Perfect, in Slovak schools. The focus of the data analysis is on three aspects of the issue - ways of teaching the tenses, mistakes made by the learners, causes of the mistakes and possibilities for their elimination.

The research was conducted during the 2015-2016 school year in 20 schools (5 primary, 5 lower secondary, 10 upper secondary - of which 4 were vocational and 6 were grammar schools). The list of participating schools is in the Appendix. The schools were chosen deliberately in the proximity of the researchers' homes. In the research four methods were used: questionnaire, achievement test, lesson observation and semi-structured interview. Not all the methods were used by every researcher. The authors dealing with PST and PCT used a questionnaire for teachers and a questionnaire for learners. The number of questions in the latter was in both cases approximately two thirds of the number of questions in the questionnaire for teachers, though the researcher dealing with PCT used more questions (14:9) than her colleague who was researching PST (11:7). The aim of both the questionnaires was to find out about the ways the tenses are taught as well as about the difficulties the learners experience and the mistakes they make. Moreover, to get a deeper insight into how well the learners have mastered and are able to use the two tenses, discrete point achievement tests for different levels of proficiency (A1 and A2) were designed and applied. A2 tests were used both in final

grades of the lower secondary schools as well as in the first grades of the upper secondary schools.

The other two methods were used to investigate the situation with SPPT teaching, acquisition, and use. As with the two researchers working with the questionnaire, the third researcher focused her attention on the ways SPPT is taught and learners' difficulties with it. For these purposes nine specific areas were observed in 10 lessons taught by different teachers and in the designed semi-structured interview 5 teachers were asked 11 questions.

Though the number of research participants is not in the thousands - they are in the hundreds (for learners) and tens (for teachers), the research data were collected from various regions of the country and from various schools and reflect the situation in the research field quite realistically and objectively. As stated earlier, the number of schools involved in the research was 20. The total number of teachers questioned by the researchers was 110 and the number of learners involved was 555. Detailed information about the number of participating teachers and learners in the research topics is provided in Table 1.

Table 1

Number of teachers and learners participating in the research

Type of school	*N° of schools*	*Present Simple Tense*		*Present Continuous Tense*		*Simple Present Perfect Tense*	
		N° of teachers	*N° of learners*	*N° of teachers*	*N° of learners*	*N° of teachers*	*N° of learners*
Primary	5	8	104	11	-	-	-
Lower secondary	5	17	103	19	73	4	36
Upper secondary	10	26	101	20	47	5	91
Total	20	51	308	50	120	9	127

3 Results

3.1 Ways of teaching the tenses

The first area the researchers focused on was the teachers' ways of teaching the tenses. The collected research data were based on the use of quantitative (questionnaire for teachers and learners) and qualitative (observation and interview) research methods. First the researchers wanted to find out how teachers plan their grammar lessons, and what materials they use. To obtain the information, a question with four options about the resources being used was included in the questionnaire for teachers. The respondents could mark more than one option if needed. As the data shows (see Table 2), there was a substantial difference in the use of reference materials, depending on the tense being taught. When teaching the PST, which is conceptually identical with its L1 equivalent, the findings revealed that the teachers felt quite confident and they relied on their own knowledge, including Internet resources (53%) or they just looked for support in students' books (67%). Very few of them looked for other sources of information, as, for example, in grammar reference books (12%) or teacher's books (4%). The situation

was quite different when teachers were to introduce the PCT. The reason for this is quite logical - the tense does not exist in the learners' L1 language system. Here just slightly more than one third of the addressed teachers (38%) relied on their own knowledge (including Internet sources). The use of the other three sources was more or less balanced; teachers used teacher's books (48%), grammar reference books (44%) and students' books (42%) almost equally. The data offered another interesting view on the preferred use of the students' book (hereinafter referred to as SB) and the teacher's book (hereinafter referred to as TB). Considerably fewer teachers relied on students' books when presenting PCT - 42% compared to 67% of the teachers who used them while introducing PST. Even though the difference between TB and SB use when presenting the PCT was not that significant, preference for the TB is visible (6% more), notwithstanding the surprising difference in its use for introducing PST in comparison with PCT. It is also worth noting that the above-mentioned growth in teachers' dependence on their current textbook was reflected in a decrease in their self-confidence to use their own knowledge (a decrease from 53% to 38%).

When learning new structures, it is evident that learners are accustomed to being guided by student books, along with writing down notes. Three quarters (76%) of the learners used the SB and 94% of them copied grammar notes from the blackboard directly into their exercise books, whereas the rest of the learners wrote their notes into worksheets. Returning to the findings in the PST research, the SB was the second most frequent teaching aid followed by blackboard use as a useful tool for presentation (see Table 2). Obviously, the teachers inclined towards print materials – mostly student's books – the use of which supports a traditional deductive approach to teaching. The research results showed that 55% of the teachers used an inductive and almost three quarters (73%) used a deductive approach to teaching. This corresponds to the 74% of learners who declared the deductive way of teaching which is nearly the same number as in the teachers' answers (73%). Despite such similarities in the data, the reality may not be as simple (for example, the learners may not have fully understood the difference between a deductive and inductive approach, even though it was explained in the questionnaire) as a similar proportion of the learners (69%) claimed that the teacher first introduces examples and their task is to discover how the structure is formed and used. Thus, the learners reflected a clearer picture of teachers' approaches to teaching the tenses (compared to 55% of the teachers).

To be even more concrete, direct verbal explanation and blackboard notes were listed as the most frequent techniques used for tense presentation as 57% of teachers and 59% of learners marked verbal explanation with the adverbial "always" and the same adverbial was used for blackboard notes by 43% of teachers and 44% of learners. The other options for presentation, such as dialogues, translations, videos, games, songs, own materials, were listed only in a very few cases (e.g. by 3 out of 51 teachers and 3 out of 308 learners).

Table 2

Approaches to presenting verb tenses - teachers' and learners' responses

Aspect	*Sub-aspect*	*Present Simple Tense*		*Present Continuous Tense*	
		Teachers	*Learners*	*Teachers*	*Learners*
		%	*%*	*%*	*%*
Resources	Student's book	67	-	42	-
	Teacher's book	4	-	48	-
	Grammar reference book	12	-	44	-
	Teacher's own knowledge and resources	53	-	38	-
Approach	Deductive	73	74	92	-
	Inductive	55	69	59	36
	Practising the introduced structure	94	93	-	-
Explanation	Mainly verbal	57	59	58	67
	With written notes on a board	43	44	-	56

Lesson observation was the method adopted to examine the ways of teaching the SPPT. Evidence indicates that the inductive (implicit) approach was favoured over the deductive (explicit) alternative (10 of the observed teachers used the inductive style). The research findings might be considered to have revealed a highly positive approach, but the teachers' answers uncovered a reality other than what was expected and observed. Here are a few of the teachers' responses: "*inductive way of teaching should be used*"; "*we can use it (inductive way of teaching) to make a lesson more interesting also for you*" ("you" indicates the researcher) - teacher at lower secondary school); "*I tried the second one* ("*the second one*" stands for inductive way of teaching) - teacher at grammar school. Such statements suggest an "ideal" or a wish which should be fulfilled, rather than a natural way of teaching implemented in the everyday teaching process. Teachers felt under pressure that linguists, theoreticians and methodologists "were directing" them to do this. Furthermore, they themselves very often asked the researcher for explanations of what these two descriptions (i.e. the two approaches to teaching a structure) mean in practice. Evidence of confusion in teachers' minds between a deductive and an inductive approach is clearly expressed in the following utterances: "*I tried the second one* (the expression "*the second one*" stands for inductive way of teaching). *It depends on the groups, levels, students' intelligence. But I often explain the rules.*" – a teacher at a grammar school; "*It depends but I think that a more deductive way should be used. It is easier for children and they use it. But in the eighth and ninth grades, it is easier for them to learn grammar inductively. They use the Internet and read a lot; they know grammar but do not know how to use it.*"; "*It is deductively. It needs to be explained to them. They can predict the structure inductively, i.e. find grammar examples and structures in the text, but children do not understand the difference between Past Simple Tense and Simple Present Perfect Tense if I use an inductive approach.*" – teachers at lower secondary schools. Obviously, teachers experience the inductive approach as more successfully applied when learners have

greater awareness of the foreign language system (L2), and the lower the learners' proficiency, the more direct guidance they need. In comparison to the observations, the data obtained from the structured interview revealed some discrepancies: the deductive way of teaching was used by one teacher at lower secondary school and one teacher at grammar school. The same results from the structured interview confirmed that a combination of inductive and deductive ways of teaching were being used. Only one teacher at a grammar school expressed very firmly that she uses an inductive approach "*for ninety per cent*." "*I do not explain the rules to them. There is a text, examples and then theory, usually based on context and examples.*"

The researchers also investigated and analysed types and frequency of activities and tasks for practising the tenses. Both the groups - teachers and learners, claimed that in their lessons there is much attention paid to practice of the grammar structures. At primary and lower secondary schools mostly mechanical, manipulative exercises were used. In the research analysis the teachers ranked them at the top of frequency (oral drills – first rank, multiple-choice tasks – third rank). On the other hand, at upper secondary schools more communicative activities were the most frequently chosen options (creating own sentences – first rank, transformation tasks – third rank). The only exceptions were gap-filling tasks (at all levels of schools ranked second) whose occurrence in all student books is high. They belong among the easiest types of practice tasks and activities for all concerned: course-book writers, teachers, and learners. Undoubtedly, they are valued highly as a practice format for any kind of grammatical structure.

Nevertheless, learners viewed the situation differently. They claimed their teachers use more mechanical, manipulative exercises, much more frequently in fact than their teachers claimed they do (42% - often), while 38% of the teachers claimed they used them only sometimes. Less than one third (28%) of the teachers claimed they use gap-filling activities but many more (42%) of the learners think so. Similarly, the learners shared the view they are not exposed to that many communicative activities, e.g. games (33% - almost never) or mini-dialogues (47% - sometimes) while their teachers (42%) stated they use games often and also mini-dialogues are often used (46%). The data reviewed above are shown in Table 3.

Table 3

Frequency of task/activity use in practising the structure

Type of task/ activity	*Frequency of task/activity use at:*		*Task/activity use - views of:*	
	primary and lower secondary schools	*upper secondary schools*	*teachers %*	*learners %*
oral drills	1.	6.	38 (sometimes)	42 (often)
gap filling exercises	2.	2.	28 (often)	42 (always)
multiple choice	3.	5.	-	-
creating own sentences	4.	1.	54 (often)	48 (always)
writing dialogues/	5.	4.	-	-

stories				
transformation tasks	6.	3.	44 (sometimes)	42 (sometimes)
mini-dialogues	-	-	46 (often)	47 (sometimes)
Games	-	-	42 (often)	33 (almost never)

Interview results showed that teachers practise structures through a combination of manipulative and communicative exercises. Here are two contrasting claims: "*So firstly, there are exercises and then comes something creative*."; "*Structural or manipulative exercises are used more often. I tried to use interactive activities to use language in a speaking activity, not only through the given exercises. I usually try to bring additional exercises, for example, communicative activities, problem solving activities and games, so students have to speak.*" - two teachers at upper secondary school. At lower secondary schools, the activities inspiring or developing communication the most were games, pair work activities and work with an interactive whiteboard. At upper secondary schools, the number of communicative activities increased, i.e. teachers used games, questions based on a situation, simulations, interactive whiteboard activities, role playing, video, and others.

3.2 Mistakes made by the learners when using the tenses

The Present Simple Tense is the first of the tenses presented in teaching English, i.e. the teaching and practising of it lasts the longest. It might be expected that learners would thus know it the best and use it without any hesitation. But the truth is somehow different. As the data analysis revealed, learners made a lot of mistakes in its use. The more and the longer they have been learning it, the more mistakes they make (see Table 4). The reason is obvious - learners' awareness during years of school language learning of the existence of other tenses, their forms and structures function as a growing snow ball. They simply attack memory and cause confusion in the learner's inner system of the grammar knowledge.

The research confirmed that for both teachers and learners interrogative sentences are the most problematic forms (claimed by 38 teachers out of 51 and 174 out of 308 learners). Comparing the data from the teacher's questionnaire and the results from the learners' written tests, the following deviant forms and usages of the tense were identified. As to primary school learners, five frequent mistakes which fully corresponded to the learners' proficiency level were discovered in the following order of frequency: the omission of the third person singular *–s* suffix; adding *–s* suffix to the verb in plural forms; using *-ing* verb form instead of the verb in PST; incorrect word order and omission of the auxiliary verb in questions. Learners at elementary level made the least number of the mistakes (e.g. *My mother working in an office.*; *Does he nice pictures draw?*; *Does sing well they?*).

Analysis of lower secondary school learners' mistakes revealed a number of other mistakes though the first three from the elementary level list were identical. At the higher level of proficiency, the other frequently made mistakes were: using the auxiliary verb "is/are" instead of "do/does" in questions and in negative sentences; omission of the auxiliary verb in negative sentences; double indication of the third person; using Present

Continuous, Past Simple and Future Simple instead of Present Simple, and redundancy of auxiliary verb in affirmative sentences.
Learners at upper secondary school level made all the above-mentioned mistakes. In addition, other incorrect usages were: using *–es* suffix instead of –s (and vice versa) in the third person singular; using the auxiliary verb "would" + verb instead of Present Simple form of the verb; using the auxiliary verb "would" instead of "will"; using "be" instead of the full verb "is"; using Present Perfect form of the verb instead of Present Simple and omission of the auxiliary verb "do" in questions. What is more, the learners frequently inserted "will" in the first type of conditional, for instance *If you will call the police without any reason, you will get a penalty.*

Table 4

Frequency of learners' mistakes in Present Simple Tense at various levels of school education

Order	*Primary school learners*	*Lower secondary school learners*	*Upper secondary school learners*
1	omission of the *–s* suffix (in the 3rd person singular)	adding *–s* suffix to the verb in plural	using Future Simple instead of Present Continuous
2	adding *–s* suffix to the verb in plural	omission of the *–s* suffix (in the 3rd person singular)	omission of the *–s* suffix (in the 3rd person singular)
3	using *-ing* verb form instead of the Present Simple one	using *-ing* verb form instead of the Present Simple one	omission of auxiliary verb in negative sentences
4	incorrect word order	using auxiliary verb forms *is/are* instead of *do/does* in questions	using Past Simple instead of Present Simple
5	omission of auxiliary verb in questions	omission of auxiliary verb in negative sentences	using Present Continuous instead of Present Simple
6		double indication of the 3rd person	omission of auxiliary verb in questions
7		using Present Continuous instead of Present Simple	adding *–s* suffix to the verb in plural
8		using Past Simple instead of Present Simple	using auxiliary verb forms *is/are* instead of *do/does* in questions
9		omission of auxiliary verb in questions	redundant use of auxiliary verb in affirmative sentences
10		redundant use of auxiliary verb in affirmative sentences	incorrect word order in questions
11		using auxiliary verb forms *is/are* instead of *do/does* in negative sentences	using *–es* suffix instead of *–s* in the 3rd person singular
12		incorrect word order in questions	double indication of the 3rd person

13	using Future Simple instead of Present Continuous	using the auxiliary verb would + verb instead of Present Simple
14		using *-ing* form instead of the verb in Present Simple
15		using *–s* suffix instead of *–es* in the 3rd person singular
16		using Present Perfect instead of Present Simple
17		using auxiliary verb forms *is/are* instead of *do/does* in negative sentences

Interestingly, learners do not find the structure complicated. The learners involved in the research were asked whether they considered PCT difficult, and a majority of them (64%) did not think so. But the reality, again, was different. When asked to recognise the PCT, to name and use it in another sentence based on the model sentence: *I am answering these questions now*, more than half (56%) of the learners failed. They were not able to identify it correctly and instead of the PCT they identified the tense used in the sentence either as *Present Tense, Present Simple, Passive Voice* or *Past Simple*.
Even though more than half of the learners (58%) created a grammatically correct sentence, 42% did not write any or they wrote an incorrect one omitting the auxiliary verb *to be*, *-ing* verb suffix or they constructed a grammatically correct sentence, but not containing the right PCT form and thus could not be regarded as a correct fulfilment of the task either, for example *I am a football player.* Thus, the response "no" to the trivial question "*Is this tense difficult for you*?" was far from reality. Likewise, the teachers' utterances declared the following: *I think that there are clear rules for using this grammatical item.; It is one of the simplest grammatical tenses.; It is easy to explain it because learners understand that we use the Present Continuous Tense when describing actions taking place now.* The rest of the teachers (32%) considered PCT difficult because *in Slovak language there is no equivalent tense.* Furthermore, the functions of the PCT are not as clear to the learners as seems to be the case. Their perception of PCT is quite limited to "actions/activities happening at the moment of speaking" (66%) without realising its other functions in context (as mentioned in the Introduction).
Table 5 shows the frequency of learners' mistakes in PST and PCT as viewed by teachers. The most frequent mistake in constructing a sentence in the PST was omission of the *–s* suffix (in the 3rd person singular), followed by omission of auxiliary verb *do/does* in questions. The third most frequent mistake was incorrect word order in questions and the fourth typical mistake was omission of *do/does* in negative sentences. Examining the frequency of the most typical mistakes occurring in learners' production of PCT sentences, the following order can be identified: omission of a form of auxiliary verb *to be* followed by incorrect form use. The third most frequent mistake is omission of verb suffix *–ing* and incorrect use of PCT in context is the fourth typical mistake the learners made. Though the order of frequency of the mistakes identified by the teachers is as discussed above and stated in Table 5, it is worth mentioning that occurrence of many of them was stated as only occasional.

Table 5

Frequency of learners' mistakes in Present Simple Tense and Present Continuous Tense at various levels of school education (as viewed by teachers)

	Type of mistake	
Order	*Present Simple Tense*	*Present Continuous Tense*
1	omission of the *–s* suffix (in the 3rd person singular)	omission of a form of auxiliary verb *to be*
2	omission of *do/does* in questions	use of incorrect form of the tense
3	incorrect word order in questions	omission of verb suffix *–ing*
4	omission of *do/does* in negative sentences	incorrect use of the tense in context

The Simple Present Perfect Tense (SPPT) is the tense taught at lower secondary schools requiring a certain level of learners' grammatical "maturation". Nevertheless, even such maturation does not guarantee the ability of learners to interiorize the tense in its complexity. Similarly, as in using the PST and PCT, the number and types of mistake increase with the length of its practice, use, and due to its other functions too (see Table 6).

Considering the learners at lower secondary schools, the following mistakes were identified: problems with discrimination between past tense and past participle forms of irregular verbs; omission of auxiliary verbs; the difference between Present Perfect and Past Simple; word order when using adverbials, such as *recently, for, since, never, ever, just, already* and *yet*.

As the collected data from lower secondary schools shows, the mistakes connected with functions of SPPT and its distinction from other, similar grammatical tenses caused the learners the most significant problems. In contrast to lower secondary school learners, who struggled with the proper perception of SPPT and PST, at upper secondary schools the newly introduced Present Perfect Continuous Tense caused additional mistakes. Getting mixed up when using the time expressions *for* and *since*, the auxiliary verb *have* and *has*, problems to remember irregular forms of the verbs were not so frequent at this stage.

Table 6

Frequency of learners' mistakes in Simple Present Perfect Tense at various levels of school education

Order	*Lower secondary school learners*	*Upper secondary school learners*
1	forms of irregular verbs	undistinguishing Present Perfect from Past Simple
2	omission of auxiliary verbs	mixing up use of Present Perfect and Past Simple
3	undistinguishing Present Perfect from Present Simple	improper/confused use of *for* and *since*

4	disuse of *has/have* or if used the verb in past simple form instead of past participle	forms of irregular verbs (minor problems)
5	word order - wrong placement of adverbs *recently, for, since, never, ever, just, already* and *yet*	undistinguishing Present Perfect from Present Perfect Continuous
6		mixing up use of *has* and *have*
7		improper/confused use of *already* and *yet* in questions

To sum up, the mistakes made by the learners in the three grammatical tenses the research was focused on, can be grouped into the following five areas: omission or adding of an element, use of auxiliaries, improper word order use, contextual function of the tenses and the ability to distinguish between two seemingly identical tenses.

3.3 Causes of mistakes and possibilities for their elimination

Having carried out a detailed analysis of the mistakes, their possible causes and elimination were discussed. Based on the research findings (see Table 7), the following potential causes of the mistakes made in PST are, in some cases, influenced by social media which deliberately do not always respect grammatical norms and they use a lot of slang expressions. In the teachers' view, more written practice as well as explanations given by brighter classmates are needed. However, according to the learners, teacher's re-explanation of the structure and its use would be more beneficial.

As indicated in the Introduction, the PCT carries a range of meanings, but in school practice they are usually ignored with just one being emphasized - "actions taking place now" which leads to undesirable simplification of PCT usage in context. The suggestions which could possibly eliminate the problem included: the use of discovery techniques promoting learners' critical thinking; more frequent use of communicative activities in oral form and focus on the tense functions in its use.

Furthermore, the other reasons for mistakes in the use of the SPPT were caused by teachers themselves who tend to explain the tense in Slovak (teachers should compare it with either Past Simple or Present Perfect Continuous Tense) and very possibly by the absence of the tense in the Slovak morphological system. Beside this, a high dominance of form-based exercises over communicative activities was demonstrated. As a way of eliminating mistakes, the use of real life situations introduced into the teaching process through activities such as role play, didactic games, problem solving activities, simulations, and drama activities should be used, though their use obviously depends on the teacher's level of creativity and involvement.

Table 7

Causes of mistakes and possibilities for their elimination

Present Simple Tense		*Present Continuous Tense*		*Simple Present Perfect Tense*	
Causes of mistakes	*Elimination of mistakes*	*Causes of mistakes*	*Elimination of mistakes*	*Causes of mistakes*	*Elimination of mistakes*
listening to slang, watching movies; influence of social media	more practice, mostly in written form (teachers); explanations by bright learners (teachers); re-explanation of the structure and its use (learners)	very general and simplified explanation of the structure and its use	use of discovery techniques and techniques fostering learners' critical thinking; more frequent use of oral communicative tasks; focus on the tense functions in its use	inappropriate explanation (often in L1); dominance of tasks oriented to practice of form over communicative alternatives; absence of the tense in L1	more frequent use of communicative and real-life - situation oriented tasks; use of self-reflection

4 Discussion

The research findings clearly show teachers' prevalent use of traditional activities and tasks for practising grammar structures rather than activities enabling critical, logical and creative thinking. The research sample of learners was mostly used to an unchanged model of teaching without opportunities for analysing, applying or evaluating their knowledge, thus creating undesirable routine for them.

The findings in the present study bear some similarity to the research results presented in the study written by Gadušová and Harťanská (2002) who conducted their research almost twenty years ago (in the school year 1998/1999) at lower and upper secondary schools in the towns of Nové Zámky, Orechová Potôň, Dunajská Streda, Šurany, Topoľčany and Čadca. The researchers also used two questionnaires – one for learners and one for teachers. The number of the research participants was 512 learners and 30 teachers. It is important to point out that the earlier research findings present rather a general view on grammar, i.e. the place of grammar in foreign language teaching and the problems the learners experienced then, without the specific focus of the current study. Therefore, only the research findings which in some way overlap with the present study are compared here.

The earlier research showed that the learners considered grammar a significant part of the lesson (more than three quarters of them), and almost three quarters of the learners claimed their teachers used an explicit, deductive approach to teaching grammar (74.4%) based on listening or reading a text (18.8%). In order to visualize knowledge of the grammar, teachers used blackboard (70.7% always and 19.7% sometimes).

In contrast, two thirds (66.7%) of the teachers were persuaded that dedicating any time to grammar in each lesson was unnecessary. Surprisingly, only 30.3% of them claimed they practised grammar deductively and half of them (50%) claimed they used an inductive approach. Their learners, on the other hand, considered that three quarters

(74%) of the teachers firstly introduced rules, and then examples were given. The blackboard as the traditional visual teaching aid was used by 86.7% of the teachers.
Concerning the language of presentation, teachers either used mother tongue exclusively (15%) or they combined it with the target language (60.5%). The data analysis of this research revealed that when explaining grammar in English (only 2.9%), the teachers also added a few words in the learner's mother tongue (21.1%).
The most frequent types of activity and task given to the learners were filling in gaps (62.5%), to create a grammatically correct form (33.2%), transformation exercises (17%), and translation (8.4%). Not even a quarter of the teachers used grammar games (23%) and role plays (21%). The percentage of the teachers relying on the exercises in the course books (usually with such instructions as *fill in, choose, underline the correct answer*) was 58.0% whereas teachers' own resources were used only by 21.1% of them. Unfortunately, communicative grammar games were almost never used.
The above listed types of activity and task supposedly resulted in the problems which the learners had. According to nearly half of the learners (44%), a correct usage of grammar and its differentiation from similar grammatical phenomena (24%) caused them significant problems. The form of a grammatical structure as such was not considered to be an obstacle to creating it (16%). The learners expressed their wish to use more real life and natural activities and tasks such as role plays (48.5%), conversational tasks (25.5%) and grammar games (24.5%) whereas translation associated with accuracy and analytical thinking was preferred only by a quarter of them (24%); (Gadušová & Harťanská, 2002, pp. 61-68).
At this point in the discussion, it is obvious that the research findings are identical in many respects to those in the current study, as the learners and teachers answered the same questions. Similarly, Lojová (2016) in her research conducted in the year 2000 emphasized declarative over procedural knowledge which consequently leads to mental blocks in communication in English. Interestingly enough, communication represented more problems for the learners than understanding of structural and functional characteristics of the language together with the distinctions between similar grammatical phenomena.
Another, similar research study was conducted by Hlava (2012) twelve years later which did not bring any noticeable improvements in the investigated field, either. From the learner's point of view, the verbalization of declarative knowledge and its irrelevance was conveyed; more learners strongly advocated changes in their English lessons which would lead to natural and communicative activities. Considering communication in English, the teachers who were questioned asserted that the learners were able to communicate exclusively using just simple structures (i.e. not *more complicated* ones).
To summarise, lack of communicative activities and tasks was, and still is, the cause of the afore mentioned problems. What remains bewildering is that despite the fact teachers are aware of this they still use mainly traditional approaches to teaching grammar. Rounding out the picture, the overuse of grammar manipulation exercises is recognised by the learners as well, but in contrast to their teachers, they cannot either influence or change the teaching situation in their English classes.

5 Conclusion

Grammar is a complex web which requires constant, meaningful, purposeful, productive practice and methodological guidance, because in formal foreign language school education control over its use is not automatically acquired. To be developed, grammar must be properly taught. The aim of this research paper has been to compare three grammatical tenses – Present Simple, Present Continuous, and Simple Present Perfect Tense in terms of how they are taught, mistakes made by learners, causes of mistakes, and possibilities for their elimination. The basic research findings are summarised in tables with commentaries. This, and other studies conducted in the past point conclusively to a lack of communicative, more challenging and real-life activities and tasks which would be welcomed by learners to break up less desirable daily patterns of instruction.

Nowadays, even though there is a strong emphasis on learner-centred teaching, the dilemma surrounding how to maintain balance between teacher and learner centeredness remains alive. Whatever the learner-centred approach might be in theory, in the classroom, the teacher typically still has the final word. If learning achievements are to be effective, teaching must be thoroughly planned, and based on properly chosen and designed activities which combine a balanced proportion of mechanical, semi-guided and communicative activities and tasks. These activities must be primarily based on teacher's refined verbal skills provoking interaction between him/her and the learner, and among learners themselves. To sum up, the presented research data enable to highlight the necessity of teacher's thoughtful and appropriate approach also in this aspect of English language instruction. The teacher should prepare grammar activities based on real-life situation-oriented tasks in which the learners will use complex and contextualised grammatical patterns more naturally. Without appropriate teaching and management, the education process may well become increasingly chaotic.

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Appendix - List of schools involved in the research

Present Simple Tense:
Gymnázium Juraja Fándlyho, Školská 3, Šaľa;
Stredná odborná škola, Štúrova 74, Šaľa;
Stredná škola s vyučovacím jazykom maďarským, Školská 485, Diakovce;
Základná škola s vyučovacím jazykom maďarským, Školská 485, Diakovce.

Present Continuous Tense
Gymnázium Antona Bernoláka, Námestovo;
Stredná odborná škola technická, Námestovo;
Spojená škola, Stredná odborná škola technická,
Stredná umelecká škola, Nižná;
Pedagogická a sociálna akadémia, Turčianske Teplice;
Základná škola s materskou školou, Oravská Lesná 299.

Present Perfect Tense
Gymnázium sv. Cyrila a Metoda, Farská 19, Nitra;
Gymnázium, Golianova 68, Nitra;
Gymnázium sv. Jozefa Kalazanského, Piaristická 6, Nitra;
Gymnázium, Párovská 1, Nitra;
Spojená škola, Slančíkovej 2, Nitra;
Základná škola, Beethovenova 11, Nitra;
Základná škola, Benkova 34, Nitra;
Základná škola kráľa Svätopluka, Dražovská 6, Nitra;
Základná škola Škultétyho 1, Nitra.

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ARTICLES

Case Study as a Part of Education in the Field of Domestic Violence

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Abstract:
Introduction: This research study deals with the necessity of educating the members of the Police of the Czech Republic in the area of a social-pathological phenomenon, specifically domestic violence. In most cases, police officers are on the scene of an incident as the first ones. It is a socio-pathological phenomenon, which requires a very sensitive but at the same time a professional approach from the police officers.
Purpose: The main objective of the research was to find out what the views of the coordinators at selected Regional Directorates of the Police of the Czech Republic dealing with the cases of domestic violence are.
Methods: For the purposes of the research, the qualitative method of structured interviews with open questions was used. The respondents were the coordinators from five regions of the Czech Republic.
Conclusions: It can be concluded that great attention has been paid to the issues of domestic violence in the Czech Republic since 1996, which has brought positive results in dealing with real cases by the members of the Police of the Czech Republic. However, each case with the features of domestic violence is different and for this reason it is not possible to describe the whole range of possibilities in the preparation. These problems are only a part of many different incidents the police have to deal with. This fact is taken into account in the proposal for the continuous education of police officers at the departments of the Police of the Czech Republic.

Key words: domestic violence, case study, coordinator in the field of domestic violence.

1 Introduction

When dealing with the issues of domestic violence, the education of the members of the Police of the Czech Republic (hereinafter referred to as the Police of the CR) cannot be omitted. They are mainly the police officers of basic units within the Police of the CR who are, in most cases, the first ones on the scene of an incident. Undoubtedly, the professionalism in dealing with an incident depends on the professional knowledge,

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skills and attitudes of police officers. Policemen tackle different situations and the issue of domestic violence is just one of them (Todt et al., 2016).
It is necessary to realize that frequent mistakes made by police officers are the incomplete finding of the facts on the spot and their erroneous documentation. These kinds of mistakes include the absence of a violent person's statement, non-recorded information of the presence of minor children in the household, the failure to notify an entity providing social and legal protection of children, filling in the SARA (Spousal Assault Risk Assessment) questionnaire, the absence of advice to a vulnerable person and then to a violent person on their legal status or the absence of a notification to a particular Intervention Centre (Střílková & Fryšták, 2009; Šmejkalová, 2014).
In case of dealing with domestic violence a complex approach must be applied. On the basis of our inquiry and its comparison with previously conducted research, we would like to point out the necessity of further professional training of the members of the Police of the CR.

2 Domestic violence

Domestic violence can be defined as long-term recurrent violence among close relatives who live together. If violence occurs at least twice, it is recurrent violence. Unambiguously, one person is a victim and the other is the aggressor and the roles do not change. Domestic violence is a typical cycle of violence which can be characterized by an asymmetry in the relationship (Čuhelová, 2016, pp. 1-5; Kramer, 1998). The cycle of violence takes place in the following phases: the phase of increasing tension and the phase of rest (the so-called honeymoon phase) (Kitzmann, 2003).
Domestic violence is a hidden problem in the family environment (Lahe, 2011). Police officers often refer to the victim's fear of the aggressor's subsequent behaviour as a barrier to the investigation of domestic violence, which is reflected in the reduced or zero communication between the victim and the police officers (Čírtková, 2014). On the arrival to the scene of an incident, police officers usually encounter an aggressive person who is under the influence of alcohol. However, the violent person often tries to hide, explains and justify his behaviour after the arrival of police officers in order to make them understand his actions (Střílková & Fryšták, 2009). Because of the sensitivity of domestic violence and its difficult solution from the aspect of evaluation, communication, tactics and law, police officers have legal instruments to end the unlawful behaviour (Střílková & Fryšták, 2009).
Police officers aim at:

- detecting domestic violence; a preventive action against the possible threat of domestic violence by the aggressor, the reception of the notice of conduct, which has the features of domestic violence, from its victims or third parties;
- an action against domestic violence and the aggressors in accordance with applicable legal rules;
- ensuring the security of the victims of domestic violence and ensuring a synergy in order to prevent the continuation of domestic violence;
- recording individual cases of attacks detected within the police officers' own activity as well as their reporting;

- a close cooperation with all governmental and non-governmental institutions in the protection of the victims of domestic violence and lawful practice in the work with the aggressor;
- A close co-operation with the police officers assigned to the General Crime Department of the Criminal Police and Investigation Service, specialized in the issues of criminality committed in the presence of children, and with the entities providing social and legal protection of children if domestic violence is committed in the presence of children (Střílková & Fryšták, 2009, pp. 46-47).

In the Czech Republic, there are two special groups dealing only with the cases of domestic violence, namely in the city of Brno and in the city of Ostrava. Within the Police of the CR, the Domestic Violence Group has been established. It operates within the framework of the Police of the CR at the City Directorate of Brno in the Criminal Police and Investigation Service. It started its activities on May 1, 2005 (Střílková & Fryšták, 2009). However, in other regions, the problem of domestic violence is dealt with by the police officers of the basic units within the Police of the CR.
Each regional directorate employs a coordinator responsible for the issue of domestic violence who provides:

- methodological guidance for the police officers, assigned to basic units, who encounter domestic violence;
- support to the police officers assigned to basic units concerning the continuous expert knowledge acquisition in the field of criminal proceedings, domestic violence and psychology (Střílková & Fryšták, 2009, pp. 46-47).

Regarding the fact that the police officers in basic units must deal with different cases, the approach of the Domestic Violence Special Group will certainly be at a higher professional level. The effort of coordinators specialized in dealing with the cases of domestic violence is to assist police officers in basic units with difficult cases in the field.

3 Methodology

The research was aimed at the police officers assigned to the regional directorates of the Police of the CR as coordinators in the field of domestic violence. The objective of the research was to gather information from the coordinators in the field of domestic violence regarding:

- their attention paid to the issues of domestic violence at the department where they are employed;
- their experience with dealing with cases of domestic violence and whether they feel they are sufficiently trained in this field;
- their opinions about the possibility of dealing with the cases of domestic violence by a special group.

The qualitative method and the structured interview technique with open questions were selected for the purposes of the research. After that, an analysis of the interviews was carried out.

The research sample consisted of five coordinators in the field of domestic violence from five selected Regional Directorates of the Police of the CR where there are no Domestic Violence Special Groups.

4 Results

Based on the evaluation of the situation, especially in the context of the possibilities given by criminal law in the field of protection against domestic violence and on the police officers' own experience with the procedures and evaluation of real domestic violence cases, a structured interview was prepared for the coordinators in the field of domestic violence. The aim of the interview was to get the answers to the questions above. The interview consisted of 10 open questions and was conducted personally in January and February 2017. The interviews took place in the coordinator's office at the relevant Regional Directorate of the Police of the CR.

The coordinators in the field of domestic violence answered the questions as follows:

1. How would you describe the activity of the coordinator in the field of domestic violence in your region?
   The coordinator carries out police officers' training, which is focused on the issue of domestic violence in the territory of the local Regional Directorate of the Police of the CR. He keeps records of the list of trained instructors belonging to the Regional Directorate of the Police of the CR and recommends other suitable instructors for further training. He coordinates individual exercises and trainings related to the issues of domestic violence and provides organizational and logistics background for instructors with a focus on domestic violence.
   He also gives consultations concerning individual cases of domestic violence at the Regional Directorate of the Police of the CR, both for the riot police and for the criminal police. He cooperates with a relevant Intervention Centre and participates in meetings of the interdisciplinary team in the region.
   It should be noted that the interdisciplinary team consists of representatives of the cooperating entities, i.e. the Police of the CR, the Intervention Centre, the entity providing the social and legal protection of children, the medical doctors, the relevant Public Prosecutor's Offices, etc.
   Further, it is necessary to characterize the concept of intervention centres, which represent a specialized workplace exclusively focused on the assistance to people at risk of domestic violence (Act No. 108/2006 Coll.). The Intervention Centre provides the following social services: professional social and psychological counselling, provision of crisis intervention, possibility of psychological therapy, social and legal counselling, assistance in drafting and submitting a proposal for the court and accommodation and food for a vulnerable person. All operations and services are provided free of charge, in the out-patient or in-patient form (Act No. 108/2006 Coll.).
   The entity for providing the social and legal protection of children is obliged to take part in dealing with the cases of domestic violence in families where minor children are present (Act No. 108/2006 Coll., Act No. 359/1999 Coll.).
2. What kind of the methodological and coordination assistance do you provide within the Regional Directorate of the Police of the CR in your region?
   The heads of district departments of the Regional Directorate and the Criminal Police and Investigation Service of the Regional Directorate of the Police of the CR

are provided with methodological and coordination assistance, which lies in dealing with particular problems related to domestic violence. Both face-to-face and telephone consultations are offered. The methodological assistance is also provided directly to the police officers who perform expelling a violent person from the common household. In more complex cases of domestic violence, consultation between the Police of the CR and the Intervention Centre is required.

3. Specify what training system the police officers of the Regional Directorate of the Police of the CR are provided with. How is the training organized, at what time intervals, what is the target group for the training, what stress is laid on the training?
   We have abandoned the previous practice that the training related to domestic violence was carried out by individual territorial departments to a greater extent. This training was attended by the heads of the basic organizational units of the Regional Directorate of the Police of the CR, and they subsequently trained their subordinates. At present, the training is mainly focused on the police officers who use the juridical institute of expelling a violent person.
   The training is carried out by a coordinator of the Regional Directorate of the Police of the CR in the field of domestic violence together with the Head of the Intervention Centre. The training takes place at regular monthly meetings of the heads of individual district departments of the Regional Directorate of the Police of the CR. The coordinator visits each district department at least once a year.
   The training itself is divided into two phases. In the first phase, the Head of the Intervention Centre analyzes the basic features of domestic violence, the work of the Intervention Centre in connection with the work of the Police of the CR and the possible dependence of the person at risk on the violent person. In the second phase, the coordinator of the Regional Directorate trains police officers mainly from a practical point of view (procedure of expelling a violent person from the common household, expulsion deadlines, legal aspects of expulsion, etc.). At the end of the training, the case reports of selected cases are completed.
   After the training, the police officers should be able to recognize individual features of domestic violence and to respond appropriately. Subsequently, they should be able to use the juridical institute of expelling a violent person. The conduct of a violent person should be documented properly for later offenses or criminal proceedings.
   The Police of the CR has a juridical institute - expulsion - at its disposal, which is regulated by § 44 to § 47 of Act No. 273/2008 Coll. The expulsion is not a procedural decision but only a measure of an administrative nature. Its purpose is a preventive action against a violent person and therefore, cannot be seen as a punishment for violent behaviour. Police officers are entitled to expel a person from a common household as well as from its immediate vicinity; a violent person can reasonably be assumed to commit a dangerous attack on life, health or freedom or a particularly serious attack on human dignity. Police officers take advantage of available information on previous attacks by this person (Section 44 (1) of Act No. 273/2008 Coll.).
4. Do the members of the Police of the CR make mistakes in dealing with the cases of domestic violence? Specify the characteristics of the most common mistakes.
   The mistakes occur during the administrative processing of documentation. The most common mistakes in processing a violent person's expulsion include especially the inadequate justification of expulsion and, in some cases, the absence of a non-

committed person. The justification itself is particularly important for the Vysočina Intervention Centre; on the basis of this justification it helps a person in danger to write an application for issuing an interlocutory judgment. It is positively appreciated that police officers have already been well aware of the domestic violence issue and are able to evaluate individual cases and decide on the expulsion.

5. Could you compare the quality of dealing with the cases of domestic violence by members of the Police of the CR during the period of five years?
   To compare the domestic violence cases over a five-year period, I would say that, in my view, dealing with domestic violence is currently at a high level. Police officers are, in most cases, able to recognize the features of domestic violence and are not afraid to use the institute of a violent person's expulsion.
   I think, five years ago, not all police officers were able to orientate themselves well in this difficult issue of expelling a violent person. At that time, police officers were only becoming familiar with the relevant guideline and the methodological manual of the Police President at regular meetings of the Head of the District Department of the Police of the CR. In my opinion, the internal management regulations and methodical manuals of the Czech Police are a well elaborated guiding rule for the procedure of an intervening police officer. However, they cannot prepare a police officer for all the pitfalls that he encounters when expelling a violent person. Even if an intervening police officer is theoretically well prepared, in practice he may encounter a problem that needs to be consulted with experts.
   At present, it is based on the previous experience. The training related to domestic violence focuses on rather the practical aspect and specific cases and problems.
6. Are the Czech Police members designated to work on the cases of domestic violence at executive departments? If so, how do you cooperate with these "specialists"?
   A special team dealing with domestic violence is formed in the South Moravian Region (Brno) and the Moravian-Silesian Region (Ostrava). As to the level of knowledge, these special teams are certainly very good, but at present, they are, in my opinion (the economic and personnel aspect) above standard. Nowadays, the Police of the CR are authorized to use expulsion. This right should, in my view, be used by every police officer in service who encounters domestic violence. At the Regional Directorate of the Czech Police, we always try to appoint one more experienced police officer – a specialist to each individual district. After the use of the juridical institute of expulsion, he will receive and process the material within the local jurisdiction. The cooperation with this police officer is mainly based on telephone and personal consultations related to an individual case. This close cooperation leads to better results in dealing with specific cases.
7. What is the topical problem for the members of the Police of the CR when dealing with domestic violence cases?
   If such a problem occurs, it is solved immediately, together with the Head of the District Department of the Police of the CR, or with the police officer who carries out the expulsion of a violent person. In my view, I would see the topical problem in the Criminal Police and Investigation Service, especially for the reason that the members of this department have not yet been trained for the issue of domestic violence. They also encounter the cases of domestic violence. In many cases it concerns a very bad conduct of a violent person (e.g. assault and battery). The

correct assessment of these cases and an early recognition of domestic violence is a common goal of the entire Police of the CR and not only of the riot police.

8. How would you evaluate the communication of the members of the Police of the CR with the staff of the Intervention Centre?
   The cooperation between the Regional Directorate of the Police of the CR and the Intervention Centre is very good. The head of the Intervention Centre is involved in the training related to the issue of domestic violence, together with the coordinators at particular district departments of the Regional Directorate of the Police of the CR. This practice has proven to be successful, especially due to forwarding up-to-date information from the Vysočina Intervention Centre, which is important for using the juridical institute of expulsion.
9. Which other entities do the members of the Police of the CR communicate with?
   Regarding the cooperation with other entities involved in dealing with domestic violence cases, one of the main partners of the Regional Directorate of the Police of the CR is primarily the Intervention Centre. In most cases of domestic violence, children are present in these incidents. For this reason, the other body involved is the entity of social and legal protection of children. The Police of the CR pass information on the presence of children in the cases of domestic violence through a form called "Early Intervention System". Another and a very important entity is the Court, especially in the cases when an interlocutory judgment is issued to a violent person following a 10-day police term.
10. Do you think that the members of the Police of the CR are adequately trained in the issue of domestic violence? What do you infer from this?
    In my opinion, the police officers of the Regional Police Directorate of the CR are better trained in the issue of domestic violence and are not afraid to use their authorization to expel a violent person. They are able to recognize individual features of domestic violence more easily and then decide to expel a violent person from home.
    Currently, the situation concerning the police training for dealing with domestic violence has greatly improved. This is also evidenced by an increase in the number of people expelled each year. This difference is, in my view, mainly due to the fact that police officers have started to assess individual cases of domestic violence properly and, in so doing, to expel violent persons.

From the conducted interviews, it is possible to analyze the basic system of the police practice and training of police officers in connection with dealing with the cases of domestic violence. Police officers from the district departments of the Czech Republic carry out initial and urgent tasks on the scene, diagnose the real situation, deal with a threatened and a violent person and communicate with other entities. The coordinator of the Regional Directorate of the Czech Police in the field of domestic violence is not only a training manager, but also provides counselling for the police officers of the lowest specially trained units of the Czech Police. The system of training is mainly run by the Heads of District Departments, who subsequently transfer information to their subordinates. Thus, as stated in the conclusions of the research by Střílková and Fryšták (2009) and Šmejkalová (2014), the administrative processing of the documentation regarding a violent person and his expulsion is a problem according to the coordinators of the Regional Directorates of the Czech Police. Currently, the position of police

officers of the Czech Republic as for the issue of domestic violence is positively evaluated. Compared to the last five years, the work of the police officers in the field of dealing with cases of domestic violence is evaluated as very good. However, each incident with the features of domestic violence is different and for this reason it is not possible to describe the full range of options in the preparation, which the coordinators of the Regional Directorate of the Police of the CR in the area of domestic violence consider to be a problem.

With regard to economic and personnel aspects, the use of a special group in the process of dealing with the cases of domestic violence in the other regions, the coordinators view as unrealistic. In the surveyed regions, there is a principle that all police officers should be able to carry out expulsion as a part of their service. At the same time, there is an effort to designate a more experienced police officer, the so-called "specialist" at each district department who, after using the juridical institute of expulsion, will receive the documentation and process it within local competence.

On the other hand, a problem can be seen, as the domestic violence coordinators say, in the case of inadequately trained police officers of the Criminal Police and Investigation Service, especially in the issue of incident diagnosis.

Based on our findings, we can state that attention is paid to the issues of domestic violence especially at the meetings of the heads of district departments. The Head of the District Department informs the subordinate police officers about new methodological procedures, gives notices of mistakes in the specific cases of domestic violence in administrative processing of documentation, tactical procedures, communication, etc. The meetings of the Head of the District Department are not devoted to domestic violence only, but also to other routine work. This suggests that the problem of domestic violence is not always on the agenda. It is likely to be an irregular, time-limited disclosure of information.

Dealing with the domestic violence cases is rather complicated. It is unpopular for police officers, as confirmed by the research previously realized by Střílková and Fryšták (2009) and Šmejkalová (2014). The research shows that police officers have knowledge, skills and attitudes to deal with domestic violence. The problem, however, is to consolidate and deepen the knowledge and skills already acquired. Continuous professional training should include a deepening, updating and specialization aspect of tackling the domestic violence issue. For this reason, the activity method used through a case study seems optimal due to the economic and time aspect, but especially due to the efficiency of the education itself. The coordinators of selected regional directorates of the Czech Police believe that the police officers at basic departments are adequately trained. However, the reasons they state for the benefit of a specialized team together with the problems related to dealing with domestic violence cases, support the idea of a continuous and system solution of professional education in this specific area.

On the basis of the above conclusions, we can recommend a conceptual solution for the training of police officers at the district departments of the Police of the CR within the framework of the meetings led by the heads of the departments. It offers an opportunity to revise and improve knowledge, skills and attitudes through case studies. The training of police officers within the Police of the CR should be a regular part of the meetings led by the head of the department, at least once in two months.

5 Case studies

The aim of introducing case studies into the continuous training of police officers would be to promote their decision-making abilities with creativity, application and communication skills and, last but not least, to develop the skill to implement appropriate and professionally acceptable behaviour. In the course of their education, case studies would allow the police officers to apply the acquired theoretical knowledge. Solving social conflicts would be more specific for police officers being educated. Feedback is also a piece of information about the success rate of an optimal solution, in a non-confrontational form that strengthens the motivation to find new procedures (Babcock, 2004).

A successful activity of police officers on the spot assumes their knowledge and skills, which should enable them to deal with a professionally challenging situation successfully. Police officers are aware of the difficulty of each case of domestic violence. It should also be emphasized that every intervention or activity is a socially sensitive matter and an interference in the rights and freedoms of the people concerned, e.g. issuing the decision on expulsion.

The proposed case study would be dealt with at the meetings of the Head of the District Department. The focus of the case study on a specific case is always dealt with by police officers in practice. The time allocation is 20 minutes. The assignment of task may be selected by randomly or intentionally. A selected group of police officers may be involved in the solution of the case and the other group would provide feedback. All present police officers would be involved in the training activity. Case studies may be tackled by every present police officer mostly in the form of a discussion. The case study may be suitably supported by the involvement of an expert from another entity, e.g. from the Intervention Centre, the entity of social and legal protection of children or the public prosecutor, which can also motivate police officers. Finally, when evaluating the case study, an expert from another entity can clarify the ambiguities that the police officers are interested in.

The advantage of case studies lies in the complex solution to the problem. In case studies administrative, security, criminal-law, criminal-tactical, but also psychological-communication aspects can be dealt with. In comparison with other methods, the preparation and implementation of a case study is not demanding. However, the disadvantage of a case study method is in the lack of opportunities to acquire skills in the field of social competencies, e.g. making a contact with the victim and the aggressor, including the communication with other entities.

6 Conclusion

The members of the Police of the CR should be trained systematically in the field of new legal regulations, tactics and techniques of interventions, information technology, administrative activities, communication and dealing with emergencies. The more changes occur in these areas, the more the need for further education is growing. Thus, the more the need for further education is growing, the more dynamically the environment changes and the more the tolerance of mistakes in the performance of an employee decreases (Mužík, 2012, p. 27). The education should be conceptual.

The frequent question is why to extend the education or how much time and money to invest in it. The answer may be in the use of case studies for the purposes of continuous

training of the members of the Police of the CR. A good case study is real and allows empathy with the main characters of the story. It has clear educational goals, requires good decision-making skills and enables generalization. Case studies are, compared to other participatory methods, not time-consuming (Turek, 2010, pp. 256-259).

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Influence of Socially Disadvantaged Environment on Aggressiveness of Pupils at Primary Schools

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Abstract:
Introduction: The study deals with occurrence of aggressiveness of pupils from socially disadvantaged environment. It describes the socially disadvantaged environment and the level of aggression of pupils from such environments. The text describes the most important results of the research.
Methods: Within the research, a survey was carried out, monitoring the level of aggression of the majority pupils compared to the pupils from socially disadvantaged environment. The survey was carried out personally based on a monitoring scheme of aggression of the pupils from socially disadvantaged environment. The research has been made by direct observation within 60 teaching hours at the level of 1st and 4th grade.
Results: The findings, which we have acquired through observation, showed that the age and maturity of younger pupils' organisms adapts to the model of social environment. Pupils from less stimulating social environments may become the victims of aggressive attacks in various forms more frequently. Types, forms and manifestations of aggression, equally subject to influence of the environment, in a school environment at the level of 10-year-old students are perceived as some form of entertainment. They join the attack on the victim for acceptance or they have the same preferences as the group. It often happens without consequences or attempts to eliminate these signs, because the seriousness of the attack is not ascribed.
Discussion: We were interested in the differences of aggression level of the majority pupils compared to the pupils from socially disadvantaged environment in the first and the fourth year of a primary school.
Limitations: The results apply only to students in the first level by using of the observation method.
Conclusions: As substantial and significant for pedagogic experience, we consider implementing the research findings as well on the higher level of pupils' education and to define further correlations between aggressive behaviour and socially disadvantaged environment.

Key words: socially disadvantaged environment, aggressiveness, prevention.

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1 Introduction

The most straightforward definition of aggressiveness defines the term as intentional hurting, causing negative consequences. In particular - aggressiveness is a form of behaviour. Aggression is neither thinking about doing something wrong with someone, nor planning and imagining how to hurt or harm someone.

According to Výrost and Slaměník (2008), aggressiveness is a form of behaviour that either causes hurt and harm or it leads to such hurt. It is not important what the real consequences of aggressive behaviour are. It can be injuries and physical pain. Aggression can also take the form of damage to someone else's property or psychological injury to another person. It can be anything that causes disgust and psychological discomfort. According to experts, aggression is a manifestation of aggressiveness and it is defined as offensive or hostile behaviour, hostility to a particular object, deliberate attack on an obstacle, a person, and an object standing in the way to meet the aggressor's needs.

2 Theoretical framework

Határ (2004) defines aggression as hostility, violence and explosiveness in behaving to a particular object, attacking an obstacle on the way to satisfying one's needs.

We agree with Dupkalová and Krajčová (2015), that a person has genetic predispositions to aggressive behaviour; however, such dispositions do not depend on genes only, as they develop by learning and the influence of the environment. Society's tolerance for aggression and aggressive behaviour has varied over time and it is constantly changing, and the social climate can also reduce aggression to something banal and to indirectly support it.

A large number of psychologists dealing with the issues of aggression (Kyriacou, 2001, Rozvadský Gugová & Eisemann, 2016) agree that aggression, similar to the majority of human behaviour is learned, based on experience, and mediated based on the surrounding environment. A person realizes easily that aggressive behaviour surely pays. It allows the aggressors to seize an object that they desire, to get a service they need, to avoid duties, etc. If a child is successful with such aggressive behaviour, then they create a lot of aggressive models in their behaviour. They deduce principles, attitudes, values that affect people in their surroundings. The child expresses the thoughts, feelings and beliefs in violation of the rights of others. Its goal is to win over any other people and to conquer them (Verbovská, 2001).

Experts classify different types of aggression. The most common classification defines two types of aggression (Zahatňanská, 2015):

1. *Verbal aggression* – realized as different verbal assaults (such as swearing, shouting or tormenting);
2. *Physical aggression* – includes a large number of a direct contact of an aggressor and a victim (such as fighting, hurting or torture).

By Čermák (1999), both types of aggression are either direct or indirect. Spurný (1996) further classifies them as:

1. *Open, direct aggression* – aggression towards a person who the aggressor dislikes;
2. *Indirect aggression* – aggression towards the values that are important for the victim;
3. *Displaced aggression* – if a substitute target of aggression is used;

4. *Imitative aggression* – imitating aggressive behaviour modelled by another person, such as bullying of new recruits in the army;
5. *Introverted aggression* – meaning self-aggression, with its extreme form, a suicide.

Regarding its length, Erb (2000) defines:
1. *Short-term aggression* – usually primitive, spontaneous, with a violent disgust of affection; its participants lose the ability to assess the scope, objective and motivation;
2. *Long term aggression* – usually considered well, repeated, taking a longer period of time.

Határ (2004) defines aggression by its nature as:
1. *Benign aggression* (adaptive aggression) – is not spontaneous; is a reaction to a certain stimulus and is of a protective nature; it is a phylo-genetically programmed adaptive response to endangering the animal's vital interests.
2. *Malign aggression* - manifested by destructiveness and cruelty distorting social structures; appears only in humans and is neither phylo-genetically programmed nor instinctive.
3. *Pseudo-aggression* – its primary purpose is not to cause any damage, but it can cause it.
4. *Unintentional aggression* - accidental, the purpose of which was not to harm.
5. *Protective aggression* – as a reaction to physical and mental threats.
6. *Conformity aggression* – natural to animals and humans, and its aim is to protect life.

Aggressive behaviour reacts to problems by aggression, meaning such behaviour intentionally hurting, and limiting other people, keeping them from doing different activities.
Aggression and aggressive behaviour of children may take different forms. Winkel, a German educationalist, defined five types of aggression of children and teenagers:
1. *Aggression as a game* – its aim is either to try the possibilities or to enjoy the victory. However, there is a danger that children's play or entertainment can go through to a serious form of aggression.
2. *Aggression as a defensive mechanism* – defending the victim against the attacker. The attracter may get hurt seriously.
3. *Aggression as the reaction of a frustrated individual* – the child seeks compensation for their loss in weaker individuals.
4. *Aggression as curiosity* – a child wants to know where the limits are, what they can afford and what not. This form of aggression can result in an egoistic promotion of the child´s own power.
5. *Aggression as inappropriate desire for love* – the child seeks to get the attention of the environment, especially by negative behaviour. May be dangerous due to masochistic satisfaction of the child´s own needs, while the aggressor does not realize their actions (Zahatňanská, 2015).

By Kolář (2001), all the aggressors share a common striking, though not always conscious, desire for power and cruelty. It is considered to be the driving force of their

aggression. Common motives of aggressive behaviour include: *attracting attention* – an aggressor is trying to become the centre of attention, capturing the surroundings, engage the attention of the peers; *killing boredom* - it is typical of the aggressor who disconnected, to whom aggression provides a stimulus strong enough to feel some satisfaction; *Mengele´s motive* – an aggressor feels like a scientist, doing research on what a person is able to bear; *jealousy* – an aggressor revenges a victim for having a good school performance and being popular with teachers; *prevention* – is typical for aggressors with previous experience as a victim, they either join the group of aggressors or become aggressors themselves not to become victims again; *effort to do something great* - for some aggressors, this is the only way to prove that they are capable of performing and the only reason for the others to remember.

The aggressors may initiate aggression either occasionally or chronically. An *occasional aggressor* behaves aggressively is it is beneficial. They can often be charming, but then aggressive to peers, teachers and siblings, they behave impulsively, later they regret. They have leadership ambitions, can be physically strong, can be persuasive, manipulative, with other antisocial behaviour (such as shouting) when things are not done as they prefer. They may burst with anger. However, their self-esteem is sufficient. These characteristics are often found in pupils whose self-confidence can be sufficiently high. Such pupils need clear and strict rules and should know the results of their actions. We should also teach them to empathize with others (empathy). A *chronic aggressor* – aggressive behaviour is their personal trait, they are not able to control themselves. Their attitude to violence is positive, they feel uncertain and oppressedF. They are distracting. They refuse to take responsibility for their actions. They have no sympathy with their victims. They feel less appreciated. They are typical aggressors, often abused and neglected at home. Similarly, Rozvadský Gugová and Eisemann (2016) found a correlation between: Rejection (father) and Rejection (mother) subscale ($r = .655$, $p < .001$). These pupils attack the weaknesses of others, which gives them a sense of fulfilment and power.

The most reliable *means of preventing pupils from aggression in schools* is to prevent it completely. The most effective prevention should be done by the school management, pedagogical and non-teaching staff together with the pupils' parents (Hanuliaková, Hasajová, & Porubčanová, 2017). The way to build prevention and remedy must be systematic and rational, because aggression, especially repeated, is by no means a matter only for the aggressor and the victim but it is a serious disease of the whole group (Tamášová & Barnová, 2011). Students associate positive school climate with a higher motivation to study, experiencing success; personal development; discovery learning which brings them pleasure; increasing prosocial attitudes and behaviour (Hanuliaková & Barnová, 2015; Andreassen et al, 2016).

Repeated aggression and bullying represent one of the forms of delinquent behaviour. Regarding this, prevention is defined as *scientifically motivated, deliberate, purposeful, planned and coordinated action on causes and conditions of criminality with the aim of eliminating and appropriate selection of forms and methods of attenuation to minimize or, if necessary, to limit their negative manifestations while simultaneously promoting anti-criminogenic conditions* (Erb, 2000, p. 19).

3 Methods

Related to the analysed problem, a research was carried out dealing with the survey of aggression level of majority pupils compared to pupils from socially disadvantaged environment. There were six monitoring procedures of sixty teachers (53 females and 7 males). In total, 60 lessons were monitored. The monitoring was carried out personally, based on a monitoring scheme of aggression of pupils from socially disadvantaged environment.

We were interested in differences in the level of aggression of majority pupils compared to pupils from socially disadvantaged environment in the first and fourth grade.

To analyse the significant difference between the respondents in different grades (the first and the fourth), we used Mann-Whitney U-test. The results are described below. The data are also shown in tables revealing the significant difference. To complete the data, supplementary table are shown with the data of Mann-Whitney U-test related to aggression of respondents of the first and fourth grade and the data of Mann-Whitney U-test related to aggression of respondents in compulsory and optional classes.

4 Research results

The results describe the significant differences. Based on the monitoring of verbal aggression in the first grade, there were significant differences for "mocking", "ignoring", "verbal assaults, threats", in favour of the respondents from the disadvantaged environment (at the significance level of 0.01).

"Gossiping" as an item in the score sheet did not report a significant difference. Regarding other items, such as "stealing things", "damaging and destructing things", "hiding things", there was also a significant difference in favour of the respondents from the disadvantaged environment in the first grade (the significance level of 0.01). The same difference was found (at the significance level of 0.01) in the first-grade pupils from the disadvantaged environment for the item "forced demeaning behaviour" (Table 1, Table 2).

Table 1

Significance of differences in aggression of pupils from socially disadvantaged environment in 1st year of primary school

Questions	*N1 – majority pupils. 1st year*	*R1 – pupils from socially disadvantaged environment. 1st year*	*Mann-Whitney U test*
ot_1a - gossiping	2.57	2.45	0.01
ot_1b - mocking	1.77	4.11	4.66 **
ot_1c - ignoring	0.57	1.34	2.61 **
ot_1d – verbal assaults, threats	3.05	6.77	3.70 **
ot_1e – threatening with a gun	0	0	0
ot_2a - stealing things	0.31	1.68	4.63 **
ot_2b - damaging and destructing things	0.42	2	4.83 **
ot_2c – hiding things	0.11	0.54	2.17 **

ot_3a – forced demeaning behaviour	0.11	0.74	2.83 **
ot_3b – forced demeaning eating	0	0	0
ot_3c –forced services	0	0	0
ot_3d – nonsense commands and restrictions	0.25	0.65	0.50

Table 2

Mann-Whitney U test of aggression in the respondents of the 1st year of primary school

	Mann-Whitney U test (data_agresia.sta) According to variables. year Marked tests are significant at level p < ,05000									
Variable	N1	R1	U	Z	p-value	Z	p-value	N platn. N1	N platn. R1	2*1 exact p
ot_1a	1240,500	1244,500	610,5000	-0,01762	0,985943	-0,01785	0,985757	35	35	0,981379
ot_1b	845,500	1639,500	215,5000	-4,65733	0,000003	-4,71544	0,000002	35	35	0,000001
ot_1c	1019,500	1465,500	389,5000	-2,61351	0,008962	-2,80310	0,005062	35	35	0,008230
ot_1d	926,500	1558,500	296,5000	-3,70589	0,000211	-3,72395	0,000196	35	35	0,000139
ot_1e	1242,500	1242,500	612,5000	0,00587	0,995314			35	35	
ot_2a	848,000	1637,000	218,0000	-4,62796	0,000004	-4,95795	0,000001	35	35	0,000001
ot_2b	830,500	1654,500	200,5000	-4,83352	0,000001	-5,08089	0,000000	35	35	0,000000
ot_2c	1057,500	1427,500	427,5000	-2,16715	0,030224	-2,83728	0,004550	35	35	0,029152
ot_3a	1001,000	1484,000	371,0000	-2,83081	0,004643	-3,51458	0,000441	35	35	0,004189
ot_3b	1242,500	1242,500	612,5000	0,00587	0,995314			35	35	
ot_3c	1242,500	1242,500	612,5000	0,00587	0,995314			35	35	
ot_3d	1199,500	1285,500	569,5000	-0,49921	0,617633	-0,66489	0,506124	35	35	0,615608

Notes:
** - significant at the level of p < 0.01000; * - significant at the level of p < 0.05000; N1 – majority pupils, 1st year;
R1 – pupils from socially disadvantaged environment. 1st year; ot_1a – gossiping; ot_1b – mocking; ot_1c – ignoring; ot_1d – verbal assaults, threats; ot_1e – threatening with a gun; ot_2a - stealing things; ot_2b - damaging and destructing things; ot_2c – hiding things; ot_3a – forced demeaning behaviour; ot_3b – forced demeaning eating; ot_3c – forced services; ot_3d – nonsense commands and restrictions

Based on the monitoring of the 1st year, there was a significant difference in "physical harm" and "degrading acts and touches" (at the level of significance of 0.01) in favour of the respondents from the disadvantaged environment. The same group of respondents reported a significant difference in monitoring the aggressors in the class. The pupils-aggressors from the 1st class came from the disadvantaged environment (Table 3, Table 4).
The survey also monitored the attitude of the pupils to aggression. The first-year pupils most commonly "entertain by it", they "admire the aggressors" and they "are the actors". These items reported a significant difference in favour of the respondents from the disadvantaged environment (at the significance level of 0.01).

Table 3

Significant differences between the measured values concerning predominant aggression and attitudes towards it in pupils from socially disadvantaged environment in the first year of primary school

Questions	*N1 – majority pupils. 1st year*	*R1 – pupils from socially disadvantaged environment. 1st year*	*Mann-Whitney U test*
ot_4a – physical harm	0.88	3.08	5.05 **
ot_4b – simulated violence	1.88	2.66	1.93
ot_4c degrading acts and touches	0.29	0.97	2.83 **
ot_5a – a boy	1.74	2.74	2.55 **
ot_5b – a girl	0.31	0.86	1.90
ot_5c - a group of boys	1.94	2.74	2.41 **
ot_5d - a group of girls	0.29	0.51	0.81
ot_5e – a teacher	0	0	0
ot_6a – they refuse aggression	0.71	0.69	0.13
ot_6b – they accept aggression	0.34	0.37	0.74
ot_6c – they pay no attention	0.26	0.29	0.34
ot_6d – they watch it as they are curious	2.37	2.80	1.15
ot_6e – they attach little importance to it	0.34	0.57	1.14
ot_6f – they entertain by it	1.86	2.86	2.64 **
ot_6g – they support aggression	0.77	1.25	1.86
ot_6h – they admire the aggressors	0.40	1.37	3.50 **
ot_6i – they are the actors	1.40	2.48	3.33 **
ot_6j – another option (which?)	0	0	0

Table 4

Mann-Whitney U test of aggression in the respondents of the 1st year of primary school

Variable	Mann-Whitney U test (data_agresia.sta) According to variables. year Marked tests are significant at level p < ,05000 N1	R1	U	Z	p-value	Z	p-value	N platn. N1	N platn. R1	2*1 exact p
ot_4a	812,000	1673,000	182,0000	-5,05082	0,000000	-5,16821	0,000000	35	35	0,000000
ot_4b	1077,500	1407,500	447,5000	-1,93223	0,053332	-1,97394	0,048389	35	35	0,052214
ot_4c	1001,000	1484,000	371,0000	-2,83081	0,004643	-3,18648	0,001440	35	35	0,004189
ot_5a	1025,000	1460,000	395,0000	-2,54890	0,010807	-2,60046	0,009310	35	35	0,010193
ot_5b	1080,500	1404,500	450,5000	-1,89699	0,057830	-2,34693	0,018929	35	35	0,056716
ot_5c	1036,500	1448,500	406,5000	-2,41382	0,015787	-2,47578	0,013295	35	35	0,014878
ot_5d	1173,000	1312,000	543,0000	-0,81048	0,417665	-1,00766	0,313617	35	35	0,420035
ot_5e	1242,500	1242,500	612,5000	0,00587	0,995314			35	35	
ot_6a	1254,500	1230,500	600,5000	0,13508	0,892549	0,14965	0,881038	35	35	0,888623
ot_6b	1179,000	1306,000	549,0000	-0,74000	0,459298	-0,91736	0,358952	35	35	0,461688
ot_6c	1272,000	1213,000	583,0000	0,34064	0,733377	0,48953	0,624464	35	35	0,734975
ot_6d	1144,500	1340,500	514,5000	-1,14524	0,252109	-1,17552	0,239788	35	35	0,251418
ot_6e	1145,000	1340,000	515,0000	-1,13937	0,254549	-1,36279	0,172950	35	35	0,256316
ot_6f	1017,500	1467,500	387,5000	-2,63700	0,008365	-2,67817	0,007403	35	35	0,007654
ot_6g	1084,000	1401,000	454,0000	-1,85588	0,063471	-1,95693	0,050357	35	35	0,063210
ot_6h	944,000	1541,000	314,0000	-3,50034	0,000465	-3,83194	0,000127	35	35	0,000346
ot_6i	958,500	1526,500	328,5000	-3,33002	0,000869	-3,50979	0,000449	35	35	0,000673
ot_6j	1242,500	1242,500	612,5000	0,00587	0,995314			35	35	

Notes:
** - significant at the level of $p < 0.01000$; * - significant at the level of $p < 0.05000$; N1 – majority pupils, 1st year; R1 – pupils from socially disadvantaged environment. 1st year; ot_4a – physical harm; ot_4b – simulated violence; ot_4c - degrading acts and touches; ot_5a – a boy; ot_5b – a girl; ot_5c - a group of boys; ot_5d - a group of girls; ot_5e – a teacher; ot_6a – they refuse aggression; ot_6b – they accept aggression; ot_6c – they pay no attention; ot_6d – they watch it as they are curious; ot_6e – they attach little importance to it; ot_6f – they entertain by it; ot_6g – they support aggression; ot_6h – they admire the aggressors; ot_6i – they are the actors; ot_6j – another option (which?)

The monitoring of the 4th year revealed a significant difference in "physical harm" and "degrading acts and touches" (at the level of significance of 0.01) in favour of the respondents from the disadvantaged environment (Table 5, Table 6).
In the 4th year, the aggressors were usually the girls from the disadvantaged environment and a group of boys from the disadvantaged environment. These differences are shown in Table 6. The respondents "watch the aggression as they are curious", they "entertain by it" and they "are the actors". Those items reported the significant differences in favour of the four-year respondents from the disadvantaged environment.

Table 5

Significant differences between the measured values concerning predominant aggression and attitudes towards it in pupils from socially disadvantaged environment in the fourth year of primary school

Questions	*N1 – majority pupils. 4th year*	*R1 – pupils from socially disadvantaged environment 4th year*	*Mann-Whitney U test*
ot_4a – physical harm	0.64	2.56	4.05 **
ot_4b – simulated violence	1.72	2.68	1.54
ot_4c degrading acts and touches	0.24	1.36	4.09 **
ot_5a – a boy	1.84	2.44	1.90
ot_5b – a girl	0.20	2.20	5.02 **
ot_5c - a group of boys	1.36	2.80	2.97 **
ot_5d - a group of girls	0.60	0.80	0.48
ot_5e – a teacher	0	0	0
ot_6a – they refuse aggression	0.60	0.24	1.53
ot_6b – they accept aggression	0.04	0.24	1.20
ot_6c – they pay no attention	0.32	0.28	0.05
ot_6d – they watch it as they are curious	3.12	1.44	3.54 **
ot_6e – they attach little importance to it	0.72	0.56	0.45
ot_6f – they entertain by it	1.08	2.36	3.02 **
ot_6g – they support aggression	0.92	1.08	0
ot_6h – they admire the aggressors	1.08	0.88	0.69
ot_6i – they are the actors	1.20	2.64	3.44 **
ot_6j – another option (which?)	0	0	0

Table 6

Mann-Whitney U test of aggression in the respondents of the 4th year of primary school

Variable	Mann-Whitney U test (data_agresia.sta) According to variables. year Marked tests are significant at level p < ,05000 N4	R4	U	Z	p-value	Z	p-value	N platn. N4	N platn. R4	2*1 exact p
ot_4a	428,0000	847,0000	103,0000	-4,05520	0,000050	-4,19900	0,000027	25	25	0,000020
ot_4b	557,5000	717,5000	232,5000	-1,54253	0,122947	-1,57135	0,116102	25	25	0,121291
ot_4c	426,0000	849,0000	101,0000	-4,09400	0,000042	-4,44827	0,000009	25	25	0,000016
ot_5a	539,0000	736,0000	214,0000	-1,90148	0,057240	-1,98872	0,046733	25	25	0,056757
ot_5b	378,0000	897,0000	53,0000	-5,02534	0,000001	-5,39708	0,000000	25	25	0,000000
ot_5c	484,0000	791,0000	159,0000	-2,96864	0,002991	-3,04121	0,002357	25	25	0,002471
ot_5d	612,0000	663,0000	287,0000	-0,48507	0,627626	-0,53311	0,593958	25	25	0,630517
ot_5e	637,5000	637,5000	312,5000	0,00970	0,992260			25	25	
ot_6a	717,0000	558,0000	233,0000	1,53283	0,125320	1,86682	0,061928	25	25	0,126084
ot_6b	575,0000	700,0000	250,0000	-1,20298	0,228986	-2,00123	0,045369	25	25	0,231218
ot_6c	640,5000	634,5000	309,5000	0,04851	0,961312	0,06510	0,948094	25	25	0,954003
ot_6d	820,5000	454,5000	129,5000	3,54102	0,000399	3,60908	0,000307	25	25	0,000240
ot_6e	661,0000	614,0000	289,0000	0,44627	0,655406	0,49522	0,620443	25	25	0,658147
ot_6f	481,5000	793,5000	156,5000	-3,01714	0,002552	-3,10013	0,001935	25	25	0,002001
ot_6g	632,5000	642,5000	307,5000	-0,08731	0,930423	-0,09563	0,923814	25	25	0,923413
ot_6h	674,0000	601,0000	276,0000	0,69850	0,484863	0,74192	0,458137	25	25	0,488209
ot_6i	459,5000	815,5000	134,5000	-3,44401	0,000573	-3,59730	0,000322	25	25	0,000367
ot_6j	637,5000	637,5000	312,5000	0,00970	0,992260			25	25	

Notes:
** - significant at the level of p < 0.01000; * - significant at the level of p < 0.05000; N4 – majority pupils, 4th year; R4 – pupils from socially disadvantaged environment. 4th year; ot_4a – physical harm; ot_4b – simulated violence; Ot_4c degrading acts and touches; ot_5a – a boy; ot_5b – a girl; ot_5c - a group of boys; ot_5d - a group of girls; ot_5e – a teacher; ot_6a – they refuse aggression; ot_6b – they accept aggression; ot_6c – they pay no attention; ot_6d – they watch it as they are curious; ot_6e – they attach little importance to it; ot_6f – they entertain by it; ot_6g – they support aggression; ot_6h – they admire the aggressors; ot_6i – they are the actors; ot_6j – another option (which?)

5 Discussion

In the current society, one of the trends is to have rights. It means that children have their rights, too. It is important to realize that rights bring responsibilities Children are not an exception, they should be aware of that – especially about the responsibility for the violation of other children's rights. Some children lack empathy, they have too much freedom and noone teaches them how to behave properly. As a result, aggression and bullying are still occurring in schools.

What should be done in order to protect our children in schools and school facilities from bullying and aggression? We believe that targeted activities of prevention would be a solid basis for decreasing or even eliminating the occurance of bullying in schools. Setting and following clear rules is one of the steps leading towards the elimination of aggression. It is necessary to fight against the lack of knowledge, downplaying, denial, silence and indifference, which are still present in our schools. Special attention should be paid to the aggressors, to the causes and reasons behind their behaviour. It is necessary to keep providing appropriate and sufficient information to all the pedagogues and school managing authorities. There is also a need for prevention targeted not only on pupils but also on teachers and parents. It is strongly recommended to develop friendly, open and safe relationships among all the members of school community, i.e. to create a

favourable social climate which we consider to be the basic form of the prevention of aggressive behaviour and bullying in schools.

6 Conclusion

Effective prevention of any aggression is linked to the requirement that parents accept and love children as the children are, regardless their appearance, intellect, ability. The parents should communicate with their child, talk to them about their experiences at school and friends, about their needs, values; giving the child attention, looking at their problems, worries and joy. They should form a healthy self-confidence of a child, in the form of commendations and awards, but also by good critic. They need to identify the child's borders, the limits of what is allowed and what is not allowed; setting rules that provide the child with certainty, as a reference point that should be kept. The children also should be able to deal with their emotions (such as anger, hatred, anger, etc.), and realized that the manifestations of anger and aggression are the result of their own failure and can become a model of conflict resolution (Kominarec, 2009).

What is therefore necessary to do to protect the children at schools and school facilities from bullying and violence? We believe that proper prevention should be the appropriate first step to prevent, or even reduce, bullying in schools. Establishing rules and keeping them is a further precondition for preventing aggression. It is important to break ignorance, attaching low importance, denial, silence and indifference that occur in our schools. Attention should also be paid to the aggressor and the reason of the behaviour. It is vitally important to keep the educators and school management well informed. There is also a need for constant preventive action not only for pupils, but also for teachers and parents. It is very appropriate to build friendly, open and secure relationships among all the members of the school, to build a favourable social climate that we think is an important part of prevention against aggression and bullying in schools.

Furthermore, in order to deal with aggression and bullying, there is a need for people who are courageous, sensitive, willing to deal with this issue, but also for openness to this problem and the implementation of effective interventions. We believe that aggression and bullying now belong to serious social problems that occur in many forms and act destructively to the personality of a person.

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