

DAUGAVPILS UNIVERSITĀTE  
DAUGAVPILS UNIVERSITY

DAUGAVPILS UNIVERSITĀTES ZINĀTŅU DAĻA  
SCIENCE DEPARTMENT OF DAUGAVPILS UNIVERSITY

**DAUGAVPILS UNIVERSITĀTES  
62. STARPTAUTISKĀS ZINĀTNISKĀS  
KONFERENCES RAKSTU KRĀJUMS**

**PROCEEDINGS OF THE 62<sup>nd</sup>  
INTERNATIONAL SCIENTIFIC CONFERENCE  
OF DAUGAVPILS UNIVERSITY**

**B. DAĻA. SOCIĀLĀS ZINĀTNES**

**PART B. SOCIAL SCIENCES**

DAUGAVPILS UNIVERSITĀTE  
AKADĒMISKAIS APGĀDS „SAULE”  
2020

Apstiprināts Daugavpils Universitātes Zinātnes padomes sēdē 2020. gada 10. decembrī, protokols Nr. 14. /  
Approved in the meeting of Daugavpils University Science Council on December 10, 2020; minutes No 14.

Kokina I., red. *Daugavpils Universitātes 62. starptautiskās zinātniskās konferences rakstu krājums. B. daļa "Sociālās zinātnes" = Proceedings of the 62<sup>nd</sup> International Scientific Conference of Daugavpils University. Part B "Social Sciences"*. Daugavpils: Daugavpils Universitāte, 2020.

***Daugavpils Universitātes 62. starptautiskās zinātniskās konferences Programmas komiteja /  
Programme Committee of the 62<sup>nd</sup> International Scientific Conference of Daugavpils University***

Dr. psych., prof. **Irēna Kokina** (Daugavpils University, Latvia, Chairman of Scientific Committee)  
Dr. biol., prof. **Arvīds Barševskis** (Daugavpils University, Latvia, Vice Chairman)  
Dr. habil. art., prof. **Romualdas Apanavičius** (Vytautas Magnus University, Lithuania)  
Dr. habil., prof. nazw. **Jakub Bartoszewski** (State University of Applied Sciences in Konin, Poland)  
Dr. philol., prof. **Maija Burima** (Daugavpils University, Latvia)  
PhD, prof. **Yesudas Choondassery** (Berkeley College, USA)  
Dr. art., prof. **Ēvalds Daugulis** (Daugavpils University, Latvia)  
Dr. paed., prof. **Jelena Davidova** (Daugavpils University, Latvia)  
Dr. habil. philol., prof. **Ina Druviete** (University of Latvia)  
PhD, prof. **Ulla Harkonena** (Joensuu University, Finland)  
Dr. habil. philol., prof. **Zaiga Ikere** (Daugavpils University, Latvia)  
PhD, prof. **Dzintra Iliško** (Daugavpils University, Latvia)  
Dr. hist., prof. **Aleksandrs Ivanovs** (Daugavpils University, Latvia)  
Dr. hum., prof. **Genovaitė Kačiuškienė** (Siauliai University, Lithuania)  
Dr. habil. art., prof. **Ludmila Kazantseva** (Astrakhan Conservatory and Volgograd Institute of Art and Culture, Russia)  
Dr. biol., prof. **Inese Kokina** (Daugavpils University, Latvia)  
PhD, prof. **Enne Koresaare** (University of Tartu, Estonia)  
Dr., assist. prof. **Detlev Lindau-Bank** (University of Vechta, Germany)  
Dr. habil. sc. soc., prof. **Antanas Makštutis** (The General Jonas Žemaitis Military Academy of Lithuania, Lithuania)  
Dr. sc. soc., prof. **Vladimirs Meņšikovs** (Daugavpils University, Latvia)  
Dr. habil. sc. ing., prof. **Sławomir Partycki** (The John Paul II Catholic University of Lublin, Poland)  
Dr. med., asoc. prof. **Anatolijs Požarskis** (Daugavpils University, Latvia)  
Dr. hist., prof. **Irēna Saleniece** (Daugavpils University, Latvia)  
Dr. habil. biol., prof. **Yarosław Skłodowski** (Warsaw University of Life Sciences, Poland)  
Dr. theol., prof. **Anita Stašulāne** (Daugavpils University, Latvia)  
Dr. paed., prof. **Małgorzata Suswillo** (University of Varmia and Mazuri in Olsztyn, Poland)  
PhD, prof. emeritus **Geoffrey R. Swain** (University of Glasgow, United Kingdom)  
Dr. philol., prof. **Vilma Šaudiņa** (Daugavpils University, Latvia)  
Dr. biol., prof. **Ingrīda Šauliene** (Šauļu Universitāte, Lietuva)  
Dr. biol., prof. **Artūrs Škute** (Daugavpils University, Latvia)  
Dr. biol., prof. **Natalja Škute** (Daugavpils University, Latvia)  
Dr. phys., prof. **Edmunds Tamanis** (Daugavpils University, Latvia)  
Dr. oec. **Manuela Tvaronavičiene** (The General Jonas Žemaitis Military Academy of Lithuania, Lithuania)  
Dr. oec., prof. **Alena Vankevich** (Vitebsk State University of Technology, Belarus)  
Dr. habil. paed., Dr. habil. psych., prof. **Aleksejs Vorobjovs** (Daugavpils Universitāte, Latvija)  
Dr. iur., prof. **Vitolds Zahars** (Daugavpils University, Latvia)  
Dr. paed., asoc. prof. **Edgars Znutiņš** (Daugavpils University, Latvia)

***Daugavpils Universitātes 62. starptautiskās zinātniskās konferences Rīcības komiteja /  
Organizing Committee of the 62<sup>nd</sup> International Scientific Conference of Daugavpils University***

Dr. biol., prof. **Arvīds Barševskis** (Chairperson of Organizing Committee)

Ludmila Aleksejeva, Maksims Balalajkins, Zeltīte Barševska, Jana Butāne-Zarjuta, Ēvalds Daugulis, Velta Dilba, Armands Gricāns, Dzintra Iliško, Irēna Kaminska, Mārīte Kravale-Pauliņa, Jānis Kudiņš, Miervaldis Mendriks, Olita Miglāne, Sergejs Osipovs, Aleksejs Ruža, Henrihs Soms, Juris Soms, Jānis Teivāns-Treinovskis, Uldis Valainis, Anna Vanaga, Elīna Vasiljeva

*Daugavpils Universitātes 62. starptautiskās zinātniskās konferences rakstu krājuma redakcija /  
Editorial staff of the 62<sup>nd</sup> International Scientific Conference of Daugavpils University*

Dr. psych., prof. Irēna Kokina – redaktore / editor

Dr. oec., asoc. prof. Ludmila Aleksejeva

Dr. biol., doc. Līga Antoņeviča

Dr. art., Mg. paed., doc., pētn. Zeltīte Barševska

Mg. biol., lekt. Jeļena Buiko

Dr. oec., asoc. prof. Aina Čaplinska

PhD, pētn. Ilona Fjodorova

Mg. hist. pētn. Maija Grizāne

Dr. biol., doc. Dāvis Gruberts

PhD, prof. Dzintra Iliško

Dr. iur., doc. Nikolajs Jefimovs

Dr. biol., doc. Irēna Kaminska

Dr. biol., prof. Inese Kokina

Dr. phys., pētn. Vadims Kolbjonoks

Dr. biol., vad. pētn. Tatjana Krama

Dr. iur., asoc. prof. Anatolijs Kriviņš

Dr. philol. doc. Ilze Oļehnoviča

PhD, zin. asist. Ilona Plaksenkova

Mg. vid. plān., lekt. Irēna Pučkina

Dr. geogr., doc. Santa Rutkovska

Dr. hist., prof. Irēna Saleniece

Dr. hist., asoc. prof. Henrihs Soms

Dr. paed., pētn. Gaļina Zavadska

*Atbildīgās par izdevumu / Responsible for the Edition*

Olita Miglāne (olita.miglane@du.lv)

Anna Vanaga (anna.vanaga@du.lv)

Daugavpils Universitātē docētāju un studējošo zinātniskās konferences notiek kopš 1958. gada. Konferencēm ir starpdisciplinārs raksturs un tajās piedalās gan studējošie, gan docētāji, gan arī ievērojami zinātnieki no dažādām pasaules valstīm. Daugavpils Universitātes 62. starptautiskās zinātniskās konferences pētījumu tematika bija ļoti plaša – dabas, veselības aprūpes, humanitāro un mākslas un sociālo zinātņu jomās.

Zinātnisko rakstu krājumā *Daugavpils Universitātes 62. starptautiskās zinātniskās konferences rakstu krājums = Proceedings of the 62<sup>nd</sup> International Scientific Conference of Daugavpils University* apkopoti 2020. gada 28.–29. maijā konferencē prezentētie materiāli.

*Daugavpils Universitātes 62. starptautiskās zinātniskās konferences rakstu krājums* tiek publicēts 3 daļās: A. daļa. *Dabaszinātnes*; B. daļa. *Sociālās zinātnes*; C. daļa. *Humanitārās zinātnes*.

The annual scientific conferences at Daugavpils University have been organized since 1958. The themes of research presented at the conferences cover all spheres of life. Due to the facts that the conference was of interdisciplinary character and that its participants were students and outstanding scientists from different countries, the subjects of scientific investigations were very varied – in the domains of natural sciences, health care sciences, humanities and art, and social sciences.

The results of scientific investigations presented during the conference are collected in the collection of scientific articles *Proceedings of the 62<sup>nd</sup> International Scientific Conference of Daugavpils University*.

*Proceedings of the 62<sup>nd</sup> International Scientific Conference of Daugavpils University* are published in three parts: part A. *Natural sciences*; part B. *Social Sciences*; part C. *Humanities*.

## SATURS / CONTENTS

### PEDAGOĢIJA / PEDAGOGY

<i>Irena Upeniece, Indra Vīnberga, Una Veseta, Oskars Onževs, Igoris Kisis</i>	STUDENT'S MOTIVATION TO ENGAGE WITH THE NORDIC WALKING	7
<i>Marina Kapuste</i>	IMPORTANCE OF AUDIO MATERIALS FOR TEACHING ENGLISH WITHIN CONTINUING PROFESSIONAL TRAINING PROGRAM WITH QUALIFICATION OF DISPATCHER (MINISTRY OF THE INTERIOR)	18

### TIESĪBU ZINĀTNE / LAW

<i>Marīta Oliņa</i>	THE RIGHT OF A PERSON TO A FAIR TRIAL THROUGH THE PRISM OF JUDICIAL INDEPENDENCE AND SUBMISSION TO THE LAW	26
<i>Leila Neimane</i>	IDENTIFYING CHALLENGES TO IMPLEMENTATION OF MARITIME SPATIAL PLANS IN THE BALTIC STATES	35
<i>Sīlviija Kotāne</i>	LEGAL FRAMEWORK FOR MICRO-RESERVES OF SPECIALLY PROTECTED SPECIES – BETWEEN OWNERSHIP AND ENVIRONMENTAL INTERESTS	49
<i>Līga Mazure</i>	HISTORICAL DEVELOPMENT OF THE LEGAL INTERPRETATION OF HUMAN HEALTH	55

### EKONOMIKA UN SOCIOLOĢIJA / ECONOMICS AND SOCIOLOGY

<i>Julija Liodorova, Ruta Shneidera</i>	THE INTERNATIONAL CONCEPT OF FORENSIC ACCOUNTING: THE EXAMPLE OF BANKRUPTCY FRAUD IDENTIFICATION	67
<i>Jānis Ezers, Kaspars Naglis-Liepa</i>	THEORETICAL EXPLANATION AND RELEVANCE OF THE CONCEPTS OF INSTITUTIONAL ECONOMICS	75
<i>Viktorija Aleksejeva</i>	THE ASPECTS OF THE CONCEPT OF DIGITAL ECONOMY	86
<i>Līga Paula</i>	CONCEPTUALIZING RESILIENCE OF RURAL COMMUNITIES	94
<i>Inese Blanka</i>	REFLECTION OF THE IMPACT OF KNOWLEDGE ON SUSTAINABLE DEVELOPMENT IN LATVIA INSTITUTIONAL AND REGULATORY DOCUMENTS	102
<i>Eduards Gailišs</i>	SMALL POWERS IN ENGLISH SCHOOL THEORY OF INTERNATIONAL RELATIONS	110
<i>Ieva Bikava, Lelde Metla Rozentāle, Mārtiņš Daugulis</i>	YOUTH – FOUNDATION FOR FUTURE OF THE CIVIC SOCIETY IN LATVIA: HOW TO EMPOWER AND STIMULATE YOUTH TO BECOME POLITICALLY ACTIVE?	117
<i>Jekaterīna Funte, Aina Čaplinska</i>	FINANCIAL LITERACY ANALYSES OF LATVIAN STUDENTS	126
<i>Nadežda Griškjāne</i>	ASSESSMENT AND DEVELOPMENT OF SMART ECONOMY IN LATVIA	138
<i>Laura Done</i>	ADAPTATION OF NATO'S CYBER DEFENCE POLICY (2014–2018)	148

### MENEDŽMENTS / MANAGEMENT

<i>Rasaq Ajibola Sijuola</i>	MANAGEMENT CONSTRAINTS TOWARDS PROVISION OF INCLUSIVE EDUCATION FOR PEOPLE LIVING WITH DISABILITIES IN NIGERIA	153
------------------------------	--	-----

**8. STARPAUGSTSKOLU PEDAGOĢIJAS UN  
IZGLĪTĪBAS ZINĀTNES MAĢISTRANTŪRAS LASĪJUMI  
“INOVĀCIJAS UN TRANSFORMĀCIJA SKOLOTĀJU IZGLĪTĪBĀ” /  
8<sup>TH</sup> INTER UNIVERSITY PEDAGOGY AND  
EDUCATIONAL SCIENCE MASTER’S DEGREE READINGS  
“INNOVATIONS AND TRANSFORMATION  
IN TEACHER EDUCATION”**

*Aļona Pavlova*

**POSSIBILITIES FOR DETERMINATION OF HEALTHY LIFE STYLE HABITS  
AMONG YOUTH**

**163**

# PEDAGOGIJA / PEDAGOGY

## STUDENT'S MOTIVATION TO ENGAGE WITH THE NORDIC WALKING

Irena Upeniece<sup>1</sup>, Indra Vīnberga<sup>2</sup>, Una Veseta<sup>3</sup>, Oskars Onževs<sup>4</sup>, Igors Kisis<sup>5</sup>

<sup>1</sup> Rīga Stradins University, Dzirciema 16, Rīga, Irena.Upeniece@rsu.lv

<sup>2</sup> Rīga Stradins University, Dzirciema 16 Rīga, Indra.Vinberga@rsu.lv

<sup>3</sup> Rīga Stradins University, Dzirciema 16 Rīga, Una.Veseta@rsu.lv

<sup>4</sup> Turība University, Latvia, Graudu 68 Rīga, OskarsO@turiba.lv

<sup>5</sup> Latvian Academy of Sport Education, Brīvības gatve 333 Rīga, Igokisis@inbox.lv

### Abstract

#### Student's motivation to engage with the Nordic walking

**Key Words:** *Nordic Walking, students, motivation, physical activity*

Nordic walking is a particularly friendly physical activity type for human health. Nordic walking is becoming increasingly popular among different faculties in Latvia and among foreign students, especially among those students, who are studying in the health-related programs. The aim of the research is to find out the motivation of Rīga Stradiņš University students to engage with the Nordic walking. Research tool: a survey with the 29 statements which are structured on a Likert scale. The internal consistency of the data was assessed using the Cronbach's Alpha criterion, which is 0.944 for the whole data set. The general group is about 240 students, who choose a Nordic walking study course. In the case of the Likert scale, in order to ensure an accuracy of 3% for the estimation of the mean value at the confidence level  $\alpha = 0.05$ , approximately 180 questionnaires were required, which were provided in the study. The obtained results clearly reflect the motivation of students to practice Nordic walking due to their physical health, emotional well-being and practical benefits, with a predominantly high level of consent. The lowest level of acceptance is for the claim that Nordic walking helps to reduce body weight, stress levels, mental strain and Nordic walking can be used as a vehicle. The highest level of consent is for the statement that Nordic walking improves overall health. Before choosing the study course Nordic walking, 93.3% of Latvian group students and 72% of foreign students had not been involved in Nordic walking. In turn, after mastering the course, 80% of Latvian students and 68% of foreign students will continue to practice Nordic walking. No significant differences have been found in the motivating factors of Latvian and foreign students to engage with the Nordic walking.

### Kopsavilkums

#### Studentu motivācija nodarboties ar Nūjošanu

**Atslēgvārdi:** *nūjošana, students, motivācija, fiziskās aktivitātes*

Nūjošana ir sevišķi draudzīgs cilvēku veselībai fizisko aktivitāšu veids. Nūjošana kļūst aizvien populārāka dažādu fakultāšu Latvijas un ārvalstu studentu vidū, īpaši to studentu vidū, kuri studē ar veselības aprūpi saistītās programmās. Pētījuma mērķis ir noskaidrot Rīgas Stradiņa universitātes studentu motivāciju nodarboties ar nūjošanu. Pētījuma instruments: aptauja ar 29 apgalvojumiem, kas strukturēti Likerta skalā. Datu iekšējā saskaņotība tika novērtēta, izmantojot Cronbachs Alpha kritēriju, kurš visai datu kopai ir 0.944. Ģenerālā kopa ir apmēram 240 studentu, kas izvēlas nūjošanas studiju kursu. Likerta skalas gadījumā, lai nodrošinātu 3% precizitāti vidējās vērtības novērtējumam pie ticamības līmeņa  $\alpha = 0.05$  nepieciešamas apmēram 180 anketas, kas pētījumā tika nodrošinātas. Iegūtie rezultāti uzskatāmi atspoguļo studentu motivāciju nodarboties ar nūjošanu savas fiziskas veselības, emocionālās labsajūtas un praktisko ieguvumu dēļ, ar dominējoši augstu piekrišanas līmeni. Zemākais piekrišanas līmenis vērojams apgalvojumam, ka nūjošana palīdz mazināt ķermeņa svaru, stresa līmeni, garīgo slodzi un, ka nūjošanu var izmantot kā pārvietošanās veidu. Visaugstākais piekrišanas līmenis vērojams apgalvojumam, ka nūjošana uzlabo veselību. Pirms studiju kursa Nūjošana izvēles ar nūjošanu nebija nodarbojušies 93,3% latviešu grupas studenti un 72% ārvalstu studentu. Savukārt, pēc kursa apguves turpinās nodarboties ar nūjošanu individuāli 80% latviešu studenti un 68% ārvalstu studentu. Būtiskas atšķirības Latvijas un ārvalstu studējošo motivējošajos faktoros nodarboties ar nūjošanu nav konstatētas.

### Introduction

Nordic walking is a particularly healthy type of physical activity for the human health. Classes are held in the “nature gym” and are becoming increasingly popular in Latvia and abroad.

Nordic walking (from English: *Nordic walking*) birthplace is Finland. Nordic walking is a quite simple form of physical activity, but still requires learning the right techniques, choosing the right equipment, and following the right exercise methodology, which includes exercise intensity dosing, exercise frequency, and duration. Thanks to the correct application of the technique, a large part of the muscles (90%) is employed, biomechanically correct and ergonomic movements are created.

Study time in the university is the time with increased ability due to selected and healthy practices (Colić Barić et al. 2003), as well as critical periods due to the fact that the energy connection is in student behavior. University students are considered to be the key to health promotion and prevention for future generations for the young people, so it is very important to identify the current frequency of physical activity (Rodríguez et al. 2013). Regular physical activity improves the quality of life, slows down the effects of physiological aging and promotes longevity (Simon 2015).

Motivation and a key factor in supporting sustainable sport, which is necessary and important for health improvements (Teixeira et al. 2012). Research on motivation to engage with the physical activities is important to find out why some people choose a particular activity and the factors that determine the independence or abandonment of such a desire (García et al. 2015).

Physical activity is very important for all people of all ages to conserve and maintain their health. It is important to look for physical activities that would be popular in society, less symptomatic and thus stimulate people's involvement in them (Upeniec et al. 2016).

Understanding how different types of motivation contribute to training is an important first step in identifying ways to increase physical activity among individuals (Duncan et al. 2010).

Physical inactivity is a current public health problem (Quadros et al. 2009; Chevan & Haskvitz 2010) and poor physical fitness at a young age is a provocative factor in health problems in later life (Madanat & Merrill 2006; Rees et al. 2006; Sauka et al. 2011). Therefore, it would be important while start learning also continue or start physical activities. Also, physical activity also improves metabolism, lowers blood pressure, increases circulating blood volume, decreases heart rate both at rest and during exercise, increases heart and its contractile capacity, increases circulating blood volume, and improves both inspiratory and expiratory reserve volumes, vital and total capacity (Love et al. 2011; Park et al. 2010; Scharhag-Rosenberg et al. 2010). Regular exercise of optimal intensity significantly increases aerobic capacity in a relatively short period of time (McArdle et al. 2007) Medical and healthcare professionals need to be physically active themselves, not only because of their well-being and health, but also to be able to motivate their patients / clients for an active lifestyle (Chevan & Haskvitz 2010; Rao et al. 2012).

The aim of the research is to study the motivation of Riga Stradins University students engage with the Nordic walking. Implementing the set goal, the dominant factors determining students'



motivation to engage in physical activities were identified, the motivating factors to engage with the Nordic walking among Latvian and foreign students were analyzed and compared, and the persistence of motivation was determined.

### **Material and Methods**

The respondents of the study were Latvian and foreign students of the Rīga Stradiņš University, who have chosen the optional study course “Nordic Walking”. Based on the abovementioned literature reviews a survey with 29 statements was created. The statements were structured on a Likert scale. A survey for Latvian students was created in Latvian, and an identical survey for foreign students was created in English. The survey was created using the “Google Forms” tool. The students were assured that their responses would be kept confidential.

In the survey also were asked questions about the age of students, the faculty of studies and motivation to engage with the Nordic walking after completing the course “Nordic walking” and the desire to participate in Nordic walking competitions and other Nordic walking events.

Analyzing the results, all statements were divided into three blocks: physical health, emotional well-being, and practical benefits. In the block “Physical health” included the following statements: improves overall health, the functional state of the cardiovascular system, walking and posture, the functional state of the respiratory system, endocrine and immune system, etc., the functional condition of the musculoskeletal system, the body's biomotor abilities – endurance, flexibility, strength, coordination; it can load the largest muscle groups; as well as active shoulder girdle muscles; optimal exercise intensity can be ensured for people with different physical fitness; there is less strain on the joints and bones than walking without sticks or running and allows to adjust the body weight. In the block “Emotional well-being” included the following statements: classes take place outdoors, in the fresh air, in an organized “picturesque” environment, improves mental well-being, there is a positive emotional background in the classes, classes are led by a competent, pleasant lecturer, classes take place in a group and give me the opportunity to meet with the university course members in the open air, reduce stress level, within the study course I can disconnect from mental load, it brings joy, "Liberate the mind" is like meditation. To assess the proportion of non-health motivational aspects, the block “Practical benefits” included the following statements: you can practice anywhere in the world and travel, technical basics and special exercises are easy to learn, acquisition of the course gives credit points, the acquired knowledge and practical skills can be used for the benefit of public health, easy to practice in an emergency situation within 2 meters, you don't have to spend a lot of money to buy equipment, classes provide an opportunity to learn special warm-up exercises with sticks in the open air, within the study course I can acquire new personal skills/abilities/competencies, it has become a popular type of

physical activity, Nordic walking can be used as a vehicle. Likert scale – rating from 1 to 5: 1 – strongly disagree, 2 – disagree, 3 – neutral, 4 – agree, 5 – strongly agree.

The results were processed using Microsoft Excel 2007 and the computer program Statistical Program of Social Sciences 20.0 (SPSS). Descriptive statistics (means, minimum and maximum values) were used. The internal consistency of the data was assessed using the Cronbach's Alpha criterion.

## **Results**

The optional course Nordic Walking is demand and is chosen by approximately 240 students each academic year. The questionnaire was sent to the students of the 2019/2020 academic year. 138 questionnaires were completed. 62.5% of the respondents were foreign students (filled in the questionnaire in English), but 37.5% were Latvian students. The majority of respondents were women, respectively: Latvian 93.3%, foreign 84%. The average age in the Latvian group was 21 years, in the foreign group – 22 years. Most of the students were second year students of the Faculty of Medicine. Before choosing the study course Nordic walking, 93.3% of Latvian group students and 72% of foreign students had not been involved in the Nordic walking. In turn, after mastering the course, 80% of Latvian students and 68% of foreign students will continue to engage with the Nordic walking individually, but 20% of Latvian students and 16% of foreign students will continue to engage with the Nordic walking in the group classes, but 16% of foreign students will not practice Nordic walking. 27% of Latvian students and 12% of foreign students would like to participate in the Nordic walking competitions and festivals.

The internal consistency of the data was assessed using the Cronbach's Alpha criterion, which is 0.944 for the whole data set. This indicates a very good internal consistency of the data. The general group is about 240 students who choose the Nordic walking study course. In the case of the Likert scale, in order to ensure an accuracy of 3% for the estimation of the mean value at the confidence level  $\alpha = 0.05$ , approximately 180 questionnaires were required, which were provided in the study. Processing the obtained results according to Cronbach's Alpha criteria in the block distribution: in the block “Physical health” 0.926, in the block “Emotional well-being” 0.887 and in the block “Practical benefits” 0.834.

The obtained results clearly reflect the motivation of students to engage with the Nordic walking to improve their physical health with a predominantly high level of consent (4 and 5) (see Figure 1). The lowest level of agreement is observed for the statement that Nordic walking helps to reduce body weight, which may be related to the respondents' limited experience in Nordic walking. The highest level of consent is for the statement that Nordic walking improves overall health.

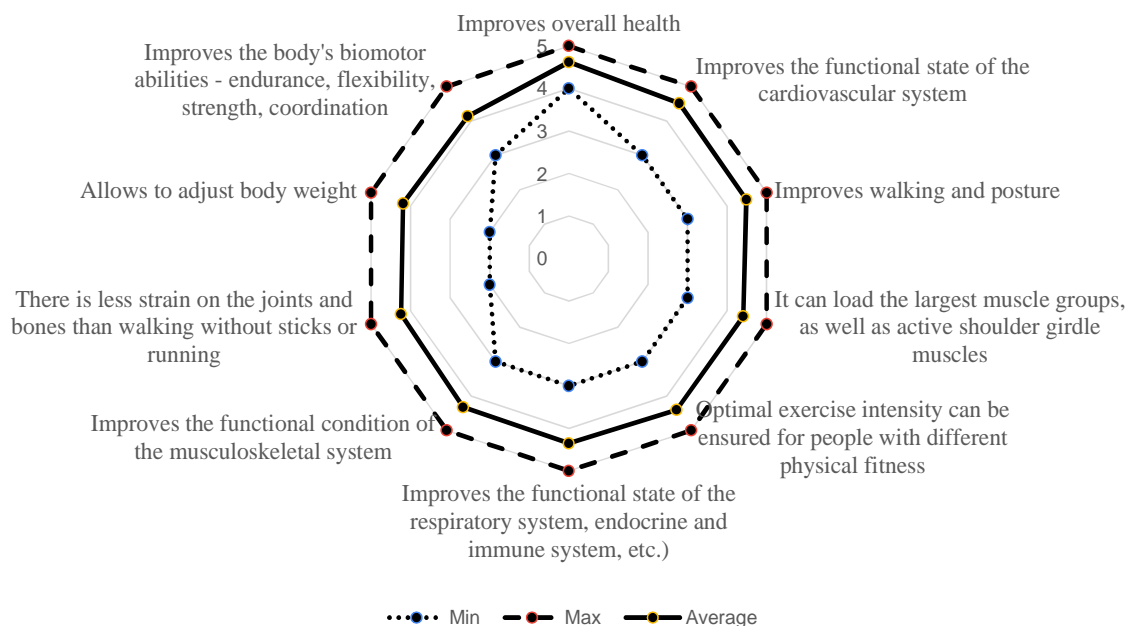


Figure 1. Claims of minimum, maximum and average value of physical health

The obtained results clearly reflect the motivation of students to engage with the Nordic walking for improving emotional well-being with a predominantly high level of consent (4 and 5) (see Figure 2). The lowest level of agreement is for the statement that Nordic walking helps reduce stress levels, within the study course I can disconnect from mental load and "Liberate the mind" is like meditation.

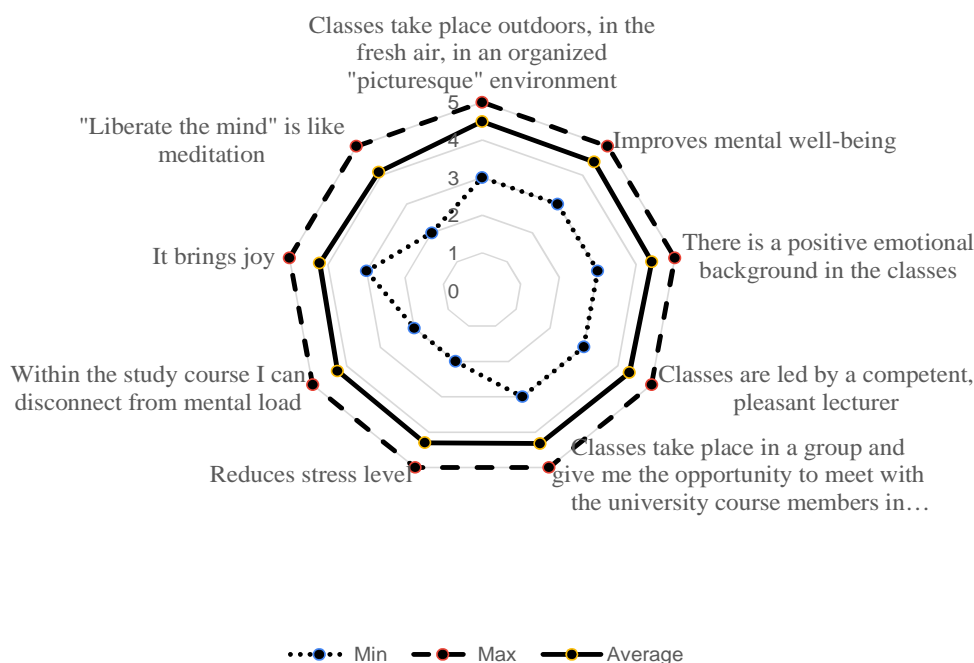


Figure 2. Minimum, maximum and average value of the statement about emotional well-being

The obtained results clearly reflect the motivation of students to engage with the Nordic walking due to practical benefits with a predominantly high level of consent (4 and 5) (see

Figure 3). The lowest level of consent is for the statement that Nordic walking can be used as a means of mobility and easy to practice in an emergency situation within 2 meters.

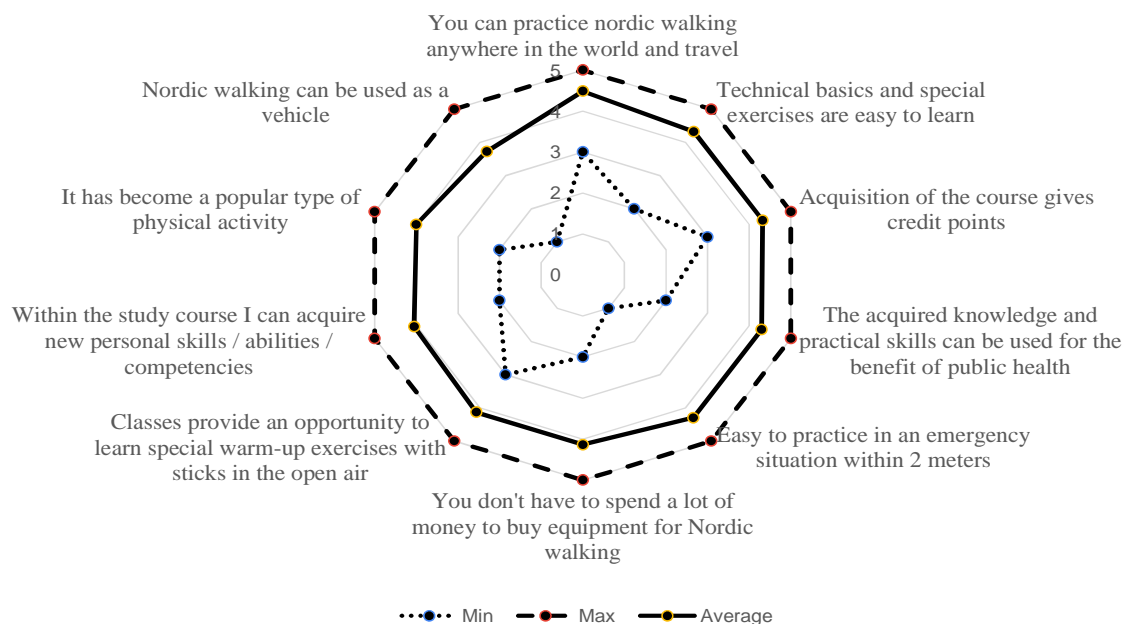


Figure 3. **Minimum, maximum and average value of the statement of practical benefits**

## Discussion

Motivation is formed under the influence of various factors that cause human activity. It also appears in research on physical activity – people have more than one motive for engaging with the physical activities (Allender et al. 2006).

The scientific literature defines several factors that influence people's involvement in the physical activities. They can be divided into two categories – factors that promote and inhibit physical activity. The main contributing factors are internal motivation, external support, health benefits, positive previous experience and positive emotional background. Factors that negatively affect participation in physical activities are health restrictions, environment, social attitude, lack of resources, individual reaction (Kaupužs 2011). Nordic walking is a type of physical activity that is applicable to any physical fitness and has many positive effects on health and quality of life (Meterniha 2010). Studies have shown many positive aspects of Nordic walking. The positive effects of Nordic walking on human physical and mental health are also confirmed by many studies. Nordic walking improves overall health.

In a systematic review of the health effects of Nordic walking, the authors, studying several studies, conclude that Nordic walking is recognized as a healthy, preventive and useful form of physical activity that normalizes blood pressure, heart capacity, heart rate, maximum oxygen consumption and improves quality of life in many diseases—cases (type 2 diabetes, chronic obstructive pulmonary disease, parkinsonism, etc.) (Tschentscher et al. 2013).

Motivation is a complicated concept that scientists are studying in relation to human behavior. Motivators are of interest to both workers in terms of employee impact and researchers of social processes, and, of course, to supporters of a healthy and active lifestyle in their search for ways to encourage people to engage with the physical activities (Ryan & Deci 2000).

There are two types of motivation: external and internal motivation. External motivation is based on external motivations and external circumstances, such as other people's behavior, rewards and punishments, the evaluation of people around them and the reaction in each specific situation. External motivation either promotes desired behavior or inhibits unwanted behavior. As a result of external motivation, a person is mainly result-oriented (Siliņš 2007).

Depending on the situation, external motivation can have both positive and negative effects. Pleasant surprises and unexpected rewards – both material and moral – can also help to develop intrinsic motivation. In turn, exaggerated external motivation can destroy motivation altogether. Exaggerated external motivation means continuous attention, verbal or material rewards related only to behavioral control – quick and frequent praise or condemnation, as well as too much praise for insignificant things and ignoring significant achievements (Siliņš 2007).

In a study at the University of Ljubljana, which took place in 2010/2011 study year, 5271 students participated. The aim of the survey results was to group students according to their different intensities and motivations to participate in physical activities. The study states that regular sports activity protects people from illness and promotes a higher quality of life. The main motivators for students to engage with the physical activities are health, joy, stress control and well-being. There are five gender differences in motivation – belonging, competition, weight control, rehabilitation and recognition. The primary factors that motivate men to participate in the sports activities are competition, social cooperation and health, while for women – social contact, competition and health. Men are more motivated by internal factors – strength, competition, challenge, fitness, while for women – external factors – weight control, appearance in society (Cerar et al. 2017).

A doctoral dissertation on happiness hormone has been defended in sports science in Latvia. The author of the work, Ieva Kundziņa, has proved that cycling, skiing and Nordic walking quench anger, aggression, fear, increase beta endorphins in the blood and give joy. From a biological point of view, well-being and happiness are not abstract states of psychology or physiology. These are biochemical processes, including also the experience of the physical body, and one of the biochemicals that causes happiness is endorphins, endogenous opioids released by the pituitary gland that act in a similar way to opiates, morphine and heroin, by blocking pain impulses and causing such a relaxed psychological state as analgesia, euphoria (Kundziņa 2015).

Exercises are one of the techniques that help to overcome stress. These release tension hormones, which occur when the body's automatic response to fights – escape syndrome, and generate energy to withstand tension, could not be avoided. The benefits of non-physical exercise can only be when at least minimal physical fitness and only then exercise is like recreation (Ozoliņa Nucho & Vidnere 2004).

A nine-month study found that Nordic walking classes were effective in improving psycho-emotional well-being and overweight: Overweight and obesity, low physical activity and lack of motivation to exercise are common among young adults. Thus, the objective of the study is to evaluate the efficiency of Nordic Walking for weight loss and improvement of functional and physiological state in young adults with overweight and obesity (Rudenko et al. 2019).

From the point of view of emotional well-being, students need to be aware of their abilities, cope with stress and be able to study productively. To perform the daily work necessary for students to feel physically healthy, the daily rhythm should include physical activity, study and recreation.

Equally important motives for students are muscle development, enjoyment of physical activity, and the fact that physical activity makes them feel good. The joy and physical activity habits of students who are motivated by internal factors such as good health, strength and endurance will be more sustainable.

Students focus on visual beauty (gait, posture, figure, body composition) and benefits that can be gained by looking good. Good looks raise self-confidence, self-esteem, self-esteem.

The undeniable motivating factor is that the acquisition of the course also gives practically much needed credit points to students.

## **Conclusions**

RSU students are motivated to engage with the Nordic walking because the classes take place outdoors, in the fresh air, in a tidy “picturesque” environment and mainly due to good health: to improve general health, improve mental well-being, provide joy and reduce stress levels. In general, it is an opportunity to disconnect from the mental workload within the study course.

Another important motivating factor is the development of biomotor skills in Nordic walking lessons: endurance, strength, flexibility, coordination of movements, etc.

Students are motivated by socialization opportunities: classes take place in a group and provide an opportunity to meet with study members in the open air, classes have a positive emotional background and classes are led by a competent, pleasant lecturer.

Students express their opinion to continue practicing Nordic walking after mastering the course “Nordic walking”, most students want to do it individually and, unfortunately, a small number of students participate in the Nordic walking competitions and festivals.

Students are motivated by the opportunity to acquire new personal skills, abilities, competencies within the study course, which can be further used for the benefit of their health and for the benefit of society / patients.

Nordic walking lessons promote the improvement of posture, gait and body composition, thanks to the acquisition of biomechanically correct, correct movements during the lessons.

No significant differences have been found in the motivating factors of Latvian and foreign students to practice Nordic walking.

The study was carried out in the academic year 2019/2020, which has also been affected by COVID-19. As a result of the research, the motivation of Riga Stradins University students to engage in Nordic Walking was updated as a very friendly and gentle physical activity and its special difference from other classes offered to students is that it takes place outdoors. The study has a practical significance because of the results obtained, as the study promoted the need to develop courses and offer other outdoor physical activities.

## References

- Allender S., Cowburn G., Foster C. 2006. Understanding participation in sport and physical activity among children and adults: a review of qualitative studies. *Health Education Research*, 2006 Dec; 21(6): 826–35. [viewed 20.03.2020.] DOI: 10.1093/her/cyl063.
- Cerar K., Kondrič M., Sindik J. 2017. The profiling of university of Ljubljana students according to their motives for exercise participation. *Zdravstveno varstvo*, 56(2), 107–114. [viewed 17.02.2020.] DOI: 10.1515/sjph-2017-0014.
- Chevan J, Haskvitz EM. 2010. Do as I do: exercise habits of physical therapists, physical therapist assistants, and student physical therapists. *Physical Therapy*, 2010 May; 90(5): 726–34. [viewed 02.02.2020.] DOI: 10.2522/ptj.20090112. Epub 2010 Mar 18. PMID: 20299411.
- Colić Barić I, Satalić Z, Lukesić Z. 2003. Nutritive value of meals, dietary habits and nutritive status in Croatian university students according to gender. *International Journal of Food Sciences and Nutrition*, 2003 Nov; 54(6): 473–484. [viewed 12.03.2020.] DOI: 10.1080/09637480310001622332.
- Duncan L.R., Hall C.R., Wilson P.M., Jenny O. 2010. Exercise motivation: a cross-sectional analysis examining its relationships with frequency, intensity, and duration of exercise. *International Journal of Behavioral Nutrition and Physical Activity*, 2010 Jan 26; 7: 7. [viewed 17.04.2020.] DOI: 10.1186/1479-5868-7-7.
- García P.F., Herazo B.Y., Tuesca M.R. 2015. Levels of physical activity among colombian university students. *Revista medica de Chile*, 2015 Nov; 143(11): 1411–8. Spanish. [viewed 25.01.2020.] DOI: 10.4067/S0034-98872015001100006.
- Kaupuzs A. 2011. Fiziskās aktivitātes veselības veicināšanai 60–75 gadus veciem cilvēkiem: promocijasdarbs. [Health-enhancing physical activities for 60–75 years old seniors] Rīga: Latvijas Sporta pedagoģijas akadēmija. [viewed 04.02.2020.] Available from: [http://www.lspa.eu/files/research/theses/A.Kaupuzs/Promocijas\\_darbs.pdf](http://www.lspa.eu/files/research/theses/A.Kaupuzs/Promocijas_darbs.pdf).
- Kundziņa I. 2015. Fiziskā rekreācija 45–55 gadus vecu cilvēku labsajūtas uzlabošanai. [Physical recreation to improve the well-being of 45–55 years old people]. [tiešsaiste]. Rīga: Latvijas Sporta pedagoģijas akadēmija, 2015. [viewed 04.02.2020.] Available from: [http://www.lspa.eu/files/students/Promotion/IEVA\\_KUNDZINA\\_kopsavilkums.pdf](http://www.lspa.eu/files/students/Promotion/IEVA_KUNDZINA_kopsavilkums.pdf).
- Love L.K., LeBlanc P., Inglis J.G., Bradley N.S., Choptiany J., Heigenhauser G., Peters S. 2011. The relationship between human skeletal muscle pyruvate dehydrogenase phosphatase activity and

- muscle aerobic capacity. *Journal of applied physiology*, 111 2, 427–34. [viewed 17.04.2020.] DOI: 10.1152/jappphysiol.00672.2010.
- Madanat H, Merrill RM. 2006. Motivational Factors and Stages of Change for Physical Activity among College Students in Amman, Jordan. *Promotion & Education*, 2006; 13(3): 185–190. [viewed 20.03.2020.] DOI:10.1177/175797590601300303.
- McArdle W.D., Katch F.I., Katch V.L. 2007. *Exercise physiology: energy, nutrition, and human performance*. Edition 6th ed. Published Philadelphia: Lippincott Williams & Wilkins, 2007., 1068 p.
- Meterniha K. 2010. Nūjošana. Saudzējošs un efektīvs spēka treniņš. [Nordic Walking protective and efficient power training], Rīga: Zvaigzne ABC, 80 lpp.
- Ozoliņa Nucho A., Vidnere M. 2004. Stress tā pārvarēšana un profilakse. [Stress management and prevention]. Apgāds: Biznesa partneri. Rīga. (Sērija: Psiholoģijas jūtu kontrole) 256 lpp.
- Park S., Kim J.K., Choi H.M., Kim H.G., Beekley M.D., Nho H. 2010. Increase in maximal oxygen uptake following 2-week walk training with blood flow occlusion in athletes. *European Journal of Applied Physiology*, 2010 Jul; 109(4): 591–600. [viewed 17.02.2020.] DOI: 10.1007/s00421-010-1377-y.
- Quadros T.M., Petroski E.L., Santos-Silva D.A., Pinheiro-Gordia A. 2009. The prevalence of physical inactivity amongst Brazilian university students: its association with sociodemographic variables. *Revista de Salud Pública (Bogota)*, 2009 Oct; 11(5): 724–33. [viewed 12.02.2020.] DOI: 10.1590/s0124-00642009000500005.
- Rao C.R., Darshan B., Das N., Rajan V., Bhogun M., Gupta A. 2012. Practice of Physical Activity among Future Doctors: A Cross Sectional Analysis. *International Journal of Preventive Medicine*, 2012 May; 3(5): 365–9. PMID: 22708033; PMCID: PMC3372079.
- Rees R., Kavanagh J., Harden A., Shepherd J., Brunton G., Oliver S., Oakley A. 2006. Young people and physical activity: a systematic review matching their views to effective interventions. *Health education research*, 21 6, 806–25. [viewed 17.02.2020.] DOI:10.1093/HER/CYL120.
- Rodríguez F., Palma X., Romo A., Escobar D., Aragón B., Espinoza L., McMillan N., Gálvez J. 2013. Eating habits, physical activity and socioeconomic level in university students of Chile. *Nutricion Hospitalaria*, 2013 Mar-Apr; 28(2): 447–55. Spanish. [viewed 17.02.2020.] DOI: 10.3305/nh.2013.28.2.6230.
- Runenko S.D., Achkasov E.E., Volodina K.A., Zhukovskaya A.V., Mushkambarov N.N., Butko D.Y. 2019. Nordic Walking as an effective physical activity for weight loss among overweight young adults in high schools. *The Journal of Sports Medicine and Physical Fitness*, 25 Oct 2019, 60(2): 294–301 [viewed 17.05.2020.] DOI: 10.23736/s0022-4707.19.10093-x.
- Ryan R.M., Deci E.L. 2000. Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 2000 Jan; 55(1): 68–78. [viewed 21.02.2020.] DOI: 10.1037//0003-066x.55.1.68.
- Sauka M., Priedite I.S., Artjuhova L., Larins V., Selga G., Dahlström O., Timpka T. 2011. Physical fitness in northern European youth: reference values from the Latvian Physical Health in Youth Study. *Scandinavian Journal of Public Health*, 2011 Feb; 39(1): 35–43. [viewed 25.01.2020.] DOI: 10.1177/1403494810380298.
- Scharhag-Rosenberger F., Meyer T., Walitzek S., Kindermann W. 2010. Effects of one year aerobic endurance training on resting metabolic rate and exercise fat oxidation in previously untrained men and women. *Metabolic endurance training adaptations. International Journal Of Sports Medicine*, 2010 Jul; 31(7): 498–504. [viewed 21.02.2020.] DOI: 10.1055/s-0030-1249621.
- Siliņš A. 2007. Darbinieku motivācija. [Motivation of employees]. Rīga: Lietišķās informācijas dienests, 2007. 177 lpp.
- Simon H.B. 2015. Exercise and Health: Dose and Response, Considering Both Ends of the Curve. *The American Journal of Medicine*, 2015 Nov; 128(11): 1171–7. [viewed 28.01.2020.] DOI: 10.1016/j.amjmed.2015.05.012.
- Teixeira P.J., Carraça E.V., Markland D., Silva M.N., Ryan R.M. 2012. Exercise, physical activity, and self-determination theory: a systematic review. *The International Journal of Behavioral*



Nutrition and Physical Activity, 2012 Jun 22; 9: 78. [viewed 25.01.2020.] DOI: 10.1186/1479-5868-9-78.

Tschentscher M., Niederseer D., Niebauer J. 2013. Health benefits of Nordic walking: a systematic review. American journal of preventive medicine, 44 1, 76–84. [viewed 20.01.2020.] DOI: 10.1016/j.amepre.2012.09.043.

Upeniece I., Vinberga I., Arnis V., Erts R. 2016. Women`s motivation to engage with the Nordic walking. Society, Integration, Education, VOL. III, 2016, P: 581–591 DOI: 10.17770/sie2016vol3.1474.

# IMPORTANCE OF AUDIO MATERIALS FOR TEACHING ENGLISH WITHIN CONTINUING PROFESSIONAL TRAINING PROGRAM WITH QUALIFICATION OF DISPATCHER (MINISTRY OF THE INTERIOR)

**Marina Kapuste**

Fire Safety and Civil Protection College, Kengaraga street 3/1, Riga, Latvia,  
marinacka20@yahoo.com, marina.kapuste@ucak.vugd.gov.lv

## Abstract

### **Importance of audio materials for teaching English within continuing professional training program with qualification of dispatcher (Ministry of the interior)**

**Key Words:** *audio materials, dispatcher (Ministry of the Interior), listening skills according to the specification of the field, use of English language, teaching methodology*

The Continuing Professional Training Program with qualification of Dispatcher (Ministry of the Interior) is specific in the context of the English language skills to be acquired and used in the future, significantly related to the professional competencies and characteristics of third-party (caller) levels of English language knowledge. The English language classes and content are unique in that they are based on the acquisition of learning topics, that enable to accomplish the tasks, that ensure the achievement of the course primary objective – sufficient skills, knowledge and competence to communicate with persons (callers) using English language and adapting to the caller's English language proficiency. Responsibilities of the dispatchers, connected with English language, include accepting and analysis of the calls to the single emergency number “112”. Communicating with the caller, finding out the necessary information (ask questions and understand the answers received, even if the caller's level of the English language is low, or if the “style” of English language is influenced by the caller's ethnicity) providing follow-up information, adjusting the type of conversation (word choice and speaking rate) to the caller's English language proficiency and psychological condition. Undoubtedly, due to the nature of the field, there are specific difficulties in receiving the information and communication, such as poor telephone connection, increased background noise, caller's accent, pronunciation, English language knowledge and emotional condition. That is why one of the most important linguistic skills developed within the curriculum is listening skills.

The choice and usage of audio materials depend on a number of influential quantitative and qualitative factors: an initial level of English of the target audience, the duration of the curriculum, and the professional experience of the audience in the field.

In a selective way created such a content of the curriculum (range of situations), which enables the learner to work in a variety of real-world situations and develop the necessary English language skills and competences, and, in the author's opinion, is most important in understanding the specifics of the language, including foreign language communication with people in extreme situations. The combination of all the linguistic, pedagogical and methodological components involved and their interactions are potentially the basis for a qualitative and productive increase in English language knowledge with the aim to improve the conversational and listening skills of dispatchers (Ministry of the Interior) answering telephone calls in their daily work, in such way providing the society with qualitative service of public administration.

## Kopsavilkums

### **Klausamo (audio) materiālu nozīme angļu valodas mācību priekšmeta pasniegšanā profesionālo tālākizglītības programmas ietvaros ar iegūstamo kvalifikāciju dispečers (iekšlietu jomā)**

**Atslēgvārdi:** *audio materiāli, dispečers (iekšlietu jomā), klausīšanās prasmes atbilstoši jomas specifikai, angļu valodas pielietošana, pasniegšanas metodoloģija*

Profesionālās tālākizglītības programma ar iegūstamo kvalifikāciju dispečers (iekšlietu jomā) ir apgūstamo un nākotnē pielietojamo angļu valodas prasmju kontekstā specifiska, būtiski pakārtota profesionālajai kompetencei un īpatnībām, kas saistītas ar trešo personu (zvanītāju) dažādiem angļu valodas zināšanas līmeņiem. Angļu valodas mācību nodarbības un to saturs ir unikāls, jo tiek balstīts uz tādu mācību tēmu apguvi ar kuru palīdzību iespējams izpildīt tos uzdevumus, kuri nodrošina prioritārā mācību kursa mērķa sasniegšanu – pietiekamas prasmes, zināšanas un kompetence saziņai ar personām (zvanītājiem) izmantojot angļu valodu un pielāgojoties zvanītāja angļu valodas zināšanu līmenim.

Dispečeru pienākumi, kuri ir saistīti ar angļu valodu, iekļauj sevī zvanu pieņemšanu un izvērtēšanu uz vienoto ārkārtas palīdzības izsaukumu numuru „112”. Komunikācija ar zvanītāju, nepieciešamās informācijas noskaidrošana (uzdot jautājumus un izprast saņemtas atbildes, arī gadījumos, kad zvanītāja angļu valodas zināšanu līmenis ir zems, vai arī angļu valodas izmantošanas “stilu” ietekmē zvanītāja etniskā piederība) informācijas par turpmāko rīcību sniegšana, pielāgojot sarunas veidu (vārdu izvēli un runāšanas tempu) atbilstoši zvanītāja angļu valodas zināšanas līmenim, kā arī psiholoģiskajam stāvoklim. Neapšaubāmi, ņemot vērā jomas īpatnību, informācijas pieņemšana un komunicēšana ir

saistīta ar specifiskām grūtībām, tādām kā nekvalitatīvi telefona sakari, paaugstināts fona trokšņu līmenis, zvanītāja akcents, izrunas īpatnības, angļu valodas zināšanu līmenis un emocionālais stāvoklis. Tieši tādēļ par vienu no svarīgākajām lingvistiskām prasmēm, kura tiek attīstīta mācību programmas realizācijas ietvaros ir klausīšanās prasme. Audio materiālu izvēle un pielietošana ir atkarīga no vairākiem ietekmējošiem kvantitatīvajiem un kvalitatīvajiem faktoriem: mērķa auditorijas sākotnējā angļu valodas zināšanu līmeņa, izglītības programmas īstenošanas ilguma, apmācāmo profesionālās pieredzes darbības jomā.

Selektīvā veidā ir izveidots tāds mācību programmas saturs (situāciju klāsts), kas apmācāmajam dod iespēju darboties daudzveidīgu reālu problēmsituāciju ietvaros un veidot nepieciešamās angļu valodas zināšanas un prasmes un, kas, autore sprāt, ir vissvarīgākais jau mācību laikā gūt izpratni par valodas specifiku tajā skaitā komunicējot svešvalodā ar cilvēkiem ekstrēmās apstākļos. Visu iesaistīto lingvistisko, pedagoģisko un metodisko komponentu kopums un savstarpēja to mijiedarbība potenciāli ir pamats kvalitatīvai un produktīvai angļu valodas zināšanu līmeņa paaugstināšanai ar mērķi uzlabot dispečeru (iekšlietu jomā) sarunvalodas un klausīšanās prasmes ikdienas darbā atbildot uz telefonzvaniem, tādā veidā sniedzot sabiedrībai kvalitatīvu valsts pārvaldes iestādes pakalpojumu.

## Introduction

Economic globalization and the free movement of people are factors, which significantly influence the spread and the use of the English language. Assessing modern trends, it can be concluded that English has become the language, the skills of which, are a prerequisite for successful cooperation between representatives of different nations. Taking into consideration the information mentioned above, it becomes clear that English and the level of the knowledge of it, plays an important role not only in the relationship between the private community, but also in the relationship between the state and the individual. Especially, taking into consideration the fact, that all public sector administration provide services to the public and society as such. Everyone, regardless of their minority group (including those who do not speak the language of the specific country) considers protection of the state. In Latvia, as in the whole Europe, the number of people visiting the country as tourists or starting studies and/or employment relations in Latvia is increasing every year. Undoubtedly, this tendency also affects the work of the public administration institutions and determines the need to face situations more often in daily work, when the fulfilment of the functions prescribed by the law, is closely related to the level of English language skills of the employees of the institution. The information mentioned above also applies to the institutions subordinated to the Ministry of the Interior and their structural units. Officials (employees) more often face the situations when knowledge of English is required for the performance of their direct service (work) duties. To the greatest extent possible, the above statement applies to those, who perform their duties in operational management units. 112 is the single emergency number to be called in the event of danger to life, health, safety, the environment or property. The operation of the specific telephone number is provided in all Member States of the European Union. Consequently, it could be concluded that, if necessary, the overwhelming majority of people are informed about the possibility to use the mentioned emergency number to communicate with the responsible authorities and receive assistance. Undoubtedly, those who speak the language of a particular country, would use it during communication, while those who do not know the official language, would use English most often. Evaluating the materials available in practice, it could be

concluded, that in most cases three languages are used – Latvian, Russian and English. In addition, it should be mentioned, that the number of calls using English language is increasing every year. Information mentioned above, confirms the fact that the use of English is also strengthening, becoming more and more obvious in Latvia and could not be ignored. Continuing to provide the functionality of the single emergency call number in the context of communication language, the aspect of human resources should be brought in front. Which professionals and owners of which professional competencies are the people whose main task is to listen to those who have called for help using the emergency number? The functionality of the 112 single emergency call number is provided by the State Fire and Rescue Service (hereinafter – SFRS), that is why telephone calls are received and information is accepted by SFRS officials – dispatchers.

The direct responsibilities of the dispatchers related to the need to communicate in English – receiving and evaluating calls and reports of emergencies, as well as providing the caller with the necessary information. In cases where the dispatcher is unable to fulfil these basic responsibilities due to a lack of English language skills, he/she will not be able to ensure coordinated follow-up by the responsible services. As a result, the optimal and prompt use of the funds and human resources available to the services will not be ensured, and even more dramatically, no assistance would be provided to the person in emergency.

Receiving information and communication could be connected with specific difficulties. The fact that SFRS officials, who start the service as dispatchers have different levels of previous education, life experience (resulting from age differences), different level of knowledge of the initial English language also has an impact. In addition, it should be noted, that in the course of their duties, dispatchers may use English during communication only on the basis of the audio component, as any possibility of non-verbal communication during a telephone conversation disappears, which is a significant circumstance and must be kept in mind during education process. The need to apply English language skills only at the audio level puts forward a training program – a Continuing Professional Training Program with qualification of Dispatcher, specific goals to be achieved. The program should be centred on a narrow (not typical) sphere of application of English language, which is developed and based mainly on the audio-verbal component, giving priority to the most important linguistic skill – listening skill.

The aim of the research is to reflect and substantiate the need for the use of audio materials, as well as the effectiveness of the English language training process for the circle of persons for whom the only form of communication in daily work (performing their official duties) is telephone communication.

In order to achieve the aim of the research, the author sets the following objectives:

1. to reflect the specifics of the performance of the duties of the dispatchers in the context of the assigned work tasks, taking into account and highlighting the problems arising from communication in a foreign language;
2. describe the main problems related to communication and resulting from different levels of English language skills;
3. to explain the problems of “listening” and “hearing” and the meaning of these concepts within the implementation of the curriculum, training program;
4. to reflect the impact of the actual situation (accident, emergency, etc.) on the possibilities of obtaining information, in cases where communication takes place in English, which is not the native language of the caller (information provider);
5. substantiating the efficiency of the implementation of the training program based on audio materials.

Research methods of the article. Logical – constructive method, with the help of which the author creates logical constructions and identified the existing problems in the work of dispatchers (Ministry of the Interior) arising from the need to communicate in English, as well as offers a solution within the learning process to reduce the impact of problems on work results. Synthesis method – combining individual elements of the research object into a single whole – in the system to study their interconnections, that is, the work identifies interconnections between the responsibilities of the dispatchers service – functions and problems arising from communication in English and affects the quality and efficiency of the service provided by the public administration. After identifying the existing systemic connections, the author makes suggestions on the possibilities of improving the training program, that is, on the choice of a teaching methodology based on the use of audio materials.

The problem of the research – the use of audio material is the only reasonable and logical method (aid) that could be used within the implementation of the program for teaching English within Continuing Professional Training Program with qualification of Dispatcher, to ensure the achievement of the goals set in the program.

### **Teaching English within Continuing Professional Training Program**

The aims of language learning and teaching should be based on the needs of the language learner and society, on the tasks, activities and processes that need to be carried out to meet these needs, and on the competencies and strategies that language learners need to develop. A competent language user uses his/her knowledge, skills and attitudes to carry out the activities productively. This is done as widely as possible, as it is not known which activities would be important for the language learner in the future. For communication to be effective, the language learner must acquire

the necessary competencies, the ability to use these competencies, the ability to use the necessary strategies to apply competencies (Eiropas kopīgās pamatnostādnes valodu apguvei: mācīšanās, mācīšana, vērtēšana. 2006: 118).

When calling the emergency number 112, the caller communicates with the dispatcher (Ministry of the Interior), whose direct duties are:

- accept and analyse calls and accident reports
- to maintain contacts with the subdivisions of the State Fire and Rescue Service
- to maintain in contact with other operational and special services
- involve or send them (subdivisions, services) to the accident scene
- communicate with the caller and provide information if necessary. Due to inadequate English language knowledge, skills and abilities, the dispatcher would not be able to continue fulfilling duties, will not be able to establish contacts with SFRS subdivisions and other operational and special services: connect with the relevant fire and rescue unit, police station, emergency operational management service.

Being aware of the difference between hearing and listening is an important feature for learning and teaching listening effectively: „Hearing is the reception of sound, listening is the attachment of meaning to the sound. Hearing is passive, listening is active” (Kline 1996: 6–7). “Simply having good hearing does not make one a good listener. Many people who have perfectly good hearing are not good listeners. Having good hearing does facilitate one’s perception of sound, but good listeners do not simply hear words – they focus on the meaning” – states J.A.Kline (Kline 1996: 6). The practical use of English by the dispatcher is related only to the use of the verbal component, that is, non-verbal communication and any kind of visualization completely disappear. There is no non-verbal language (gestures, facial expressions, etc.), no use of typical language (no eye contact, no emotions). For this reason, one of the most important linguistic skills – listening skills – comes in front within the curriculum. Productive listening is a precondition for successful operation and functioning of dispatchers, the result of it – efficient and optimal response of special services, the result of it – preservation of human health and life, the preservation of values/property, which is the main goal of the service.

During the work, the dispatcher performs several activities simultaneously: communicates with the caller, records the necessary information in the system, communicates with the necessary structural unit or service. Dispatcher use absolute multitasking approach fulfilling their duties. Penny Ur in her book “Teaching Listening Comprehension” in the chapter – Listening to English as a foreign language, gives an opinion, that the main difficulties that student face while learning the language are: Hearing the sounds, understanding intonation and stress, coping with redundancy and noise, predicting, understanding colloquial vocabulary, fatigue, understanding different accents,

using visual and aural environmental clues (Ur 2007). Also C.C.M. Goh emphasises that studies have shown when speaking about listening skills in the sphere where English language is a second and foreign language learning, show the fact that Listening is one of the most difficult skills for language learners (Goh 2000). In the performance of their direct duties, dispatchers are faced with a variety of nuances and specifics of work, which often go beyond the frames stipulated in their algorithms. Receiving and communicating information could be associated with specific difficulties (caller-centred aspect):

- noise, poor quality telephone communications
- emotional state of the caller
- accent/pronunciational features of the caller
- level of English language (English is the 2nd–3rd language)
- English "style" of language use (influenced by the caller's ethnicity)
- word choice, speaking tempo.

These technical and man-made problems could often affect one of the main and the most important responsibilities of dispatchers to receive and evaluate a call. In this regard, it should not be forgotten that the dispatcher himself/herself might create potential difficulties in achieving the goal. Receiving and communicating information could be associated with specific difficulties (dispatcher-centred aspect):

- noise, poor quality telephone communications
- level of English language (vocabulary, questioning, word choice, etc.; English is the 2nd–3rd language)
- ability to understand received answers
- ability to provide information at the required level (objective, important, appropriate to the psychological condition).

There are also many coincidences with the above in the article of the D.R.Saraswaty „Learners’ difficulties and strategies in listening comprehension” (Saraswaty 2018). There is no denying the fact that this is only about English-speaking callers. Latvia has a large number of residents, as well as tourists, guests and students. Dispatchers also face specific difficulties for the following reasons: Dispatcher's age, education, experience and other factors that affect the provision of information and advice, the ability to distinguish the severity of the situation. A.Anderson and T.Lynch stated that successful listening could be connected with four different ways, how the student could accept incoming speech: 1. The listener may not hear what was said; 2. The monologue could contain such sentences, phrases, words, which listener can hear in an appropriate way, but is not able to understand due to linguistic or semantic problems; 3. The listener could understand the speaker, but have switched off the consciousness; 4. The listener is accepting

the information in the full amount and is able to cooperate and react to it in the necessary level (Anderson, Lynch 2003: 5–6).

The Continuing Professional Training Program with qualification of Dispatcher (Ministry of the Interior) of the Fire Safety and Civil Protection College is specific in the context of the English language skills to be acquired and used in the future, significantly related to the professional competencies and characteristics of third-party (caller) levels of English language knowledge. The Continuing Professional Training Program as well as the subject of English language are specific, significantly subordinated to professional competence, unique (only in Latvia), subordinated to a specific service of a public administration institution. The use of audio materials and the development of listening skills (in context) is a priority, as it is the only tool through which information could be received from the caller. During the learning process, real and factual audio materials are used. The co-operation between the State Fire and Rescue Service (as a practitioner in the specific field) and the educational institution that implements the Continuing Professional Training Program with the acquired Dispatcher's qualification gives the opportunity to make full use of real and actual audio materials, which allows learning to focus on action in the context of real events, rather than being limited to fictional problem-solving. In a selective way created such a content of the curriculum (range of situations), which enables the learner to work in a variety of real-world situations and develop the necessary English language skills and competences, and, in the author's opinion, is most important in understanding the specifics of the language, including foreign language communication with people in extreme situations. The choice and usage of audio materials depend on a number of influential quantitative and qualitative factors. One of these factors is the initial level of English proficiency of the target audience. Unfortunately, learners who join an institution in order to participate in the program do not meet common criteria and have a wide variety of English language skills. This fact complicates the learning process and creates the need to adapt to the situation on the part of the lecturer. Another factor is the duration of the implementation of the educational program, which unfortunately is short enough to form a full-fledged and comprehensive application of all methodological and linguistic methods and techniques. Last but not the least, the trainees' professional experience in the field should be mentioned. Dispatchers who come to participate in the program vary in experience from 1 month of service to 1–2 years of service in the respective profession.

## **Conclusions**

The combination of all the linguistic, pedagogical and methodological components involved and their interactions are potentially the basis for a qualitative and productive increase in English language knowledge with the aim to improve the conversational and listening skills of dispatchers (Ministry of the Interior) answering telephone calls in their daily work, in such way providing the



society with qualitative service of public administration. Taking into consideration information listed in the article, the author concludes that in the current situation, the use of English in Latvia is becoming more common for SFRS officials, who ensure the operation of the single emergency call number, systematic and systemic improvement of the English language skills is required. When developing the non-formal adult education program, the data available in the Office of Citizenship and Migration Affairs of the Ministry of the Interior on the platform that have received residence permits in the Republic of Latvia should be taken into consideration. Given the fact that persons with a residence permit form a close and lasting link with the country in question, it is possible to identify and predict, using an analytical method, possible trends in the use of English among specific groups of people (“Arabic English”, “Chinese English”, etc.). For example, there is currently a large enough community of Pakistani nationals in Latvia (with a tendency of this community to grow). That is why, it is possible to emphasize the peculiarities of the use of English that are characteristic of immigrants from a particular region. In order to ensure both the study programs – Continuing Professional Training Program with qualification of Dispatcher, as well as the implementation of adult non-formal education and the effectiveness of the feasible programs, it is necessary to improve the library of the audio recordings. The audio recording library should be made up of those recordings that have been made while receiving real calls and where all (or a part) of the conditions that cause difficulties for the dispatchers during communication in English have been recorded. The author points out that the use of such practical audio materials is one of the main aspects that would ensure the effective practical application of theoretical knowledge, which is undoubtedly the main goal of the study program – the preparation of a knowledgeable and effective specialist.

## References

- Anderson A., Lynch T. 2003. *Listening*. Oxford: Oxford University Press, pp. 5–6.
- Eiropas Padome. Valodas politikas nodaļa. 2006. Eiropas kopīgās pamatnostādnes valodu apguvei: mācīšanās, mācīšana, vērtēšana. Rīga: Madonas poligrāfists, 118 lpp.
- Goh C.C.M. 2000. A cognitive perspective on language learner’s listening comprehension problems. In: *System*, 28(1), pp. 55–75.
- Kline J. A. 1996. *Listening Effectively*. AU-4. April 1996. Maxwell Air Force Base, Alabama: Air University Press, pp. 6–7.
- Sarawaty D.R. 2018. Learners’ difficulties and strategies in listening comprehension. *English Community Journal*, pp. 141–143.
- Ur P. 2007. *Teaching Listening Comprehension*. Cambridge: Cambridge University Press, pp. 11–20.

# TIESĪBU ZINĀTNE / LAW

## THE RIGHT OF A PERSON TO A FAIR TRIAL THROUGH THE PRISM OF JUDICIAL INDEPENDENCE AND SUBMISSION TO THE LAW

**Marita Oliņa**

Rīga Stradins University, Dzirciema street 16, Rīga, LV-1007, marita.pasts@gmail.com;  
CITA pieeja, Pērnavas 44 – 20, Rīga, LV-1009, cita-pieeja@inbox.lv

### Abstract

**The right of a person to a fair trial through the prism of judicial independence and submission to the law**

*Key words: fair court, judicial independence, submission to the law of a judge*

The state has guaranteed the right to a fair trial to all persons who have applied to court to defend their rights and legitimate interests. Legal provisions provide for the independence of a judge, at the same time determining that a judge is submitted to the law or subject to the law. Consequently, the state power has strictly limited the independence of a judge, imperatively stipulating that the decision of a judge for the legal settlement of a specific situation must comply with the legal regulation.

Practice shows that a judge's decision for the legal settlement of a specific situation does not always comply with the law, the letter and the spirit of the law. In Latvia, there is a three-tiered court system at the legislative level. This gives the false impression that if a court decision is made in violation of the law, then it can be appealed to the court of the next instance. In practice, this possibility can be used by a small number of litigants. Therefore, if a judge has made a “wrong” decision – ignoring the law corresponding to the legal settlement of a particular situation, the right to a fair trial is not ensured.

The possibility of being heard in a court of second instance does not in itself guarantee the right to a fair trial. The application of the law corresponding to the specific more legal situation of the panel of judges is important.

The work deals with the current problems of practice, legal regulation and court practice in the implementation of state-guaranteed rights. The work discusses the issues relating the correlation of the principle of a fair trial with the principle of judicial independence and submission to the law, as well as the application of these principles in Latvia. Analysing a person's right to a fair trial, an insight into the applicable legal provisions is provided. The objectives set by the legislator and their compliance with the state policy in ensuring a fair trial have been analysed.

### Kopsavilkums

**Personas tiesības uz taisnīgu tiesu caur tiesnešu neatkarības un likumpadošanās prizmu**

*Atslēgvārdi: taisnīga tiesa, tiesneša neatkarība, tiesneša likumpadošanās*

Valsts ir garantējusi tiesības uz taisnīgu tiesu ikvienam, kas vērsies tiesā aizstāvēt savas tiesības un likumīgās intereses. Tiesību normas paredz tiesneša neatkarību, tai pat laikā nosakot, ka tiesnesis ir likumam padots jeb pakļauts likumam. Līdz ar to, valsts vara ir strikti aprobežojusi tiesneša neatkarību, imperatīvi nosakot, ka tiesneša lēmumam konkrētas situācijas tiesiskam noregulējumam ir jāatbilst tiesiskajam regulējumam.

Prakse liecina, ka tiesneša lēmums konkrētas situācijas tiesiskam noregulējumam ne vienmēr atbilst likumam, likuma burtam un garam. Latvijā likumdošanas līmenī pastāv trīspakāpju tiesu sistēma. Tas dod maldīgu iespaidu, ka, ja tiesas lēmums pieņemts neievērojot likumu, tad to var pārsūdzēt nākamās instances tiesā. Praksē šo iespēju var izmantot neliels prāvnieku loks. Tādēļ, ja tiesnesis ir pieņēmis „kļūdainu” lēmumu – ignorējis konkrētas situācijas tiesiskam noregulējumam atbilstošo likumu, tiesības uz taisnīgu tiesu netiek nodrošinātas.

Iespēja būt uzklaušātam nākamās instances tiesā pati par sevi nenodrošina tiesību uz taisnīgu tiesu nodrošināšanu. Būtisks ir tiesnešu kolēģijas konkrētai tiesiskākai situācijai atbilstošā likuma piemērojums.

Darbā skatītas prakses aktuālās problēmas, tiesiskais regulējums un tiesu prakse valsts garantēto tiesību īstenošanā. Tiek aplūkots taisnīgas tiesas principa korelācija ar tiesneša neatkarības un likumpadošanās principu, kā arī to piemērošana Latvijā. Analizējot personas tiesības uz taisnīgu tiesu īstenošanu, sniegts ieskats attiecināmajās tiesību normās. Analizēta likumdevēja izvirzītie mērķi un to atbilstība valsts politikai taisnīgas tiesas nodrošināšanā.

### Introduction

The will of the State and people of Latvia, the Independence of which was proclaimed on 18 November 1918, to live in a state governed by the rule of law is confirmed in the Constitution of the

Republic of Latvia (Satversme). But only with the amendments to the Constitution of 15 October 1998 is the regulation of the fundamental rights of persons included in the state constitution. The rule of law requires that we all comply with the law: both as citizens, as individuals, and as representatives of all branches of government: the executive, the legislature and the judiciary. (Kūtris 2010)

The legislator has incorporated into the laws the rules of public conduct in legal relations, as well as has guaranteed that the state will ensure compliance with these regulations. One of the objectives of the state declared by the President is “to ensure that every inhabitant of Latvia will be able to fully implement himself as a legal entity, who will no longer depend on the arbitrariness of institutions.” (Levits 2019)

### **Right to a fair trial**

Where a dispute is not resolved by agreement, it can be tried to be resolved in court. The right to a fair trial is one of the universally recognized fundamental human rights in the world, expressed *expressis verbis* and enshrined in Article 10 of the UN Universal Declaration of Human Rights, Article 14 of the International Covenant on Civil and Political Rights (ICCPR), Article 6 of the Convention for the Protection of Human Rights and Fundamental Freedoms, better known as the European Convention on Human Rights, Article 47 of the Charter of Fundamental Rights of the European Union (CFR). Latvia is bound by these regulatory enactments (Satversme, Article 89).

The right to a fair court is also included in Article 92 of the Satversme: “Everyone has the right to defend his or her rights and lawful interests in a fair court.” It requires “the right to a hearing in at least one instance” (Slampe 2020: 23), but then it should be a high-quality hearing.

Taking into account the importance of the right to a fair trial in a democratic society, the guarantees deriving from the right to a fair trial should not be interpreted restrictively. (Čepāne 2005). These rights include access to justice, the right to appeal any judicial decision, the right of procedural participation, submission and evaluation of evidence, the right to be present at the hearing and to express his or her opinion, the right to be heard within a reasonable time, the right hearing the case within a reasonable time, the right to a reasoned judgment, effective execution of the judgment, independent and objective court, observance of the presumption of innocence and adequate compensation in case of violation of rights. (Briede 2011: 129–160). In Latvia, the meaning of a person's right to a fair trial is disclosed in the Law On Judicial Power and other laws. While Article 47 of the Charter of Fundamental Rights of the European Union (CFR) emphasizes that this right must provide that “everyone is entitled to a fair and public hearing within a reasonable time”.

According to Article 6 of the Convention for the Protection of Human Rights and Fundamental Freedoms (The European Convention on Human Rights) *expressis verbis* the right to a

fair trial usually relates to civil legal and criminal legal relations. While the European Court of Human Rights has stated that this right must also be guaranteed in administrative legal relations when civil rights are infringed by an act or omission of the public administration (ECHR 1987).

In criminal legal relations and civil legal relations, the task of a court in accordance with the law is to ensure a fair settlement of legal relations, but for case law – “the basic task of administration of justice – to find the fairest and most useful solution to a dispute” (Senate 2017). In its turn, the task of an administrative court is to exercise control over the activities of the executive power in specific public law relations.

### **Judicial independence**

The court is not a mystical formation, but the people – the lawyers who act as judges – to settle the dispute between the parties. Judicial independence is determined by law (Satversme, Article 83; Law on Judicial Power, Sections 1 and 13). The law does not allow any restrictions, pressures and influences, and any influencing of judges or interference with the administration of justice shall be punished. In accordance with Paragraph 2 of the Basic Principles on the Independence of the Judiciary of the United Nations, approved in Milan in 1985, the judiciary shall decide matters before them impartially. This is also emphasized in Section 17 of Law On Judicial Power.

Neutrality in legal proceedings is prescribed by law, but reality tends to be far from this statutory setting. (Osipova 2010). Judges mention the media, parties and society as the most important influencers. Research shows that the mechanisms built into the law are sufficient and adequate, but individual cases of corruption, influence from another judge, a well-known lawyer or a politician individual influence from another judge, a well-known lawyer or a politician, still exist. (Osipova 2010). But no one can be influenced more than he or she allows. To read or not to read the media, to listen or not to public opinion or politicians – it is the judge's choice.

Judicial independence is an important fundamental principle of the judiciary. But this is not an end in itself. It is a tool for the protection of human rights. It is in the public interest to have a fair judgment, and a fair judgment requires the professionalism and ethical conduct of a judge, as well as judicial independence. (Zvejniece 2017). However, it is not the case that a judge is absolutely independent and not responsible for the quality of the mission entrusted to him or her by the state. (Torgāns 2017). Judicial independence is organically limited by the principle of people's sovereignty, the principle of the right to a fair trial (Osipova 2010), but especially by submission to the law.

### **Submission to the law of a judge**

Judges are subject to the law (Satversme, Article 83) and submitted to it (Law on Judicial Power, Sections 1, 2, 10, 13, 68 and 89). The law is the basis on which a judge acquires legal rights

and obligations. The judge must exercise his or her rights and perform his or her duties in good faith.

A judge swears “to adjudge strictly in accordance with the Constitution and the laws of the Republic of Latvia.” (Section 68 of the Law On Judicial Power). A judge who has to settle a particular legal dispute in a particular court proceeding must search for a norm appropriate to the specific case and examine its meaning by means of interpretation in order to determine whether the legal consequences provided for in the norm are applicable to the specific factual situation. (Horns 2000)

Courts report on their productivity in 2020: “In the period from 13 March to 24 April, 4928 cases were received in the courts of first instance, of which 4,923 cases were examined ...” (Court 2020). 99.9% of the received cases were examined. Unfortunately, the public’s opinion about the court system in Latvia suggests to think about improving the quality of court proceedings. In 2019, about 40% of the population trusted the judicial system (Gailīte 2019), 60% do not trust it, but in 2020, out of 1436 respondents, 1150 respondents – 80 % – do not trust it (Bojārs 2020).

### **Judicial independence and submission to the law of a judge in action**

The existence of a three-tiered court system with collegial adjudication gives the impression that the implementation of the right to a fair trial is ensured. In practice, the court of first instance is usually heard by a single judge, but the court of appeal has the right not to accept the appeal or there is no legal basis to hear it. For example, in the civil case No. C33472117 concerning the annulment of an inheritance contract, the factual situation – the action was brought in court by the testators themselves, but they died before the substantive proceedings and the legal heir has asked the court to recognize him as the successor. The judge decides: to stay the court proceedings in the civil case No. C33472117 on contesting the inheritance contract until [...] and [...] identification of successors. Bases for it: Section 214, Paragraph one, Section 216, Paragraph one, Section 217 and Section 230 of the Civil Procedure Law (CPL). There is no decision on admission of the heir to participate in the case, suspension of the inheritance case and notification of information to the notary. The court's judgment must not allow the rights to be abused “even if formally everything is in order with the judgment.” (Zvejniece 2017)

In legal action, not the intention, but the objective result of the action has legal significance. (Jakubaņecs 1998: 114) The result of a judge's decision:

- the legal heir is not allowed to participate in the case, consequences – he cannot challenge the decision and exercise other rights;
- the court has imposed an obligation on the notary to issue a certificate of inheritance to the person whose right to inherit has been challenged by the testators themselves in court;

- the Land Register has registered the property rights to the property of the person whose right to inherit is being examined in the court.

The court has not fulfilled the legal obligation (Section 315 and Section 282 of Notarial Law, Section 1 of the Civil Procedure Law (CPL), Section 3 of the Law On Judicial Power) to suspend the inheritance case conducted by a notary, to resolve a dispute regarding the right of inheritance in court and to protect the rights of a person.

In accordance with Section 7 of the Law On Judicial Power, the court ascertains the lawfulness and validity of an administrative act or actual action of an institution or public official. It is perfect, but in practice it does not happen. For example, the case No. C30476118 was initiated on 19.07.2017. According to Section 632 of the Civil Procedure Law (CPL) a complaint shall be examined at a court hearing within 15 days, but in fact it was completed on 06.01.2020. – the examination lasted for 2.5 years.

In case No. C30476118 one of the grounds of the complaint is non-compliance with Section 556 and Section 557 of the Civil Procedure Law (CPL) in the statement drawn up by the public official. In the reasoned part of the court decision, it leads to an erroneous conclusion that what is written in the statement – “Bags with clothes” and photos with bags are in accordance with Section 576 of the Civil Procedure Law (CPL) – “in inventorying the tangible properties, their individual characteristics shall be indicated ...” and in accordance with Section 577 of the Civil Procedure Law (CPL) – “the name of each article inventoried and its individual features”, “the appraisal of each individual article”. The court has not exercised control over the activities of the executive and the legality of the document.

The Case No. 1A33104220, received in court on the 28<sup>th</sup> of April in 2020, vividly shows the result of a quick examination of the case. The person has submitted a complaint to the court regarding the decision and actual action of the institution. On the 7<sup>th</sup> of May in 2020, the judge made a decision regarding the examination of the case in a written procedure and also made a judgment – to reject the complaint, the judgment shall not be appealed. No substantive analysis of the merits of the complaint has been carried out. The judge has not observed the legal rights of the complainant – to receive information about the proceedings regarding the initiation of the case, its examination. The judge has not provided an opportunity to express an opinion and other legal rights. As a result, the judge has not complied with the law.

In turn, the mandatory provision included in Section 3 of the Law “On the Operation of State Authorities During the Emergency Situation Related to the Spread of Covid-19” – “the state institutions do not have the right to reject claims of persons against the state for damage” turns out to be non-binding for the District Administrative Court. It demanded payment of the State fee and then refused to see the claim.

But the cases No. C33407217 and No. C33610818 and No. C33256220 are about the payment of management and utility bills. The court decides that the bill is the basis for deciding that the bills must be paid. The court has not ascertained the objective truth (Section 17 of the Law On Judicial Power) – whether the services have been provided.

These examples are common typical examples of the legal nihilism of individual judges. In all these cases, the court did not follow the law. As if we live in the state governed by the rule of law, but quite often the employer's regulations (only political ones?) are valued higher than the norms of the state's basic law. (Kūtris 2010) Times change, but what about virtues? Researching the legal framework and the practice of its application, it must be concluded that “the biggest problems in Latvia are at the level of application of legal norms.” (Levics 2000: 502). There are judges who are passionate about their independence and forget about the rule of law. In these cases, state responsibility will be assessed by the European Court of Human Rights.

### **Responsibility of the judge and the state for ensuring the right to a fair trial**

In the 18<sup>th</sup> century, Charles Louis Montesquieu stated: “In order to prevent the control of forces such as tyranny and authoritarianism, man has been trying to evolve certain control mechanisms.” (Montesquieu 1955). The judiciary is not really supervised, which allows for legal nihilism even in court.

Our legal system is based on two basic principles – democracy and the rule of law (Kūtri 2010). The state has undertaken the obligation to ensure a court that will adjudicate the case in accordance with the law (Satversme, Articles 89 and 92). The state has an obligation to take active actions (Briede 2011:125) to ensure the right to a fair trial. In order for a person to be able to exercise his or her rights, the state must create an institutional structure that allows the person to defend his or her rights as effectively and fully as possible and protects them from infringement of rights (Osipova 2010).

An essential element of the rule of law mechanism is the individual's right to appeal to the next court. It must be externally controlled. However, it is not effective enough because it depends on the individual's willingness to fight for his or her rights in court, and in the case of corruption and conflict, the individual has no interest in appealing to court (Levics 2002).

The public has the impression that a judge has immunity and is not responsible for his or her professional activities. It is not like this. The law does not provide for the financial liability of a judge (Section 13 of the Law On Judicial Power) for an unlawful or unfounded court judgment. The Judicial Disciplinary Liability Law [JDLL] stipulates their disciplinary liability for intentional violation of the law during examination of a matter in court and failure to perform his or her duties of employment or allowing gross negligence – disciplinary sanction – annotation, reprimand, reduction of the salary (Section 1, Section 2, Section 7 of the Judicial Disciplinary Liability Law).

Section 291 of the Criminal Law provides the deprivation of liberty for a period of up to three years or temporary deprivation of liberty, or community service, or a fine for knowingly rendering an illegal judgment or taking an illegal decision. The will to apply them is needed.

The rule of law is a mandatory element of Latvia's constitutional identity (Levics 2020), which affects “the lives of all people as members of a particular society. And it is lawyers who protect, strengthen and develop the basic principles of democracy – that is their professional duty. It must be understood that the disregard for the rule of law by individuals jeopardizes the importance of this principle and, consequently, democracy in society as a whole.” (Kūtris 2010). Everybody must work hard to make the big work go on! (Rainis 1905:56)

## Conclusions

The state has guaranteed the right to a fair trial to all persons who have applied to court to defend their rights and legitimate interests. In Latvia, there is a three-tiered court system at the legislative level, but it is not possible to use it for everyone.

The state power has strictly limited the judicial independence, imperatively stipulating that a judge's decision must comply with the law regulating the specific situation.

The solution to the right to a fair trial, the judicial independence and submission to the law is not to amend the law or issue a new law. Only the judge himself can ensure the independence of his decisions from external influences and their compliance with the law regulating the specific situation.

If a judge does not comply with the law when administering justice, then one of the solutions to the problem and a way to ensure a person's right to a fair trial is public intolerance and self-cleaning of the judicial system from judges acting dishonestly.

The fundamental human rights guaranteed by the Constitution – the right to a fair trial have been ensured to a person by the Latvian state if the decision adopted by the court is timely and based on legal norms corresponding to the specific case and the legal consequences are applicable to the specific factual situation. They are fair and humane.

## References

- ANO Vispārējās cilvēka tiesību deklarācija*. Pieejams (Accessed): <https://www.mfa.gov.lv/ministrija/latvijas-parstavis-starptautiskajas-cilvektiesibu-institucijas/individam-tiesi-pieejamas-apvienoto-naciju-organizācijas-cilvektiesibu-aizsardzibas-proceduras/vispareja-cilvektiesibu-deklaracija> [skatīts 12.05.2020.].
- Bojārs G. 2020. *Tieša runa: «Tiesas spriedums Zolitūdes traģēdijas lietā»*. 19.2020. LSM.LV Pieejams (Accessed): <https://ltv.lsm.lv/lv/raksts/19.02.2020-tiesa-runa-tiesas-spriedums-zolitudes-tragedijas-lieta.id180522/> [skatīts 16.06.2020.].
- Briede J., Viškele I., Litvins G., Bitāns A., Danovskis E. 2011. 92. *Ikviens var aizstāvēt savas tiesības un likumiskās intereses taisnīgā tiesā. Ikviens uzskatāms par nevainīgu, iekams viņa vaina nav atzīta saskaņā ar likumu. Nepamatota tiesību aizskārums gadījumā ikvienam ir tiesības uz*



*atbilstīgu atlīdzinājumu. Ikvienam ir tiesības uz advokāta palīdzību. Latvijas Republikas Satversmes komentāri.* Latvijas Vēstnesis, 2011.

Čapāne I. *Tiesības uz taisnīgu tiesu kā personas pamattiesības.* 27.09.2005. Juristu Vārds Nr. 36 (391) Pieejams (Accessed): <https://juristavards.lv/doc/117420-tiesibas-uz-taisnigu-tiesu-ka-personas-pamattiesibas/> [skatīts 16.06.2020.].

Eiropas Cilvēktiesību tiesas 1987. gada 15. oktobra lēmums lietā “M v UK”, iesnieguma Nr. 13284/87 [skatīts 16.04.2020.].

*Eiropas Cilvēktiesību un pamatbrīvību aizsardzības konvencija.* Pieejams (Accessed): <https://likumi.lv/ta/lv/starptautiskie-ligumi/id/649> [12.05.2020.].

*Eiropas Savienības Pamattiesību harta.* Pieejams (Accessed): <https://eur-lex.europa.eu/legal-content/LV/TXT/?uri=CELEX%3A12012P%2FTXT> [12.05.2020.].

Gailīte D. 2019. *Tiesu varu neatkarība ir katra cilvēka interesēs.* Jurista Vārds 05 (1063): 9. lpp.

Horns N. 2020. *Ievads tiesību zinātnē un tiesību filozofijā. Likums un tiesības,* Nr. 7(11), jūlijs 2000, 2. sējums.

Jakubaņecs V. 1998. *Juridiski – terminoloģiskā, skaidrojošā vārdnīca juristiem iesācējiem.* Rīga: P&G.

Kūtris, G. 2010. *Jurista īpašais pienākums pret valsti.* Jurista Vārds 3 (598).

*Latvijas Republikas Augstākās tiesas 2017. gada 17. februāra sprieduma lietā Nr. SKC-67/2017 (C28403009). 6. punkts.* Pieejams (Accessed): <http://www.at.gov.lv/lv/judikatura/judikaturas-nolemumu-arhivs/civillietu-departaments/klasifikators-pec-lietu-kategorijam/civilprocesa-likums/adala-visparigie-noteikumi-1-126pants/tresa-sadala-pieradijumi-92.-126.pants> [skatīts 14.05.2019.].

*Latvijas Republikas Satversme: Latvijas Republikas likums. 01.07.1993.* Latvijas Vēstnesis, 43. Aktuālā redakcija [www.likumi.lv](http://www.likumi.lv). Pieejams (Accessed): <https://likumi.lv/ta/id/57980-latvijas-republikas-satversme> [21.11.2019.].

Levics, E. 2002. *Valsts pārvaldes iekārtas likuma koncepcija.* 4. nodaļa. Tiesiskuma kontrole. 1. Pamatnostādnes. Piektā daļa. 26.06.2002. Latvijas Vēstnesis, 94. Pieejams (Accessed): <https://www.vestnesis.lv/ta/id/63685> [skatīts 12.05.2020.].

Levits E. 2020. *Valsts prezidenta Egila Levita runa Satversmes tiesas Jaunā gada atklāšanas svinīgajā sēdē.* 10.01.2020. Pieejams (Accessed): <https://www.president.lv/lv/jaunumi/zinas/valsts-prezidenta-egila-levita-runa-satversmes-tiesas-jauna-gada-atklšanas-svinigaja-sede-26093#gsc.tab=0> [skatīts 01.05.2020.].

Levits: *Tagad Latvijas tiesiskā sistēma darbojas tāpat kā citās ES dalībvalstīs.* 2019. 06.09.2019. Ziņu aģentūra LETA Pieejams (Accessed): [https://nra.lv/latvija/291184-levits-tagad-latvijas-tiesiska-sistema-darbojas-tapat-ka-citas-es-dalibvalstis.htm?utm\\_source=draugiem.lv&utm\\_medium=say&utm\\_campaign=post\\_1849667947](https://nra.lv/latvija/291184-levits-tagad-latvijas-tiesiska-sistema-darbojas-tapat-ka-citas-es-dalibvalstis.htm?utm_source=draugiem.lv&utm_medium=say&utm_campaign=post_1849667947). [skatīts 12.05.2020.]

Osipova S., Strupišs A., Rieba A. 2010. *Tiesu varas neatkarības un efektivitātes palielināšanas un nostiprināšanas rezerves.* Jurista Vārds, 10 (605). Pieejams (Accessed): <https://juristavards.lv/doc/206150-tiesu-varas-neatkaribas-un-efektivitates-palielinasanas-un-nostiprinanas-rezerves/> [skatīts 12.05.2020.].

*Pēc krīzes izpratne par tieslietu pakalpojumiem iespējams būtiski mainīsies.* Portāls: Tiesas.lv. 30.04.2020. Pieejams (Accessed): <https://tiesas.lv/aktualitates/pec-krizes-izpratne-par-tieslietu-pakalpojumiem-iespejams-butiski-mainisies-9568> [skatīts 12.05.2020.].

Rainis J. 1905. Jaunais laiks. Vētras sēja. Cēsis: Apgāds J.Ozols.

Rīgas pilsētas Vidzemes priekšpilsētas tiesas civillietas C30476118 materiāli.

Rīgas rajona tiesas civillietas Nr.C33256220 materiāli.

Rīgas rajona tiesas civillietas Nr.C33407217 materiāli.

Rīgas rajona tiesas civillietas Nr.C33610818 materiāli.

Rīgas rajona tiesas civillietas Nr.C33472117 materiāli.

Rīgas rajona tiesas lēmums lietā Nr.1A33104220.

Satversmes tiesas 2009. gada 26. novembra sprieduma lietā Nr. 2009-08-01.

*Starptautiskais pakts par pilsoņu un politiskajām tiesībām.* Pieejams (Accessed): <http://www.humanrights.lv/doc/vispaar/pptpakc.htm> [skatīts 12.05.2020.].

- Starptautiskais pakts par pilsoņu un politiskajām tiesībām*. 23.04.2003. "Latvijas Vēstnesis", 61, Pieejams (Accessed): <https://likumi.lv/ta/lv/starptautiskie-ligumi/id/705> [skatīts 10.04.2019.].
- Tiesu darbības principi*. Pieejams (Accessed): <https://tiesas.lv/tiesu-darbibas-principi> [12.05.2020.].
- Torgāns K. 2019. *Tiesas kļūdas un tiesnešu neatkarības robežas*. Jurista Vārds 14 (1072) Pieejams: <https://juristavards.lv/doc/274483-tiesas-kludas-un-tiesnesa-neatkaribas-robezas/> [skatīts 10.04.2019.].
- Vispārējā cilvēka tiesību deklarācija*. Pieejams (Accessed): <http://www.humanrights.lv/doc/vispaar/vispcd.htm> [12.05.2020.].
- Zvejniece R. 2017. *Konferencē akcentē tiesneša neatkarības trīs aspektus: ārējā, sistēmas un tiesneša personības neatkarība*. Pieejams (Accessed): <http://at.gov.lv/lv/jaunumi/par-tieslietu-padomi/konference-akcente-tiesnesa-neatkaribas-tris-aspektus-areja-sistemas-un-tiesnesa-personibas-neatkariba-8449> [skatīts 20.11.2019.].
- Монтескье Ш. 1955. *Избранные произведения. (О духе законов)*. Москва, 1955.

# IDENTIFYING CHALLENGES TO IMPLEMENTATION OF MARITIME SPATIAL PLANS IN THE BALTIC STATES\*

**Leila Neimane**

University of Latvia, Faculty of Law, Institute of Legal Science, Raina blvd. 19, Riga, LV-1586, Latvia, e-mail: leila.neimane@lu.lv

## Abstract

### Identifying challenges to implementation of maritime spatial plans in the Baltic States

**Key Words:** *maritime/marine spatial planning, adaptive management, monitoring, performance evaluation, Baltic States*

Maritime/marine spatial planning (MSP) is a general term that designates integrated sea governance through balancing the demands of development and the need to protect the environment. By applying the ecosystem-based approach, MSP is the most commonly accepted management framework for promoting the long-term sustainability and Blue Growth of the marine environment globally. Among the MSP process's several main phases, the implementation phase can lead to revision, adapting the MSP process.

This paper analyses implementation, i.e., performance of maritime spatial plans (maritime or marine plans, used interchangeably) in the three Baltic Sea basin countries, i.e., Estonia, Latvia, and Lithuania, considering the *status quo* of the MSP in each country.

In 2014, Directive 2014/89/EU of the European Parliament and of the Council establishing a framework for MSP (the MSP Directive) was adopted. Following two pilot marine plans (the area around Hiiumaa Island and Pärnu Bay area), currently in Estonia the initial outline for the maritime plan is being prepared, with additional public display of the draft. In turn, in Latvia, on 14 May 2019, the Government approved the maritime plan until 2030. In Lithuania, the marine plan was prepared in 2014 and adopted by the Parliament in 2015.

In this study, evaluating implementation of performance of the maritime plans is proposed by

- 1) examining the principles used in national MSP,
- 2) exploring the influence of existing regulation and soft law tools on an international, national, regional and local level,
- 3) taking into account compliance with the minimum requirements set out by the MSP Directive,
- 4) clarifying opportunities and threats resulting from adoption of maritime plans,
- 5) exploring best practice examples.

## Kopsavilkums

### Jūras teritorijas plānojuma ieviešanas izaicinājumu identifikācija Baltijas valstīs

**Atslēgvārdi:** *jūras teritorijas plānošana, adaptīvā pārvaldība, monitorings, veiktspējas novērtēšana, Baltijas valstis*

Jūras telpiskā plānošana (JTP) ir vispārīgs termins, kas apzīmē integrētu jūras pārvaldību, līdzsvarojot attīstības prasības un nepieciešamību aizsargāt vidi. Izmantojot "uz ekosistēmām balstīto pieeju", JTP ir vispārējais pārvaldības ietvars jūras vides ilgtermiņa ilgtspējības un zilās izaugsmes veicināšanai visā pasaulē. JTP procesam ir vairākas galvenās fāzes, starp kurām arī īstenošanas posms. Šajā posmā konstatētie trūkumi var būt par pamatu JTP pārskatīšanai un procesa pielāgošanai.

Rakstā ir analizēta jūras telpisko plānu (arī jūras plānojumu) ieviešanas veiktspēja trīs Baltijas jūras baseina valstīs, t.i., Igaunijā, Latvijā, un Lietuvā, ņemot vērā JTP *status quo* katrā valstī.

2014. gadā tika pieņemta Eiropas Parlamenta un Padomes Direktīva 2014/89/ES, ar ko izveido jūras telpiskās plānošanas satvaru (JTP direktīva). Pēc diviem izmēģinājuma projektiem (teritorija ap Hjū salu un Pērnavas līča teritorija) šobrīd Igaunijā ir sagatavots sākotnējais jūras plānojuma projekts, par kuru norisinājās publiskā apspriešana. Savukārt 2019. gada 14. maijā Latvijā valdība apstiprināja jūras plānojumu līdz 2030. gadam. Lietuvā jūras plānojums tika sagatavots 2014. gadā un pieņemts 2015. gadā.

Pētījumā jūras plānojumu ieviešanas veiktspējas novērtēšanu tiek piedāvāts veikt, izmantojot:

- 1) nacionālajā JTP izmantoto principu pārbaudi,
- 2) esošo regulējumu un rekomendatīvo tiesību instrumentu izpēti starptautiskā, nacionālā, reģionālā un vietējā līmenī,
- 3) atbilstības JTP direktīvā noteiktajām minimālajām prasībām izvērtēšanu,
- 4) iespēju un draudu, kas saistīti ar jūras plānu pieņemšanu, noskaidrošanu,
- 5) labākās prakses piemēru analīzi.

## Introduction

Nowadays, "the marine environment is rapidly becoming a collection of habitats, natural processes, multi-stakeholder practices" (Martin & Hall-Arber 2008: 779) in the light of biodiversity

conservation undertakings, sea-level rise, ocean acidification and many other phenomena related with climate change (Long 2012; EC 2008), as well as the devastating effect of economic development, “elevating competition among users and interest groups and resulting in increasingly undesirable effects [...] and ... cumulative threats to the health of the oceans as a whole” (Douvere 2008: 763). In the past 15 – 20 years the concepts of “marine governance” or “marine ecosystem-based management” have been “turned into operational activities some of which have become known as ‘marine spatial planning’ or MSP” (Ehler 2014a: vi). The popularity of MSP is growing exponentially, as evidenced by the adoption of maritime/marine spatial plans (MSPlans) worldwide and with a powerful impetus of this process in the Member States of the European Union (EU). Active development of MSPlans is also taking place in the Baltic Sea Region (BSR) (Carneiro 2013), one of “the most active forerunners in terms of MSP enhancement and practical advancement” (Zaucha 2014b: 5).

However, while national governments unreservedly continue to adopt MSPlans, inquiries as to MSP effectiveness, practice and ability to achieve sustainability form an essential part of academic debates. The scientific community is continuously and increasingly questioning and pondering sustainable use of marine resources and sustainable activities conceived in much of the MSP literature (Gissi et al. 2019; Jones et al. 2016; Collie et al. 2013). Taking into account the non-static nature of the marine environment, much of the relevant literature (Varjopuro et al. 2019; Ehler 2014a; Carneiro 2013; Kidd & Ellis 2012; Douvere & Ehler 2011; Plasman 2008; Day 2008; Schultz-Zehden et al. 2008; Hinds 2003) concerns the success of implementing MSPs, including monitoring, evaluation and adaptation issues, and the ability of MSPs to achieve a sustainable outcome. The European Commission (2010: 16) aptly indicates: “Discussing [MSP] is all very well, but it must be introduced and enforced in the real world as well.”

Against this background, the aims of this paper are twofold. Firstly, it aims at establishing a general idea of performance in implementing MSPlans. Secondly, the paper conceptualises this process, by proposing a preliminary performance evaluation for MSPlans, using *the ex-ante* approach, to provide a better understanding of the necessary inputs for the next MSP cycles. To that end, the paper is laid out as follows. First, the paper briefly describes MSP development in the EU and the BSR with a focus on the Baltic States, i.e., Estonia, Latvia, and Lithuania. Secondly, the paper characterises the essence of MSP and concepts of implementation and evaluation in MSP and their interrelationship with adaptive management. In conclusion, the paper offers suggestions for review of existing – or adoption of “next generation” – MSPlans in general and specifically in the Baltic States. It also provides directions to support in-depth future research.

The paper draws on a literature review derived from an international, regional and national legal and political framework and relevant scientific literature. Regulatory enactments and planning

documents are used according to their availability as of July 1<sup>st</sup>, 2020. Traditional legal research methods – monographic, dogmatic, comparative and special analytical techniques – are used.

### **MSP development in the EU and the Baltic States**

With few exceptions recorded in the scientific literature (see, e.g., Douvere 2008), among which the most commonly cited is zoning for the Great Barrier Reef Marine Park in Australia (Day 2015; Jay et al. 2013; Ehler & Douvere 2009; Day 2008; Douvere 2008; Day 2002), the rise and broader development of MSP internationally can be dated from the early 2000s. This period became “a turning point for conceptualisation of the sea space management” (Zaucha 2014b), including the BSR (Wismar Declaration 2001; Zaucha 2014a; Cieślak 2009).

Echoing the growing international discourse of integrated marine governance since the 1992 United Nations (UN) Conference on Environment and Development in Rio de Janeiro (Jay et al. 2013, see also Plasman 2008), the political and legal framework of the EU also increasingly commenced reflecting the importance of MSP in the past decade (Douvere 2008). At first, originating from the EU’s 6<sup>th</sup> Environment Action Programme (European Parliament & Council of the European Union 2002), it was further evidenced by adoption of the European Marine Strategy in 2005 (EC 2005) followed by the “Green Paper” (EC 2006) and “Blue Book” (EC 2007). Next, Integrated Maritime Policy and the Action Plan were endorsed in 2007 (EC 2007; EC 2008; Zaucha 2014b). This policy provided the basis for numerous different initiatives in the context of sustainable management of European Regional Seas (see also Meiner 2010), including specifically the EU strategy for BSR (EC 2009). In 2008, the Marine Strategy Framework Directive 2008/56/EC (MSF Directive) – the environmental pillar of the Integrated Maritime Policy (Recital 3) – was adopted. It enshrines an ecosystem-based approach (Recitals 8, 44; Art. 1(3)) and establishes “a framework within which Member States shall take the necessary measures to achieve or maintain good environmental status in the marine environment by the year 2020 at the latest” (Art. 1). In 2014, the European Parliament endorsed Directive 2014/89/EU creating a framework for MSP (MSP Directive) and requiring the Member States to establish MSPlans at the latest by 31 March 2021. In this manner, strengthening of the Europeanization of MSP was provided for (Zaucha 2014a), making this Directive “the strongest transnational legal instrument in the field of marine planning applicable to the EU Member States in the region” (Backer 2015: 138). Here it should be recalled that the MSP Directive is not a stand-alone instrument for MSP. During its implementation, a broader context must be assumed, carefully considering EU regulation, including political guidance, in the domains of environmental protection (Birds Directive and Habitats Directive), climate, fisheries, energy, transport, integrated coastal zone management, environmental impact assessment and strategic environmental assessment, and other relevant EU legal acts (most notably the MSF Directive and Water Framework Directive). Taking into account the interrelation

and synergy of the EU framework, the European Commission (2010: 17) puts it thus: “The key to successful [MSP] lies in acknowledging that all existing EU legislation and initiatives related to marine activities are intertwined and should be treated as different branches of one same tree.”

Along with specific EU regulation, when adopting legislative measures useful for MSP, harmonising sectoral matters and planning the marine environment, states must obey the rules of international and regional law and operate in the context of a complex array of marine and maritime rights and duties (Backer 2015). Among the international and regional tools, to name a few, the UN Convention on the Law of the Sea, the Convention on Biological Diversity and the Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention), as well as International Maritime Organisation-based agreements, regional fisheries agreements and the legislative and political framework of impact assessments (Backer 2015; Cieślak 2009; Maes 2008) should be distinguished.

In the Baltic States, the early beginnings of MSP legislative preparatory works and initiatives can be dated back to the start of this decade 2010/2011 (EC 2019a, 2019b, 2019c; VASAB 2019). MSPlans have the status of national level long-term spatial development planning documents in the Baltic States. They are developed for a period of fifteen years in Estonia (MoF 2020), twelve years in Latvia (MoEPRD 2019) and at least twenty years in Lithuania (MoE 2019). At the moment, the development of MSPlans is at different stages in all three countries.

Unlike in Latvia and Lithuania, besides the national level, Estonia has two legally binding pilot regional MSPlans in the area around Hiiu Island (adopted in July 2016) and Pärnu Bay area (adopted in April 2017) (VASAB 2020a; EC 2019a). However, the national MSP process is still ongoing in Estonia. MSP is being prepared according to Arts. 13 – 26 of the Planning Act (2015). The initial outline of the MSPlan as a thematic plan to the national plan (Planning Act 2015: Art. 13(2); EC 2019a) is available (Rahandusministerium & Hendrikson & Co 2019), and additional public display of the draft is provided. The transboundary commenting phase of the plan is scheduled to start in the third quarter of 2020. Adoption of the plan is expected in March 2021, and the action plan for MSP will be reviewed after every five years (MoF 2020; Planning Act 2015: Art. 25(1)).

In Latvia, in May 2019, the Cabinet of Ministers (2019) approved the MSPlan until 2030. Following the purpose and rules of the Marine Environment Protection and Management Law (2010), the MSPlan was prepared in accordance with the Spatial Development Planning Law (2011) and Regulations of the Cabinet of Ministers No. 740 “Procedures for the Development, Implementation and Monitoring of the Maritime Spatial Plan” (2012). Many other laws and secondary legal acts are relevant during implementation of the MSPlan (VASAB 2020b). According to Regulations No. 740 (2012: para. 12), the Latvian MSPlan consists of four parts: the

explanatory part, the strategic section, a description of the planned use of the sea, and the graphical part (see also MoEPRD 2019). The methodology used in development of the plan is available and well described in the recommendations of the legally unbinding pilot projects (e.g., Veidemane et al. 2017). A review of the MSPlan will take place every six years (MoEPRD 2019; CM 2012: para. 30).

In Lithuania, the MSP is incorporated in the Law on Territorial Planning (1995), as to the amendments coming into force on 1 January 2014, and its secondary legal acts (e.g., the order of the Minister of the Environment “On approval of the rules for the preparation of Integrated Spatial Planning Documents” (MoE 2014)) (VASAB 2019). The MSP outcome preparation took place in 2014, and marine spatial solutions were adopted by the Parliament in 2015 as a part of the Comprehensive Territorial Plan, extending it by one more part – Marine Territories (Resolution No. XII-1781; EC 2019c; VASAB 2019). In 2018, preparation of the new Comprehensive Plan was under way so that a second MSPlan will be prepared in Lithuania (MoE 2019). It is noted: “Compared to its previous counterpart, the Comprehensive Plan will be a *live document*, meaning that it will not become a rigid and stagnant document; it will always contain room for constructive reflection and will be updated given any new development challenges or trends if it is needed” (VASAB 2018). The revision time frame of the plan stipulated by the Law on Territorial Planning (1995: Art. 29(5)) is five years. Pilot plans are not legally binding in Lithuania (EC 2019c).

### **The essence of MSP and challenges of implementation**

To the author’s knowledge, the most popular and frequently quoted MSP definition denotes MSP as “a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic and social objectives that are usually specified through a political process” (Ehler & Douvere 2009: 18). MSP Directive (2014: Art. 3(2)) defines that MSP “means a process by which the relevant Member State’s authorities analyse and organise human activities in marine areas to achieve ecological, economic and social objectives.” In line with these approaches, there appears to be a consensus (Grimmel et al. 2019; Morf et al. 2019; Flannery & Ellis 2016; Ritchie 2014; Ehler 2014a; Jay et al. 2013; Ehler & Douvere 2009; EC 2010; Gilliland & Laffoley 2008; Douvere 2008; EC 2008) that MSP as an essential, valuable and practical key tool for helping to implement the ecosystem-based approach is becoming increasingly popular as the most commonly accepted and comprehensive management framework for marine planning and regulation for the promotion of sustainable development and Blue Growth by integrating ecological, social, economic, and institutional perspectives. In this regard, achieving sustainable development must be understood as relating to multiple objectives, i.e., managing marine activities and conservation of marine living resources and the need to avoid, to minimize, or

at least to reduce *user-user* and *user-environment* conflicts in the marine environment (EC 2010; Douvère 2008; Maes 2008).

The principal output of MSP is generally a comprehensive marine area or ecosystem spatial plan that moves the entire marine system towards a “Future Vision” (Ehler 2014b; Ehler & Douvère 2007; see also Cieślak 2009; Maes 2008). The process of producing a plan – the MSP cycle – “involves a series of basic steps that are likely to be generic to different situations” (Gilliland & Laffoley 2008: 795). This consists of three to four ongoing phases: the first phase includes planning and analysis that can be combined with MSPlan development; the next phase is implementation, followed by monitoring and evaluation (Ehler & Douvère 2009; Douvère 2008; Ehler & Douvère 2007; see also Varjopuro et al. 2019; Heinrichs & Gee 2012). Consequently, monitoring and evaluation lead to the “overall comprehensive evaluation and subsequent plan revision” through adaptive management (cf. EC 2010) for dealing with uncertainty and incorporating various types of change (Douvère & Ehler 2011) and accordingly ensuring the flexibility of the plans (cf. Maes 2008). This implies that “MSP does not lead to a one-time plan. It is a continuing, iterative process that learns and adapts over time” (Ehler & Douvère 2009: 18, see also 30; see also Varjopuro et al. 2019).

For the purpose of this paper, implementation is understood as “[i]mplementing the plan through the execution of programmed works or investments, enabling change, encouraging improvement and through regulation and incentives, and enforcement of proposed changes and ongoing activities in, on, over and under the sea, in accordance with the plans” (Douvère 2008: 766; see also Maes 2008; Plasman 2008). In turn, in its general meaning evaluation means assessing the merit and value of a public process or its products, e.g., public policies and spatial plans (Varjopuro 2017). Evaluation as “the step linking any two subsequent iterations” is the stage “where the lessons from the closing cycle are incorporated into the preparation for the coming one” (Carneiro 2013: 212). Douvère (2008: 766) explains that monitoring and evaluation deal with “[a]ssessing the effectiveness of the plans, their time scales and implementation mechanisms, considering ways in which they need to be improved and establishing review and adaptation procedures. Results of evaluation are fed back into the planning and analysis element of management, and the process begins again” (see also Day 2008).

MSP “conducted in a continuous and adaptive manner encompassing monitoring and evaluation” is one of the common denominators for MSP in Europe and also beyond (Ehler et al. 2019). Reference to adaptive management is included in the set of common principles underlying MSP policy in the BSR (EC 2008: Principle 8, 10; VASAB-HELCOM 2010: Principle 10). Also, the MSF Directive and the MSP Directive *inter alia* set the framework for monitoring. In the first case, it is addressed through rules determining the obligation of the Member States to establish and



implement coordinated monitoring programmes (see Art. 11). In the second case, the monitoring of implementation as a necessary step of the MSP is outlined (Recital 18), and a minimum requirement is established for review of MSPlans at least every ten years (Art. 6(3)). As indicated above, the time frames for revision of MSPlans are as follows: in Estonia and Lithuania – every five years and in Latvia – every six years. The set periods for cyclical review are in line with the indications found elsewhere in MSP literature (see, e.g., Gilliland & Laffoley 2008).

### **Preliminary MSP performance evaluation**

Evaluation of MSPlans' implementation is a tenuous and complex task. In MSP literature (e.g., Carneiro 2013; Laurian et al. 2010), attention is drawn to two dichotomic approaches to evaluation – a “rational perspective” that leads to conformance evaluations and a “communicative-action perspective” that results in performance evaluations.

In conformance evaluations, the plans are assessed based on the degree of compliance between the specific goals and the results achieved. This is in line with a large part of MSP literature, underlining an MSP “objective-based approach.” Through this viewpoint, it seems appropriate to “measure” the success of spatial plans by contrasting real, measurable progress with the goals set out in the plan (Varjopuro et al. 2019). The “objective-based approach” implies organization “around a hierarchy of goals, objectives, and indicators that evaluate the performance of management measures in achieving those goals and objectives” reflecting a set of MSP principles as the guides of the process (Ehler & Douvère 2009: 36). However, one must take into account that goals and objectives identified in the previous planning cycle are likely to be modified (cf. Ehler & Douvère 2009) and affect different management measures (incl. input, process, output, as well as spatial and temporal measures) and other issues that need to be considered for the purposes of reviewing existing – or adopting “next generation” – MSPlans. Thus, there would be a need to re-evaluate and modify both objectives and management measures in the context of changing conditions.

Performance evaluations as an alternative to “conformance evaluation” take into account the actual performance of the plans – their ability to convey ideas for the future and to provide guidelines for other policy initiatives, broader effects and side-effects (Varjopuro 2019). Generally, these evaluations are more suitable for comprehensive and strategic plans (Carneiro 2013; Laurian et al. 2010; Faludi 2000; Mastop & Faludi 1997). Varjopuro et al. (2019: 9) explain that, from this perspective, “[t]he planning process can be considered successful or effective in a broader sense if deviations can be justified in relation to the plan and the plan is frequently used or consulted in the decision-making process.”

Hence, based on the fact that applying an adaptive management approach in the marine environment presumes the incorporation of various types of change – environmental and economic

changes, as well as changes in political priorities (Douvere & Ehler 2011), the author suggests that the matrix of *preliminary* performance evaluation of MSPlans, using the *ex-ante* approach, should include at least five aspects:

1. Relevance to the principles with a sustainable development purpose. This is a vital aspect since the overall purpose of the MSP is centred around delivering sustainability (Gilliland & Laffoley 2008). It includes “the sustainable growth of maritime economies, the sustainable development of marine areas and the sustainable use of marine resources” (MSP Directive 2014: Recital 14) and MSP “should be based on a clear set of principles with a sustainable development purpose” (Gilliland & Laffoley 2008: 787). One pertinent example, in this case, is the new Comprehensive Plan in Lithuania. While substituting the previous plan, the new plan integrates the UN Sustainable Development Goals of the 2030 Agenda (VASAB 2018).
2. Accordance with existing regulation (including existing visions and strategies) and soft law tools (e.g., “Best Environmental Practice”). Since the MSP of states must be compliant with their rights and duties at sea (Backer 2015; Maes 2008), at any review of MSPlans an up-to-date screening on an international, national, regional and local scale must be done to ensure fulfilment of the commitments undertaken by the state and respectively conformance of the plans with the evolving political and legal framework (e.g., Planning Act (Estonia) 2015: Art. 53(4)). In addition, here, one should recall the Latvian (Veidemane et al. 2017) and Lithuanian (VASAB 2018) approaches in designing MSPlans.
3. Compliance with the minimum requirements set out by the MSP Directive. This implies conformance with other relevant EU legislation (see section “MSP Development in the EU and the Baltic States”, also Milerienė et al. 2014). Although this aspect is partially covered under the 2<sup>nd</sup> aspect, in the case of the EU Member States, it should be particularly emphasized.
4. Clarification of the opportunities and threats resulting from adoption of MSPlans in terms, e.g., identification and analysis of existing obstacles for developments at sea (Blažauskas et al. 2015) or more generally using the popular heuristic method SWOT/TOWS for planning at the strategic level (cf. Bieda et al. 2019).
5. Consideration of examples of best practice. In this regard useful information is provided by the European MSP Platform (EC 2018), MSPGLOBAL2030 of the Intergovernmental Oceanographic Commission of the UN Educational, Scientific and Cultural Organisation, and the European Commission (2018), currently developing international guidelines on MSP, and more recently, the Ocean Best Practices System under the auspices of the International Maritime Organisation (2019).

The above-listed considerations present the initial starting point for *preliminary* MSP performance evaluation to be taken into account for review of existing – or adoption of “next

generation” – MSPlans in the Baltic States. However, they are not, firstly, complete or, secondly, delineated. As to the first aspect, this proposal does not aim at establishing an exhaustive list of the considerations to be taken into account in MSP evaluation. Therefore, they are subject to in-depth future research and should be further elaborated and complemented. As to the second aspect, it must be noted that an inevitable overlap exists between different considerations to be taken into account. For example, the first three considerations have common features since they are tightly related to constant framework evolvement due to measures related to the fight with climate change, ocean plastic pollution and even coronavirus consequences (e.g., EC 2020) in the foreseeable future. In a similar fashion, the second and the fourth aspects might be mutually reinforcing and overlapping during the evaluation process, as evidenced by the Latvian experience (Veidemane et al. 2017).

### Conclusions

1. MSP as an essential, valuable and practical vital tool is increasingly becoming well known as the most commonly accepted and comprehensive management framework for marine planning and regulation for promotion of sustainable development and Blue Growth by integrating ecological, social, economic, and institutional perspectives.
2. In the past 15 – 20 years, with the growing popularity of MSP and adoption of MSPlans, the question about their meaningful implementation comes into the spotlight. That is the case worldwide, in the EU and the Baltic States, i.e., Estonia, Latvia, and Lithuania, more specifically. Although the development of MSPlans is at different stages in all three countries and evaluation of implementation of MSPlans is a tenuous and complex task, some preliminary conclusions can be drawn.
3. The continuous and adaptive nature of MSP is widely recognized. Thus, monitoring and evaluation are formants of the MSP cycle and lead to “overall comprehensive evaluation and subsequent plan revision” through adaptive management to deal with uncertainty, incorporate various types of change and ensure the flexibility of plans. These processes might result in re-evaluation and modification of both objectives and management measures of the MSPlans.
4. Part of the evaluation process should include a *preliminary* MSP performance evaluation. While not representing an exhaustive list of considerations, this approach as an alternative to “conformance evaluation” suggests taking into account five criteria while reviewing existing – or adopting “next generation” – MSPlans in the Baltic States.
5. The initial proposal of a matrix for *preliminary* MSP performance evaluation using *the ex-ante* approach includes analysis of five considerations: (1) examining the principles used in national MSP, (2) exploring the influence of existing regulation and soft law tools on an international, national, regional and local level, (3) taking into account compliance with the

minimum requirements set out by the MSP Directive, (4) clarifying opportunities and threats resulting from adoption of maritime plans, (5) exploring examples of best practice.

6. The evaluation matrix presented is not complete. Further in-depth future research and elaboration of the matrix for *preliminary* MSP performance evaluation using *the ex-ante* approach should be conducted.

### Acknowledgement

\* This work is an output of the research project and has been financially supported by the specific support objective activity 1.1.1.2. “Post-doctoral Research Aid” of the Republic of Latvia (project No. 1.1.1.2/VIAA/3/19/514 “Effective Maritime Spatial Planning Regulation Framework and Implementation Challenges and Best Practice Examples for the Context of the Baltic Sea”), funded by the European Regional Development Fund (project No. 1.1.1.2/16/I/001).

### References

- Backer H. 2015. Chapter 7. Maritime Spatial Planning in the Baltic Sea. In: Kuokkanen H., Soininen N. (eds.). *Transboundary Marine Spatial Planning and International Law*. New York: Earthscan Routledge, pp. 132–153.
- Bieda A., Adamczyk T., Parzych P. 2019. Maritime Spatial Planning in the European Union on the Example of the Polish Part of the Baltic Sea. In: *Water*, 11(3), 555, pp. 1–27.
- Blažauskas N., Grigelis A., Gelumauskaitė L.Ž., Gulbinskas S., Suzdalev S., Ferrarin C. 2015. Towards sustainable use of marine resources in the south-eastern Baltic Sea (Lithuania): a review. In: *Baltica*, 28 (2), pp. 179–188.
- Carneiro G. 2013. Evaluation of marine spatial planning. In: *Marine Policy*, 37, pp. 214–229.
- Cieślak A. 2009. Maritime spatial planning in the Baltic Sea Region. In: *Informationen zur Raumentwicklung*, 8/9, pp. 607–612.
- Collie J.S., Vic Adamowicz W.L., Beck M.W., Craig B., Essington T.E., Fluharty D., Rice J., Sanchirico J.N. 2013. Marine spatial planning in practice. In: *Estuarine, Coastal and Shelf Science*, 117, pp. 1–11.
- Day J.C. 2015. Chapter 6. Marine spatial planning: one of the fundamental tools to help achieve effective marine conservation in the Great Barrier Reef. In: Kuokkanen H., Soininen N. *Transboundary Marine Spatial Planning and International Law*. New York: Earthscan Routledge, pp. 103–131.
- Day J.C. 2008. The need and practice of monitoring, evaluating and adapting marine planning and management – lessons from the Great Barrier Reef. In: *Marine Policy*, 32, pp. 823–831.
- Day J.C. 2002. Zoning – lessons from the Great Barrier Reef Marine Park. In: *Ocean and Coastal Management*, 45, pp. 139–156.
- Douvere F., Ehler C.N. 2011. The importance of monitoring and evaluation in adaptive maritime spatial planning. In: *Journal of Coastal Conservation*, 15, pp. 305–311.
- Douvere F. 2008. The importance of marine spatial planning in advancing ecosystem-based sea use management. In: *Marine Policy*, 32, pp. 762–771.
- Ehler C.N., Zaucha J., Gee K. 2019. Maritime/Marine Spatial Planning at the Interface of Research and Practice. In: Zaucha J., Gee K. (eds.). *Maritime Spatial Planning: past, present, future*. Springer International Publishing AG.
- Ehler C.N. 2014a. *A guide to evaluating marine spatial plans*. UNESCO, IOC Manuals and Guides, 70 ICAM Dossier 8, 84 p.
- Ehler C.N. 2014b. Pan-Arctic Marine Spatial Planning: An Idea Whose Time Has Come. In: Tedsen E., Cavalieri S., Kraemer R.A. (eds.). *Arctic Marine Governance: Opportunities for Transatlantic Cooperation*. Heidelberg: Springer, pp. 199–213.

- Ehler C.N., Douvère F. 2009. *Marine Spatial Planning: A Step-by-Step Approach Toward Ecosystem-Based Management*. Paris: UNESCO. IOC Manual and Guides no. 53, ICAM Dossier no. 6, 99 p.
- Ehler C.N., Douvère F. 2007. *Visions for a Sea change*. Report of the first international workshop on Marine Spatial Planning. Intergovernmental Oceanographic Commission and the Man and the Biosphere Programme. IOC manual and Guides 46, ICAM Dossier 3. Paris: UNESCO.
- Faludi A. 2000. The performance of spatial planning. In: *Planning Practice and Research*, 15(4), pp. 299–318.
- Flannery W., Ellis G. 2016. Exploring the winners and losers of marine environmental governance. In: *Planning Theory and Practice*, 17(1), pp. 121–122.
- Gilliland P.M., Laffoley D. 2008. Key elements and steps in the process of developing ecosystem-based marine spatial planning. In: *Marine Policy*, 32, pp. 787–796.
- Gissi E., Frascchetti S., Micheli F. 2019. Incorporating change in marine spatial planning: A review. In: *Environmental Science and Policy*, 92, pp. 191–200.
- Grimmel H., Calado H., Fonseca C., Suárez de Vivero J.L. 2019. Integration of the social dimension into marine spatial planning – Theoretical aspects and recommendations. In: *Ocean and Coastal Management*, 173, pp. 139–147.
- Heinrichs B., Gee K. 2012. *Necessary common minimum requirements for Maritime Spatial Planning (MSP) in the Baltic Sea*. Plan Bothnia project. Available: [https://vasab.org/wp-content/uploads/2018/06/minimum\\_requirements-2.pdf](https://vasab.org/wp-content/uploads/2018/06/minimum_requirements-2.pdf) (accessed 20.6.2020).
- Hinds L. 2003. Oceans governance and the implementation gap. In: *Marine Policy*, 27, pp. 349–356.
- Jay S., Flannery W., Vince J., Liu W.-H., Xue J.G., Matczak M., Zaucha J., Janssen H., van Tatenhove J., Toonen H., Morf A., Olsen E., de Vivero J.L.S., Mateos J.C.R., Calado H., Duff J., Dean H. 2013. International Progress in Marine Spatial Planning. In: Chircop A., Coffen-Smout S., McConnell M. (eds.). *Ocean Yearbook 27*. Leiden: Martinus Nijhoff, pp. 171–212.
- Jones P.J.S., Lieberknecht L.M., Qiu W. 2016. Marine spatial planning in reality: Introduction to case studies and discussion of finding. In: *Marine Policy*, 71, pp. 256–264.
- Kidd S., Ellis G. 2012. From the Land to Sea and Back Again? Using Terrestrial Planning to Understand the Process of Marine Spatial Planning. In: *Journal of Environmental Policy and Planning*, 14(1), pp. 49–66.
- Laurian L., Crawford J., Day M., Kouwenhoven P., Mason G., Ericksen N., Beattie K. 2010. Evaluating the outcomes of plans: theory, practice, and methodology. In: *Environment and Planning B: Planning and Design*, 37, pp. 740–757.
- Long R. 2012. Legal Aspects of Ecosystem-Based Marine Management in Europe. In: *Ocean Yearbook*, 26, pp. 417–484.
- Maes F. 2008. The international legal framework for marine spatial planning. In: *Marine Policy*, 32, pp. 797–810.
- Mastop H., Faludi A. 1997. Evaluation of strategic plans: the performance principle. In: *Environment and Planning B: Planning and Design*, 24, pp. 815–832.
- Martin K.St., Hall-Arber M. 2008. The missing layer: Geo-technologies, communities, and implications for marine spatial planning. In: *Marine Policy*, 32, pp. 779–786.
- Meiner A. 2010. Integrated maritime policy for the European Union – consolidating coastal and marine information to support maritime spatial planning. In: *Journal of Coastal Conservation*, 14(1), pp. 1–11.
- Milerienė R., Blažauskas N., Gulbinskas S. 2014. Integration of marine research results into a maritime spatial plan for Lithuania. In: *Baltica*, 27, Special Issue, pp. 65–72.
- Morf A., Kull M., Piwowarczyk J., Gee K. 2019. Towards a ladder of marine/maritime spatial planning participation. In: Zaucha J., Gee K. (eds.). *Maritime Spatial Planning: past, present, future*. Springer International Publishing AG.
- Plasman I.C. 2008. Implementing marine spatial planning: A policy perspective. In: *Marine Policy*, 32, pp. 811–815.

- Ritchie H. 2014. Understanding emerging discourses of Marine Spatial Planning in the UK. In: *Land Use Policy*, 38, pp. 666–675.
- Schultz-Zehden A., Gee K., Scibior K. 2008. *Handbook on Integrated Maritime Spatial Planning*. INTERREG III B CADSES PlanCoast Project. Berlin: S.Pro Sustainable projects, 98 p.
- Varjopuro R., Konik M., Cehak M., Matczak M., Zaucha J., Rybka K., Urtāne I., Kedo K., Vološina M. 2019. Monitoring and Evaluation of Maritime Spatial Planning. Cases of Latvia and Poland as examples. *Pan Baltic Scope*, 62 p.
- Varjopuro R. 2017. Evaluation and Monitoring of Transboundary Aspects of Maritime Spatial Planning: A Methodological Guidance. *Baltic SCOPE Report*, 50 p.
- Veidemane K., Ruskule A., Sprukta S., Kedo K., Urtāne I. 2017. *Development of a Maritime Spatial Plan: the Latvian Recipe*. Baltic Scope project, 52 p.
- Zaucha J. 2014a. Sea basin maritime spatial planning: A case study of the Baltic Sea region and Poland. In: *Marine Policy*, 50, pp. 34–45.
- Zaucha J. 2014b. The key to governing the fragile Baltic Sea. Maritime spatial planning in the Baltic Sea Region and way forward. Riga: Vision and Strategies around the Baltic Sea (VASAB), 110 p.

### Legal acts

- United Nations Convention on the Law of the Sea. 1982, 1833 U.N.T.S. 397. Montego Bay.
- The Convention on Biological Diversity. 1992, 1760 U.N.T.S. 69. Rio de Janeiro.
- Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Convention). 1992. Helsinki.
- Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 establishing a framework for maritime spatial planning. *OJ L 257*, 28.8.2014, pp. 135–145.
- Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (Birds Directive). *OJ L 20*, 26.1.2010, pp. 7–25.
- Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive (MSF Directive)). *OJ L 164*, 25.6.2008, pp. 19–40.
- Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (Water Framework Directive). *OJ L 327*, 22.12.2000, pp. 1–73.
- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (Habitats Directive). *OJ L 206*, 22.7.1992, pp. 7–50.
- European Parliament, Council of the European Union. Decision No 1600/2002/EC of the European Parliament and of the Council of 22 July 2002 laying down the Sixth Community Environment Action Programme. *OJ L 242*, 10.9.2002, pp. 1–15.
- Parliament of the Republic of Estonia. Planeerimisseadus [Planning Act]. 2015. (28 January). RT I, 26.02.2015, 3.
- Parliament of the Republic of Latvia. Teritorijas attīstības plānošanas likums [Spatial Development Planning Law]. 2011 (December 1). *Latvijas Vēstnesis No. 173*, 02.11.2011.
- Parliament of the Republic of Latvia. Jūras vides aizsardzības un pārvaldības likums [Marine Environment Protection and Management Law]. 2010 (November 18). *Latvijas Vēstnesis No. 183*, 17.11.2010.
- Seimas of the Republic of Lithuania. Teritorijų planavimo įstatymas [Law on Territorial Planning]. 1995 (December 12), No. I-1120.
- Seimas of the Republic of Lithuania. Dėl Lietuvos Respublikos teritorijos bendrojo plano dalies “Jūrų teritorijos“ patvirtinimo [On approval of the part “Maritime Territories” of the Comprehensive Territorial Plan of the Republic of Lithuania]. 2015. (11 June). Resolution No. XII-1781.
- Ministry of Environment of the Republic of Lithuania (MoE). Dėl Kompleksinio teritorijų planavimo dokumentų rengimo taisyklių patvirtinimo [On approval of the rules for the preparation

of Integrated Spatial Planning Documents]. 2014 (January 2). Order of the Minister of the Environment of the Republic of Lithuania.

Cabinet of Ministers of the Republic of Latvia (CM). Par Jūras plānojumu Latvijas Republikas iekšējiem jūras ūdeņiem, teritoriālajai jūrai un ekskluzīvās ekonomiskās zonas ūdeņiem līdz 2030. gadam [On the Maritime Plan for the Inland Sea Waters of the Republic of Latvia, the Territorial Sea and the Waters of the Exclusive Economic Zone until 2030]. 2019 (May 21). Order No. 232. *Latvijas Vēstnesis No. 102*, 23.05.2019.

Cabinet of Ministers of the Republic of Latvia (CM). Jūras plānojuma izstrādes, ieviešanas un uzraudzības kārtība [Procedures for the Development, Implementation and Monitoring of the Maritime Spatial Plan]. 2012 (October 30). Regulations No. 740. *Latvijas Vēstnesis No. 180*, 14.11.2012.

### **Other practice materials**

European Commission (EC). 2020. CORONAVIRUS: Emergency response to support the fishing and aquaculture sectors. Available: [https://ec.europa.eu/fisheries/sites/fisheries/files/2020-factsheet-coronavirus\\_en.pdf](https://ec.europa.eu/fisheries/sites/fisheries/files/2020-factsheet-coronavirus_en.pdf) (accessed 20.6.2020).

European Commission (EC). 2019a. European MSP Platform. Maritime Spatial Planning Country Information. Estonia. Available: [https://www.msp-platform.eu/sites/default/files/download/estonia\\_-\\_april\\_2020.pdf](https://www.msp-platform.eu/sites/default/files/download/estonia_-_april_2020.pdf) (accessed 16.6.2020).

European Commission (EC). 2019b. European MSP Platform. Maritime Spatial Planning Country Information. Latvia. Available: [https://www.msp-platform.eu/sites/default/files/download/latvia\\_12.04.2019.pdf](https://www.msp-platform.eu/sites/default/files/download/latvia_12.04.2019.pdf) (accessed 16.6.2020).

European Commission (EC). 2019c. European MSP Platform. Maritime Spatial Planning Country Information. Lithuania. Available: [https://www.msp-platform.eu/sites/default/files/download/20190415\\_lithuania\\_country\\_fiche\\_0.pdf](https://www.msp-platform.eu/sites/default/files/download/20190415_lithuania_country_fiche_0.pdf) (accessed 16.6.2020).

European Commission (EC). 2018. European MSP Platform. Available: <https://www.msp-platform.eu> (accessed 25.5.2020).

European Commission (EC). 2010. Maritime Spatial Planning for the EU's seas and oceans: what's it all about? Luxembourg: Publications Office of the European Union, 19 p.

European Commission (EC). 2009. The European Union Strategy for the Baltic Sea Region. Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions. Brussels, COM(2009) 248 final.

European Commission (EC). 2008. Roadmap for Maritime Spatial Planning: Achieving Common Principles in the EU. Brussels: European Commission, COM(2008) 791 final.

European Commission (EC). 2007. An Integrated Maritime Policy for the European Union ("Blue Book"). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Brussels, COM(2007) 575 final.

European Commission (EC). 2006. Towards a future Maritime Policy for the Union: A European vision for the oceans and seas (Green Paper). Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions. Brussels, COM(2006) 275 final.

European Commission (EC). 2005. Thematic Strategy on the Protection and Conservation of the Marine Environment. Communication from the Commission to the Council and the European Parliament. Brussels, COM(2005) 504 final.

Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organisation, European Commission. 2018. MSPGLOBAL2030. Available: <http://www.mspglobal2030.org> (accessed 15.5.2020).

International Maritime Organisation. 2019. The Ocean Best Practices System. Available: <https://www.oceanbestpractices.org/about/> (accessed 27.6.2020).

- Ministry of Environment of the Republic of Lithuania (MoE). 2019. New Comprehensive Plan of the Territory of the Republic of Lithuania. Available: <http://www.bendrasiplanas.lt/2019/12/13/en/> (accessed 15.6.2020).
- Ministry of Environmental Protection and Regional Development of the Republic of Latvia (MoEPRD). 2019. Fields of Activities. Maritime Spatial Planning. Maritime Spatial Plan version in English. Available: [http://www.varam.gov.lv/eng/darbibas\\_veidi/maritime\\_spatial\\_planning/](http://www.varam.gov.lv/eng/darbibas_veidi/maritime_spatial_planning/) (accessed 16.5.2020).
- Ministry of Finance of the Republic of Estonia (MoF). 2020. Spatial Planning Department. Author's correspondence, personal archive material.
- Rahandusministerium, Hendrikson & Co. 2019. Estonian Maritime Plan. Draft Plan. Available: <http://mereala.hendrikson.ee/en.html> (accessed 30.6.2020).
- Vision and Strategies around the Baltic Sea (VASAB). 2020a. Country Fiche. Estonia. Available: [https://vasab.org/wp-content/uploads/2020/03/Country-fiche\\_EE\\_MSP\\_March2020.pdf](https://vasab.org/wp-content/uploads/2020/03/Country-fiche_EE_MSP_March2020.pdf) (accessed 20.6.2020).
- Vision and Strategies around the Baltic Sea (VASAB). 2020b. Country Fiche. Latvia. Available: [https://vasab.org/wp-content/uploads/2020/03/Country-fiche\\_-LV\\_MSP\\_March2020.pdf](https://vasab.org/wp-content/uploads/2020/03/Country-fiche_-LV_MSP_March2020.pdf) (accessed 20.6.2020).
- Vision and Strategies around the Baltic Sea (VASAB). 2019. Country Fiche. Lithuania. Available: [https://vasab.org/wp-content/uploads/2019/03/Country-fiche\\_LT\\_March2019.pdf](https://vasab.org/wp-content/uploads/2019/03/Country-fiche_LT_March2019.pdf) [accessed 20.6.2020].
- Vision and Strategies around the Baltic Sea (VASAB). 2018. Country Fiche on Terrestrial Spatial Planning. Lithuania. Available: [https://vasab.org/wp-content/uploads/2018/09/Lithuania\\_Country\\_Fiche\\_Spatial\\_Planning\\_Jan2018.pdf](https://vasab.org/wp-content/uploads/2018/09/Lithuania_Country_Fiche_Spatial_Planning_Jan2018.pdf) (accessed 26.6.2020).
- Vision and Strategies around the Baltic Sea (VASAB) – The executive body of the Convention on the Protection of the Marine Environment of the Baltic Sea Area (Helsinki Commission) (HELCOM). 2010. Baltic Sea broad-scale maritime spatial planning (MSP) principles. Adopted by HELCOM HOD 34-2010 and the 54th Meeting of VASAB CSPD/BSR. Available: <https://helcom.fi/media/documents/HELCOM-VASAB-MSP-Principles.pdf> (accessed 19.6.2020).
- Wismar Declaration: and VASAB 2010+. 2001. Platz H. (ed.). Wismar: Vision and Strategies around the Baltic Sea, 39 p.



# LEGAL FRAMEWORK FOR MICRO-RESERVES OF SPECIALLY PROTECTED SPECIES – BETWEEN OWNERSHIP AND ENVIRONMENTAL INTERESTS

**Silvija Kotāne**

Aglona, Latvia, silvijakotane@inbox.lv

## Abstract

### Legal framework for micro-reserves of specially protected species – between ownership and environmental interests

**Key Words:** *Special areas of conservation, species, micro-reserve, environmental protection, restriction of property rights, compensations*

The article deals with the establishment of a micro-reserve as an area that would ensure the conservation of specially protected species or biotope **outside** the special areas of conservation, as well as in the special areas of conservation, if any of the functional zones do not provide it. The legitimate objective of the micro-reserve establishment is the conservation of the environment in the public interest by limiting economic activity in the territory of specially protected species by assessing natural, economic and social considerations in order to preserve biodiversity, regulate species, population, the conservation and protection of biotopes, and implementation of the necessary measures as well as the maintenance of populations of wild birds living naturally in accordance with ecological, scientific and cultural requirements, taking into account economic and recreational requirements. Micro-reserves have been established for specially protected species: mammals, amphibians, reptiles, invertebrates, vascular plants, moss, algae, lichens, and fungi; for conservation and protection of the biotopes of the specially protected species of birds and fish. The conditions of establishment and termination of a micro-reserve, legal basis, and the assessment of the proportionality of violation of interests of the landowners in the judicial practices, compensation mechanism are considered.

## Kopsavilkums

### Īpaši aizsargājamo sugu mikroliegumu tiesiskais regulējums – starp īpašumtiesībām un vides interesēm

**Atslēgvārdi:** *īpaši aizsargājamās dabas teritorijas, sugas, mikroliegums, vides aizsardzība, īpašuma tiesību ierobežošana, kompensācijas*

Rakstā aplūkots mikrolieguma kā tādās teritorijas izveidošana, kas nodrošinātu īpaši aizsargājamas sugas vai biotopa aizsardzībai **ārpus** īpaši aizsargājamām dabas teritorijām, kā arī īpaši aizsargājamās dabas teritorijās, ja kāda no funkcionālajām zonām to nenodrošina. Mikrolieguma veidošanas leģitīmais mērķis – vides aizsardzība sabiedrības interesēs ierobežojot saimniecisko darbību īpaši aizsargājamo sugu mikrolieguma teritorijā, izvērtējot dabas, saimnieciskos un sociālos apsvērumus, lai saglabātu bioloģisko daudzveidību, regulētu sugu, populāciju, biotopu saglabāšanu, aizsardzību un nodrošinātu nepieciešamo pasākumu veikšanu, kā arī uzturētu savvaļā dzīvojošo savvaļas putnu sugu populācijas atbilstoši ekoloģijas, zinātnes, kultūras prasībām, ņemot vērā saimnieciskās un rekreatīvās prasības. Mikroliegumus veido noteiktām īpaši aizsargājamām sugām: zīdītāju, abinieku, rāpuļu, bezmugurkaulnieku, vaskulāro augu, sūnu, aļģu, ķērpju un sēņu; īpaši aizsargājamo putnu un zivju sugu, biotopu aizsardzībai un saglabāšanai. Apskatīti mikrolieguma veidošanas un izbeigšanas nosacījumi, likumiskā bāze, zemes īpašnieku interešu aizskārums samērīguma izvērtējums tiesu praksē, kompensāciju mehānisms

## Introduction

The right of everyone to live in a benevolent environment is protected by The Constitution of the Republic of Latvia (article 115). The scope of the environment as a concept includes anthropogenic factors, social factors, and natural factors as well. In order to preserve the diversity of the environment for future generations as much as possible, specially protected nature territories are created. A complex, undivided environmental protection in a large area is essential for their existence, together with the inclusion of a continuous territory in a particular protected area, in line with the specifics of protected values. If there is no generally ensured level of protection for a species, or it is outside the protected nature territories then, based on an assessment by an expert in

the relevant field of the protection needs of a particular species in the specific area, separate small areas are created within the zones of specially protected nature areas, to act as micro-reserves. The aim of the article is to explore the significance of the establishment of a micro-reserve, raising challenges and proposals for the improvement of the legal framework to balance the interests of the environment and property rights.

Several methods have been applied in the work, mainly scientific research method, to analyze legal acts, case law on understanding and operational aspects of micro-reserves, as well as inductive cognitive research method to analyze individual cases of establishing micro-reserves and formulating correlations for drawing conclusions.

By using the deductive cognitive research method, conclusions from the theoretical findings on the normative regulation and correlations of the micro-reserve can be made on individual elements, and the basic methods of interpretation of legal norms have been used as well.

In Latvia, there are eight types of special areas of conservation (hereinafter – SAC) with different levels of conservation, surface area and different development purposes covering 19% of the land territory in total<sup>1</sup>. The existing SACs are simultaneously defined as protected areas of the European Union (Natura 2000)<sup>2</sup>, which occupy 11.56% of land and 15.66% of maritime territory in Latvia and includes 333 (Nikodemus 2015:157) SACs: four (4) national parks, four (4) nature reserves, seven (7) marine protected areas, nine (9) protected landscape areas, 239 nature preserves and 37 nature parks, as well as nine (9) natural monuments and 24 micro-reserves (occupying 0.02%)<sup>3</sup>. These areas have different conservation and management regimes – from minimal restrictions in the protected landscape areas to a complete prohibition of the economic activity in the nature reserves. Different conservation natural areas and micro-reserves can be spatially overlapped with each other, for example, in a nature park there may be a separate nature preserve, where a micro-reserve is defined.

To maintain biodiversity, to regulate the conservation and protection of species, populations, and biotopes, as well as to ensure the necessary measures are taken, as well as to maintain populations of wild birds living naturally in accordance with ecological, scientific and cultural requirements, taking into account economic and recreational requirements. These objectives are defined in the Law on the Conservation of Species and Biotopes<sup>4</sup>. In order to achieve the objectives of these specially protected species (mammals, amphibians, reptiles, invertebrates, vascular plants, moss, algae, lichens, and fungi; for conservation and protection of biotopes of the specially

---

<sup>1</sup> [https://www.daba.gov.lv/public/lat/statistika1/ipasi\\_aizsargajamas\\_dabas\\_teritorijas1/](https://www.daba.gov.lv/public/lat/statistika1/ipasi_aizsargajamas_dabas_teritorijas1/)

<sup>2</sup> In accordance with the Council Directive 92/44/EEC on the conservation of natural habitats, wild fauna and flora and Council Directive 2009/147/EC on the conservation of wild birds.

<sup>3</sup> [https://www.daba.gov.lv/public/lat/statistika1/ipasi\\_aizsargajamas\\_dabas\\_teritorijas1/](https://www.daba.gov.lv/public/lat/statistika1/ipasi_aizsargajamas_dabas_teritorijas1/)

<sup>4</sup> Law On the Conservation of Species and Biotopes, adopted on 16.03.2000, Section 4.

protected species of birds and fish) also outside the SACs, micro-reserves shall be developed in accordance with the regulations of the Cabinet of Ministers<sup>5</sup>. According to habitats of species and the location of habitats, micro-reserve areas are defined between 0,1–30 ha, except for birds, fish and other species living in the watercourses and water reservoirs with different regulated areas (for birds up to 200 ha). In total, micro-reserves of 47 thousand ha with the buffer zones of 56 thousand ha have been established in the country. Data on micro-reserves and species found therein are available to anyone interested in or owner as registered users in the database of the Nature Conservation Agency, as particularly rare or extinct species are conserved. Information on the presence of specially protected species and biotopes in the micro-reserve may be distributed only with the permission of the Nature Conservation Agency.

A micro-reserve means an area defined to ensure the conservation of the specially protected species or biotopes **outside** the special areas of conservation, as well as in the special areas of conservation, where one of the functional zones does not provide it.<sup>6</sup> Since the micro-reserves are usually smaller in area than SACs (0.1–30 ha; the bird micro-reserves with a buffer zone can reach up to 500 ha), their establishment procedure is faster than the establishment of SACs, which provide operational conservation of particularly rare and endangered species. The most of micro-reserves are established for the conservation of specially protected species of birds nesting in forests. They usually are located on land owned by the state, local municipality, and private individuals. The majority (~ 88%) of micro-reserves are established on the state-owned lands. For example, the status of the specially protected species for the lesser spotted eagle (*Aquila pomarina*) is defined by both Latvian and EU laws, but often there is a lack of understanding of why should a bird be specially protected, which, apparently, feels comfortable in Latvia as 1/5 of the world's population (~ 4,000 pairs) is nesting there, and, currently, the number of pairs nesting is stable. Experts call for a wider look in time and space, because if population dynamics are stable at the moment, which does not mean the dynamics will be the same in the long term. 20 years ago, the number of the lesser spotted eagle decreased in Latvia, as well as the intensification of agriculture and the situation in Latvian forests makes it possible to predict that the situation with nesting and feeding sites for the lesser spotted eagle could deteriorate. Since Latvia is the centre of the population of the lesser spotted eagle in Europe, it is most important to conserve the protected species directly in the most important places of their nesting in order to ensure the sustainability of the species as a whole.

A proposal regarding establishment of a micro-reserve may be submitted to the responsible institution by any person in writing by filling in the first part of the questionnaire for the application

---

<sup>5</sup> Regulation of the Cabinet of Ministers No. 940 of 18.12.2012 “Regulations Regarding the Establishment and Management of Micro-reserves, Their Conservation, as well as Determination of Micro-reserves and Their Buffer Zones”.

<sup>6</sup> Section 1 (3) of the Law On the Conservation of Species and Biotopes.

and inventory of a micro-reserve of specially protected species and biotope to which the foreseeable territory of the micro-reserve is attached. The opinion on the formation of a micro-reserve is provided by a certified Expert, the register of which is published on the website of the Nature Conservation Agency<sup>7</sup>. The process of establishment of the micro-reserves is different in forest and non-forest lands: the micro-reserves in non-forest lands, as well as in the nature reserves and national parks are determined by the Nature Conservation Agency; the micro-reserves in the forest lands outside the nature reserves and national parks are determined by the State Forest Service; in turn the micro-reserves in the spawning grounds of specially protected fish species shall be determined by the Ministry of Agriculture.

Before deciding on the establishment of a micro-reserve, the responsible authority shall assess the opinion of the landowner or the legal land holder, as well as the social and economic interests of the public, which may take more time and often cause landowners' dissatisfaction. One can partially understand the landowners as the restrictions disrupt their future individual economic plans despite compensation which, if compared to a one-off income such as cutting a part of the forest in a clear felling, is so negligible that even for several decades it is impossible to be compensated for. Disputes are settled in a court, where all objections are comprehensively evaluated. For example, the court<sup>8</sup> recognized that insufficient compensation to the forest owners for the limitation of their economic activity is an issue, however, it is not considered in the framework of these legal proceedings. Moreover, the fact that the establishment of a micro-reserve infringes the economic interests of the forest owner has already been taken into account in the adoption of the relevant laws and regulations which establish a micro-reserve as a means of protecting certain species and a compensation system in case of forestry restrictions.

Similarly<sup>9</sup>, according to the court, the wording of the law "micro-reserves may be constituted" really indicates that grammatical interpretation allows them not to be established, however, these exceptions may be, e.g., in cases where the territory already is established as the special area of conservation.

In a dispute over the establishment of a micro-reserve for the lesser spotted eagle, the court pointed out that<sup>10</sup> the most effective way to protect the nesting site of the lesser spotted eagle is to establish a micro-reserve, as it provides protection not only for the nesting tree and its surroundings, but for the wider environment necessary for the lesser spotted eagle. The court did not find a disproportionate infringement of the interests of the third party, since the micro-reserve is not

---

<sup>7</sup> According to the regulation of the Cabinet of Ministers No. 267 of 16 March 2010 "Procedures for Certification of Experts in the Field of Conservation of Species and Biotopes and Supervision of the Activities Thereof".

<sup>8</sup> Archival No. A42-00097-20/10 ECLI:LV:ADRJRIT:2020:0131.A420240118.7.S.

<sup>9</sup> Archival No. A42-00621-19/6 ECLI:LV:ADRJRIT:2019:1011.A420237418.4.S.

<sup>10</sup> Archival No. A42-00533-19/25 ECLI:LV:ADRJRIT:2019:0508.A420220618.2.S.

established throughout the whole property and the pursuit of economic activity is allowed in the buffer zone.

For the restrictions on agricultural and forestry activities in the special areas of conservation and micro-reserves<sup>11</sup>, the landowners are granted a compensation in the form of annual payment of aid or land repurchase, as well as they are entitled to the tax exemption. The annual payment of aid for the part of land located in the Natura 2000 territory shall be granted by the Rural Support Service (*Lauku atbalsta dienests*) from the funds of the European Union, whereas for the part of land that is located in a special area of conservation, but not in the Natura 2000 territory, an annual payment of aid shall be granted by the Nature Conservation Agency from EUR 44 – 157 per hectare (depends on the activity that is prohibited)<sup>12</sup>. However, the compensation is not a substitute for the financial benefit that the landowner would gain in the absence of a fixed micro-reserve area. The grounds for non-acquisition or loss of financial benefit for owners are many times higher than the compensation granted. The Latvian Fund for Nature has been appealing to the responsible authorities to evaluate and improve the compensation system for some time. Under the auspices of the Ministry of Environmental Protection and Regional Development of the Republic of Latvia, a working group on this issue has been set up and there is hope that the amount and mechanism of the compensation could be reviewed. The necessity to improve the compensation system and to ensure adequate compensation is a common issue for the landowners, forest industry and environmental organizations.

The status of the protected territory may be eliminated only if the value of the protected area has been lost and the expert opinion has been obtained. The decision on the elimination of the protected territory status shall be taken on the basis of this opinion by the national authority which has decided on the establishment of the protected territory concerned.

## Conclusions

1. A micro-reserve means an area defined to ensure the conservation of the specially protected species or biotopes outside the special areas of conservation, as well as in the special areas of conservation, where one of the functional zones does not provide it.
2. Micro-reserves have been established for specially protected species: mammals, amphibians, reptiles, invertebrates, vascular plants, moss, algae, lichens, and fungi; for conservation and protection of the biotopes of the specially protected species of birds and fish
3. The most of micro-reserves are established for the conservation of specially protected species of birds nesting in forests. They usually are located on land owned by the state, local

---

<sup>11</sup> Law “On Compensation for Restrictions on Economic Activities in Protected Territories” adopted on 04.04.2013 <https://likumi.lv/doc.php?id=256138>

<sup>12</sup> Regulation of the Cabinet of Ministers No. 891 17 September 2013 “Regulations on Restrictions of the Economic Activity for which Compensation is due, its Conditions, Procedure and Amount”.

municipality, and private individuals. The majority of micro-reserves are established on the state-owned lands.

4. For the restrictions on agricultural and forestry activities in the special areas of conservation and micro-reserves, the landowners are granted a compensation in the form of annual payment of aid or land repurchase, as well as they are entitled to the tax exemption. However, the compensation is not a substitute for the financial benefit that the landowner would gain in the absence of a fixed micro-reserve area. The grounds for non-acquisition or loss of financial benefit for owners are many times higher than the compensation granted.

## References

Archival No. A42-00097-20/10 ECLI:LV:ADRJRIT:2020:0131.A420240118.7.S.

Archival No. A42-00621-19/6 ECLI:LV:ADRJRIT:2019:1011.A420237418.4.S.

Archival No. A42-00533-19/25 ECLI:LV:ADRJRIT:2019:0508.A420220618.2.S.

Council Directive 92/44/EEC on the conservation of natural habitats, wild fauna and flora and Council Directive 2009/147/EC on the conservation of wild birds.

[https://www.daba.gov.lv/public/lat/statistika1/ipasi\\_aizsargajamas\\_dabas\\_teritorijas1/](https://www.daba.gov.lv/public/lat/statistika1/ipasi_aizsargajamas_dabas_teritorijas1/)

Law On the Conservation of Species and Biotopes, adopted on 16.03.2000.

Law “On Compensation for Restrictions on Economic Activities in Protected Territories” adopted on 04.04.2013.

Nature protection (Dabas aizsardzība) (O. Nikodemus, G. Brūmelis ed.). Riga: LU Academic Publishing House, 2015., 288 p.

Regulation of the Cabinet of Ministers No. 940 of 18.12.2012 “Regulations Regarding the Establishment and Management of Micro-reserves, Their Conservation, as well as Determination of Micro-reserves and Their Buffer Zones”.

Regulation of the Cabinet of Ministers No. 891 17 September 2013 “Regulations on Restrictions of the Economic Activity for which Compensation is due, its Conditions, Procedure and Amount”.

Regulation of the Cabinet of Ministers No. 267 of 16 March 2010 “Procedures for Certification of Experts in the Field of Conservation of Species and Biotopes and Supervision of the Activities Thereof”.

# HISTORICAL DEVELOPMENT OF THE LEGAL INTERPRETATION OF HUMAN HEALTH

**Līga Mazure**

Rezekne Academy of Technologies, Atbrīvošanas al.115, Rezekne, LV-4601,  
liga.mazure@inbox.lv

## Abstract

### Historical development of the legal interpretation of human health

**Key Words:** *health, human, legal system, medicine, philosophy, religion*

The World Health Organisation has significantly contributed to the modern legal definition of human health by providing a definition of health in its constitution soon after WWII. Countries have adopted the definition and included it in their national laws and regulations. Although this definition of health was seen as an innovative view of the understanding of human health, still nowadays it does not correspond to the stage of development of society. Legal arguments have been found that call for improvement of the legal definition of human health.

Proper amendment of the legal interpretation of human health requires an assessment of the historical development of this interpretation. This allows establishing important means to be used for the improvement of the legal interpretation of human health – firstly, criteria that affect the legal interpretation of human health; secondly, the method for forming the legal interpretation of health. Historical development of the legal definition of human health also allows modelling future development prospects of health to be taken into account when designing a modern legal definition of human health.

## Kopsavilkums

### Cilvēka veselības tiesiskās interpretācijas vēsturiskā attīstība

**Atslēgvārdi:** *cilvēks, medicīna, reliģija, filozofija, tiesību sistēma, veselība*

Pasaules Veselības organizācija ir devusi būtisku ieguldījumu cilvēka veselības tiesiskā definējuma formulēšanā mūsdienās, neilgi pēc Otrā pasaules kara dodot savā konstitūcijā veselības skaidrojumu. Valstis to aizguva un nostiprināja savā nacionālajā normatīvajā regulējumā. Lai arī šis veselības definējums bija vērtējams kā novators skatījums uz cilvēka veselības izpratni, tomēr mūsdienās tas neatbilst sabiedrības attīstības pakāpei. Ir konstatējami tiesiski argumenti, kas izvirza nepieciešamību cilvēka veselības tiesiskā definējuma pilnveidei.

Atbilstoši cilvēka veselības tiesiskās interpretācijas korekcijai ir nepieciešams izvērtēt šīs interpretācijas vēsturisko attīstību. Tas ļauj konstatēt būtiskus līdzekļus, kas izmantojami cilvēka veselības tiesiskās interpretācijas pilnveidei – pirmkārt, kritērijus, kas ietekmē cilvēka veselības tiesisko interpretāciju; otrkārt, metodi, kādā ir veidojama veselības tiesiskā interpretācija. Un cilvēka veselības tiesiskās interpretācijas vēsturiskā attīstība ļauj modulēt veselības nākotnes attīstības perspektīves, kas ņemamas vērā, izstrādājot cilvēka veselības mūsdienu tiesisko definējumu.

## Introduction

The World Health Organisation (hereinafter – WHO) has significantly contributed to the modern legal definition of human health by providing a definition of health in its constitution soon after WWII. Countries have adopted the definition and included it in their national laws and regulations (Constitution of the World Health Organization 1946; Ārstniecības likums 1997; Veterans Health Care Regulations 1990). Although WHO's definition of health was seen as an innovative view of the understanding of human health, still nowadays it does not correspond to the stage of development of society. Legal arguments have been found that call for improvement of the legal definition of human health (Mazure 2020).

Proper amendment of the legal interpretation of human health requires an assessment of the historical development of this interpretation. This allows establishing important means to be used for the improvement of the legal interpretation of human health – firstly, criteria that affect the legal interpretation of human health; secondly, the method for forming the legal interpretation of health.

Historical development of the legal definition of human health also allows modelling future development prospects of health to be taken into account when designing a modern legal definition of human health.

The aim of the article is to analyse the historical development of the legal interpretation of human health, establish the criteria that affect this interpretation and its design methods, as well as model future development prospects of the understanding of health. The article employs the semantic, grammatical, historical, comparative, analytical, systemic, and teleological research method. After studying the historical development of the legal definition of human health, improvement of this issue is suggested with specific implementable recommendations.

### **1. Developments of the Legal Idea of Human Health in Ancient History (Until the 5<sup>th</sup> Century)**

In primeval society (until the 5<sup>th</sup> century BC), the understanding of human health was closely related to supernatural forces and religion (Hajar 2018: 1; Tountas 2009: 185). It manifested in three ways. Firstly, initially patients were healed by experienced elders of the community through collective treatment, where professional servants of the religious cult appeared at a later stage (such as shamans, magicians), who also fulfilled the duty of treatment (Hajar 2018: 2; Сорокина 1988: 22, 23; Entwicklungsschema zur Medizin). Moreover, it is notable that God, a deity, or a supernatural force (e.g., Homer's *Odyssey* had a god of healing called Apollo (Tountas 2009: 189)) was believed to be the real healer of the patient, and the human being was only a middleman, fulfilling a secondary role in the healing of the patient.

Secondly, patient healing involved a religious ritual, asking God, a deity, or a supernatural force to give the patient health, without checking the patient at all (Hajar 2018: 2; Badash, Kleinman, Barr, Jang, Rahman, Wu 2017: 1). Thus, it was of utmost important in society to establish a connection between a human being and the real healer, where the patient's health depended on the quality of this connection only and, as the community believed, was determined by a superior force that existed outside society.

Thirdly, God established the Ten Commandments, where people's actions must conform to God's will, i.e., in the Commandments God has set his will as a priority, postulating conditions that limit people's actions (Desmit baušļi 2007; Mazure 2014: 12). If a person broke them, then the actions of supernatural forces (for example, demons) caused the person's illness (Badash, Kleinman, Barr, Jang, Rahman, Wu 2017: 1). Thus, the patient's illness was explained as a consequence of the patient's action that contradicted the will of God, a deity, or a supernatural force.

It can be concluded that the understanding of health was not directly explained in primeval society; however, it could be established indirectly. Health was understood as the ideal in imitation of God or a deity. And in the beliefs of primeval society, this ideal, in fact, presupposed the ability



to survive, to protect oneself and the society, while obeying the rules of the community. Thus, an abstract interpretation of health where religious nature predominated, derived, in fact, from the survival criteria established by primeval society, was applicable to any patient, without relating human health to the individual and true condition of a specific patient.

In the antique period, when defining the notion of health, several ideas can be found at the centre of the explanation. These ideas reflect the developmental direction of the interpretation of human health and its scope in antique society.

Firstly, human health was defined as harmony, the ideal of beauty and virtue, where morality was brought to the foreground when describing ways of preserving health (Nordenfelt 2007; *Философия медицины* 2004: 419). The point of departure in this definition was the person, where health was related to an abstract philosophical category of ideal, attributing it to the person.

Secondly, the human being began to be divided into the spirit and body, where health was defined as a balance between these constituents, and when this balance was disturbed, suffering and illness appeared (Ancient Greece (Plato, Aristotle), Ancient India, Ancient China) (Svalastog, Donev, Kristoffersen, Gajovič 2017; Hajar 2018: 7; *Философия медицины* 2004: 418, 419). The idea of balance has been preserved in the definition of human health, viewing it in more detail now, within the person.

Thirdly, human health began to be defined as a balance between the person or their internal environment and the person's external environment (e.g., natural elements such as water, fire, metal, wood, earth (Ancient China, Ancient Greece (Hippocrates *Airs, Waters, Places*)); the interests of society (Plato's *Dialogues*); the political system, where the system is based on the laws of one person only and illness is created (Ancient Greece)) (Hajar 2018: 6; Tountas 2009: 185–187, 189, 191; Svalastog, Donev, Kristoffersen, Gajovič 2017). Thus, human health is viewed as a balance between the person and their surrounding environment – physical environment, social environment both in terms of content as social interests and in terms of organisation of society as a political system, while recognising and evaluating the effect of the criteria existing outside the person on their health.

Fourthly, human health was also viewed as a balance between the person and the Universe, cosmic laws and their order (Ancient Greece, Plato) (Tountas 2009: 186). On the one hand, this approach can be explained by the desire to replace the involvement of supernatural forces in the definition of human health with a criterion grounded in objective science. On the other hand, even though science in antique society was still not developed to such a degree that would allow understanding of the Universe and its structure, still, a sense of the existence of a superior idea appeared, which was related to the interpretation of human health. Given that the human is part of

the Universe, its effect on human health was naturally recognised, thus expanding the scope of the interpretation of health.

Fifthly, human health was also explained as a balance between the elements – wet, dry, cold, hot – in the person, referring to the four fluids in the human body (Hippocrates, Galen, Pythagoras) (Nordenfelt 2007; Badash, Kleinman, Barr, Jang, Rahman, Wu 2017: 1, 2; Tountas 2009: 186), which in the 5<sup>th</sup> century resulted in the understanding of health as harmonious functioning of the organs of the human body (Pindar) (Svalastog, Donev, Kristoffersen, Gajovič 2017). Such explanation of human health is already characterised by a nuanced medical understanding, bringing the human body to the foreground.

The analysis of these ideas, from which the interpretation of human health followed, leads to two kinds of conclusions. On the one hand, explanations of human health show that the idea of supernatural forces has been given up. Instead, the interpretation uses different criteria, creating a comprehensive philosophical understanding, which is even directed towards objective medicine, also including the effect of indirect criteria on human health. On the other hand, the criteria used in the interpretation are viewed separately from one another instead of combining them in terms of content. This creates an, although progressive, but still divided view of human health. Still, it can overall be noted that finally the understanding of human health was not just indirectly accepted, but directly explained in a wider scope with the human being as the point of origin.

In ancient history, medicine was an interdisciplinary field (Van der Eijk 2005) because medicine was closely interrelated with philosophy and religion. Still, two significant aspects were found in this interrelation of disciplines, which also affected the interpretation of human health.

Firstly, in ancient medicine, with the decrease of the influence of religion, the effect of philosophy grew at first and even acquired a relatively dominating position over medicine. In Ancient Greece, medicine separated from religion (Badash, Kleinman, Barr, Jang, Rahman, Wu 2017: 1; Tountas 2009: 190), and its place was in fact taken by philosophy because often physicians were also philosophers (Nordenfelt 1986: 281) and medicine also started to be grounded in natural philosophy (Tountas 2009: 186, 191; Van der Eijk 2005). Considering that in ancient times the medical science was only at the initial stage of development and due to its objectively complex nature, this development required a longer time period, initially, explanation of ideas was dominated by philosophy.

In antique philosophy, with the decrease of the influence of religion, the human being was brought to the foreground (Mazure 2014: 23), determining their autonomy as a value (Socrates) (Tountas 2009: 187). Under this influence, the understanding of human health emphasised the importance of the person's actions for preserving health as a balance through their lifestyle (Hippocrates, Pythagoras) (Tountas 2009: 187; Svalastog, Donev, Kristoffersen, Gajovič 2017).

Thus, human health was explained as the condition where the person does not depend on others (Protagoras) (Tountas 2009: 187) and which the person can control personally instead of through prayer to God (Svalastog, Donev, Kristoffersen, Gajovič 2017; Hipokrāts a) 2003: 280).

Secondly, with the development of medicine in ancient times, separation of medicine and philosophy was observed, as well as a decrease of the importance of religion in medicine, but not its disappearance. Considering that the absolute goal of medicine is unlimited human health (Aristotle) (Философия медицины 2004: 419), ancient times had favourable conditions for the development of the medical science to reach its goal. For example, in Ancient Egypt, nine medical papyri were created on diagnostics, treatment, and prognosis (1550 BC) (Hajar 2018: 4); in Ancient Mesopotamia, they checked the patient's pulse, understanding its meaning in health, even though the idea is borrowed from the Epic of Gilgamesh, the ruler of Ancient Iraq (2500 BC) (Hajar 2018: 3); Herophilos established the foundations of the anatomical and physiological sciences (330–260 BC) (Hajar 2018: 8); the physician education system was introduced, which was based on the medical science (Мейер-Штейнер 1999: 15, 22, 23). With objective development of medicine, it started to separate from philosophy (Tountas 2009: 186). However, given that medical knowledge allowed acquiring an understanding of human body, not the spirit (Ancient Greece, Ancient Rome (Galen)) (Hajar 2018: 8; Nordenfelt 2007), the interpretation of human health was to a greater extent related specifically to the human body.

Considering that the social beliefs prevailing in ancient times were favourable for the development of medicine, the importance of religion was decreasing under this influence. Still, regardless of this trend, religion influenced medicine in two ways. Overall, religion hindered the development of medicine because a strong contradiction existed between the main principles of medicine and religion. For example, in Ancient Mesopotamia, autopsies were forbidden under the influence of religion because in religion the physical body is the temple of the Holy Spirit (Koenig 2012: 8; Hajar 2018: 3), whereas in medicine, autopsy is a significant source of knowledge. Still, rare cases have been found where religious rituals also provided specific knowledge, which was useful in medicine. For example, mummification practiced in Ancient Egypt contributed to the development of human anatomy (Hajar 2018: 5). There is thus reason to believe that regardless of the ancient history events, the influence of religion was weakened, but not eliminated.

It can thus be concluded that due to the worldview and beliefs of society, the influence of religion in medicine decreased in ancient times, which resulted in the development of two kinds of trends. On the one hand, the initial domination of religion in medicine was replaced by philosophy, albeit with decreasing importance in later ancient times. On the other hand, the growing importance of medicine is seen throughout the ancient history period. Such change of priorities in the

interaction of medicine, religion, and philosophy also determined the development of the nature of interpretation of human health in ancient history.

Notably, in ancient times, under the influence of philosophy and medicine, a flexible interpretation of human health was created. On the one hand, Aristotle and Plato believed that human health and sickness are opposites and there is no intermediate condition (Van der Lugt 2011: 7; *Философия медицины* 2004: 419). On the other hand, the idea of stoicism – a school of philosophy – gained support, which stated that neutral things coexist together with good and bad things (Van der Lugt 2011: 5). This idea has also been transferred to the interpretation of human health, stating that there is a healthy, sick, and neutral condition of a human being, which is a deviation from the normal condition of health (Herophilus, Hippocrates, Pythagoras, Galen) (Van der Lugt 2011: 4, 6, 7, 8; *Hipokrāts b*) 2003: 268; Tountas 2009: 186). Moreover, Hippocrates also notes that two kinds of such deviation are possible – endemic, i.e. always existing in the population, and epidemic, i.e. reoccurring in the population after a longer period of time (Tountas 2009: 188). This more flexible interpretation of human health introduced by philosophy has been consolidated in medicine, grounding it in objective knowledge about human health.

It can thus be concluded that in primeval society the understanding of human health was abstractly presumed, similar to supernatural forces, without a relation to specific human criteria. Whereas in antique society, the understanding of human health was explained, although in an abstract way, but still according to specific criteria of human health with a relatively deep, wide, and flexible view. Such change of interpretation was possible due to the decreasing interdisciplinarity of medicine. The initial philosophical domination in the interpretation of human health started decreasing while the medical science was convincingly increasing its dominance, while also preserving a small influence of religion.

## **2. Principles of Legal Interpretation of Human Health in the Middle Ages (5<sup>th</sup>–17<sup>th</sup> Century)**

In the Middle Ages, the influence of religion was relatively big, and religion even started to dominate over the secular power (Указ Вильгельма I 1999: 85; *Саксонское зеркало* 1999: 437; Balodis 2000: 75). The medical science was also influenced by scholasticism, which was a school of religious philosophy where the primary sources were Biblical texts and the works of antique authors (mainly Galen and Hippocrates) (Зудгоф 1999: 18; Сорокина 1988: 41; Harington 1920: 76,77). Medical knowledge was acquired mainly from the works of antique authors because the Church had forbidden shedding blood and performing autopsies. God was brought to the centre, and the lives of people had to be oriented to God, which is why people's wish to live according to their own will was considered a sin (*Философия медицины* 2004: 83,84,394; *Антология мировой правовой мысли* 1999: 6; Нерсесянц 2006: 540). Religion justified its superiority by the principle that life on earth is unimportant; it only prepares us for life with God (Svalastog, Donev,

Kristoffersen, Gajovič 2017; Nordenfelt 2007). Thus, religion hindered the development of medicine, which was practically opposite to religious beliefs.

In the Middle Ages, the Church tried to be actively involved in secular life, including the field of medicine. Firstly, monastery medicine was developing, which was performed by special clergymen – monks who had received permission to perform secular deeds, including medical treatment (Yousif; Cassell 1997). Secondly, in the Byzantine Empire, in the early and developed Middle Ages, monastery hospitals were founded where monks took care of travellers and the wounded in the monasteries. At a later stage, monastery hospitals had shift physicians as permanent employees and their assistants, who received a salary (Марчукова 2003: 164, 165; Byzantine Medicine). Thirdly, monasteries created medical education institutions, which could only be attended by future monks (Сорокина). It can thus be concluded that religion was no stranger to medicine and medical treatment, as well as the explanations of related issues.

Interpretation of human health was not given directly in religion. Still, it could be concluded from the principles incorporated in religion. In religion, the physical body is the temple of the Holy Spirit, or a vessel for the soul (Koenig 2012: 8; Medicine in the 13–16th centuries) where the person's spirit is also recovering (Da Nóbrega Alves, da Nóbrega Alves, Rilke Duarte Barboza, de Medeiros Silva Souto 2010: 2106). This allows concluding that in religion human health was related to the body, which was subject to religious beliefs in accordance to religious principles, and failing to meet the expectations of religion was interpreted as illness (Williams, Sternthal 2007: 48), and these beliefs could be different, considering the diversity of religions (Chatters 2000).

Things took a turn in the Late Middle Ages (15<sup>th</sup>–17<sup>th</sup> century). Scholasticism was gradually replaced by science, bringing the practical scientific approach to the foreground. For example, the anatomical science started to develop in Western Europe, where the human body became the object of research, and humanistic ideas were consolidated, where the human being was recognised as a value (Ideju vārdnīca 1999: 210, 212; Сорокина 1988: 43; Medicine in the 13–16th centuries; Hong, Park 2017:290).

Under the influence of these events, the interpretation of human health also changed. Human health was understood as flawless functioning of the organs of the human body (Avicenna, R. Descartes, Fr. Bacon, LaMettrie) (Философия медицины 2004: 419, 420; Obaidullah 2007: 3; Toso, Gaspar, Banha da Silva, Garcia, Alexander 2019: 3699, 3700). Moreover, health could also be viewed from the point of view of different natural sciences, relating it to the understanding of the human being in them. For example, iatrophysics (*Greek “iatros” – “doctor”*), a live organism and nature are viewed by applying the rules of physics (R. Descartes); in iatromechanics, a live organism is like a machine where the processes are explained through mathematics and mechanics (G.A. Borelli); in iatrochemistry, the processes in the human body are chemical (Paracelsus)

(Сорокина; Healing in the Middle Ages; Baldunčiks, Pokrotniece 1999: 324). Thus, human health meant the functioning of the body in accordance with the principles of science and the level of development at the time.

In the Middle Ages, with the dominance of science, interpretation of human health was also contributed to by philosophy. Under its influence, human health was explained in more detail, discovering some principles grounded in philosophy. Firstly, health was recognised as a neutral or average condition with small damage to the body functions (Bartholomew of Salerno) (Van der Lugt 2011: 14, 15). Secondly, coexistence of health and illness in the same body at the same time was allowed (Haly ibn Ridwan) (Van der Lugt 2011: 18). Thirdly, health meant the balance of the elements in the human body (Hegel). Fourthly, health was recognised as the highest good, characteristic of the human body, the basis of all other goods and the source of human happiness (Fr. Bacon, B. Spinoza, LaMettrie) (Философия медицины 2004: 420). It is fascinating that these philosophical planes of human health were also grounded in medicine.

It can be concluded that the Middle Ages saw a significant change of the main principles in the interpretation of human health. At the initial stage, the domination of religion restored the presumption of abstract human health in imitation of God. At the final stage, when science came forward, the health of the person was assessed according to medical views. It is characteristic of the Middle Ages that only the body is given a narrow assessment in human health, albeit according to different principles: in religion – according to the physical image of God, but in medicine – according to scientifically justified principles of functioning of the human body.

### **3. Changes in the Interpretation of Human Health in Modern and Contemporary History (End of the 17<sup>th</sup> Century Until Today)**

The events of Modern and Contemporary history created the premises for the change of approach regarding the institute of personal will. Firstly, revolutions (17<sup>th</sup> century England, 18<sup>th</sup> century France) promoted the move from feudalism to a society based on legal equality of free people in the society (Антология мировой правовой мысли 1999: 5, 6). Secondly, with the Catholic Church being unable to maintain the monopoly of power, reformation took place (16<sup>th</sup> century), which affected not only the Church, but also other fields (Balodis 2000: 78). Thirdly, the new political system called for the transformation of the legal system. Thus, rights were created following the reception of Roman law and liberalism, where the human being was brought to the centre (Антология мировой правовой мысли 1999: 6, 7, 12; Osipova, Lazdiņš 2007). Fourthly, Modern and Contemporary history philosophy also started increasingly supporting the principle of personal autonomy (Devereux 2002: 450). Fifthly, this time period saw a rapid development of science and even discovery due to cooperation of countries (Michel 2005). It can thus be concluded

that in Modern and Contemporary history, objective conditions were created for the change of the interpretation of human health.

Under the effect of the new conditions, the explanation of human health started to also include a philosophical view. Human health was interpreted as the first of all goods which gives the person natural freedom of action and which is a condition qualitatively different from illness (C.Bernars, Snow, K.Marx), and the possibility of absolute health was doubted because illness is one of the manifestations of life (Fr.Nietzsche, S.P.Botkin) (Философия медицины 2004: 421; Concepts of disease and health 2015: 3; Svalastog, Donev, Kristoffersen, Gajovič 2017; Gangl 2015:7). Thus, the explanation of human health with the help of philosophy regained a wider scope, at the same time preserving in this view a remotely perceivable medical basis.

The WHO has made a significant contribution to the formulation of the modern legal definition of human health. Soon after the WWII the WHO defined health in its constitution as “a state of complete physical, mental and social well-being”, specifying that health is “not merely the absence of disease or infirmity” (Constitution of the World Health Organization 1946); this definition was also stressed in a later period (The Ottawa Charter for Health Promotion 1986). Considering that this definition of health was not legally binding, countries borrowed it and included in their national laws and regulations (e.g.: Ārstniecības likums 1997; Veterans Health Care Regulations 1990). Thus, the definition of health proposed by the WHO acquired a binding nature, becoming the content of national laws and regulations.

Although the definition of health by the WHO is seen as an innovative view on the understanding of human health, nowadays it needs to be corrected. Legal arguments are found that promote the necessity to improve the legal definition of human health. When analysing the legal definition of human health, it needs to be adjusted in accordance with the modern legal system. Firstly, this definition should include already existing objective principles of human health (health is characteristic of each individual, however, with actually different levels; complete health is presumed for a person; a person possesses self-determination in the evaluation of their own health to an objective limit determined by society a.o.). Secondly, the definition of human health should be completed with innovative modern principles of the understanding of human health (elements of health are interrelated with the principle of balance among them, which is achieved through lifestyle as a measure; health is an interdisciplinary concept where the prevalence of the medical explanation is preserved a.o.). Thirdly, an expansion of the understanding of health itself as a nonmaterial good is expected due to the changes found in the legal system. The legal science discusses, for example, the idea of animal health, the health of a legal entity, the health of the planet, where these developments are an issue for a separate study.

It can, thus, be concluded that in Modern and Contemporary history, the abstract, philosophical view of human health re-emerged, moving the medical criterion of this interpretation to the background. When assessing future development of the explanation of human health, its change is expected, bringing the legal criterion to the foreground, which would consolidate the legal and medical principles of health in the definition of health. Expansion of the understanding of health itself as a nonmaterial good is also possible in the future.

## Conclusions

1. Historical development of the legal interpretation of human health brings out the most significant factors that affect it. These are the following – philosophy, religion, medicine, and the legal system. Each stage of its history shows different domination of these criteria in the legal interpretation of human health, which shows spiral development in the changes of these criteria.
2. At the historical stages the method of abstraction was replaced with the causal approach to legal interpretation of human health. Furthermore, the modern course shows the growth of the level of specification in the legal interpretation of human health.
3. In the modulation of future development trends in relation to the legal interpretation of human health, two courses of the most important change can be predicted in such interpretation. Firstly, more convincing consolidation of the necessary legal criteria is predicted in the legal interpretation of human health, and secondly, the expansion of the legal understanding of health itself as a nonmaterial good is expected, testified to by the change trends observed in the legal system.

## References

- Ārstniecības likums. 1997. LR likums. *Latvijas Vēstnesis*, 167/168, 3.p. pirmā daļa.
- Badash I., Kleinman N.P., Barr S., Jang J., Rahman S., Wu B.W. 2017. Redefining health: The evolution of health ideas from Antiquity to the Era of Value-Based care. *Cureus*, Nr. 9(2), 4 p. Doi: 10.7759/cureus.1018 [skatīts 05.04.2020].
- Baldunčiks J., Pokrotniece K. 1999. *Svešvārdu vārdnīca: vairāk nekā 15 000 citvalodu cilmes vārdu un terminoloģisku vārdkopu*. Red. Baldunčiks J. Rīga: Jumava.
- Balodis R. 2000. *Valsts un Baznīca*. Rīga: Nordik.
- Byzantine Medicine. The Introduction of Hospitals. Accessed: <http://www.healthsystem.virginia.edu/internet/library/wdc-lib/historical/artifacts/attiqua/byzantine.cfm> [skatīts 05.04.2020].
- Cassell E.J. 1997. About: Amundsen D.W. Medicine, Society, and Faith in the Ancient and Medieval Worlds. Baltimore: Johns Hopkins University Press, 1996. *The New England Journal of Medicine*, Nr. 12. Accessed: <http://content.njem.org/cgi/content/full/336/12/883> [skatīts 05.04.2020].
- Chatters L.M. 2000. Religion and health: Public Health Research and Practice. *Annu. Rev. Public Health*, Nr. 21, pp. 335–367. Accessed: [www.annualreviews.org](http://www.annualreviews.org) [skatīts 05.04.2020].
- Concepts of disease and health. 2015. Stanford Encyclopedia of Philosophy. Accessed: <https://plato.stanford.edu/entries/health-disease/> [skatīts 05.04.2020].
- Constitution of the World Health Organization. 1946. The World Health Organization. Preamble. Accessed: [https://www.who.int/governance/eb/who\\_constitution\\_en.pdf](https://www.who.int/governance/eb/who_constitution_en.pdf) [skatīts 05.04.2020].



- Da Nóbrega Alves R.R., da Nóbrega Alves H., Rilke Duarte Barboza R., de Medeiros Silva Souto W. 2010. The influence of religiosity on health. *Ciência & Saúde Coletiva*, Nr. 15(4), pp. 2105–2111.
- Desmit baušļi. 2007. No: Blūzma V., Zemītis G., Osipova S. Ārvalstu tiesību vēstures avoti (no vissenākajiem laikiem līdz 1689. gadam). Rīga: Turība, 39.–40. lpp.
- Devereux J. 2002. *Medical Law*. Cavendish Publishing (Australia) Pty Limited. Accessed: <http://rulv.etailer.dpsl.net/home/html/moreinfo.asp?bookId=536899501&category=LW600000&whichtpage=&pagenam=category.asp> [skatīts 05.04.2020].
- Entwicklungsschema zur Medizin. Accessed: [http://www.gottwein.de/graeca/lex/m\\_medizin01.php](http://www.gottwein.de/graeca/lex/m_medizin01.php) [skatīts 05.04.2020].
- Gangl V. 2015. "Gesundheit" ist mehrdimensional. Grundlagen einer Gesundheitsbildung. *Magazin Erwachsenenbildung.at*, Nr. 24. Accessed: [https://www.pedocs.de/volltexte/2015/10361/pdf/Erwachsenenbildung\\_24\\_2015\\_Gangl\\_Gesundheit\\_ist\\_mehrdimensional.pdf](https://www.pedocs.de/volltexte/2015/10361/pdf/Erwachsenenbildung_24_2015_Gangl_Gesundheit_ist_mehrdimensional.pdf) [skatīts 05.04.2020].
- Hajar R. 2018. The Pulse in Ancient Medicine Part 1. *Heart Views*, Nr. 19(1), pp. 36–43. doi: 10.4103/HEARTVIEWS.HEARTVIEWS\_23\_18 [skatīts 05.04.2020].
- Harington J. 1920. *The Salerno Book of Health. Images from History of the School of Salerno*. Accessed: <http://www.umanitoba.ca/libraries/units/health/resources/salerno.html> [skatīts 05.04.2020].
- Healing in the Middle Ages. Medicine, Religion and the Rise of Institutional Care. Accessed: [http://www.medscape.com/viewarticle/418847\\_2](http://www.medscape.com/viewarticle/418847_2) [skatīts 05.04.2020].
- Hipokrāts a). 2003. Par mākslu. No: *Hipokrātiskie raksti: izlase*. A.Gailes un A. van Hofas tulk. no sengrieķu val., ievads un komentāri. Rīga: Liepnieks&Rītups.
- Hipokrāts b). 2003. Senā ārstēšanas māksla. No: *Hipokrātiskie raksti: izlase*. A.Gailes un A. van Hofas tulk. no sengrieķu val., ievads un komentāri. Rīga: Liepnieks&Rītups.
- Hong Y.J., Park S.H. 2017. Medical Care or Disciplinary Discourses? Preventive Measures against the Black Death in Late Medieval Paris: A Brief Review. *Iran J Public Health*, Vol. 46, Nr. 3, pp. 286–292. Accessed: <http://ijph.tums.ac.ir> [skatīts 05.04.2020].
- Ideju vārdnīca. 1999. Domātāji, teorijas un jēdzieni filozofijā, zinātnē, reliģijā, politikā, vēsturē un mākslā. Adikibi O., Baleins B., Brejī E.u.c. Rīga: Zvaigzne ABC.
- Koenig H.G. 2012. Religion, Spirituality, and Health: The Research and Clinical Implications. International Scholarly Research Network. *ISRN Psychiatry*, 33 pages. Doi: 10.5402/2012/278730 [skatīts 05.04.2020].
- Mazure L. 2020. Modern legal definition of human health. In: *Society. Integration. Education. Proceedings of the International Scientific Conference (May 22–23, 2020)*, Vol. VI. Rezekne: RTA, 334–343. Doi: <http://dx.doi.org/10.17770/sie2020vol6.4912> [skatīts 05.04.2020].
- Mazure L. 2014. *Pacienta griba un tās civiltiesiskā aizsardzība*. Rēzekne: RA Izdevniecība.
- Medicine in the 13–16th centuries. Universities, Hospitals, Anatomical Revolution. Accessed: <http://pacs.unica.it/biblio/lesson3.htm> [skatīts 05.04.2020].
- Michel W. 2005. Western Medicine and Pharmaceutics in 17th Century Japan. *Proceedings of the Tenth International Conference oh the History of Science in East Asia*. Shanghai Jiao Tong University Press, pp. 173–181. Accessed: [www.flc.kyushu-u.ac.jp/~michel/publ/aufs/76/76.htm](http://www.flc.kyushu-u.ac.jp/~michel/publ/aufs/76/76.htm) [skatīts 05.04.2020].
- Nordenfelt L. 2007. Understanding the concept of health. Dept of Health and Society, Linköping University. Accessed: <https://www.fil.lu.se/hommageawlodek/site/papper/NordenfeltLennart.pdf> [skatīts 05.04.2020].
- Nordenfelt L. 1986. Health and disease: two philosophical perspectives. *Journal of Epidemiology and Community Health*, Nr. 41, pp. 281–284. Doi: 10.1136/jech.40.4.281 [skatīts 05.04.2020].
- Obaidullah M. 2007. Medical science and Islam: An analysis of the contributions of the medieval Muslim scholars. Accessed: [https://www.researchgate.net/publication/270215891\\_Medical\\_Science\\_and\\_Islam\\_An\\_Analysis\\_of\\_the\\_Contributions\\_of\\_the\\_Medieval\\_Muslim\\_Scholars](https://www.researchgate.net/publication/270215891_Medical_Science_and_Islam_An_Analysis_of_the_Contributions_of_the_Medieval_Muslim_Scholars) [skatīts 05.04.2020].

- Osipova S., Lazdiņš J. 2007. *Tiesību sistēmas ģenēzes un evolūcijas(transformācijas) aspekti Eiropas tiesību kontekstā*. Tēzes. Konferences „Tiesību harmonizācija Baltijas jūras reģionā pēc Eiropas Savienības paplašināšanās” materiāli. 2007. gada 24.–27. janvāris, Rīga, Latvijas Universitāte. Npublicēts.
- Svalastog A.L., Donev D., Kristoffersen N.J., Gajovič S. 2017. Concepts and definitions of health and health-related values in the knowledge landscapes of the digital society. *Croat Med J.*, Nr. 58(6), pp. 431–435. Doi: 10.3325/cmj.2017.58.431 [skatīts 05.04.2020].
- The Ottawa Charter for Health Promotion. 1986. First International Conference on Health Promotion, Ottawa. Accessed: <https://www.who.int/healthpromotion/conferences/previous/ottawa/en/> [skatīts 05.04.2020].
- Toso A., Gaspar S., Banha da Silva R., Garcia S.J., Alexander M. 2019. High status diet and health in Medieval Lisbon: a combined isotopic and osteological analysis of the Islamic population from São Jorge Castle, Portugal. *Archaeological and Anthropological Sciences*, Nr. 11, pp. 3699–3716. Doi: <https://doi.org/10.1007/s12520-019-00822-7> [skatīts 05.04.2020].
- Tountas Y. 2009. The historical origins of the basic concepts of health promotion and education: the role of ancient Greek philosophy and medicine. *Health Promotion International*, Vol. 24, Nr. 2, pp. 185–192. Doi: 10.1093/heapro/dap006 [skatīts 05.04.2020].
- Van der Eijk P.J. 2005. *Medicine and Philosophy in Classical Antiquity: Doctors and Philosophers on Nature, Soul, Health and Disease*. Cambridge: Cambridge University Press.
- Van der Lugt M. 2011. Neither ill nor healthy: The intermediate state between health and disease in medieval medicine. *Quaderni Storici*, Nr. 136, pp. 13–46. Accessed: <https://halshs.archives-ouvertes.fr/halshs-00603635> [skatīts 05.04.2020].
- Veterans Health Care Regulations. 1990. Department of veterans affairs act, Canada, SOR/90-594. Accessed: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-90-594/page-1.html?txthl=definition+health#s-2> [skatīts 05.04.2020].
- Williams D.R., Sternthal M.J. 2007. Spirituality, religion and health: evidence and research directions. *MJA*, Volume 186, Nr. 10, pp. 47–50.
- Yousif J. *The Progress of Ancient Medicine: Medieval Medicine. Medical Practitioners*. Accessed: [http://students.ou.edu/Y/Jason.S.Yousif-1/epizode\\_3\\_medieval.html](http://students.ou.edu/Y/Jason.S.Yousif-1/epizode_3_medieval.html) [skatīts 05.04.2020].
- Антология мировой правовой мысли. 1999. Т.П. Европа. V–XVII вв. Отв.ред. Крашенинникова Н.А. Национальный общественно-научный фонд. Москва: Мысль.
- Зудгоф К. 1999. *Медицина средних веков и эпохи возрождения*. Москва: Вузовская книга.
- Марчукова С.М. 2003. *Медицина в зеркале истории*. Санкт-Петербург: Европейский дом.
- Мейер-Штейнер Т. 1999. *Древняя медицина*. Москва: Вузовская книга.
- Нерсисянц В.С. 2006. *Философия права*. Учебник для вузов. Институт государства и права Российской академии наук, Академический правовой университет. 2-е изд. Москва: Норма.
- Саксонское зеркало. 1999. *Антология мировой правовой мысли: в 5-и т. Т. 2. Европа V–XVII вв.* Рук. науч. проекта Г.Ю. Семигин; Национальный общественно-научный фонд. Москва: Мысль.
- Сорокина Т.С. 1988. *История медицины*. Москва: Ун-т дружбы народов.
- Сорокина Т.С. *История медицины в двух томах*. Том 1, часть 3, глава 4. Accessed: <http://bibliotekar.ru/423/12.htm> [skatīts 05.04.2020].
- Философия медицины. 2004. Науч.ред. Шевченко Ю.Л. Москва: ГИТАР-МЕД.
- Указ Вильгельма I. 1999. Указ отделяющий церковные суды от светских. Антология мировой правовой мысли: в 5-и т. Т.2. Европа V–XVII вв. Рук. науч. проекта Г.Ю. Семигин; Национальный общественно-научный фонд. Москва: Мысль.

# EKONOMIKA UN SOCIOLOĢIJA / ECONOMICS AND SOCIOLOGY

## THE INTERNATIONAL CONCEPT OF FORENSIC ACCOUNTING: THE EXAMPLE OF BANKRUPTCY FRAUD IDENTIFICATION

**Julija Liodorova, Ruta Shneidera**

University of Latvia, 19 Raina Blvd., Riga, Latvia

### Abstract

**The international concept of forensic accounting: the example of bankruptcy fraud identification**

*Key Words:* forensic accounting, examination, financial statements, bankruptcy fraud, insolvency, fraud transaction

The aim of the study is to classify a conceptual algorithm of forensic accounting examination using the example of identifying bankruptcy fraud.

The topic of the article is determined by the incompleteness of theoretical developments in the field of forensic accounting and examination and the relevance of the scientific substantiation of its methods.

There are special legal requirements and methods based on documented facts that are suitable for the court as evidence used in forensic accounting examination. The essential characteristics and methods of forensic accounting are presented in the study. The main stages of examination are item valuation, planning of examination, finding, interpretation of examination results and expert's conclusion.

The authors summarize the international concept of forensic accounting examination on the example of detecting bankruptcy fraud. The study demonstrates the internationally recognized core algorithm for detecting bankruptcy fraud based on financial statements, which consists of determining economic insolvency and identifying fraud transactions.

The research methods are generally accepted qualitative and quantitative methods of economic science, including monographic analysis of scientific literature, teleological method and graphical analysis.

### Kopsavilkums

**Grāmatvedības ekspertīzes starptautiskā koncepcija: krāpnieciska bankrota identifikācijas piemērs**

*Atslēgvārdi:* tiesu grāmatvedība, ekspertīze, finanšu pārskati, krāpniecisks bankrots, krāpnieciskas transakcijas

Pētījuma mērķis ir sistematizēt grāmatvedības ekspertīzes konceptuālo algoritmu, ņemot par pamatu krāpnieciska bankrota identifikācijas piemēru.

Tēmas aktualitāte pamatota ar relatīvi mazu teorētisko pētījumu skaitu grāmatvedības ekspertīzes jomā un nepieciešamību zinātniski pamatot ekspertīzē pielietotās metodes.

Grāmatvedības ekspertīzei un tajā izmantotajām metodēm, kuru pamatā ir dokumentāli fiksētie fakti, izvirzīta virkne speciālo normatīvo prasību, lai ekspertīzes secinājumi varētu kalpot par pierādījumiem tiesas prāvās. Pētījumā aprakstītas būtiskākās prasības un ekspertīzes pamatmetodes. Galvenie ekspertīzes posmi ir šādi: pētījuma objektu novērtēšana, ekspertīzes plānošana, pētīšanas (ekspertīzes) gaita, rezultātu interpretācija un eksperta secinājumi.

Autores apkopo grāmatvedības ekspertīzes starptautisko koncepciju uz krāpnieciska bankrota identifikācijas piemēra bāzes. Pētījums demonstrē starptautiski atzītu pieeju krāpšanas atklāšanai finanšu pārskatos, kas apvieno ekonomiskas maksātspējas noteikšanu un krāpniecisku darījumu atklāšanu.

Pētījuma metodes ir vispārpieņemtas ekonomiskās zinātnes kvalitatīvās un kvantitatīvās metodes, ieskaitot zinātniskās literatūras monogrāfisko analīzi, teoloģisko un grafisko analīzi.

### Introduction

The institution of forensic accounting was established at the beginning of the 20th century, following the historical and legislative development in social and economic activities. Forensic accounting can be used in criminal and civil investigation; in disputes related to labor, insurance, supplier or divorce proceedings; to identify tax evasion, fraud and money laundering; for investigation of insolvency and liquidation; for identification of cases of bankruptcy fraud, etc. All

large accounting companies, such as PWC, Ernst & Young, Deloitte, KPMG, and others have forensic accounting departments (Ozkul, Pamukcu 2012; Mohite 2019; Narayanan 2020).

According to one of the first researchers of forensic accounting D. L. Crumbley, “forensic accounting” means “suitable for use in a court of law” (Crumbley et al. 2005). The practitioner Max Messmer (Messmer 2004) called forensic accountant Sherlock Holmes from the world of accountants with the ability to solve puzzles. New opportunities of the forensic accountant are presented in the action-thriller film “The Accountant” by Gavin O’Connor in 2016 (Friedman LLP n/d). In Latvia, accounting examination is registered in the classification list of the forensic examinations with no. 11.02, and it is described as “research and analysis of bookkeeping registers, reports and financial activities” (Cabinet Regulation 2016).

At present, the forensic accountant must not only be fluent in accounting and audit methods, but also be able to freely use approaches to legal regulation and investigation, software and actuarial calculations, and must have basic knowledge in the field of forensics and criminology.

According to the empirical study of the interviewing of the certified Latvian forensic accountants using the analytic hierarchy process method (Liodorova, Zeltite 2018), based on the issue of the American Institute of Certified Public Accountants (AICPA 2009), the most important skills and traits of a forensic accountant were selected:

- two personal traits (weight 20.2%): analytical thinking and responsibility;
- four key skills (weight 34.4%): accounting skills, ability to identify key issues, anomalies and ability to synthesize and present the findings of the analysis;
- special skills (weight 45.4%): ability to analyze financial statements and financial information, asset tracing skills, fraud recognition skills and ability to testify.

For the examination, the forensic accountant uses an inference, relevance and logic solution (Oyedokun et al. 2019). The main forensic accounting approaches are described in the non-public expert methods (Council of Forensic Experts 2020; Ministry of Justice of Ukraine n/d; Rauza 2014) and specialized literature (Zvyagin et al. 2018; Дубоносов 2018; Spičiūtė 2013). These are:

- research methods: analysis / synthesis, deduction / induction, abstraction / concretization, comparison, analogy method, system analysis, etc.;
- analytical methods: statistical methods (average values, dynamics series), economic analysis (determination of causation or deviations, statistical-mathematical methods (correlation, regression, modelling), etc.;
- auditing (document revision) methods: formal and regulatory verification, arithmetic check, counter check, chronological and comparative analysis, document recovery method, etc.;
- accounting methods: balance method, profit and cash-flow method, financial analysis, etc.

The classic method of document verification is used in conjunction with the method of matching documents, which consists in comparing the data contained in different documents to determine the identities of the respective indicators or discrepancies between them. The method of comparison is aimed at revealing the general characteristics of the compared objects; therefore, this method is among the main ones in solving identification tasks (Gise et al. 2020; Ministry of Justice of Ukraine).

Relatively new forensic accounting approaches are the fraud detection and criminology methods:

- *Red Flags* are used in auditing as an indication of anomaly change in the accounting items for fraud detection in financial statements (Golden et al. 2006);
- *Fraud Triangle*, developed by D. R. Cressey (1973), is a model for explaining the three factors that cause someone to commit occupational fraud;
- *Fraud Tree*, carried out by the Association of Certified Fraud Experts (ACFE 2020), classifies professional fraud into three main types (corruption, misappropriation of assets and fraudulent claims);
- *M-score* manipulation index, developed by M. Beneish (1999), is a mathematical model to identify earnings manipulation;
- *Benford's law*, proposed by M. Nigrini (2011), is a statistical approach adapted to the digital analysis of big data to detect fraudulent transactions;
- *Data Mining Techniques* – computer applications based on mathematical and statistical methods, including artificial intelligence (Lenard, Alam 2009).

Forensic accounting requirements are regulated on several levels (see Table 1):

- requirements for forensic accountants as accounting specialists: international and national legislative acts on accounting, taxes, etc.
- requirements for specialists as forensic experts: national legislative acts, international and national guidelines and standards, etc.

**Table 1. Requirements for forensic accountants and forensic experts**  
 (compiled by the authors)

<b>Level</b>	<b>Forensic accountant</b>	<b>Forensic expert</b>
International level	The International Accounting Standards Board (IASB): <b><i>International Financial Reporting Standards (IFRS)</i></b>  <b><i>The International Federation of Accountants (IFAC): International Code of Ethics for Professional Accountants (2018)</i></b>	The <b><i>European Network of Forensic Science Institutes</i></b> (ENFSI) guidelines for evaluative reporting of forensic science (2015) The International Organization for Standardization (ISO) standards: <ul style="list-style-type: none"> <li>• No. 21043:2018 Forensic sciences (2018)</li> <li>• No. 17020:2012 Conformity assessment – requirement for the operation of various types of bodies performing inspection (2012)</li> <li>• No. 17025:2017 General requirements for the competence of testing and calibration laboratories (2017)</li> </ul> <b><i>American Institute of Certified Public Accountants</i></b> (AICPA) standard No.1 Statement on Standards for Forensic Services (2019)
National level (Latvia)	The Supreme Council: On Accounting (1992) and binding regulations	Parliament (Saeima): Law On Forensic Experts (2016) and binding regulations Council of Forensic Experts: Code of Ethics (2017)

In order for the expert’s opinion to be accepted as evidence in court, the expert conclusion must guarantee the quality of the examination at all its stages, as well as meet other criteria – the sufficient relevant data (research objects) to provide a reasonable basis for the conclusion, the professional competence in the field of the issue in question (AICPA 2019).

The main stages of forensic accounting examination are item valuation, planning of examination, finding, interpretation of examination results and expert’s conclusion (ISO 2018).

One of the most discussed issues for forensic accountants is the methodology of detecting bankruptcy fraud. In general, all methodologies for detecting bankruptcy fraud use two stages: determining insolvency based on financial analysis and identifying fraudulent transactions based on document revision using an integrated approach to detection (Spičiūtė 2013).

## **Discussion**

Summarizing the review of the literature and the requirements for forensic accounting examination, the authors have developed an *International Conceptual Model of Forensic Accounting*. This model includes all stages of examination (accepting, planning, findings, conclusion and reporting) and mandatory procedures of examination (using the forensic process, obtaining quality criteria, etc.). The model is presented in Figure 1.

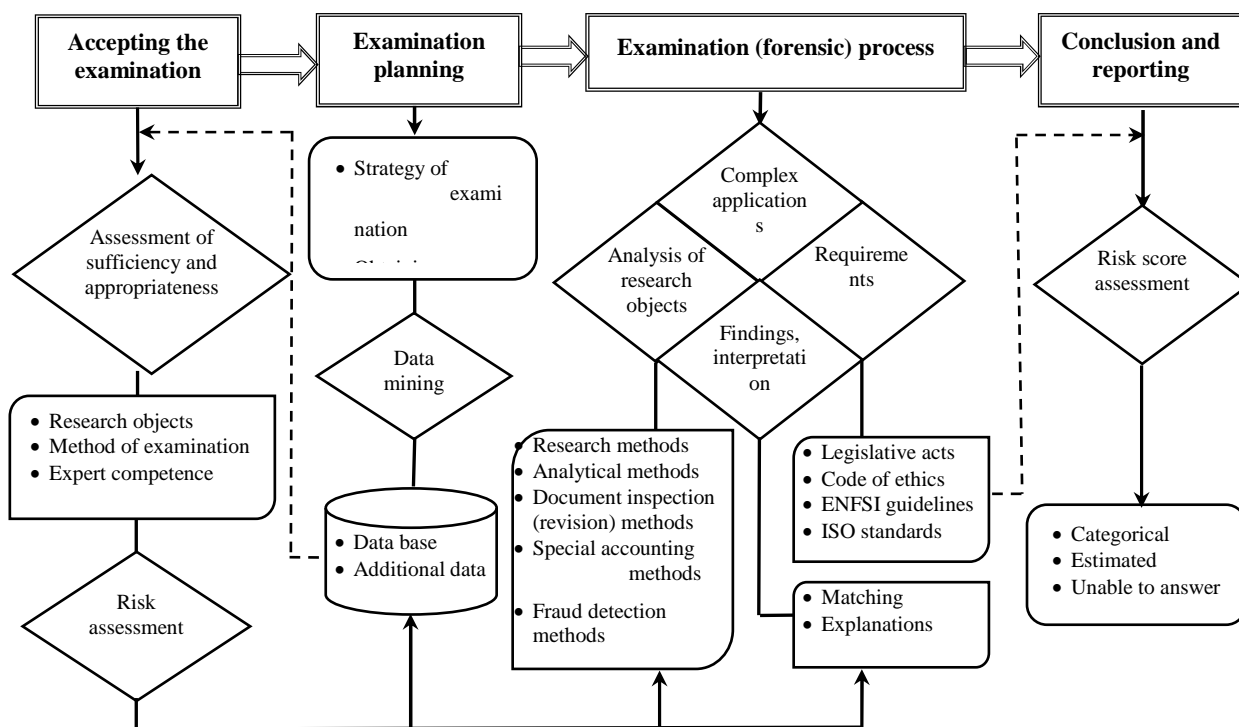


Figure 1. **International conceptual model of forensic accounting examination**  
 (compiled by the authors)

### Conclusion

According to the authors, the conduct of an accounting examination of each selected consolidated control point should be based on a process approach using questionnaires and block schemes. In Table 2, the authors present a fragment of control points of accounting examination on the example of detecting bankruptcy fraud.

Table 2. **Control points of accounting examination on the example of detecting bankruptcy fraud** (compiled by the authors)

Accepting the examination (Stage 1) / Examination planning (Stage 2)						
Components of expertise	Economic insolvency	Legal insolvency	Potential reason of insolvency	Liquid assets and real debts	Bankruptcy fraud	
					Fraud in financial statements	Fraudulent transactions
1	2	3	4	5	6	7
Purpose	Financial position assessment	Legal insolvency determination	Identification of the anomaly changes in accounting position	Determination of the real excess of debt over assets	Detection of the fraud in statements	Identification of the fraudulent transactions
Identification task	Insolvency (yes/no), date of insolvency	Evaluation of the regulatory excess of debt over assets (amount), definition of other requirements	Anomaly changes (yes/no), position of changes, other data	Liquid assets and real debt identification and assessment	Fraud (yes/no) type of fraud	Certain fraudulent transactions
Evaluation task	Assessment of solvency indicators		Assessment of changes, impact or other data			
Research objects	Annual reports, accounting registers	Annual reports, accounting registers, list of creditors, court rulings, etc.	Annual reports, accounting registers, other: administrator, audit reports, etc.	Annual reports, accounting registers, other data	Reports, registers, other data	Reports, registers, other data
Risk assessment of sufficiency and relevance (research objects, method of examination, expert professional competence)						

Examination (forensic) process (Stage 3)				Conclusion and reporting (Stage 4)		
Components of expertise	Economic insolvency	Legal insolvency	Potential reason of insolvency	Components of expertise	Economic insolvency	Legal insolvency
1	2	3	4	1	2	3
Methods	Financial ratios, financial analysis, prediction models	Analysis of the normative regulatory, comparison	Financial analysis, comparison, graphical method, index method, correlation and factor analysis	Categorical	Determination of economic insolvency or its absence at a certain date	Confirmation of regulatory excess of debt over assets, other requirements
Checkpoints	Balance sheet: assets and liabilities	Balance sheet: assets and liabilities; lender accounting registers	Balance sheet and accounting registers: fixed and current assets (inventory, debtors, cash, etc.), long-term and current liabilities (loans, payments to customers, employees, taxes, etc.)	Estimated	Identification of indicators of insolvency and its period	Estimated excess of debt over assets that are valued as part of the regulatory
Possible violations	Absence of reports, incomplete reports, fraud statements	Absence of reports and registers, fraud or incomplete reports and registers; fraud in insolvency process	Absence of reports and registers, fraud or incomplete reports and registers	Unable	Unable to evaluate insolvency	Unable to estimate debt or/and assets
Effects	Significant	Medium significant	Significant			
<b>Risk score assessment</b>	Risk assessment of sufficiency and relevance (research objects, method of examination, expert competence)					

The advantage of this approach is that the number of control points can be increased and in the event of changes in financial statements or their presence, new points of accounting examination can be allocated.

## Conclusions

Forensic accounting expertise is an interdisciplinary science recognized internationally. To ensure the quality of the examination results, forensic accounting requirements are regulated at the international and national levels. The international concept of forensic accounting has the main stages and components that can be accurately classified, classical document revision and modern forensic methods are used in examination.

To identify bankruptcy fraud, the experts use two stages: insolvency determination based on financial analysis and fraud detection based on document revision using an integrated approach to detection.

This study made it possible to create a conceptual model of forensic accounting and systematize the groups of its methods to provide the results of the examination as evidence in the courts. The authors proposed a process-based approach to improve the quality and relevance of forensic accounting as part of the Statement on Standards for Forensic Services No. 1 and ISO 21043-1:2018: Forensic sciences, as well as control points of accounting examination on the example of detecting bankruptcy fraud. The research findings can be useful to stakeholders such as forensic experts, accountants, auditors, administrators, lawyers and regulators responsible for setting standards in industry sectors.



There is a necessity to continue research in the field of forensic accounting in accordance with the rapid development of this area and international scientific interest.

## References

- ACFE 2020. *The fraud tree*. [skatīts 30.06.2020]. Pieejams (Accessed): <https://www.acfe.com/fraud-tree.aspx>
- AICPA 2009. *Characteristics and Skills of the Forensic Accountant*. [skatīts 30.06.2020]. Pieejams (Accessed): <https://docplayer.net/3134445-Characteristics-and-skills-of-the-forensic-accountant.html>
- AICPA 2019. *Statement on Standards for Forensic Services No. 1*. [skatīts 30.06.2020]. Pieejams (Accessed): <https://www.aicpa.org/content/dam/aicpa/interestareas/forensicandvaluation/resources/standards/downloadabledocuments/ssfs-no-1.pdf>
- Beneish M. 1999. The detection of earnings manipulation. In: *Financial Analysts Journal*. Vol. 55(5), pp. 24–36.
- Cabinet of Ministers of the Republic of Latvia. (20.12.2016.) *Regulation No. 835. Regulations on the List of Forensic Institutions and the Classifier of Specialties of Forensic Experts*.
- Council of Forensic Experts 2020. *Register of methods of forensic examinations*. [skatīts 30.06.2020]. Pieejams (Accessed): [https://www.ta.gov.lv/LV/tiesu\\_ekspertu\\_padome\\_1536/tiesu\\_ekspertizu\\_metozu\\_registrs\\_\\_1580](https://www.ta.gov.lv/LV/tiesu_ekspertu_padome_1536/tiesu_ekspertizu_metozu_registrs__1580)
- Crumbley D. L., Heitger L. E., Smith G. S. 2005. *Forensic and investigative accounting*, 2nd ed. Chicago: CCH Incorporated.
- Cressey D. D. 1973. *Other people's money: a study in the social psychology of embezzlement*. In: Smith, P. ed. Montclair, N. J.: Free Press.
- Дубоносов Е. С. 2018. *Судебно-бухгалтерская экспертиза: учебник для бакалавриата, специалитета и магистратуры*, 2-е изд., перераб. и доп. Москва: Издательство Юрайт.
- Friedman LLP n/d. *The accountants role in fraud/forensic investigations*. [skatīts 30.06.2020]. Pieejams (Accessed): <https://slideplayer.com/slide/15292485/>
- Gise I., Liodorova J., Barkauskas M., Markina O., Mamikonian K. 2020. The use of analytical methods for identification of illicitly acquired funds of individuals. In: *Criminalistics and Forensics*. Vol. 65, pp. 542–557. DOI: <https://doi.org/10.33994/kndise.2020.65.54>
- Golden T., Skalak S., Clayton M. 2006. *A Guide of forensic Accounting Investigation*. Hoboken, N. J.: John Willey & Sons Inc.
- ISO 2018. Standard No. 21043-1:2018. *Forensic sciences – Part 1: Terms and definitions*. [skatīts 30.06.2020]. Pieejams (Accessed): <https://www.iso.org/standard/69732.html>
- Lenard M., Alam, P. 2009. An historical perspective of fraud detection: from bankruptcy models to most effective indicators of fraud in recent incidents. In: *Journal of Forensic & Investigative Accounting*. Vol. 1, pp. 1–27.
- Liodorova J., Zeltite A. 2018. Essential skills and traits of a forensic accountant. In: *История и современность судебно-экспертного образования*, October 25–26, 2018, Minsk, pp. 22–25.
- Messmer M. 2004. Exploring options in forensic accounting. In: *National Public Accountant*, Vol. 5, pp. 9–20.
- Ministry of Justice of Ukraine n/d. *Register of methods of forensic examinations*. [skatīts 30.06.2020]. Pieejams (Accessed): <https://rmpse.minjust.gov.ua/search>
- Mohite S. V. 2019. Forensic Accounting: An Ex-Ante–Ex-post Evaluation for India. In: *International Journal of Trend in Scientific Research and Development*, pp. 190–195. Pieejams (Accessed): [www.ijtsrd.com](http://www.ijtsrd.com)
- Narayanan H. 2020. Forensic Accounting and Fraud Examine – an Inquiry. In: *Mukt Shabd Journal*. Vol. 9(6), pp. 6378–6391. DOI: 10.6084/m9.figshare.12666902
- Nigrini M. 2011. *Forensic analytics: methods and techniques for forensic accounting investigation*, 1st ed. Hoboken, N. J.: John Willey & Sons Inc.

- Oyedokun G.E., Enyi E. P., Dada S. O. 2019. Integrity of Financial Statements and Forensic Accounting Techniques. In: *Journal of Forensic Accounting & Fraud Investigation*, Vol. 4, Issue, January – March, 2019, pp. 27–44.
- Ozkul F. U., Pamukcu A. 2012. Fraud Detection and Forensic Accounting. In: *Emerging Fraud. Fraud Cases from Emerging Economies*. Vol. 26, pp. 19–41.
- Rauza G. 2014. *Grāmatvedības tiesu ekspertīžu veikšanas metode* Nr. 2-20/PRIV-I/432.
- Spičiūtė A., Barkauskas M., Kuncevič M., Jansone A., Zeltite A., Liodorova J., Kangro I., Liivamae I. 2013. The economic expertise best practice guide for investigation of the crimes related to bankruptcy and for completion of the experimental insolvency research in the Baltic countries. In: Malevski, H., Gorbatov, A. ed. *Forensic methods*. Vilnius: Forensic Centre of Lithuania, pp. 62–122.
- Zvyagin S. A., Fomenko T. N., Breslavtseva N. A., Fedchenko A. A. 2018. Study of Objects During the Accounting Expertise in the Economic Entities of the Public Sector. In: *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. Vol. 9(6), pp. 1961–1970. Pieejams (Accessed): [http://www.rjpbcs.com/pdf/2018\\_9\(6\)/\[344\].pdf](http://www.rjpbcs.com/pdf/2018_9(6)/[344].pdf)

# THEORETICAL EXPLANATION AND RELEVANCE OF THE CONCEPTS OF INSTITUTIONAL ECONOMICS

**Jānis Ezers, Kaspars Naglis-Liepa**

Latvia University of Life Sciences and Technologies, Faculty of Economics and Social  
Development, 18 Svētes Street, Jelgava, Latvia, LV-3001, ezers.j@gmail.com, ef08389@llu.lv

## Abstract

### **Theoretical explanation and relevance of the concepts of institutional economics**

**Key Words:** *institutional economics, new institutional economics, institutions, economic development*

The research aims to examine and assess the role of institutional and new institutional economics schools of thought in the history of economics as a science, as well as to identify the relevance of institutional and new institutional economics schools of thought in an era when the economy is also affected by factors such as government restrictions pertaining to the 2020 epidemiological crisis. The research examined and analysed the scientific literature on the institutional and new institutional economics schools of thought as well as the fact that the institutional and new institutional economics schools of thought refer to formal and informal phenomena, e.g. unification of norms and customs in the form of laws, organizations and institutions, as “institutes”. The regulatory framework – the state’s constitution, legal acts and other legal documents that have been developed mostly through political processes – is part of formal institutes. Informal institutes, in contrast, encompass prevailing beliefs, values and behavioural norms in society, which have developed mostly in social and cultural processes. Analysing the scientific literature, the research found that the public and private sectors should work on creating and developing the institutes that would ensure economic development and growth.

## Kopsavilkums

### **Institucionālās ekonomikas jēdzienu teorētiskais skaidrojums un aktualitāte**

**Atslēgvārdi:** *institucionālā ekonomika, jaunā institucionālā ekonomika, institūcijas, ekonomiskā attīstība*

Raksta mērķis ir izpētīt un novērtēt institucionālās un jaunās institucionālās ekonomikas skolas lomu ekonomikas kā zinātnes vēsturē, kā arī apzināt institucionālās un jaunās institucionālās skolas aktualitāti laikmetā, kad ekonomiku ietekmē arī tādi faktori kā valdību noteiktie ierobežojumi saistībā ar 2020.gada epidemioloģisko krīzi. Rakstā tiks pētīta un analizēta zinātniskā literatūra par institucionālo un jauno institucionālo ekonomisko skolu, kā arī pētīts tas, ka institucionālā un jaunā institucionālā skola formālās un neformālās parādības – normu un paražu apvienošana likumu, organizāciju, institūciju veidā – apzīmē ar terminu “institūti”. Formālie institūti iekļauj normatīvo regulējumu – valsts konstitūciju, tiesību aktus un citus normatīvus, kas veidojušies galvenokārt politiskos procesos. Savukārt neformālie institūti aptver sabiedrībā valdošos uzskatus, vērtības un uzvedības normas, kas veidojušies galvenokārt sociālos un kultūras procesos. Rakstā, analizējot zinātnisko literatūru, tiek secināts, ka publiskajam un privātajam sektoram būtu jāveic darbs pie tādu institūtu veidošanas un attīstīšanas, kuri nodrošinātu ekonomisko attīstību, izaugsmi.

## Introduction

Various theoretical schools of thought have historically developed in economics, for example, mercantilism, classical and neoclassical economics, Marxism, Keynesianism etc. These theoretical schools of thought include institutional economics (emerged in the late 19<sup>th</sup> century) and new institutional economics (emerged in the 1930s), which focus on the shortcomings of classical economics in explaining and managing economic processes and offer an alternative way to explain and to develop economic growth processes. The diversity of economic development has been a focus of scientific debate for a long time. Defining and researching factors of economic growth becomes particularly important, as it is clear that after the Covid-19 epidemiological crisis of 2020, the public and private sectors need to consider the way of overcoming the economic crisis by setting up institutes to build and develop public-private partnerships in order to contribute to economic growth.

The history of economics shows that global economic conditions are constantly changing, the challenges that society as a whole, incl. both the public and private sectors has to overcome. Also requires new, different solutions that would be beneficial to both the society as a whole and the individual with regard to the economic development. Institutional and new institutional economics, according to the analysis of the scientific literature, offers such complex solutions.

The spring of 2020 around the world showed that no matter how an individual (identified by classical economics as a driving force of economic development) seeks prosperity alone, if, for example, the public sector (e.g. the Cabinet of the Republic of Latvia) passes Cabinet Order No. 103 of 12 March 2020 regarding the Declaration of the Emergency Situation, economic activity in the private sector is possible only within the framework specified by the order. This is an extreme example, yet, day-to-day relations between the public and the private sectors are also determined by phenomena such as taxes, households, the state, trade unions, private property and other factors referred by institutional economics as institutes.

Currently, in Latvian economic science, institutional and new institutional economics designates the mentioned phenomena by two terms: institute and institution. The Academic Terminology Database of the Latvian Academy of Sciences defines the term institute in two ways: first, as a research and teaching institution, and second, as a set of rules governing social relations, such as marriage. Dainis Zelmenis points out in his monograph *The Role of the State in a Market Economy* that the term institute is understood to mean various social phenomena: taxes, family, the state, trade unions etc. (Zelmenis, 2019). However, Alise Vītola and Maija Šēnfelde in their monograph *Institutional Environment and Economic Development in Modern Conditions* (Vītola, Šēnfelde, 2019) and Alise Vītola (Vītola, 2016) point out that there are formal institutes (e.g. property rights, respect for the rule of law) and informal institutes (values, customs, behavioural norms formed by culture, religion and the evolution of society), and the term institute is used to designate the phenomena.

In contrast, A. Auzāns cites an example in Russian – “живем по понятиям” (to live by reflexes) – meaning informal economic rules that not only the criminal world adheres to in Russia – in order to illustrate what is also understood by an institute in institutional economics (Аузан, 2017).

Within the present research, the mentioned formal and informal phenomena representing the unification of norms and customs in the form of laws, organizations and institutions are referred to as institutes. The regulatory framework – the state’s constitution, legal acts and other legal documents that have been developed mostly through political processes – is part of formal institutes. Informal institutes, in contrast, encompass prevailing beliefs, values and behavioural norms in society, which have developed mostly in social and cultural processes.

The research aim is to examine the emergence and role of institutional and new institutional economics and the differences the mentioned schools of thought brought to the history of economic theory.

The specific research tasks were set as follows: to review the most important literature on institutional and new institutional economics, placing a focus on the history of economic theory; to examine the unique aspects of institutional and new institutional economics in economic theory; to examine economic institutes and what institutes should be established in order to contribute to economic growth as well as why dysfunctional institutes are maintained and exist enduringly in poor countries. Informative analysis and compilation of monographs and other scientific literature has been used as a research method in the development of the article.

## **Discussion**

P. Bardhan points out that institutional economics is a topical subdivision of economics, as the main difference between rich and poor countries probably lies in the institutional system in the countries concerned (Bardhan, 2010). A successive question is why dysfunctional institutes are being set up and maintained in poor countries?

The classical and neoclassical economics schools of thought and particularly Adam Smith, the most prominent representative of the classical economics school of thought, in his fundamental work *An Inquiry into the Nature and Causes of the Wealth of Nations* state that economics is studied as a self-regulatory system whose elements work in the interests of the public and point out that the source of the country's wealth is the individual's desire for prosperity, advocating the idea of the "invisible hand" in the economy, which, as the individual seeks to satisfy his/her material needs, indirectly benefits society as a whole. At the end of the 19<sup>th</sup> century, an economist and the father of the institutional school of thought, Thorstein Bunde Veblen, stated in his book *The Theory of the Leisure Class* that in order for economic processes to develop for the benefit of society, they need to be managed and controlled (Veblen, 1899).

T. Veblen was not lonely in his views. The following economists could be mentioned as important representatives of the institutional school of thought: Wesley Clair Mitchell (made a significant contribution to the study of the industrial process, was the founder of econometrics, improved the science of statistics and contributed as a national market economy planner), John Roger Commons (who believed that it was possible to create a publicly regulated market economy), John Atkinson Hobson (who believed that capitalism needed to be developed through government intervention). Overall, an analysis of the works of the mentioned economists of the institutional school of thought allows us to conclude that the institutional school was characterized by a critical attitude towards the concept of a free market expressed by the neoclassical economics school of thought. Institutionalists from the neoclassical school of thought criticized the school, firstly, over

the fact that a starting position for its research was methodologically narrow, i.e., the role of sociological, political, socio-psychological factors in economic processes was ignored; secondly, the fact that the school did not take into account the most important structural and institutional features of a real economy and, thirdly, the ideological bias and methodological individualism of the neoclassical school was not acceptable to the institutionalists, i.e. the theorists of the school based their research on the behaviour of an abstract individual in an abstract economic environment and the fact that in a market economy, business structures are supposedly isolated and competition is perfect and perfectly regulates market processes.

T. Veblen also raised the question of overconsumption in the economy and society, as well as of sustainable behaviour and economic development and, in fact, at the end of the 19<sup>th</sup> century pointed to the emergence/existence of a consumer society, indicating that market participants often purchase tangible goods not because they need them but to show themselves and others that they can buy them, thus gaining self-confidence. T. Veblen defined entrepreneurs who choose to switch to demonstrative consumption instead of rational production as an idle or inactive class (Veblen, 1899). More than 100 years after T. Veblen made that conclusion, it is still necessary to continue researching which institutes would best ensure that the economy is built on sustainable principles, i.e. the needs of today have to be met without compromising the ability of future generations to meet their needs.

The representatives of the institutional school of thought believe that an absolutely free-market system has shortcomings that do not ensure the development of economic processes for the benefit of society as a whole, promote opportunism, and sometimes government intervention in the management of economic processes is necessary. The historical background has to be taken into account when analysing the emergence of the institutional school of thought, because along with classical and neoclassical economics with its main idea of a free market, the ideas of Marxism were still popular in the world. The institutional school of thought asserts that it would be important to provide the economy with institutes that ensure the development of markets for the benefit of society as a whole, as the market system itself would not develop laws and regulations that restrict its activities, or develop informal institutes that would lead to the discrimination of weaker market participants, fraud etc. The government and the public sector should be involved in some way to ensure the development of the national economy in the interests of the whole society and not only to ensure the interests of some individuals.

John R. Commons, a prominent representative of the institutional school of thought, points out that since economists try to find a universal condition that is characteristic of entire economic behaviour, an institute could be defined as collective control, liberation and expansion of individual activity. It is a matter of collective action, which is a custom for various organized permanent

institutes such as a family, an association, a corporation, a trade union, a reserve system and the state. The common feature of the mentioned institutes is more or less control, as well as release and expansion of individual activities based on collective acceptance (Commons, 1931).

American economist Thorstein Bunde Veblen is considered to be the most prominent representative and founder of institutional economics, while Walton Hamilton, who defined this concept in his journal paper *The Institutional Approach to Economic Theory*, is considered to be the implementer of the concept of institutional economics (Hamilton, 1919). The link between economics and law is not an exception to the institutional school of thought but a norm that is specific to both institutional and new institutional economics. W. Hamilton, as well as many representatives of both the institutional and new institutional economics schools of thought point out that the institutional approach to studying economics is theoretically “the only right one”, which, of course, arouses interest and a desire to further investigate the validity of this assertion.

W. Hamilton put forward five criteria that a system doctrine should meet if it tries to reach the standard of an economic theory, thereby justifying the relevance of institutional economics to such a doctrine (Hamilton, 1919):

1. Economic theory should unify economic science. W. Hamilton points out that economic theory is highly fragmented – its boundaries range from value theory, financial theory, tax systems and transportation through to sales skills, insurance and advertising. W. Hamilton believes that only institutional economics can make a common description of the economic system by viewing it as a single system. For example, in describing an industrial economy, only institutional economics would describe the system as a whole, showing, for example, the importance of institutes such as finance and insurance.
2. Economic theory should be relevant to the modern problem of control. Institutional economics is relevant to the regulatory framework.
3. The proper subject-matter of economic theory is institutions. To tackle a specific aspect of economic life, a researcher needs knowledge of particular institutes. For example, to tackle inflation, the researcher needs to understand aspects of managing public finances.
4. Economic theory is concerned with matters of process. Institutes such as competition, property, price structure, the remuneration system and others change their contents; for example, an amendment has been made in the regulatory framework, or a court decision has entered into force. It is important to understand that institutional economics studies a system, and the change of any element of the system leads to the change of the whole system.
5. Economic theory must be based upon an acceptable theory of human behaviour. Institutional economics calls for a shift in the focus of economists from the interests of the individual to the interests of society as a whole.

In the world economy, the 1930s were a time when the world community as a whole, incl. economists, were actively seeking a way out of one of the world's serious economic crisis – the Great Depression. It was the period when economists were critical of classical and neoclassical economics and the solutions they offered for dealing with a major crisis, such as the Great Depression. In his fundamental work *The General Theory of Employment, Interest and Money*, John Maynard Keynes (founder of Keynesianism) pointed out that classical economics cannot solve the problems of the real world's economic crisis by means of “the invisible hand of the market”; therefore, a new, more global view is required, which was suggested by Keynes himself (Keynes, 1936). However, J. M. Keynes was not the only economist of that time who sought practical solutions to the global economic problem.

The research done by Ronald Coase is considered to be the beginning of the new institutional economics school of thought: *The Nature of the Firm*, a paper on transaction costs published in 1937 (Coase, 1937) and *The Problem of Social Cost*, a paper on the economic problem of externalities published in 1960 (Coase, 1960). In 1991, R. Coase was awarded a Nobel Prize in Economics for the mentioned research.

*The Nature of the Firm* was devoted to the study of why it was more economically advantageous for natural persons to establish companies than to do business as natural persons, as it was clear that, for example, in order to ensure the legal and real operation of a company, a number of so-called transaction costs were incurred before concluding a contract.

R. Coase pointed out that “to date” (i.e. before 1937 when the research by Coase was published) economists explained that the economy worked on its own, the market system itself set the price mechanism. The founder of the new institutional economics school of thought pointed out that such a view created an incomplete picture of the economy. The costs of a firm consist of, for example, the following transaction costs – the costs incurred to conclude contracts (including those incurred to use market mechanisms):

1. Information collection and processing costs,
2. Negotiation and decision-making costs,
3. Control costs,
4. Contract legal protection costs.

Examining the costs of concluding a contract, it becomes clear that the larger the firm, the greater the possibility to reduce its transaction costs, the fewer mistakes it will make, the more experience it has and the stronger its ability to maintain low prices. Of course, the firm could be expanded only to an extent that it is economically feasible for its operation.

More than twenty years passed between publishing *The Nature of the Firm* (1937) and *The Problem of Social Cost* (1960). During this period, R. Coase researched a lot of government



monopolies (e.g. those supplying postal services, TV and radio services), which resulted in writing and publishing *The Problem of Social Cost*. Based on this research, the Coase theorem was created, which was not formulated by R.Coase himself but by another economist, G.Stigler, in his work *The Price Theory* published in 1966. The Coase theorem states that if property rights are clearly defined and there are no transaction and wealth effects, the result remains the same and is effective regardless of changes in the distribution of property rights (Stigler, 1966).

*The Problem of Social Cost* by R.Coase is an important research study not only because it laid foundations for the famous Coase theorem but also focussed on the problems of a sustainable economy. It could be concluded that the problems of a sustainable economy were addressed not only by the “father” of institutional economics, T.Veblen, but also by the “father” of new institutional economics, R.Coase. For example, R.Coase points out that one of the reasons that does not allow us to effectively solve the problem of harmful externalities of production is a misunderstanding of the factor of production. R.Coase points out that entrepreneurs believe that by purchasing land, they have purchased something tangible that could be used as needed. R.Coase believes that, in principle, this should be a matter pertaining to a well-defined right to take the necessary steps to ensure the firm’s operation, as well as impermissible operations for the firm have to be defined. According to R.Coase, this is useful because it is possible to precisely define what kind of contracts should be concluded in order for the firm to operate as an efficient economic system. The entrepreneur then sees exactly how the system actually operates.

Summarizing the ideas of new institutional economics, it could be concluded that the new institutional economics school of thought believes that institutes are the ones that determine the way a national or regional economy operates. The new institutional economics school of thought seeks to analyse institutes, understand their nature and identify the implications of a particular institute for the economy. Of course, the representatives of the new institutional economics school of thought believe that it is the new institutional economics school of thought that is the only real economic science. This is an assertion that arouses interest in further examining new institutional economic theory.

R.Coase points out that when analysing economic development opportunities for a country/region, it is necessary to examine the institutes of the particular country, which already operate there, as well as to further develop economic development factors based on the institutes available in the country/region in that period. R.Coase points out that in developing a country’s economic institutes. It seems a mistake not to start from where the country is located, referring to two large countries – China and Russia. In China, economic development progresses better than in Russia only because China bases its development strategy on available institutes. Russia, in contrast, freed people from working in collective farms and made many unemployed. Consequently,

it could be concluded that it is important that the state does not dismantle working institutes until new institutes ensuring economic development have been established. On the one hand, it is very important to ensure the continuity of the economic process. On the other hand, it is clear that a natural person cannot acquire, for example, property rights without exercising state power. It should always be taken into account that the economy is about dealing with people having very different interests (Coase, 1997).

Douglas North, one of the most important representatives of the new institutional economics school of thought, defines institutes as man-made constraints that structure political, economic and social interactions (North, 1991). They consist of informal restrictions (sanctions, taboos, customs, traditions and codes of conduct) as well as regulations (constitutions, laws, property rights). Institutes are designed by individuals to create order and reduce uncertainty in public and economic life. In addition to standard economic constraints, market participants determine the choice they make and therefore determine transaction and production costs and, consequently, the profitability and feasibility of economic activities. Individuals develop gradually, connecting the past with the present and the future. According to D.North, the history of economic development is, to a large extent, the history of development of institutes, in which the historical activity of the economy could be understood only as a part of the overall history. Institutes provide a stimulating (or hindering) structure for the economy – as this structure develops, it shifts the direction of economic change towards growth, stagnation or decline.

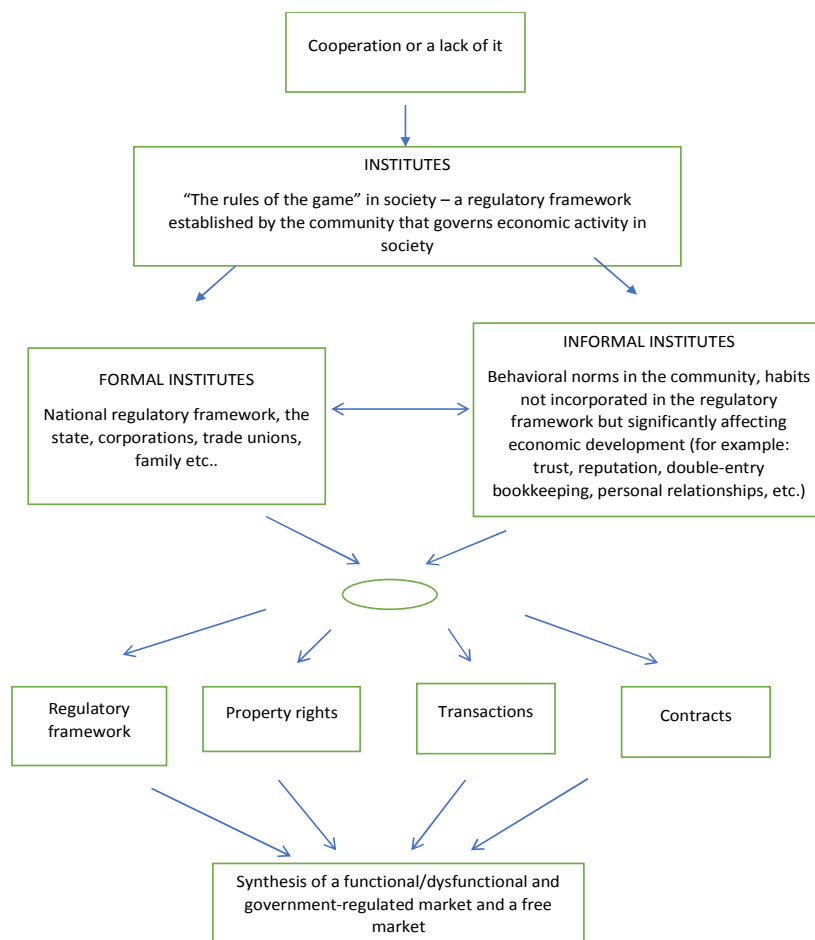
In a joint research study with R.Thomas, D.North points out that the factors that are generally considered to be the causes of economic growth (capital accumulation, increase in educational attainment, technological innovation, etc.) are not the causes of growth; it is growth itself (North, Thomas, 1970).

In the book *Why Nations Fail* (Acemoglu, Robinson, 2012), the authors conclude that the main reasons for a country's economic growth are its institutes that facilitate the growth. A lack of the rule of law and order, insecure property rights, barriers to entry and regulations that hamper the functioning of the market and the imbalance in the establishment of institutions are the factors that hinder economic growth. Other such factors are political institutes having unlimited power, which should be counterbalanced by, for example, secure property rights, one law one truth for all and public procurement, an orderly and comprehensible market and government support (public services and the regulatory framework), relatively free entry into the market for new companies and access to education and opportunities for the majority of the population. There should be political institutes that allow for the participation and pluralism of members of the economic community and ensure the rule of law, as well as do not allow for disproportionate restrictions and inspections.

The authors conclude that economic growth is possible if the following institutes are available: secure property rights, an orderly and understandable regulatory framework, public procurement, government support (public services and regulation), a free and orderly market, relatively free entry into the market for new companies, a secure contract system, etc.

A question asked by the representatives of the new institutional economics school of thought is as follows: which institutes do not promote economic development? The authors conclude that they are, for example, corruption, a disorderly and incomprehensible regulatory framework, a lack of education, etc.

After examining the impact of an institute such as corruption on the development of the regional economy, it becomes clear that the corruption is a distorting component of the economic environment, acting as an additional payment for both entrepreneurs and any taxpayer. Corruption pertains not only, for example, to conclusion of transactions but also to receipt of public services, etc. Corruption benefits individual groups in society rather than provides a level playing field for society as a whole. Therefore, the elimination of corruption as an institute would ensure the economic development of the regions by reducing market distortions and creating equal opportunities for all members of society.



**Conceptual model of interinstitutional cooperation** (authors' construction)

## Conclusion

- 1) An analysis of the scientific literature revealed that in the history of economics, institutional and new institutional economics schools of thought emerged along with other theoretical schools of thought, incl. ancient ideology, mercantilism, Marxism, classical and neoclassical economics, Keynesianism (emerged at the end of the 19<sup>th</sup> century).
- 2) According to the scientific literature, institutes could be both formal (regulatory framework) and informal (social norms, conventions and self-defined codes of conduct).
- 3) Institutes are restrictions that create interactions in society and provide incentives to achieve a desired outcome.
- 4) The institutional and new institutional economics schools of thought emphasize the key role of institutes in economic growth and point out that factors such as innovation, GDP, education or capital accumulation are not the causes of growth but reflect growth, and that political and economic institutes are a major cause of disparities in economic development.
- 5) According to the scientific literature, the public and private sectors should work on creating and developing institutions that ensure economic development, growth and an increase in the standard of living. In poor countries and regions, economic development might be insufficient due to an inadequate and underdeveloped institutional environment.
- 6) The representatives of institutional and new institutional economics schools of thought have identified transaction costs and property rights and an illustration of their importance to institutional structures and the functioning of the economy as important research priorities, as well as done an analysis of economic governance.

## References

- Acemoglu, D., Robinson, J.A. 2012. *Why Nations Fail*. Crown Business.
- Bardhan, P. 2010. *Institutional Economics of Development: Some General Reflections*. Retrieved: <https://eml.berkeley.edu/~webfac/bardhan/papers/InstCESifo-1.pdf>
- Acemoglu, D., Robinson, J.A. 2008. *The Persistence and Change of Institutions in the Americas*. Retrieved: [https://projects.iq.harvard.edu/files/history-culture-society-workshop/files/acemoglu\\_2.pdf](https://projects.iq.harvard.edu/files/history-culture-society-workshop/files/acemoglu_2.pdf)
- Coase, R.H. 1937. *The Nature of a Firm*. Retrieved: <https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1468-0335.1937.tb00002.x>
- Coase, R. H. 1960. *The Problem of Social Cost*. Retrieved: <https://www.law.uchicago.edu/files/file/coase-problem.pdf>
- Coase, R. H. 1991. *Lecture to the memory of Alfred Nobel. The Institutional Structure of Production*. Retrieved: <https://www.nobelprize.org/prizes/economic-sciences/1991/coase/lecture/>
- Commons, J. R. 1931. *Institutional Economics*. Retrieved: <https://la.utexas.edu/users/hcleaver/368/368commonsoninstitutionalecontable.pdf>
- Eggertsson, T. 1990. *Economic Behavior and Institutions: Principles of Neoinstitutional Economics: 1st (First) Edition*. Cambridge University Press.
- Hamilton, W.H. 1919. *The Institutional Approach to Economic Theory*. Retrieved: [https://www.jstor.org/stable/1814009?seq=1#metadata\\_info\\_tab\\_contents](https://www.jstor.org/stable/1814009?seq=1#metadata_info_tab_contents)
- Interview with Ronald Coase. (1997). Retrieved: <https://www.coase.org/coaseinterview.htm>

- McGann, J.G. 2018. 2017 Global Go To Think Tank Index Report. Retrieved: [https://repository.upenn.edu/cgi/viewcontent.cgi?article=1012&context=think\\_tanks](https://repository.upenn.edu/cgi/viewcontent.cgi?article=1012&context=think_tanks)
- Menard, C., Shirley, M. M. 2011. New Institutional Economics: From Early Intuitions to a New Paradigm? Retrieved: <https://www.coase.org/workingpapers/wp-8.pdf>
- North, D.C., Thomas, R.P. 1970. An Economic Theory of the Growth of the Western World. Retrieved: <http://www.compilerpress.ca/Competitiveness/Anno/Anno%20North%20&%20Thomas%20Western%20World.htm>
- North, D.C. 1991. Institutions. Retrieved: <https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.5.1.97>
- Keynes, J. M. 1936. The General Theory of Employment, Interest and Money. Retrieved: <https://www.marxists.org/reference/subject/economics/keynes/general-theory/index.htm>;  
<https://www.marxists.org/reference/subject/economics/keynes/general-theory/>
- Cabinet Order No. 103 Regarding Declaration of the Emergency Situation. Retrieved: <https://likumi.lv/ta/id/313191-par-arkartejas-situacijas-izsludinasanu>
- Ranga, M. and Etkowitz, H. 2013. Triple Helix systems: an analytical framework for innovation policy and practice in the Knowledge Society. Retrieved: [https://www.researchgate.net/publication/262009893\\_Triple\\_Helix\\_Systems\\_An\\_Analytical\\_Framework\\_for\\_Innovation\\_Policy\\_and\\_Practice\\_in\\_the\\_Knowledge\\_Society](https://www.researchgate.net/publication/262009893_Triple_Helix_Systems_An_Analytical_Framework_for_Innovation_Policy_and_Practice_in_the_Knowledge_Society)
- Richter, R. 2005. The New Institutional Economics – Its Start, Its Meaning, Its Prospects. Retrieved: [https://www.researchgate.net/publication/228261489\\_The\\_New\\_Institutional\\_Economics\\_Its\\_Start\\_Its\\_Meaning\\_Its\\_Prospects](https://www.researchgate.net/publication/228261489_The_New_Institutional_Economics_Its_Start_Its_Meaning_Its_Prospects)
- Smith, A. 1776. An Inquiry into the nature and causes of the Wealth of Nations. Retrieved: [https://www.ibiblio.org/ml/libri/s/SmithA\\_WealthNations\\_p.pdf](https://www.ibiblio.org/ml/libri/s/SmithA_WealthNations_p.pdf)
- The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1991. Retrieved: <https://www.nobelprize.org/prizes/economic-sciences/1991/summary/>
- The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 1993. Retrieved: <https://www.nobelprize.org/prizes/uncategorized/the-sveriges-riksbank-prize-in-economic-sciences-in-memory-of-alfred-nobel-1993>
- Vītola, A. 2016. Socio-economic Impact Assessment of Institutions. Riga. RTU.
- Vītola, A., Šenfelde, M. (2019) Institutional Environment and Economic Development in Modern Conditions. RTU Press.
- Vītola, A., Šenfelde, M., 2015. The role of institutions in economic performance. Retrieved: [https://www.researchgate.net/publication/283852708\\_The\\_role\\_of\\_institutions\\_in\\_economic\\_performance](https://www.researchgate.net/publication/283852708_The_role_of_institutions_in_economic_performance)
- Veblen, T. 1899. The Theory of the Leisure Class: An Economic Study of Institutions. Retrieved: <http://www.gutenberg.org/files/833/833-h/833-h.htm>
- Zelmenis, D. 2019. The Role of the State in a Market Economy. Riga Stradins University.
- Аузан А. 2017. ЭКОНОМИКА ВСЕГО. Как институты определяют нашу жизнь. Москва. «Манн, Иванов и Фербер».

# THE ASPECTS OF THE CONCEPT OF DIGITAL ECONOMY

**Viktorija Aleksejeva**

Daugavpils University, Parādes street 1, Daugavpils, Latvia, LV-5401, aleksejeva30@inbox.lv

## Abstract

### The aspects of the concept of digital economy

**Key Words:** *digital economy, sharing economy, gig economy, information economy, new economy*

As the digital economy develops around the world, researchers are increasingly focusing on researching and defining this concept. The digital economy is a relatively new area of the economy, with various transformations and new processes, leading to new definitions and new concepts related to the digital economy.

Many scientists in their researches analyze the concept of the digital economy, and digital economy is often referred to similar, associated concepts. These concepts are mainly divided and separated by economic field. For example, the sharing economy, which is a digital economy, but this concept emphasizes an economy based on digital platforms and peers.

The author distinguishes the most popular concepts related to the digital economy, namely the sharing economy, the gig economy, the information economy and the new economy, and determines the aspects of the concept of digital economy development process.

Research methods: methods of logical analysis and synthesis, monographic and analytical method of research of international economic theoretical and empirical sources, induction, deduction. The aim of the article is to analyze the aspects of the concept of digital economy and determine their development processes. Tasks of the article: (1) to analyze international research and define digital economy and concepts of digital economy; (2) describe concepts related to the digital economy; (3) describe the development process of aspects of the concept of digital economy; (4) draw conclusions about the digital economy and related concepts.

## Kopsavilkums

### Digitalās ekonomikas jēdzienu aspekti

**Atslēgvārdi:** *digitālā ekonomika, dalīšanās ekonomika, gig ekonomika, informācijas ekonomika, jaunā ekonomika*

Attīstoties digitālajai ekonomikai visā pasaulē, pētnieki arvien vairāk pievēršas šī jēdziena pētīšanai un definēšanai. Digitālā ekonomika ir salīdzinoši jauna ekonomikas joma, kurā tiek novērotas dažādas transformācijas un jauni procesi, līdz ar to parādās jaunas definīcijas un jauni ar digitālo ekonomiku saistītie jēdzieni.

Daudzi zinātnieki savos pētījumos apskata un analizē digitālās ekonomikas jēdzienu un digitālo ekonomiku mēdz dēvēt vai atvasināt citos līdzīgos jēdzienos. Šie jēdzieni galvenokārt tiek iedalīti un nošķirti pēc ekonomikas jomas. Piemēram, dalīšanās ekonomika jeb *sharing economy*, kas ir digitālā ekonomika, taču šajā jēdzienā tiek uzsvērti tieši ekonomika, kura tiek balstīta uz digitālās platformām un vienādranga ekonomikas subjektiem.

Pētījuma metodes: loģiskās analīzes un sintēzes metodes, starptautisko ekonomisko teorētisko un empīrisku avotu izpētes monogrāfiskā un analītiskā metode, indukcija, dedukcija.

Raksta autore izšķir populārākos ar digitālo ekonomiku saistītos jēdzienus, proti, dalīšanās ekonomika jeb *sharing economy*, gig ekonomika, informācijas ekonomika un jaunā ekonomika un nosaka to veidošanās galvenos aspektus.

Raksta mērķis ir analizēt ar digitālo ekonomiku asociētos jēdzienus un noteikt to aspektus. Raksta uzdevumi: (1) analizēt starptautiskus pētījumus un noteikt ar digitālo ekonomiku saistītos jēdzienus; (2) aprakstīt ar digitālo ekonomiku saistītos jēdzienus; (3) noteikt digitālās ekonomikas saistīto jēdzienu aspektus; (4) izdarīt secinājumus par digitālo ekonomiku un ar to saistītiem jēdzieniem.

## Theoretical-methodological aspects of the research

In different sources and literature, the associated concepts of the digital economy appear in a various way, namely, each researcher has his own way of concept interpretation. This is due to the relatively recent emergence of the digital economy, and therefore their derived concepts are treated and named in different ways. There is no official definition of digital economy and its associated concepts.

The concept of the digital economy appeared about 20 years ago, but the meaning of the concept is still not clearly defined among researchers. Definitions of the digital economy tend to differ significantly. (Головенчик 2019)

Table 1. **Definitions of the digital economy**

Digital economy is:
is perceived as a <b>set of economic relations</b> provided on the basis of ICT, electronic infrastructure and services;
is defined as a <b>complement to the real (traditional) economy</b> , which is able to promote the development of industries;
is a large-scale structured world of people, businesses and other economic actors, oriented towards sustainable economic development and GDP growth at macro, mezo and micro levels, through the use of intellectual capital <b>based on digital platforms, cloud computing technologies</b> ;
is a type of economy characterized by the <b>active integration and practical application of digital technologies</b> for the collection, storage, processing and reproduction of information in all spheres of human life;
<b>a set of types of economic activities</b> as a sector of production of the national economy and trade of digital goods and services in a virtual environment.

**Source:** developed by author based on Кешелава et.al. (2017), Ткач (2018). Головенчик, Г. (2019).

Table 1 summarizes only few interpretations of the digital economy definitions, but it is clear that the definitions are different and in different directions, but it should be noted that there is also a common aspect, namely ICT and digital devices as the main drivers of the digital economy.

The article discusses and defines the associated concepts of the digital economy based on the analysis of various sources. One of the most popular associated concepts of the digital economy is the sharing economy, the description and analysis of which appear quite frequently in the literature.

In the context of the digital economy, the sharing economy or collaborative economy is highlighted. The sharing economy is seen as a phase in the development of the current economy and society, influenced by individuals or 'crowds' and the use of individuals' digital technologies, so digital technologies only partially influence the development of the sharing economy. Digital technologies are the main driving force in the development of the sharing economy, but the “new” behavior of individuals, companies and households, as well as the “new” business behavior, also play an important role in the development of this economy. The term 'new behavior' refers to a form of economic behavior in which economic activity is based on digital technologies. (Sundararajan 2016)

The main entities or actors of the sharing economy are peer-to-peer objects, whose rights are equal, i.e. the exchange of goods or services between these objects takes place on the basis of the principles of equality. Goods and services are exchanged, shared in the market, namely in the virtual market, based on the digital platforms. (Sundararajan 2016)

Nowadays, the term “new” economy is actively used, which is mostly used as a synonym for the term digital economy or related to usage of ICT in economy. The new economy is an economy that is unconventional and has its own distinctive, modern and contemporary characteristics. Under the word 'new' are hidden concepts such as 'rapid growth', 'development of digital technologies and

innovation', 'science-based economy', new methods and techniques, 'the role of ecology', constant change in the economic sector, etc. The creation and development of the new economy was mainly driven by the rapid development of technology, which in turn boosted economic growth and productivity. Information and communication technologies provided a rapid flow of information that was not provided before the emergence of the "new economy".

The new economy is characterized by:

- 1) Development of digital technologies or ICT (Information and Communication Technologies);
- 2) Rapid growth;
- 3) Productivity;
- 4) Information;
- 5) Knowledge. (Godin 2004)

Digital technologies and devices have influenced the format of work, for example, ICT has made it possible to work remotely using various digital platforms and systems, including, of course, the Internet. This kind of change has contributed to the emergence of a new concept – new associated concept of the digital economy – the gig economy.

The concept of gig economy is the latest trend that combines different types of flexible work. The development of the gig economy took place thanks to new technological solutions that facilitated the automation of non-stop work functions and the transformation of the form of work. The gig economy is seen as the key to success in all modern economies. (De Ruyter, Brown 2019)

Previously, the gig was equated to sharing economy, but there are some differences, as it is not always possible to attribute an independent contractor to the use of digital platforms to perform a certain job; therefore, it can be concluded that the sharing economy and the gig economy have their own nuances and certain differences. A common feature is that both economies use technology, namely digital platforms. (De Ruyter, Brown 2019)

Work format in a gig economy is super-flexible, but very precarious and volatile, as the independent contractor has to provide himself with the job on a regular basis, terminating the employment relationship with the previous employer. In a gig economy, employees are "free" in their choice of where and how to work. In a gig economy, the relationship between the employer and employee is different from the relationships in a traditional economy. The concept of 'work for life' is lacking, as is loyalty, because there is no long-term employment relationship between the employer and employee in a gig economy. (De Ruyter, Brown 2019)

Researchers in the information economy highlight the problem of how to gather scattered information, given the large amount of information that is stored in a variety of sources. The emergence of large amounts of information, thanks to the Internet and the simple creation of



information, has contributed to the emergence of a new economic concept, namely the information economy.

In order to use information as an effective tool in the information economy, it is necessary not only to know the information, but also to know what kind of information is known by others. Information also has specificity – it is not possible to obtain information from another source of information if the necessary information is not provided, respectively, the information cannot be used economically fully if the binding information is not reproduced. Information is the basis of many global phenomena and problems. (Birchler, Butler 2007)

The information economy is a new area of the economy that developed during the information and telecommunications revolution, which in turn led to the development of the Internet. In the early days of the information economy, physicists focused on its development, developing technologies that help to reproduce, store and process information. It was based on technologies that enable the flow of information. However, later, when the flow of information was already ensured, economists began to focus on the analysis of information, how information affects economic processes, economic decisions and why some economic agents have better information than another economic agent. (Birchler, Butler 2007)

Along with the rapid development of ICT in the world, the concept of ICT economy is also highlighted, which is characterized on the basis of the return of ICT economic benefits through the integration of digital technologies into business, connectivity of economic entities, etc. ICT allow companies to work efficiently, which contributes to raising productivity levels and, consequently, economic development. The integration and optimization of ICT in different sectors makes it possible to reduce information retrieval, processing, costs, etc. (Sepehrdoust 2018).

It must be concluded that all the associated concepts of the digital economy mentioned in this article are interrelated and there are certain common features. In the article, the author describes the aspects of defining these concepts.

### **Research results**

Based on the literature analyzed by the author on the associated concepts of the digital economy, a summary table on the aspects of concept development was created (see Table 2).

It must be concluded that most researchers focus on the analysis of the collaborative or sharing economy, as it accounts for the largest share of the digital economy. The sharing economy has simple entry and exit conditions, a prerequisite for the existence of relevant technologies and digital platforms. The main actors or entities in the sharing economy are peers, i.e. people with equal rights. In order to become a participant in the sharing economy, one must own the unused resources with which the sharing economy is shared. In a sharing economy, the process of sharing takes place on the basis of the so-called “new” behavior, which means consumer behavior based on

digital technologies, i.e. people or “crowds” share different goods and services or unused resources for a fee. Any sharing economy entity's sharing demand depends on the reputation or feedback identified by previous consumers. The processes of transformation in the sharing economy are often referred to as ubberization, which is associated with the ride-sharing service company name “Uber Technologies Inc.” that appeared in the beginnings of the sharing economy emergence. (Wallsten 2015)

The concept of the new economy is described as a non-traditional economy with modern or contemporary characteristics:

- 1) Digitalization processes of the economy;
- 2) Rapid growth due to the development of ICT;
- 3) ICT integration in all sectors;
- 4) Continuous changes;
- 5) Use of digital platforms;
- 6) Digital thinking of society, etc.

The gig economy can also be referred to the new economy, as it is characterized by the use of digital platforms, ICT and the Internet, but a number of features of the gig economy need to be highlighted. The gig economy must adapt to the emergence of a new form of work thanks to the development of the Internet and ICT. Gig economic actors are a real-time workforce available at any time via digital platforms. Gig economy participants are called freelancers who focus and tend on result of the work rather than the work process. The conditions for entering and leaving the gig economy are simple; the main prerequisites are ICT skills, internet connection, experience in using digital platforms, etc. In the gig economy, work is short-lived, so there is no job loyalty in this type of work, the concept of “work for life” is not relevant.

The flow of information from the independent contractor to the employer is important in the gig economy, and in this case the concept of the information economy, which is based on information and its constant growth, can be mentioned. Information as an economic commodity is used to make reasonable economic decisions. It must be concluded that without a certain lack of information, economic decisions cannot be made effectively. The most effective decisions are made when you have access to all the necessary information. Participants of the information economy are economic subjects, who work with large-scale information processing, storage and reproduction.

**Table 2. Formation aspects of a digital economy associated concepts**

Associated concepts of digital economy	Aspects of defining the concept
Collaborative or sharing economy	<p>The concept is defined based on:</p> <ul style="list-style-type: none"> <li>• peer-to-peer economic subjects;</li> <li>• sharing objects are unused resources (place, car, food etc.);</li> <li>• “new” behavior – crowd-based sharing;</li> <li>• sharing place – digital platforms;</li> <li>• fee-based sharing (determined by peer-to-peer economic subject);</li> <li>• feature of shared consumption that is promoted based on reputation or feedback;</li> <li>• access for everyone to the sharing economy;</li> <li>• emphasis on ubberisation processes.</li> </ul>
New economy	<p>The concept is defined based on:</p> <ul style="list-style-type: none"> <li>• untraditional economy;</li> <li>• modern features;</li> <li>• rapid economic growth;</li> <li>• integration of ICT;</li> <li>• continuous change in the economy;</li> <li>• science-based economy;</li> <li>• use of digital applications, platforms, etc.;</li> <li>• digital thinking and digital skills;</li> <li>• productivity growth, etc.</li> </ul> <p>The concept has been defined based on the rapid development of ICT (tech-boom) since the 1990s.</p>
Gig economy	<p>The concept is defined based on:</p> <ul style="list-style-type: none"> <li>• emergence of new and flexible forms of work;</li> <li>• demand for real-time labor;</li> <li>• emergence of new labor relations;</li> <li>• new forms of work based on digital platforms;</li> <li>• independent employees (freelancers) ability to control their own work style and approach;</li> <li>• the work is based on the result;</li> <li>• simple entry and exit conditions;</li> <li>• temporary work style;</li> <li>• there is no work loyalty.</li> </ul>
Information economy	<p>The concept is defined based on:</p> <ul style="list-style-type: none"> <li>• the increase in the amount of information,</li> <li>• the use of information to make economic decisions;</li> <li>• information as an economic commodity that is unique because it is the only commodity that can be sold and kept with you;</li> <li>• information cannot be fully economically efficiently used without the reproduction and acquisition of binding information;</li> <li>• information economy subjects are participants who spend most of their time working with information and use information to make decisions.</li> </ul>
Information and communication economy	<p>The concept is defined based on:</p> <ul style="list-style-type: none"> <li>• rapid development of ICT (tech-boom) in the 90s;</li> <li>• rapid economic development;</li> <li>• increase in the level of productivity;</li> <li>• increase in the level of competitiveness due to ICT;</li> <li>• technological progress;</li> <li>• integration ICT into economic sectors.</li> </ul>

**Source:** made by author based on Tapscot (1996), Sundararajan (2016), De Ruyter, Brown (2019), Birchler, Butler (2007), Dsmail, (2008).

Without the development of ICT described in the article, the existence of associated economies of the digital economy would not be possible, because all these economies are based on ICT, digital platforms, Internet connection. However, the concept of the ICT economy is emphasized, which is based on the rapid development of ICT and its integration into all sectors of the economy in order to achieve economic efficiency and productivity level growth.

The author concludes that the economies described in the article – the sharing economy, the information economy, the gig economy, the ICT economy and the new economy – are important cross-cutting economies that can be applied to all areas of the digital economy. Cross-cutting economies contribute to the development of the digital economy, and thus to the development of the traditional economy as a whole.

### **Conclusions**

1. The digital economy is an area of the economy that includes economic relations, the drive for economic growth and productivity, and economic activities based on ICT and digital platforms. The digital economy is a non-traditional economy and serves as a complement to the traditional economy.
2. The definitions of the concepts of the digital economy differ in different literature sources and different directions and areas are emphasized in the interpretations, but there are also common features, namely ICT and digital devices as the main basis of the digital economy.
3. The associated concepts of the digital economy – the sharing economy, the emerging economy, the gig economy, the information economy and the ICT economy – are cross-cutting economies that are closely interlinked.
4. The aspects of developing the concept of a sharing economy are based mainly on the exchange of unused resources on digital platforms between peers.
5. The aspects of developing the new concept of economics are based on the continuous development of digital technologies, digital thinking in society, rapid growth and rising productivity level.
6. The aspects of developing the concept of information economy are based on information as the main commodity of the economy, which has a continuous growth. Information as an economic commodity is used in making economic decisions.
7. The aspects of developing the concept of the gig economy are based on a flexible form of work based on digital platforms, the participants – independent contractors – perform results-oriented work.
8. The aspects of developing the concept of ICT economy is based on the rapid development and integration of ICT in all sectors of the economy, which contributes to raising the level of productivity.

## References

- Birchler, U., Butler., M. 2007. *Information Economics*. London; New York: Routledge.
- De Ruyter, A., & Brown, M. D. 2019. *The gig economy*. Agenda publishing.
- Dsmail, S. E. K. D. (2008). *The importance of ICT for the knowledge economy: A total factor productivity analysis for selected OECD countries. Emerging Economic Issues in a Globalizing World*.
- Godin, B. 2004. *The new economy: what the concept owes to the OECD*. Research policy, 33(5), 679–690.
- Sepehrdoust, H. 2018. *Impact of information and communication technology and financial development on economic growth of OPEC developing economies*. Kasetsart Journal of Social Sciences.
- Sundararajan, A. 2016. *The sharing economy: The end of employment and the rise of crowd-based capitalism*. Mit Press.
- Tapscott, D. 1996. *The digital economy: Promise and peril in the age of networked intelligence* (Vol. 1). New York: McGraw-Hill.
- Wallsten, S. 2015. *The competitive effects of the sharing economy: how is Uber changing taxis*. Technology Policy Institute, 22, 1–21.
- Головенчик, Г. 2019. *Теоретические подходы к определению понятия цифровая экономика*. Наука и инновации, 2(192).
- Кешелава, А. В., Буданов, В. Г., Румянцев, В. Ю., Дмитров, И. Д., Сорокин, К. С., Хаев, И. Л., Щербаков, А. В. 2017. *Введение в «цифровую» экономику (На пороге «цифрового будущего»*. Книга первая). М.: ВНИИГеосистем.
- Ткач В. И. 2018. *Цифровая экономика: оптимум, эквилибриум, синергизм. Экономика и экология территориальных образований*.

# CONCEPTUALIZING RESILIENCE OF RURAL COMMUNITIES

**Līga Paula**

Latvia University of Life Sciences and Technologies, Liela street 2, Jelgava, LV-3001,  
Liga.Paula@llu.lv

## Abstract

### Conceptualizing resilience of rural communities

**Key Words:** rural communities, social resilience, community resilience, neo-endogenous development, sustainability

The concept of community resilience has become increasingly important in community studies in recent decades. Based on the literature review, the aim of the paper is to conceptualize the resilience of rural communities from the perspective of different theoretical approaches (equilibrium approach, evolutionary approach, socio-ecological perspective, etc.). The resilience of communities means the ability of communities both to adapt and withstand new conditions and influences caused by external factors and to exploit potential risks to their advantage by strengthening their capacity, learning and developing new skills. Analysing the factors influencing the resilience of rural communities, the role of communities in the context of social change is emphasized; therefore, development policy makers should strive to support resilient rural development, recognizing the interplay between locality and resilience, interaction of socio-economic and environmental factors, the role of digital technologies in promotion rural community resilience, etc. Rural policy-making should emphasize the viability of rural communities, where social, economic and environmental aspects are perceived as complementary and not opposed. Particularly in the context of neo-endogenous development, the concept of community resilience includes the idea of community sustainability, community capacity building and learning. The diversity of community resources is a key factor influencing community resilience and contributing to the community's ability to adapt.

## Kopsavilkums

### Lauku kopienu dzīvotspējas konceptualizācija

**Atslēgvārdi:** lauku kopienas, sociālā dzīvotspēja, kopienu dzīvotspēja, neoendogenā attīstība, ilgtspēja

Kopienu studiju ietvaros pēdējās desmitgadēs aizvien lielāku ievērību gūst kopienu dzīvotspējas (*community resilience*) jēdziens. Balstoties uz literatūras analīzi, raksta mērķis ir konceptualizēt lauku kopienu dzīvotspējas jēdzienu dažādu perspektīvu salīdzinājumā (līdzsvara pieeja, evolucionāras attīstības pieeja, sociāli ekoloģiskā perspektīva u.c.). Kopienu dzīvotspēja nozīmē kopienu spēju gan pielāgoties un pretoties jauniem ārēju faktoru radītiem apstākļiem un ietekmēm, gan iespējamos riskus izmantot savā labā, stiprinot savu kapacitāti, mācoties un attīstot jaunas prasmes. Analizējot lauku kopienu dzīvotspēju ietekmējošos faktorus, tiek akcentēta kopienu loma sociālo pārmaiņu kontekstā, tādēļ attīstības politikas veidotājiem jātiecas atbalstīt dzīvotspējīgu lauku attīstību, atzīstot vietas piesaistes un dzīvotspējas savstarpējo ietekmi, sociāli ekonomisko un ekoloģisko faktoru mijiedarbību, digitālo tehnoloģiju lomu dzīvotspējas veicināšanā u.c. Lauku politikas veidošanā jāakcentē lauku kopienu dzīvotspēja, kur sociālie, ekonomiskie un vides aspekti tiek uztverti kā savstarpēji papildinoši un netiek pretstatīti. Īpaši neoendogenās attīstības kontekstā kopienu dzīvotspējas jēdziens ietver ideju par kopienas ilgtspēju, kopienas kapacitātes celšanu un mācīšanos. Kopienas resursu dažādība ir būtisks dzīvotspēju ietekmējošs faktors un veicina kopienas spēju adaptēties.

## Introduction

As part of community studies, researchers analyse various aspects of community life, and in recent decades, the community resilience has become an increasingly important concept. In Europe, in the context of rural development and agriculture, the debate on environmental sustainability, mobility, human society and environmental vulnerability in rural areas is marked by discourses that focus on greater respect for the locality (Marsden, 2009). A great number of academic papers is devoted to the topics such as factors influencing community resilience, the role of communities in local rural change, capacity of policies to support resilient rural development, mutual interaction between resilience and a place attachment, resilience of communities during the economic crisis and in the post-crisis context, the role of digital technologies in promoting resilience (e.g., Zwiers, Markantoni, Strijker, 2013; Quaranta, Wilson, Salvia, Kelly, 2013; Lendvay, 2013). Analysing

resilience of communities and defining specific indicators is a major challenge as communities are diverse, and researchers use different approaches to analysis; their understandings of quantitative and qualitative indicator systems vary (Zautra, Hall, Murray, 2008). Most of definitions focus on resilience as the ability of communities both to adapt and resist new conditions and influences caused by external factors and to use potential risks to their advantage by strengthening their capacity, learning and developing new skills. Based on the literature review, the aim of the paper is to conceptualize the resilience of rural communities from the perspective of different theoretical approaches (e.g. equilibrium approach, evolutionary approach, socio-ecological perspective).

## **Discussion**

Community studies show how different parts of a community, including those identifiable beyond geographically defined local boundaries, fit together and that the community as a whole is something larger than the sum of its parts (Crow, 2008). By referring to the number of studies, G. Crow concludes that the community is not just characterized by a sense between ‘we in this locality’ and the rest of the world; community study approach is flexible enough to take this fact into account (Crow, 2008, p. 137). The concept of community resilience includes the idea of community sustainability. In the discourses of European rural development policy, sustainable development has become a guiding idea, which is implemented in various rural development programs and resource management strategies, especially those related to integrated rural development (Bruckmeier, Tovey, 2008, pp. 314). Many individuals and social agents support sustainability and the move towards a sustainable society, but on closer inspection it becomes clear that everyone understands these processes differently, so there is no consensus what must be maintained in the long run: local communities, economic wellbeing future generations, biodiversity or humanity as such. From the perspective of ecological economics, community sustainability is a complex concept that includes, among other things, the full participation of community members in the community’s socio-political system, the equitable distribution of income and “co-operation” with the natural environment rather than dominance (Tisdell, 1993). Thus, sustainability presupposes balanced development of several pillars – environmental, economic, social, and institutional. T. Marsden suggests that “rural and environmental social sciences need to pay serious attention to the development of more alternative complex and socio-ecological models of rural development” (Marsden, 2009, p. 128), because socio-ecological and eco-economic relations are important for both rural and urban residents especially today when rural areas have become vulnerable, experience greater mobility, and seek sustainability.

The concept of resilience in social sciences is taken from the natural sciences (Figure 1) briefly demonstrates how the concept has developed), where it is used to describe the ability of

ecosystems to absorb changes and the effects of external conditions, while still maintaining their state, structure and behaviours.

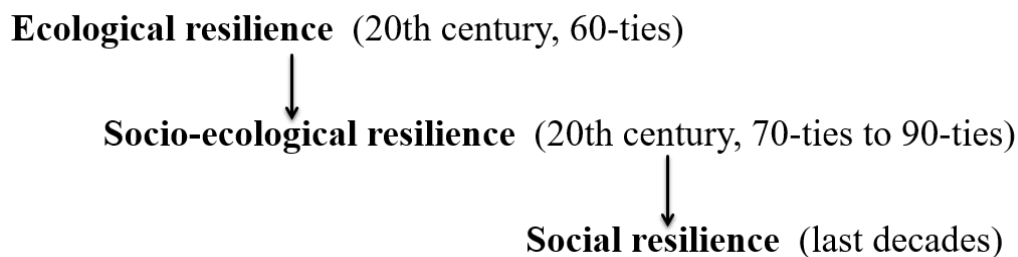


Figure 1. **Historical development of resilience analysis**

In its most general sense, resilience is defined as “a system’s capacity to persist in its current state of functioning while facing disturbance and change, to adapt to future challenges, and to transform in ways that enhance its functioning” (Keck, Sakdapolrak, 2013, p. 8). M. Lendvay points out that the concept of the resilience of rural communities has become increasingly used in recent years and it has been studied in the context of community development, community health, resource dependency and sustainability (Lendvay, 2013, p. 121). If the community is an element of the socio-economic system, the concept of social resilience applies to it. According to W.N. Adger, in cases of socio-ecological systems such as territorial rural communities, resilience concept has a different meaning, taking into account, for example, the political and anthropogenic dimensions of deviations and change (Adger, 2000; Skerratt, 2013, p. 36). Thus N. W. Adger defines social resilience as “the ability of groups or communities to cope with external stresses and disturbances as a result of social, political and environmental change” (Adger, 2000, p. 347) and resilience of social systems means a capacity of a community’s social infrastructure to withstand external shocks (Adger, 2000, p. 361). Social resilience is based on several principles: the ability to maintain stability, the ability to adapt and the ability to change (Keck, Sakdapolrak, 2013, p. 6).

In his paper, M. Scott explores two approaches to resilience: an equilibrium (or bounce back) approach and an evolutionary (or bounce forward) approach (Scott, 2013). Based on ‘return to normal’ assumptions and characterised by an emphasis on adaptive capacity and transformation, an evolutionary approach seems more acceptable in discussions about the sustainability of communities and their ability to adapt to shocks and threats from external conditions. M. Scott points that rural studies are dominated by two themes related to resilience: the first is the role of agriculture in socio-ecology resilience and the other focuses on aspects of community resilience in rural areas (Scott, 2013, p. 602). In the case of community research, the authors focus on the process of re-localisation as a means of promoting resilience and stimulating the move towards a greener economy and lifestyles, creating a closer connection with the local economy. M. Scott also



points that the increasingly relevant concept of community resilience has been conceptually included in discussions on neo-endogenous rural development, on asset-based community development approaches in rural development, and on discussions on community capacity building (Scott, 2013, p. 603).

M. Lendvay analyses how the resilience of rural communities is conceptualized and how the meaning of this concept has changed from the point of view of the socio-ecological system perspective and community psychology approach (Lendvay, 2013). Researchers analysing resilience of communities typically use one of these two fundamentally different approaches, and some studies show even attempts to integrate both perspectives. The socio-ecological approach and the community psychology approach are two coexisting approaches that can be used to analyse change in rural areas, communities and their resilience. The basic idea of the socio-ecological system approach is to look at the complex of the researched problems, taking into account the relationships of interrelated elements at different levels, while the community psychology approach focuses on the adaptive capacities of individuals and groups (Lendvay, 2013, p. 121). G. Quaranta *et al* supports idea about rural territories as a socio-ecological system that should not be seen as an isolated but rather as a complex interaction between interdependent parts and processes that take place at diverse spatial and temporal scales, where changes in one component or process can lead to changes in others thus significantly affecting resilience of the whole socio-ecological system (Quaranta, Wilson, Salvia, Kelly, 2013, p. 123). M. Lendvay emphasizes whose resilience is studied, in relation to what it must be resilient, and what must be maintained (Lendvay, 2013, p. 122). As community definitions and understandings vary and communities perform different functions, it is important to be aware of whether resilience is related to a community as a region or a community as a social system that unites groups and individuals, and to what extent resilience is important within groups. The author also discusses whether external influences are agents of change that foster innovation and positive change in community life, or are perceived only as threats that need to be eliminated. Therefore, Lendvay emphasizes the idea of several resiliencies in a community leading to the following: increased resilience of one agent or responding to one particular external disruption may reduce the resilience of other parts of the system (Lendvay, 2013, p. 122). Similar discussion can be found in the article of M. Keck and P. Sakdapolrak who ask “resilience in whose interest” and emphasize that probable winners and losers should be identified (Keck, Sakdapolrak, 2013, p. 14).

Also A.Schouten *et al* view rural areas as socio-ecological systems with socio-economic or man-made features and ecological or biophysical features (Schouten et al., 2012, p. 166). There is a close interaction between the two sub-systems. The socio-economic system consists of individuals, social groups, networks and institutions (rules, regulations and procedures) which intervene

(interact) with ecological system. In other words, it consists of both social and economic components, and the processes in each of these components play an important role in determining the interaction with the ecosystem, as these interactions directly and indirectly modify the structure and functions of the ecosystem. Examples of human intervention are the transformation of the natural ecosystem into an agricultural system, such as afforestation, land irrigation and the construction of flood control reservoirs. Human intervention can also have a negative effect. The system of governance is perceived as an external influence on the socio-ecological system and is above it, being a precondition for the socio-ecological system (Schouten et al., 2012).

There is a number of factors influencing community resilience, for example, social capital and community ties, place attachment and common identity, economic considerations, etc. Nowadays, it is accepted that the influence of communities on the individual has significantly decreased in rural areas. However, a number of studies reveal a different reality. The impact of the community on individuals' decisions to stay, live and to continue with traditional activities in the countryside or to start something new can be quite significant. For example, Crow (Crow, 2008, p. 137) refers to Bennett *et al.*, who have conducted the study in Cumbria, England (Bennett, Carroll, Lowe, Phillipson, 2002). During their research, interviews were conducted with farmers who, willing to maintain a family business and to sustain community ties, confirmed their readiness to continue breeding and keeping their livestock by restoring their farms to previous levels, even after severe foot-and-mouth disease in the region (Bennett et al., 2002, p. 115). Thus, individual decisions to continue a business even when it is endangered have been influenced by a sense of belonging to the community and also by its social role. The role of community agents is emphasized by analysing community resource management practices and opportunities in the context of rural sustainability (e.g., Glass, Price, Warren, Scott (eds), 2013).

The role of place attachment and social relationships within a context of community resilience is emphasized, for example, in the study of P. McManus *et al.*, which was carried out in Australian rural communities by interviewing 115 farmers (McManus, Walmsley, Argent, Baum, Bourke, Martin, Pritchard, Sorensen, 2012). The authors conclude that rural policy-making should emphasize the resilience of rural communities, where social and economic aspects should be involved as complementary and not contrasted (McManus et al., 2012, p. 21). This means that a resilient economy, the quality of the local natural environment and a strong sense of belonging among the population are essential for the rural community as a territorial unit.

S. Skerratt focuses on discourses in which the concept of rural community resilience is used (Skerratt, 2013). She points out that in various international studies the dominant discourse is related to the ability of communities to recover from external shocks or the negative effects of external factors. At the same time, she concludes that there is also another type of discourse –

communities as agents of proactive change, which not only respond to external factors and absorb their negative effects, but also adapt, developing their capacity and skills as a result of change (Skerratt, 2013, p. 36). Therefore, other community-related concepts and characteristics should also be taken into account when analysing resilience, such as social capital (Skerratt, 2013. p. 36) or place attachment (Zwiers, Markantoni & Strijker, 2013). A. Schouten *et al* in their study analyse how rural development policies in Europe contribute to the resilience of rural areas (Schouten et al., 2012). Nine criteria of resilient development of socio-ecological systems for the framework of evaluation policy objectives are defined (Walker, Salt, 2006): *diversity, modularity, ecological variability, acknowledging slow variables, tight feedbacks, social capital, innovation, different levels of governance, and unpriced ecosystem services* (Schouten et al., 2012; Walker & Salt, 2006).

The involvement of the community in local rural development has been recognized by both academic researchers and practitioners (such as social scientists, policy makers, decision-makers and executives at various levels and fields) in many countries. The involvement of communities and the use of local expertise in development processes in various forms of formal and less institutionalized participation, both as top-down and bottom-up initiatives, is well known in almost every society. However, this experience and the forms of community participation have historically developed quite differently in different countries. For example, there is a stronger and more active representation of rural communities in formal community organizations and structures, their participation and involvement in solving local problems in English- and German-speaking countries. This is also evidenced by many case study descriptions and thematic study reports (e.g. Clark, Southern, Beer, 2007). It is important to be aware of what support tools are available to social agents in rural areas to strengthen resilience of rural areas and thus also communities (impact of policy decisions on rural resilience is studied, for example, by Quaranta et al., 2013). The transformation of local knowledge or local culture in the resources available to the local territory is emphasized by C. Ray who points out that the cultural economy acts as a strategy that drives the above-mentioned transformation (Ray, 1998, p. 9).

Sustainable rural development is inconceivable without a viable local community, therefore its involvement in development processes is inevitable. Involving the local community in decisions about changes in rural socio-economic structure, land use and development planning is at place in many European countries, as evidenced by a number of studies, such as the Scottish experience (e.g., Midgley, Shucksmith, Birnie, Geddes, Bayfield, Elston, 2005). This is also required by the European Union's rural development policy (European Commission). In the wider social fabric, communities act as intermediaries between the individual, small groups and the macro-environment. Viable rural communities are inconceivable without the skills to use the resources and

opportunities at their disposal, to participate actively in decision-making and to implement their goals purposefully.

## Conclusions

- 1) There are different opinions in the scientific literature about resilience as a process or a state of stability (result). Many consider resilience as a process or the ability to adapt, and stability to some extent, in this case, could indicate a lack of resilience. The diversity of community resources (economic development, social capital, information and communication, community competence) is an important factor influencing resilience and contributes to the community's ability to adapt.
- 2) The concept of community resilience includes the idea of community sustainability, community capacity building and learning. The importance of knowledge and learning processes in development planning and implementation, which includes the exchange and management of knowledge and competences of various stakeholders, is increasingly emphasized.
- 3) Involvement of the community in local rural development has been recognized by both scholars and practitioners in many countries. The involvement of communities and the use of local expertise in development processes in formal and less institutionalized participation forms, both as top-down and bottom-up initiatives, can contribute to resilience local communities.

## References

- Adger W.N. 2000. Social and ecological resilience: are they related? In: *Progress in Human Geography*. Vol. 24(3), pp. 347–364.
- Bennett K., Carroll T., Lowe P., Phillipson J. (eds.). 2002. *Coping with crisis in Cumbria: The Consequences of Foot and Mouth Disease* (Research Report). University of Newcastle [skatīts 11.06.2020]. Pieejams (Accessed): <http://www.ncl.ac.uk/cre/publish/pdfs/rr02.01a.pdf>
- Bruckmeier K., Tovey H. 2008. Knowledge in Sustainable Rural Development: from Forms of Knowledge to Knowledge Process. In: *Sociologia Ruralis*. Vol. 48(3), pp. 313–329.
- Clark D., Southern R., Beer J. 2007. Rural Governance, Community Empowerment and the New Institutionalism: A Case Study of the Isle of Wight. In: *Journal of Rural Studies*. Vol. 23, pp. 254–266.
- Crow G. 2008. Recent Rural Community Studies. In: *International Journal of Social Research Methodology*. Vol. 11(2), pp. 131–139.
- European Commission. *Rural development. Protecting the future of rural communities* [skatīts 23.11.2020]. Pieejams (Accessed): [https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/rural-development\\_en](https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/rural-development_en)
- Glass J., Price F.M., Warren C., Scott, A. (eds) (2013). *Lairds, Land and Sustainability. Scottish Perspectives on Upland Management*. Edinburgh: Edinburgh University Press.
- Keck M., Sakdapolrak P. 2013. What is Social Resilience? Lessons Learned and Ways Forward. In: *Erdkunde*. Vol. 67(1), pp. 5–19.
- Lendvay M. 2013. Rethinking rural community resilience. In: Proceedings of the XXV ESRS Congress *Rural resilience and vulnerability: the rural as locus of solidarity and conflict in times of crisis*. Florence, pp. 121–122 [skatīts 11.06.2020]. Pieejams (Accessed): [http://www.euroreg.uw.edu.pl/dane/web\\_euroreg\\_publications\\_files/4285/esrs2013\\_eproceedings.pdf](http://www.euroreg.uw.edu.pl/dane/web_euroreg_publications_files/4285/esrs2013_eproceedings.pdf)
- Marsden T. 2009. Mobilities, Vulnerabilities and Sustainabilities: Exploring Pathways from Denial to Sustainable Rural Development. In: *Sociologia Ruralis*. Vol. 49(2), pp. 113–131.

- McManus P., Walmsley J., Argent N., Baum S., Bourke L., Martin J., Pritchard B., Sorensen T. 2012. Rural Community and Rural Resilience: What is important to farmers in keeping their country towns alive? In: *Journal of Rural Studies*. Vol. 28, pp. 20–29.
- Midgley J.L., Shucksmith D.M., Birnie R.V., Geddes A., Bayfield N., Elston D. 2005. Rural development policy and community data needs in Scotland. In: *Land Use Policy*. Vol. 22, pp. 163–174.
- Quaranta G., Wilson G., Salvia R., Kelly C. 2013. Resilience and rural change: conflict or synergy? In: Proceedings of the XXV ESRS Congress *Rural resilience and vulnerability: the rural as locus of solidarity and conflict in times of crisis*. Florence. pp. 123–124 [skatīts 11.06.2020]. Pieejams (Accessed): [http://www.euroreg.uw.edu.pl/dane/web\\_euroreg\\_publications\\_files/4285/esrs2013\\_eproceedings.pdf](http://www.euroreg.uw.edu.pl/dane/web_euroreg_publications_files/4285/esrs2013_eproceedings.pdf)
- Ray C. 1998. Culture, Intellectual Property and Territorial Rural Development. In: *Sociologia Ruralis*. Vol. 38(1), Oxford, pp. 3–20.
- Schouten A.H.M., van der Heide M.C., Heijman J.M.W., Opdam F.M.P. 2012. A resilience-based policy evaluation framework: Application to European rural development policies. In: *Ecological Economics*. Vol. 81, pp. 165–175.
- Scott M. 2013. Resilience: A Conceptual Lens for Rural Studies? In: *Geography Compass*. Vol. 7(9), pp. 597–610.
- Skerratt S. 2013. Enhancing the Analysis of Rural Community Resilience: Evidence from Community Land Ownership. In: *Journal of Rural Studies*. Vol. 31, pp. 36–46.
- Tisdell C. A. 1993. *Environmental Economics: Policies for Environmental Management and Sustainable Development*. Cambridge: University Press.
- Walker B., Salt D. 2006. *Resilience Thinking: Sustaining Ecosystems and People in a Changing World*. Washington: Island Press.
- Zautra A., Hall J., Murray K. 2008. Community Development and Community Resilience: An Integrative Approach. In: *Community Development*. Vol. 39(3), pp. 130–147.
- Zwiers S., Markantoni M., Strijker D. 2013. Place attachment versus resilience: the influence of place attachment on resilience building in rural communities. In: Proceedings of the XXV ESRS Congress *Rural resilience and vulnerability: the rural as locus of solidarity and conflict in times of crisis*. Florence, pp. 127–128 [skatīts 11.06.2020]. Pieejams (Accessed): [http://www.euroreg.uw.edu.pl/dane/web\\_euroreg\\_publications\\_files/4285/esrs2013\\_eproceedings.pdf](http://www.euroreg.uw.edu.pl/dane/web_euroreg_publications_files/4285/esrs2013_eproceedings.pdf) [skatīts 15.10.2014].

# REFLECTION OF THE IMPACT OF KNOWLEDGE ON SUSTAINABLE DEVELOPMENT IN LATVIA INSTITUTIONAL AND REGULATORY DOCUMENTS

**Inese Blanka**

Latvia University of Life Sciences and Technologies, faculty of Economics and Social Development, Jelgava, Svetes street 18, Latvia, i.blanka@inbox.lv

## Abstract

### Reflection of the impact of knowledge on sustainable development in Latvia institutional and regulatory documents

**Key Words:** *knowledge, knowledge management, sustainable development, institutional documents, regional development, growth*

The concept of knowledge is one of the most important and essential factor in the history of humanity. The value of knowledge has existed in the earliest works of Ancient Greek thinkers and later in the Western philosophy. Knowledge has influenced socio – economic processes and societal development throughout the history of human existence. Knowledge is the main force in the way to the progress and the development in different areas of human life. Nowadays knowledge has become an important intangible resource for companies. Knowledge can influence the competitiveness of companies and their development. Developed and knowledge-based business activity is also a prerequisite for the sustainable development of regions. The institutional policy planning documents highlight directly for growth the knowledge and the human resources that play an important role in economic development and competitiveness. The study has assessed the term “sustainable development”, which in the 90s of the last century have been interpreted in different contexts in areas of life and are no longer exclusively relevant to the environment, but also to economic processes and societal development. The aim of the study is to analyse institutional and regulatory documents that reflects knowledge and its impact on sustainable development. The analysis of regulatory and institutional planning documents which created chronologically between 2000 and 2015 most of all reflects, in the context of regional development, concepts such as “knowledge”, “sustainable development” and “human capital”. The definition of sustainable development in policy planning documents is interpreted differently. The institutional planning documents and regulatory enactments have been most of all created for a specific period until 2020, the author analysed the documents using the content analysis method from a historical point of view. Although the method of analyzing documents is a subjective method, nevertheless, it allows the information to be identified in the spotlight and the main trends in the issue. Most of all, the documents are created from 2010 till 2015 in government institutions.

## Kopsavilkums

**Zināšanu ietekme uz ilgtspējīgu attīstību atspoguļojums Latvijas institucionālajos un normatīvajos dokumentos**  
**Atslēgvārdi:** *zināšanas, zināšanu pārvaldība, ilgtspējīga attīstība, institucionālie dokumenti, reģionālā attīstība, izaugsme*

Zināšanu jēdziens ir viens no būtiskākajiem un svarīgākajiem cilvēces vēsturē. Zināšanu vērtība ir pastāvējusi sengrieķu domātāju darbos un vēlāk arī rietumu filozofijā. Zināšanas visā cilvēces pastāvēšanas vēsturē ir ietekmējušas sociāli ekonomiskos procesus un sabiedrības attīstību. Zināšanas ir galvenais virzītājspēks uz progresu un attīstību dažādās cilvēku dzīves jomās. Mūsdienās zināšanas ir kļuvušas par nozīmīgu nemateriālo resursu uzņēmumos. Zināšanas spēj ietekmēt uzņēmumu konkurētspēju un to attīstību. Attīstīta un uz zināšanām balstīta uzņēmumu darbība ir priekšnosacījums arī reģionu ilgtspējīgai attīstībai. Politikas plānošanas dokumentos Latvijas izaugsmes veicināšanai ir izceltas tieši zināšanas un cilvēkresursi, kam ir nozīmīga loma ekonomikas attīstībā un konkurētspējas nodrošināšanā. Pētījuma procesā ir vērtēts termins “ilgtspējīga attīstība”, kas kopš 20 gs. 90 gadiem ir interpretēts dažādos kontekstos dažādās dzīves sfērās un vairs nav tikai attiecināms uz vidi, bet arī uz ekonomikas procesiem un sabiedrības attīstību. Pētījuma mērķis ir analizēt Latvijas normatīvos un plānošanas dokumentus, kuros ir atspoguļotas zināšanas un to ietekme uz ilgtspējīgu attīstību. Analizējot normatīvos un politikas plānošanas dokumentus, kas hronoloģiski ir izstrādāti no 2000. gada līdz 2015. gadam, kuros ir atspoguļoti tādi jēdzieni kā „zināšanas” ilgtspējīga attīstība” un „cilvēkkapitāls”. Ilgtspējīgas attīstības definīcija politikas plānošanas dokumentos tiek interpretēta dažādi. Latvijas institucionālie plānošanas dokumenti un normatīvie akti ir izstrādāti konkrētam laika periodam līdz 2020. gadam, tādēļ autore analizē dokumentus no vēsturiskā aspekta, jo pamatā analizētie dokumenti tika izstrādāti laikā no 2010. gada līdz 2015. gadam. Teorētiskās izpētes procesā, lai analizētu institucionālos politikas plānošanas dokumentus ir izmantota kvalitatīvā izpētes metode – kontentanalīze. Minētā tekstuālu datu analīzes metode ļauj izvērtēt datus un informāciju, kā tiek definēta zināšanu ietekme uz ilgtspējīgu attīstību. Kaut gan dokumentu analīzes metode ir subjektīva metode, tomēr tā ļauj noteikt informācijas aktualitāti un galvenās tendences problēmjautājumā.

## Introduction

Knowledge is an important resource not only in each company, but also in its capacity to influence and promote economic development, not only in Latvia as a whole, but also in each region. The knowledge aspect is unique with the fact that, as an intangible resource, it is capable of affecting the competitiveness, development of companies and promoting the production of innovative products or the provision of services. The regions of Latvia have sufficient prerequisites for sustainable development, which is determined by the fact that innovative companies have developed, which are able to apply knowledge to their development. Resources and environment in Latvian regions enable the creation of competitive goods, products and services.

In the modern era of information technology, companies are aware of the importance of innovative technologies for information management processes and data processing. At the same time, knowledge has become an important tool in the management, use and storage of enterprise processes. Knowledge is valued at a very high level and, therefore, contributes to their storage, processing and use. Knowledge is also valued as a high intellectual capital, which is judged as the key to corporate success. Knowledge is a transdisciplinary field and incorporates many disciplines such as philosophy, economics management, information technology, human resources, psychology, sociology, communication studies and many more (J.Davidova, I.Kokina,2018). It is important to realise that “knowledge is a resource and knowledge management is linked to information technologies” (M.Dumpe,2006). The linkage of knowledge to the context of sustainable development should be assessed by initially studying the institutional documents of Latvia created from 2000. In 2002, the guidelines for sustainable development in Latvia were already approved. From 2006, the planning process for sustainable development in Latvian state institutions was launched, drawing up a series of institutional and regulatory documents including the principles of sustainable development.

The aim of the study is to analyse institutional and regulatory documents that reflects knowledge and its impact on sustainable development. The analysis of regulatory and institutional planning documents which created chronologically between 2000 and 2015 reflects, in the context of regional development, concepts such as “knowledge”, “sustainable development” and “human capital”. The definition of sustainable development in policy planning documents is interpreted differently. The institutional planning documents and regulatory enactments have been most of all created for a specific period until 2020, that is why the author analyses the documents, using content analysis method, from a historical point of view. Although the method of analyzing documents is a subjective method, nevertheless, it allows the information to be identified in the spotlight and the main trends in the issue. The article gives an insight into institutional planning and

regulatory documents and reflects how the knowledge in the context of sustainable development may impact the growth of regions.

## **Discussion**

The importance of knowledge and sustainable development in national level is highlighted in a number of institutional documents – guidelines, strategies and legislative documents. The sustainable development goals formulated at regional level. Sustainable development is defined as the smooth development of regions or as economic development (sustainable growth, production capacity). The process of sustainable development in terms of economic growth and regional development is linked with knowledge. In institutional documents sustainable economy being evaluated as “green economy”, “knowledge economy”, “smart economy”, “human capital” are defined and clarified by the Natural Resources Tax Act and Regional Development Act, in which the aim of the law is to support the sustainable development of economy (Natural Resources Tax Act,2020) and to ensure balanced and sustainable development of the country (Regional Development Act,2016). Consequently, in order to address these challenges, it was based on sustainable environmental development. In Latvia, various policy planning documents including the principles of sustainable development were developed. 15.08.2002. Cabinet regulation no.436 approved the document “Guidelines for sustainable development of Latvia”. The aim of the document is to identify sustainable development directions for the country, both in specific sectors and in a comprehensive way. At first, in the planning documents the main attention is focused on the regional development problems, stressing that “existing different levels of regional development have a negative impact on development rates” (Guidelines for sustainable development of Latvia, 2002). Various levels of development – “unbalanced development”, “socio-economic differences” (Guidelines for sustainable development of Latvia, 2002) have been identified in this document. Sustainable development is linked to “knowledgeable human capital”, which is a necessity for companies to make efficient use of production factors and knowledge as potential for sustainable development.

In 2005, the conceptual document “Latvia growth model: human in the first place”, which is the hierarchically superior document and is the basis for other planning documents – National Development Plan 2014–2020, Sustainable Development Strategy “Latvia 2030”, is adopted and approved. In 2006, the planning process for sustainable development of Latvia was launched.

Reflecting the role of knowledge in institutional and regulatory documents, one of the main challenges to regional development and ensuring their sustainability is the issue of business development and its diversification, including the creation of innovative companies. Knowledge is needed to create innovative companies or to create new innovations in existing businesses.



Although the policy planning documents, such as, Research and Innovation strategy for smart specialization (RIS3), Programme of Latvia for the Implementation of Europe 2020 Strategy, etc, to boost Latvian growth, knowledge and human resources are highlighted as key priorities, knowledge in the business environment (companies, organisations) is not sufficiently used. Knowledge and human capital are highly valued in the strategic planning and development documents. These value are identified as the main force for further sustainable economic development. In the main institutional planning document – Sustainable Development Strategy “Latvia2030”, the main challenge is the emphasis on basic – human capital. Human is the one who creates and uses knowledge through his intellectual capital, his skills acquired in the form of knowledge and experience. Knowledge transfer is an important condition for transferring knowledge, skills and experience acquired and investing in business development, thereby, affecting the development of regions where the company is located and the country as a whole.

In analysing institutional instruments – the laws and planning documents, sustainable development objectives are widely defined. Sustainability in regional development can be influenced by knowledge and directed by economic development processes within the company.

Regional development is defined in a legislative document – Regional Development Law. This document defines the principle and the concept of sustainable development, which applies to all three dimensions – environmental, social and economic. The implementation of sustainable development was essentially launched in 90’s in the last century, when the country’s environmental policy was formed. The issue of knowledge is already reflected in the long-term conceptual document “Latvia growth model: human in the first place.” In the document the main transfer of knowledge is human. Growth of Latvia is centered on people, emphasizing knowledge, wisdom, skills and their use as a resource for growth. The value of human capital is characterised by its knowledge capacity and talent base, as well as use and productivity (Sustainable Development Strategy “Latvia 2030”)

Both intellectual capital and human capital are linked to competitive economic growth, in line with the documents developed in the European Union. Human, as a fundamental value, as a key capital, as the most important resource in the strategy is put forward as one of the main forces. Sustainable Development Strategy “Latvia2030” has developed on the basis of the concept of sustainable development (Long-term conceptual document “Latvia growth model: Human in the first place”, 2005), where the following are identified as the main priorities:

1. Investments in human capital;
2. An innovative and eco – efficient economy.

The priorities identified can be linked to knowledge. The greater investment in human capital (education provision, promotion of competences and skills development), the greater prosperity in

economic growth (creation of innovative companies, generation, introduction of new ideas and achieving “reasonable growth” (Recommendations on general guidelines for economic policies of the Member States, 2010). However, shortcomings have also been pointed out why knowledge and talented workers are undervalued.

In analysing the sustainable development strategy, the shortcomings highlight the underinvestment of companies in the development of human capital competences and skills, and refrain from investing in their development (Sustainable Development Strategy “Latvia 2030”).

The table below shows the chronology of the development of planning documents developed by the institutions and the use of the concepts “knowledge” and “sustainable development” emphasizing their importance for the growth of the Latvian economy.

**Table 1. Chronology of creating the institutional planning documents in the state institutions**

<b>Year</b>	<b>State institution</b>	<b>Institutional document</b>	<b>The “knowledge” and “sustainable development” aspect in the document</b>
1	2	3	4
2000		Latvia from vision to action. The concept of sustainable development	1. Knowledge and experience, information exchange; 2. The use of knowledge and high technologies; 3. The creation of new knowledge and their use for economic development; 4. Linking knowledge to capital, technology and labour.
2000	Ministry of Transport, Ministry of Economics	Conceptual guidelines of Socio-economic programme e-Latvia	1. Each company and population must be actively involved in the knowledge management process; 2. Capacity to use knowledge, use information in knowledge that becomes a prerequisite for increasing economic activity. 3. In the 21 <sup>st</sup> century, knowledge is becoming the main force of development and is incorporated into economic value scale along with capital, technology and labour, largely by replacing materials, energy resources and muscle power.
2002	Ministry of Environmental Protection and Regional Development of the Republic of Latvia	Guidelines for sustainable development of Latvia	1. The sustainable development of each region is the basis for country’s overall growth; 2. Development of regional education and knowledge management infrastructure.
2005	Saeima of the Republic of Latvia	Long-term conceptual document “Growth model of Latvia: Human in the first place”	1. Growth resources of Latvia – knowledge, wisdom, skills; 2. Knowledge management, coordinated and directed their creation, accumulation, dissemination, use as a complex process becomes the basis for economic and social life, covering the whole country and society.

1	2	3	4
2010	Saeima of the Republic of Latvia	Sustainable Development Strategy "Latvia2030"	<ol style="list-style-type: none"> <li>1. Knowledge plays an increasingly important role in nowadays economy;</li> <li>2. Working with different external sources for business and individuals to acquire new knowledge and ideas to be jointly transformed into innovation or new business models;</li> <li>3. Human capital – most important source in Latvia;</li> <li>4. Human intellectual and creative potential: the growth of an innovative, energy-efficient and competitive economy.</li> </ol>
2012	The Ministry of Economy	The National Reform Program of Latvia for the implementation of EU 2020 Strategy	The competitiveness of Latvia is the goal to develop ICT and to implement the digital common market.
2012	Saeima of the Republic of Latvia	National Development Plan 2014–2020	<ol style="list-style-type: none"> <li>1. Without human creativity and initiative, neither economic growth, nor regional development can be achieved;</li> <li>2. Business development in every populated area is a prerequisite for the sustainable development of the territory;</li> <li>3. Sustainable growth is possible by strengthening the capacity of the regions, making efficient use of resources;</li> <li>4. Human capital resources enable municipalities to develop a competitive business.</li> </ol>
2013	Ministry of Education and Science	Scientific and Technological Development and Innovation Guidelines 2014–2020	<ol style="list-style-type: none"> <li>1. Development of science, technology, human capital;</li> <li>2. Effective knowledge transfer;</li> <li>3. Strengthening business innovation capacity;</li> </ol> <p>Prioritising human capital and talent to promote development and economic growth.</p>
2013	Ministry of Economics	National Industrial Policy Guidelines 2014–2020	<ol style="list-style-type: none"> <li>1. There are capacity and capacity constraints in companies based on insufficient technology knowledge and the existence of "know-how" in companies;</li> <li>2. High capacity potential is the availability of an appropriate level of knowledge for the workforce;</li> <li>3. Knowledge and skills in the enterprise contribute to the growth and strengthening of business (e.g. competitiveness).</li> </ol>
2013	Ministry of Environmental Protection and Regional Development of the Republic of Latvia	Regional Policy Guidelines 2013–2019	Promoting entrepreneurship, at the beginning of the regional level specialist training for business start-ups.
2013	Ministry of Environmental Protection and Regional Development of the Republic of Latvia	Information and society development guidelines 2014–2020	<ol style="list-style-type: none"> <li>1. Strengthening technological innovation capabilities geared towards knowledge creation;</li> <li>2. Information resource management (digitalization and datasets);</li> <li>3. Business growth and competitiveness increasingly depend on capacity to apply new knowledge, organisations and working methods to create new products and services;</li> </ol>

1	2	3	4
			4. Improving innovation in companies by increasing the share of manufacturing and service industries in the economics of Latvia should form a balanced and complementary set of support instruments aimed at creating knowledge, disseminating and using this knowledge.
2014	Ministry of Education and Science Republic of Latvia	Research and Innovation strategy for smart specialization (RIS3)	1. Deep knowledge base; 2. Without adequate human capital, a modern knowledge economy cannot be developed and maintained.
2015	Ministry of Justice	Guidelines for the protection and enforcement of intellectual property rights 2015–2020	1. Commercialising intellectual property is capable of increasing the capital, income, productivity of the company, because known merchants can more successfully pursue commercial activities that promote sustainable development in the country as a whole; 2. The foundation of the national economy is modern, innovative companies that invest in innovation, research, development a new products and services; 3. Intellectual property plays and its competitiveness, increasing the innovation potential of the company and contributing to the economic growth of the country.

**Source:** author’s construction based on the institutional planning documents, created from 2000 till 2015.

The analysis of planning documents listed in Table 1, created between 2000 and 2015 shows the main priorities, core tasks and actions for achieving the objectives, which are highlighted during this period. The documents analyse the knowledge aspect, its importance in promoting entrepreneurship, increasing competitiveness, achieving economic growth. The objectives set out in the documents are based on the identified priorities for sustainable development in the European Commission’s “Europe2020” strategy.

### Conclusions

Exploring institutional and regulatory documents in Latvia, the concepts “sustainable development” and “knowledge” are stressed on several occasions as an important process that promotes a long-standing socio-economic environment, based on the investment of knowledge and the ability and skills of people to apply them. In all documents, knowledge is highlighted as a potential for sustainable development. The analysis of institutional planning documents proves the fact, that the main attention is focused on theoretical statements, which is difficult to realize in practical situations. There is still unequal development of regions linked to socio – economic aspects. By linking theoretical studies to the analysis carried out by institutional planning and regulatory documents, it should be stressed that, overall, this issue is up to date and essential for further in- depth research. In evaluating theoretical views that have been identified in scientific

literature and focusing also on historical aspects while studying the concept of “knowledge”, it should be stressed that knowledge has been paid great attention in the 21<sup>st</sup> century, but there are insufficient studies on the current situation in Latvian companies in the field of knowledge and knowledge management.

## References

- Dabas resursu nodokļa likums. Latvijas Republikas likums. Pieņemts 15.12.2005. [stājas spēkā 01.01.2006.], spēkā esošā redakcija 26.05.2020.–31.12.2020. Pieejams: <https://likumi.lv/ta/id/124707-dabas-resursu-nodokla-likums>
- Davidova J., Kokina I. 2018. Paradigms, Approaches and Principals of Knowledge management. Rural Enviroment. Education. Personality. In: *Proceedings of the 11<sup>th</sup> International Scientific Conference, Jelgava*, Vol. 11, pp. 58–65.
- Dumpe M. 2006. Zināšanu pārvaldības izmantošana augstskolās. No: *Scientific Papers of University of Latvia. Education Management*, Vol. 697, 93.–98. lpp.
- Ilgttermiņa konceptuālais dokuments “Latvijas izaugsmes modelis: Cilvēks pirmajā vietā”. 2005. Pieejams: <https://likumi.lv/doc.php?id=217923>
- Informācijas un sabiedrības attīstības pamatnostādnes 2014.–2020. gadam. 2013. Pieejams: [https://www.google.com/search?q=13.+Informācijas+un+sabiedrības+attīstības+pamatnostādnes+2014.-2020.+gadam&rlz=1C1GCEA\\_enLV800LV800&oq=13.+Informācijas+un](https://www.google.com/search?q=13.+Informācijas+un+sabiedrības+attīstības+pamatnostādnes+2014.-2020.+gadam&rlz=1C1GCEA_enLV800LV800&oq=13.+Informācijas+un)
- Intelektuālā īpašuma tiesību aizsardzības un nodrošināšanas pamatnostādnes 2015.–2020. gadam. 2015. Pieejams: <https://likumi.lv/ta/id/273234-par-intelektuala-ipasuma-tiesibu-aizsardzibas-un-nodrosinasanas-pamatnostadnem-2015-2020-gadam>
- Latvijas ilgtspējīgas attīstības pamatnostādnes. 2002., apstiprināts 15.08.2002. ar Ministru kabineta rīkojumu Nr. 436. Pieejams: [http://www.varam.gov.lv/lat/darbibas\\_veidi/ilgtspejiga\\_attistiba/](http://www.varam.gov.lv/lat/darbibas_veidi/ilgtspejiga_attistiba/)
- Latvijas ilgtspējīgas attīstības stratēģija līdz 2030. gadam. 2010. Pieejams: [http://www.pkc.gov.lv/sites/default/files/images-legacy/LV2030/Latvija\\_2030.pdf](http://www.pkc.gov.lv/sites/default/files/images-legacy/LV2030/Latvija_2030.pdf)
- Latvija no vīzijas uz darbību. Ilgtspējīgas attīstības koncepcija. 2000. Pieejams: <https://mrserge.lv/assets/ilgspejigas-attistibas-koncepcija-2000.pdf>
- Nacionālais attīstības plāns 2014.–2020. 2012. Pieejams: [https://www.pkc.gov.lv/sites/default/files/inline-files/20121220\\_NAP2020%20apstiprinats%20Saeima\\_4.pdf](https://www.pkc.gov.lv/sites/default/files/inline-files/20121220_NAP2020%20apstiprinats%20Saeima_4.pdf)
- Nacionālā industriālās politikas pamatnostādnes 2014.–2020. gadam. 2013. Pieejams: <https://likumi.lv/doc.php?id=257875>
- Reģionālās attīstības likums. Latvijas Republikas likums. Pieņemts 21.03.2002. [stājas spēkā 23.04.2002.], spēkā esošā redakcija 16.06.2016. Pieejams: <https://likumi.lv/doc.php?id=61002>
- Research and Innovation strategy for smart specialization (RIS3). Retrieved: <https://www.izm.gov.lv/lv/viedas-specializācijas-stratēģija>
- Sociāli ekonomiskā programmas e-Latvija konceptuālās pamatnostādnes. 2000. Pieejams: <https://likumi.lv/doc.php?id=14063>
- Sustainable Development Strategy of Latvia. 2010. Retrieved: [http://www.pkc.gov.lv/sites/default/files/images-legacy/LV2030/Latvija\\_2030.pdf](http://www.pkc.gov.lv/sites/default/files/images-legacy/LV2030/Latvija_2030.pdf)
- The National Reform Program of Latvia for the Implementation of EU 2020 Strategy. Retrieved: <https://en.unesco.org/creativity/governance/periodic-reports/2012/latvia>
- Zinātnes un tehnoloģijas attīstības un inovācijas pamatnostādnes 2014.–2020. gadam. 2013. Pieejams: [https://www.izm.gov.lv/images/zinatne/ZTAIP\\_2014-2020.pdf](https://www.izm.gov.lv/images/zinatne/ZTAIP_2014-2020.pdf)

# SMALL POWERS IN ENGLISH SCHOOL THEORY OF INTERNATIONAL RELATIONS

**Eduards Gailiņš**

Riga Stradins University, Dzirciema street 16, Rīga, Latvia, LV-1007, edigs@inbox.lv

## Abstract

### **Small powers in English school theory of international relations**

**Key Words:** *small power, international system, international society, English school*

Small power research has been going on in the field regardless of the fact that there is no common definition of a research object. Research deals with small powers which is a broader notion than small states. English School of international relations is one of the theories suitable for small power research because it deals with interaction of states in international society. The theory was developed by Martin Wight, Hedley Bull and Barry Buzan.

The aim of the research is to look at the problem of defining small powers in the field and to find one of the possible definitions for small power according to English School theory of international relations. This aim will help the English School theory effectively adapt to small power research, which has been rather neglected topic in the discipline. The used method to address the problem is qualitative text analysis. In the research it is necessary to look at the main approaches or schools of thought that exist for defining small powers in international relations before creating a definition.

The key results: there have been five main methodological approaches in international relations for defining small powers: qualitative, quantitative, structural, security and comparison approach. To define small powers in the English School of international relations, a definition is created according to the two main concepts of the theory. According to the first concept, smallness can be defined as state's relative lack of influence in international system and, according to the second, it creates necessity for power maximization through mechanisms of international society.

## Kopsavilkums

### **Mazas varas Angļu skolas starptautisko attiecību teorijā**

**Atslēgvārdi:** *maza vara, starptautiskā sistēma, starptautiskā sabiedrība, Angļu skola*

Mazu varu pētniecība starptautiskajās attiecībās notiek neskatoties uz vienojošas definīcijas trūkumu pētījuma objektam. Pētījums ir saistīts ar mazām varām, kas ir plašāks jēdziens nekā mazas valstis. Angļu skola ir viena no starptautisko attiecību teorijām, kura ir piemērota mazu varu pētniecībai, jo skaidro to mijiedarbību ar lielvarām starptautiskajā sabiedrībā. Šo teoriju starptautiskajās attiecībās attīstījuši Hedlijs Buls, Mārtins Vaits un Barijs Buzans.

Pētījuma mērķis ir aplūkot mazas varas jēdziena definēšanas problemātiku starptautiskajās attiecībās un, piemērojot Angļu skolas teoriju, radīt piemērotu definīciju tās ietvaros. Mazas varas definīcijas formulēšana palīdzēs Angļu skolas teorijai efektīvi pievērsties mazu varu pētniecībai, kas starptautiskajās attiecībās nav pienācīgi novērtēta. Pētījumā tiek izmantota kvalitatīva teksta analīze, ar kuras palīdzību tiek aplūkotas nozīmīgāko pieeju autoru darbi, kā arī analizēti teorijas autoru darbi, lai izveidotu mazu varu definīciju teorijas ietvaros.

Galvenie rezultāti: starptautiskajās attiecībās vēsturiski identificējamās tādas pieejas mazu varu definēšanai kā kvalitatīvā, kvantitatīvā, strukturālā, drošības un salīdzinošā. Angļu skolas teorijā maza vara definējama saskaņā ar diviem teorijas galvenajiem konceptiem. Varas mazums teorijas ietvaros ir definējams kā relatīvs ietekmes trūkums starptautiskajā sistēmā, un tas rada nepieciešamību maksimizēt varu izmantojot starptautiskās sabiedrības mehānismus.

## Introduction

Small power is a widely used term and topic in the discipline of international relations. The term is wider than the term small states, because all small states are small powers, but not all small powers are small states. The research object is definition of small powers in English school theory of international relations. In the discipline of international relations, small powers are differently defined term and there is no common understanding of universal definition. There are different approaches that use different criteria to define the research object. Many authors in the field have tried to define small powers, but definitions made have been only adjusted to their specific research. The aim of this research is to look at the problem of defining small powers in the field. This includes reviewing the main authors and their approaches to define small powers in international

relations. The main objective of the research is not to make another approach, but find one of the possible definitions of small power according to concepts of English school theory. The main materials are works of those authors which represent the main approaches in scientific literature regarding small power definitions and research. The works of founders of English school theory are used to apply the theory for small power research. The used method to address the problem is qualitative text analysis.

## **Discussion**

From the historical perspective in the 19<sup>th</sup> century, small power was a state that was not considered as a great power. Russia, Prussia, Great Britain, Austria-Hungary and France were considered as great powers. In the continuing period of history, some of those states were not considered as great powers anymore. This example illustrates how in different periods of history there were different great powers to which in comparison with other states were considered small. Smallness is not something static or unchanging in time. Smallness is relative to geographic location and place in time of history. In the European continent, small states were considered to have between 100.000 to 16 million inhabitants. In the second half of the twentieth century, smallness of the state was measured taking into account political and economical argumentation, for example, internal market size, poor economical diversification, production costs, dependence on foreign trade and investment in science. At the beginning of twentieth century, smallness was mostly a lack of power in any kind of field, for example, military or economic field. Also, due to multilateral development, smallness leads to the necessity of increasing power in any kind of international engagement that is participating in international institutions. (Gostohl; Neumann 2006: 3–23)

World Bank criteria which for a small state is at least half a million inhabitants. This kind of criteria only measures quantitative data. Small powers can also be defined by comparison to other powers. In European Union most of the member states are small in comparison to the French Republic, Italy or Spain. Baldur Thorhallsson points out that qualitative criteria is needed for defining small state and power. Theories that measure only quantitative data, do not take into account that international norms also dictate the behavior of states. State image, reputation and priorities in international arena are qualitative data of smallness. (Thorhallsson 2012: 136–143)

Iftar Ahmed Crowdhury admits the problem of defining small states in international relations in general. Small states seek order in the international relations that is based on norms and common laws, not power. This order can be maintained using advantages of participation in international organizations. (Crowdhury 2012) Thus, smallness is characterized by how the state can influence an international organization. If it is a great power, then its exit from an international institution is more of a loss for the institution rather than the state itself. (Bailes; Wivel; Archer 2014: 5–9)

David Vital uses quantitative data to distinguish small powers from great powers. He points out that human and economical resources are the main factors to measure states. According to his measurements, a small developed state needs to have 10 to 15 million inhabitants, but an underdeveloped small state from 10 to 30 million inhabitants. Lack of resources also indicates smallness of the state. (Vital 2006: 77–81)

Robert Keohane has indicated that small power can never change an international system; not on its own, nor in a small group. Cooperation with international organizations can help to maintain international system that is based on norms and common rules, thus it makes a better international environment for small power to survive. (Keohane 2006: 55–61)

Anders Wivel, Alyson Bailes and Clive Archer add that power can be defined as small, both using quantitative and qualitative criteria. It depends on the theory used in the research. Different criteria differs from theory to theory. For example, realism would take into account quantitative data like Growth Domestic Product, military expenditure and number of inhabitants. From a security approach it would be measured by a qualitative perspective, for example, small power security problems always differs from great power security problems. Small power would be one that cannot protect itself from other powers militarily, it must rely on the help from other states. Great power is the one that has enough military potential to protect itself.

The authors indicate that quantitative criteria is problematic, because states differ to one another in economical development. Qualitative criteria could be more suitable, because it measures the influence by taking many criteria that are more suitable for defining power, not a state. If a state is considered uninfluential without participating in an international organization, it is considered small by its power. In contrast, a great power would be influential without participating in an international organization. States and powers can be measured by their relative location. Denmark is considered a small power in NATO, but a great power in comparison to Baltic states. Authors conclude that fixed and quantitative criteria are problematic, thus, smallness of a state is characterized by its location in time and geographic space. This lets us think more of a comparison approach. (Bailes; Wivel; Archer 2014) By contrast the structural approach would define small power as such based on amount of its autonomy.

The problem remains, because there is no accepted definition where the small power or state starts and where it ends. Jeanne Hey is against the strict definition of small state definition. There are no accepted definition, but small states are being researched. Small powers not only have to be differed from great powers, but also from micro powers, because there are also micro states. The author sets criteria for a small state. It has narrow foreign policy, their behavior is dependent on geographic location, states avoid conflicts and support international law more often than great powers. (Hey 2003: 2–4)



Mathias Maass develops a more specific idea regarding small state research claiming, that a definition, which is too strict on small states, allows too much exceptions. They should be researched in a more flexible definition while there is no common understanding where small state criteria starts and where it ends. Researchers use quantitative and qualitative data to measure them, others define actors by their behavior. The author agrees idea that small states are defined as small according to the political and geographical environment where they are located. Smallness has a relative lack of influence in the international system and against the most influential states in it. (Maass 2017: 18–28) The author adds that smallness problem can be unsolved by theorists, but is easily solved when avoided at all. A lot of studies have avoided defining small state and power, because the term is well known and has not stopped the research process. The author recognizes that there are different definitions of the term “state”, which are sometimes referred as nations, powers, states. The term “power” is used as a measure of strength in military or economical field, but the term “state” as territorial means. (Maass 2009: 65–83) There is no common definition for small powers, but specific definitions can be adjusted for different theories as they are based on certain paradigms. A definition can be added according to the theory used in the research. In order to stick to any definition of small powers, which is not defined, it will be adjusted to the theory in this research.

English School theory is sometimes referred to as a separate paradigm or discipline, but is widely used as a theory of international relations. One of the founders of the theory was Hedley Bull, who agrees with the realists that there is anarchy in the system of states, but he interpreted it in the context of international society which aims for order and justice in it. Other authors like Martin Wight, John Burton and Barry Buzan have contributed to the development of the theory. (Geopolitica 2016) Headley Bull points out that international law is important for states while it does not harm the interests of them. If an actor prioritizes its interests it does not mean that international law is cancelled or does not exist. (Bull 2002: 136–139)

English school is based on three concepts that are international society, international system and world society. Concept of international system has originated from the tradition of realism, while the concept of international society is based on liberalism. The third concept is world society, but it will not be used in the research because of its underdevelopment. The main synthesis in the theory is between previous two concepts. In the concept of the international system states interact in anarchy and relations are based on power. In concept of international society state interactions are based on common rules, values and international law. (Buzan 2004: 6–9) More specifically, concept of international society differs two approaches. The first one is the solidarism approach, which accepts interference in internal affairs of an actor in order to maintain international law. The second

is pluralisms, which respects sovereignty over the international law, but is not against it. The debate in the school continues between pluralists and solidarists. (Murray 2013: 58–59)

As Iver Neumann and Benjamin de Carvalho have indicated that, according to English school theory, to be a great power it is important to take some responsibility of international peace and security. Small powers can be useful by taking up some part of those responsibilities. Small powers gain status by being useful to great powers. (Neumann; Carvalho 2015: 2,16) The English school benefits small state research by being a combination of different concepts, which include more than power politics of realism. It combines morality and power, as well as theory and history. It is defined to be the middle way between realist and idealist approaches. The theory applies to small powers by explaining their place in the anarchic environment and power politics. Also it's the liberal approach that explains how small powers adapt to certain rules and values that reduce the effects of the anarchy. (Dunne 2011)

## **Conclusions**

There are five main approaches to define small powers in international relations. Those are qualitative, quantitative, structural, security and comparison approach. The qualitative approach is based on the criteria of influence of an actor or a state in the anarchical structure. This approach is similar to English school's concept of international system, where actors are different in their power and influence. The quantitative approach is based on measurable mathematical criteria, for example, population, Growth Domestic Product, square kilometers of a territory. Structural approach is based on the concept of autonomy of the actor. The security approach of defining small powers is based on measuring military power. The comparison approach is usually used together with the qualitative and quantitative approach which measure influence, territory, economical strength comparing different actors. For example, a state can be a small power compared to another state, but a great power to a different state.

To define small states in the English school theory, it is necessary that the definition is made according to the two main concepts. The concept of the international system measures states by their power and influence, while the concept of international society explains state interaction and behaviour that is based on norms and rules. In the first concept, small powers interact in the anarchical system of different states. This concept realizes that there are actors of which some of them are more influential, but others lack influence. At the same time, there is an international society in which small powers can maximize their power using cooperation and laws accepted among the states. The liberalism side of the theory and the international system are useful tools to explain in the small power research how small powers can use strategies of multilateral cooperation, international law, support peace and prosperity. States interact with the international system using ways of interaction. Not only war, but also international law, etc. Smallness of a power, according

to the theory, can be defined as a relative lack of influence in the international system that requires participation in international society based on norms, values and international law that benefits small powers to survive and gain status in the system against the great powers. The theory of English school has not been used as a tool to make small power research and does not make another approach among other approaches. By applying two different ontological assumptions the theory has the potential to explain how some powers are considered small compared to other powers and how they interact in the society of states.

## References

- Archer, C., Bailes, A., Wivel, A. 2014. *Setting the scene: small states and International security*. In: Archer, C., Bailes, A., ...[Eds.] *Small States and International Security*. New York: Routledge. pp. 5 – 9.
- Bull, H. 2002. *The anarchical society: a study in order in world politics*. New York: Columbia University Press, pp. 130 – 140.
- Buzan, B. 2004. *From International to World Society? English School Theory and the Social Structure of Globalization*. Cambridge: Cambridge University Press. pp. 6 – 9.
- Carvalho, B., Neumann, I. [Eds.] 2015. *Small State Status Seeking. Norway's quest for international standing*. New York: Routledge. pp. 2, 16.
- Chowdhury, I. 2012. *Small States in UN System: Constraints, Concerns, Contributions and Contributions*. Institute of South Asian Studies. Available: [https://www.files.ethz.ch/isn/154305/ISAS\\_Working\\_Paper\\_No\\_\\_160\\_\\_Small\\_States\\_in\\_UN\\_System\\_24102012161034.pdf](https://www.files.ethz.ch/isn/154305/ISAS_Working_Paper_No__160__Small_States_in_UN_System_24102012161034.pdf) [viewed: 27.10.2019.].
- Dunne, T. 2011. *The English School*. Available: <https://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199604456.001.0001/oxfordhb-9780199604456-e-034> [viewed: 02.03.2020.].
- Geopolitica. 2016. *Geopolitica.ru* Available: <https://www.geopolitica.ru/en/article/ir-english-school> [viewed: 05.06.2020.].
- Gostohl, S., Neumann, I. *Lilliputians in Gulliver's World?* In: Beyer, G., Gostohl, S., Ingebritsen, C., Neumann, I. [Eds.] 2006. *Small States in International Relations*. University of Washington Press. pp. 3 – 23. Available: [https://ebookcentral-proquest-com.db.rsu.lv/lib/rsub-ebooks/reader.action?docID=3444375&query=Beyer%252C%2BJessica.%2BSmall%2BStates%2Bin%2BInternational%2BRelations](https://ebookcentral-proquest-com.db.rsu.lv/lib/rsub-Hey, J. [Ed.] 2003. Small States in world Politics. Explaining Foreign Policy Behaviour. London: Lynne Rinner Publishers. pp. 2 – 4.</a></p>
<p>Keohane, R. 2006. <i>Lilliputian's Dilemmas</i>. In: Beyer, G., Gostohl, S., Ingebritsen, C., Neumann, I. [Eds.] <i>Small States in International Relations</i>. University of Washington Press. pp. 55–61. Available: <a href=) [viewed: 27.10.2019.].
- Maass, M. 2017. *Small states in World politics. The story of small state survival, 1648 – 2016*. Manchester: Manchester University Press. pp. 18 – 28.
- Maass, M. 2009. *The elusive definition of the small state*. *International Politics* 46(1): 65–83 January  
 Available: [https://www.researchgate.net/publication/233489400\\_The\\_elusive\\_definition\\_of\\_the\\_small\\_state](https://www.researchgate.net/publication/233489400_The_elusive_definition_of_the_small_state) [viewed: 26.02.2020.].
- Murray, R. [Ed.] 2013. *System, Society & the World: Exploring the English school of international Relations*. Bristol: e-International Relations. pp. 58–59 Available: <https://www.files.ethz.ch/isn/181081/Exploring-the-English-School-e-International-Relations.pdf> [viewed: 05.06.2020.].
- Thorhallsson, B. 2012. *Small States in the UN Security Council. Means of Influence? The Hague Journal of Diplomacy*. pp. 136 – 143. Available: <http://uni.hi.is/baldurt/files/2012/08/Small-States-UN-Security-Council-by-Thorhallsson.pdf> [viewed: 23.10.2019.].

Vital, D. 2006. *The Inequality of States*. In: Beyer, G., Gostohl, S., Ingebritsen, C., Neumann, I. [Eds.] *Small States in International Relations*. University of Washington Press. pp. 77 – 81. Available: <https://ebookcentral-proquest-com.db.rsu.lv/lib/rsub-ebooks/reader.action?docID=3444375&query=Beyer%2C%2BJessica.%2BSmall%2BStates%2Bin%2BInternational%2BRelations> [viewed: 28.10.2019.].

# YOUTH – FOUNDATION FOR FUTURE OF THE CIVIC SOCIETY IN LATVIA: HOW TO EMPOWER AND STIMULATE YOUTH TO BECOME POLITICALLY ACTIVE?

Ieva Bikava, Lelde Metla Rozentāle, Mārtiņš Daugulis

Riga Stradins University, Dzirciema street 16, Riga, Latvia, ieva.bikava@rsu.lv

## Abstract

**Youth – foundation for future of the civic society in Latvia:  
how to empower and stimulate youth to become politically active?**

**Key Words:** *youth participation, civic society, youth engagement, democracy*

Active civic society is the root of any democracy, and Youth is the most powerful and influential investment in the future of social capital. Political participation is the most successful way of representing the interests and needs of any group, including the topical issues of young people.

According to the Flash Eurobarometer 455 on European Youth evaluation of social and civic participation – the most of respondents in Latvia – have not participated in any social or civic activities 58%, and only 4% had participated in activities of a political organization or party. Likewise, the minor part of the Youth had participated in elections in Latvia: 44% at local, 31% at regional, and 43% at a national level.

The goal of the research is to identify the inhibiting factors and find ways how to empower and stimulate Youth to become societally and politically active members, defending and advocating the issues that concern that age group – in depths interviews were carried out with Youth age member candidates of European Parliament elections, NGOs working for Youth and institutions working towards strengthening youth involvement and participation.

The research results showed that traditional forms of member and volunteer involvement are not effective and efficient working towards the Youth. There is a demand for the paradigm change, related to the new age of consumption dominating over ideology. Parties need to research potential volunteer or member, to provide stimulus and benefits, appreciation and gratitude, exciting journey and experience, as well as the desirable platform of socialization and networking for the young people. The political marketing strategy and tools have become not only the way to look for the votes but as well to attract new members or volunteers.

## Kopsavilkums

**Jaunatne – pamats pilsoniskas sabiedrības attīstībai un ilgspējai Latvijā:  
Kā veicināt un iedrošināt jauniešus būt politiski aktīviem?**

**Atslēgvārdi:** *jauniešu līdzdalība, pilsoniska sabiedrība, jauniešu iesaiste, demokrātija*

Aktīva pilsoniska sabiedrība ir demokrātijas pamats, savukārt ieguldījums jauniešos ir spēcīgākā un ietekmīgākā investīcija nākotnes sociālā kapitāla veidošanā. Politiskā līdzdalība ir viens no veiksmīgākajiem veidiem kā pārstāvēt noteiktas sabiedrības grupas intereses un vajadzības, tai skaitā arī jauniešiem aktuālās tēmas.

Saskaņā ar Flash Eurobarometer 455 Eiropas jaunatnes sociālās un sabiedriskās līdzdalības pētījumu – lielākā daļa Latvijas jauniešu (58%) nav piedalījušies nekādās sociālās vai pilsoniskās aktivitātēs un tikai 4% jaunieši ir piedalījušies politisko organizāciju rīkotajās aktivitātēs. Līdzīgi, mazākums Latvijas jauniešu ir piedalījušies vēlēšanās: 44% vietējās, 31% reģionālās, un 43% nacionālās.

Pētījuma mērķis bija identificēt jauniešu līdzdalību kavējošos faktoros, kā arī analizēt pieejas, kuras ir veiksmīgas jauniešu iedrošināšanā un stimulēšanā aktīvi līdzdarboties. Pētījums balstīts uz padziļinātām intervijām ar Eiropas Parlamenta vēlēšanu kandidātiem – jauniešiem, NVO un institūciju pārstāvjiem, kas realizē dažādus jauniešu projektus un aktivitātes.

Pētījuma rezultāti norāda, ka darbā ar jauniešiem tradicionālās pieejas nav efektīvas un ir nepieciešama paradigmas maiņa, kas saistīta ar sabiedrībā valdošo patēriņciskuma dominanci pār ideoloģijām. Organizācijām, lai piesaistītu jauniešus savam darbam vai aktivitātēm ir jāveic potenciālo interesentu padziļināta izpēte, nodrošinot tiem atbilstošus stimulus un ieguvumus, atzinību un pateicību, aizraujošu pieredzi un iespējas socializēties un tīkloties. Politiskā mārketinga stratēģijas un rīki ir jāizmanto ne tikai potenciālo vēlētajū piesaistē, bet arī jaunu biedru vai brīvprātīgo, aktīvistu uzrunāšanā.

## Introduction

Active civic society is the root of any democracy, and Youth<sup>13</sup> is the most powerful and influential investment in the future of social capital. There are several ways how the young people

<sup>13</sup> Youth – by the Youth in this article is meant the group of young people in age 16-30.

can be civic and socially active – to take part in activities provided by the different states and NGO, to become a member or volunteer of NGOs or Youth organizations, as well as participate in different social events. Meanwhile, political participation is one of the most successful ways of representing the interests and needs of any group, including the topical issues of young people.

The research “Youth Participation in Democratic Life”, recommended normative conception of youth participation by engaging youth in forming opinions and taking actions to promote changes in society. Those activities can take different forms, and as examples: 1) participation of young people in representative democracy; 2) participation of young people in participatory structures; 3) participation in debate and 4) seeking information and learning about democracy. (Youth Participation in Democratic Life, 2013)

According to the Treaty of the Functioning of the European Union (EU), one of the directions in which the EU shall be aimed at is “*encouraging the development of youth exchanges and of exchanges of socio-educational instructors, and encouraging the participation of young people in democratic life in Europe*” (Treaty of EU, Article 165).

Moreover, to provide possibilities to reach the above-mentioned aim of the treaty, the EU Youth strategy 2010–2018 was developed with two main objectives: “*to provide more and equal opportunities for young people in education and the job market*” and “*to encourage young people to actively participate in society*” (EU Youth Strategy, 2010–2018).

In addition, in the new EU Youth Strategy 2019–2027, as one of the overall objectives is to “*encourage and equip young people with the necessary resources to become active citizens, agents of solidarity and positive change inspired by EU values and a European identity.*” (EU Youth Strategy, 2019–2027)

The research on Youth participation in civic and social activities – Flash Eurobarometer 455 in 2017, showed that only a minor part of young people are taking part in social and civic activities. In the last 12 months, 58% of respondents were not taking part in any social or civic activities (average in EU – 47%). Only 4% of respondents participated in the activity of a political party or organization (average EU – 7%). The highest participation rate was in the case of members of a sports club – 19% (average EU – 29%). Also answering the question on voting in political elections, the part of young people who did not participate in elections is 17% higher in Latvia than the EU average – 15%. Those numbers indicate that young people of Latvia are not active participates neither in social, nor civic activities and the participation rate is lower than the average rate in EU. (Flash Eurobarometer 455, 2017).

Evaluating the youth engagement and participation as the representatives of the Youth interests, by becoming members of the parliament of local municipality, National Parliament or European Parliament, unfortunately, the youth is not represented enough. According to the data of

candidates at youth age group and comparing the proportion of youth in overall group of people of age, that can become the candidates in municipality, national or EU elections, the share of youth candidates is less than the share as youth as a part of adult population (see Table 1).

**Table1. Participation of Youth as candidates in municipality, national and European Parliaments elections in Latvia**

Year	Election Type	Candidates (youth) <sup>14</sup>	Candidates (all)	Candidates: Share of Youth	Inhabitants: Share of Youth
2009	Municipality elections (18–30)	1 601	11 196	14,30%	23,59%
2009	European Parliament (21–30)	45	186	24,19%	19,00%
2010	National elections (21–30)	201	1234	16,29%	18,78%
2011	National elections (21–30)	197	1092	18,04%	18,48%
2013	Municipality elections (18–30)	1313	8725	15,05%	21,80%
2014	National elections (21–30)	187	1156	16,18%	18,04%
2014	European Parliament (21–30)	20	170	11,76%	18,04%
2017	Municipality elections (18–30)	1247	8945	13,94%	18,90%
2018	National elections (21–30)	189	1461	12,94%	15,52%
2019	European Parliament (21–30)	25	246	10,16%	14,74%

**Source:** The Author made the above table, based on data of Central Election Commission and Central Bureau of Statistics.

As can be seen from the data in Table1, the share of youth as candidates is overall lower than the share of young people at the same age group in overall population (with only exception in EP elections in 2009). Therefore, we can conclude that youth is not represented sufficiently in the lists of candidates for any elections in past 10 years in Latvia, and some stimulating activities have to be taken.

To empower and stimulate Youth to become socially and politically active, there is a need of provision of appropriate civic education programs for young people. As K.Komalasari mentioned, *“Globalization demands civic education to develop civic competence involving civic knowledge, civic skills and civic disposition, which are multidimensional. Civic education learning oriented to*

<sup>14</sup> According to the election law in Latvia, the age of a person who can vote in any elections (municipality, national or European Parliament elections) is 18 years. To become a candidate of the member of municipality parliament – the person has to be 18 years old, to become a candidate in national parliament or European Parliament – 21 years old on the date of elections.

*“contextualize multiple intelligences” concept opened the view of needs to manage more creative, active participation, meaningful and pleasant learning”*. (Komalasari, 2009).

The aim of the research was to identify the inhibiting factors and find ways how to empower and stimulate Youth to become socially and politically active, defending and advocating the issues that concern that age group – in depth interviews were carried out with Youth age member candidates of European Parliament elections, NGOs working for Youth, and institutions working towards strengthening youth involvement and participation.

## **Discussion**

In-depth interviews with the candidates of European Parliament 2019 election, which represented youth age group (21–30 years old) revealed several facts on their motivation to become members of parliament, their knowledge about the democracy and opportunities, experience and knowledge on political participation possibilities.

Most of the candidates mentioned that the main motivation to become a deputy was related to the feeling that it is the only way to affect existing processes, as relaying on their previous attempts to make some changes or initiate some changes were un-successive and they felt disappointed. Another desire was to be the person, who will struggle for the interests of youth, as all the members of the parliaments, were not interested in those topical issues, as those issues were not popular to the most part of voters in Latvia (the elderly people). The young people are not interesting so much in local subjects and welfare issues, but are more interested in global topics – like climate change issues, ”green” politics, inclusion policies (mostly about the LGBT topics).

Another unifying factor, for the entire interviewed candidates was – that they were civic activists during the school time – members or even chairs in school self-government institutions and have participated in some local social events. However, after the graduation, they fell out of those civic and social communities, dedicating their time to education or work, or started their own entrepreneurship. Only at age of 25–27, they become interested in politics again and wanted to make some changes at local or national level.

None of those candidates had participated in any activities that are available for the youth and provided by the bureau of EP in Riga or the NGOs working with projects for youth, although the most of them have heard about at least some of those activities. The reasons why they did not take part in those activities, they stigmatized themselves as too old for those activities.

Another reason, observed in the most of candidates, was the lack of knowledge on the democracy issues. As respondents confessed, they know that their knowledge is insufficient, and they would like to be more educated on those subjects, but they would not choose to take classes on politics, democracy, law – or any other that kind of subject. They would like to have some classes in school, where this information and knowledge would be integrated in some other topics. They



would be happy, if they had the possibility to get to know how they, as students, can work to affect, lobby or raise some society interest to the topical issues.

Our findings about the Youth perception of civic participation and the ways in which those abilities and skills can be developed, pointed out to the need of using Contextual Learning approach in developing civic competencies for the young generation.

The candidates for EP elections in interviews pointed out that unfortunately, the traditional educational system does not provide necessary tuition and training, to be prepared to solve civic participation issues and even doesn't provide those young people knowledge on what to do and where to go, in need to solve some everyday problems. On those basics, being socially, civic and politically active is a "hard nut" for every young person.

Those results correlate with K. Komalasari research findings: *"learning was not meaningful for students to solve civic problems occurring in their lives. Learning had not been able to develop civic knowledge, civic skills and civic disposition comprehensively. It happened because civic education did not correlate the materials with the students' life reality, was not contextual, gave more abilities to memorize, but not to think creatively, critically and analytically, moreover it caused the students' apathetic attitude and they thought that civic education was not an important and interesting subject"*. (Komalasari, 2009).

As the solution for this problem, to provide Youth with possibilities to develop necessary civic competencies, K. Komalasari recommends the use of Contextual Learning approach, as *"This approach is effective because it assumes that learning process would be actually occurring if the students could find meaningful correlation between abstract thinking and practical application in the real world context. In such learning experience, facts, concepts, principles and procedures as subject materials that are internalized through discovery, reinforcement, interrelation and integrity processes."* (Komalasari, 2009).

As was mentioned by the representative of the bureau of European Parliament in Riga, one of the very successful projects for the students of professional educational institutions was "Tasty law". This project was aimed to educate young people about the impact of EU laws and directives in the national scope and the impact on our – Latvian citizen everyday life. The students who participated in this project were next food technologists, cooks, etc., and the tasks were concrete and simple. They read those laws and directives that were related to the industry, discussed them and then worked on the investigation of their implementation in students' surroundings – the cafeteria of the institution, food shops, restaurants, etc. After the project, those students mentioned that now they have a clear vision why and how those rules affect them, why and how they are implemented and how they can affect the implementation of those rules nationally and globally.

That was one successful example of how abstract thinking – the EU law or directive and practical application in the real world can be done, providing the contextual learning approach.

Another great example on how to catch the interest, educate young people of the need to be politically active, and go to vote in European Parliament elections was also provided by the influencer that worked in hand to hand with EP bureau in Riga. The influencer came from the beauty domain and most of the blogs and videos were about the beauty care issues. Approaching the elections, the blogger made a series of videos about the different beauty products that are available in USA, but forbidden in the EU. For example, a shampoo that contains some substances that can negatively affect the health and the outcomes of beautiful and shiny hair. However, if you are in the EU, you can feel free and safe as those substances are forbidden in the EU. Those videos attract a significant part of youth, who become more interested in those topics, and step by step were “fed” with the bites of more and more information about EU and the values and regulations that are common to EU. Moreover, after the series of those educational blogs, related to the topics that are meaningful for this target group, those young people became more motivated to go on and vote for the safer future.

One of the most known projects, provided by the bureau of EP in Riga is the “School of new Ambassadors”. This activity is provided to the schools in Latvia on a voluntary basis. A school can apply to participate in this project, and then representatives of the bureau of EP in Riga provide schools with all the related information, as well as provide some introduction seminars, workshops and methodological support. During the project, the representatives of schools such as – teachers and students initiate and provide activities related to the subjects that are also related to project – EU and EU values.

The questionnaire run by the bureau of EP in Riga, for the students who have finished the program and have become “new Ambassadors” (233 students from 70 schools in Latvia, covering all the regions in Latvia) pointed out the following:

- 1) 85% of students acknowledge that this project helped them to get to know the history of EU, as well as provided them with the knowledge on EU values, goals and topical issues;
- 2) 78% of respondents believe that Youth can affect the political process in the EU, as well as locally in Latvia (72%);
- 3) 89.3% of students are actively interested, they participate and affect processes in the EU and 87.6% want to be active participants nationally, in Latvia.
- 4) More than half of the respondents (66.1%) consider that the possibilities to affect processes and negotiate interests are hampered due to the lack of knowledge.

As can be seen from the results of the questionnaire, after the completion of the educational program, run by the school and “new ambassadors” providing different activities in a way choose as

interesting and exciting for the young people on their own, the results are successful and the confidence, motivation and interest to be involved socially, civic and politically significantly raise.

Another interesting finding was that students are not interested in communication about the EU with teachers, local Politician's, members of the institutions or members of the Government. Answering the question, with whom those students would like to talk about the Europe and topical issues, they pointed out to: Laura Ikauniece (worldwide known Latvian athlete competing in heptathlon), Mārtiņš Dukurs (worldwide known Latvian skeleton racer), Kristaps Porziņģis (Latvian basketball player, who is playing for NBA), Sandis Ozoliņš (former professional Latvian ice-hockey player and coach, seven time NHL All-Stars and Stanley Cup champion), Artūrs Irbe (former professional Latvian ice-hockey goaltende and coach, played in NHL), Arnis Krauze, Snadijs Semjonovs and Inga Sprīņģe (all are well known Latvian news reporters and journalists), musician Jānis Krīvēns, the former president of Latvia – Vaira Vīķe Freiberga, as well as the current president of Latvia – Egīls Levits. But there are not only the local celebrities, but also – American singer and songwriter Taylor Swift, the chairman of the EU Commission – Ursula von der Leyen, and USA politician – Hillary Clinton. (Bureau of EP in Latvia, 2019). That is another interesting point to take into account for every organization, aiming to involve young people – they are interested in persons they admire or respect, those who are familiar in their “bubble of communication and interests”, but they are not interested to go to meet the candidate for the elections, read the programs or devote their time to other activities and personnel, that are not influential at all.

As a good example of the appropriate speaker choice, the bureau of EP in Latvia, started a long-term cooperation with the two broadcasters – Toms Grēviņš and Kaspars Ozoliņš, who were not mentioned, but were known for the significant part of students, as leaders of the program dedicated to children – education program “Smarter than the 5<sup>th</sup> grader”. The bureau signed a contract with them and provided a series of broadcasts “Smarter than smarter” dedicated to the topics related to EU values and topical issues, and then hired them to become ambassadors also for the other activities, like “this time I will vote”.

Interviews with the NGOs working with the Youth and providing different projects and activities for the young persons, mostly in age group 17–25, also pointed out that most of the youth is interested in activities that gives to the participants a real life experience and practical skills. Of course, there are some activities, which are dedicated to some value aspects as democracy, climate change, United Nation objectives and long-term development goals, but that are some special events, such as conferences once or twice a year. Most of the projects are those, which provide necessary skill development, or provide possibilities to socialize and network, for example, summer/winter camps, workshops on special skill development, and others.

However, for NGOs to obtain project funding, those activities must be related to the notions and limitations of the project, as well as based in the values of EU promotion, but this is the duty of the NGO to create such activities that consist of entertaining activities for young people. At the same time, to “sow the seed” of necessary knowledge or information in unobtrusively, easy and unforced way.

## **Conclusions**

The research results showed that traditional forms of member and volunteer involvement are not effective and efficient when working towards the Youth. There is a demand for a paradigm change, related to the new age of consumption dominating over ideology.

1. Youth is not interested in theoretical debates on the values, principles or good will. They demand a practical approach, which demonstrates why those values are so significant in their lives, and how principles, regulations and other aspects affect their lives, as well as how they can influence the world.
2. The interest and motivation at that age group is fragile and transient. To attract the youth and involve them to become volunteers or members, the organization has to provide a personal attitude and interest in the young individual, as well as to show the benefits and stimulus, that are desirable for this person. Moreover, the gains have to be reachable at transparent and close future, as well as communication – answers, needed help, assistance have to be provided immediately or the interest or participation will be lost. Due to impatience to get the desired results, the youth not only loose interest, but also feel disappointed and disabled to have any affect. As a result, they conclude, that no one is interested in their problems and topical issues. For example, if they have participated in the manifest or have signed a petition, and the desired law or reform is not implemented in the next months, but takes a year or more from initiation to implementation, the youth see it as “drowned in the drawers”.
3. Due to globalization, the sources of information and opinions have changed. Most of the youth gain the information through social media or in their communities. The representatives of institutions, professionals and politicians – are not reliable and trustworthy source, but instead the celebrities and influencers take the floor as respectful speakers in youth age group.

Summarizing the mentioned conclusions, organizations need to research potential volunteers or members, to provide stimulus and benefits, appreciation and gratitude, exciting journey and experience, as well as the desirable platform of socialization and networking for the young people. The political marketing strategy and tools have become not only the way to look for the votes, but also to attract new members or volunteers in any organization.

## Acknowledgement

This publication has been prepared as a part of the Latvian State Research Program Project No. VPP-IZM-2018/1-0013 “Values in action: towards a responsible, secure and educated civic society with research and research models.”

## References

- Bureau of the European Parliament in Latvia. *EP vēstnieku skola. Aptauja: Latvijas jaunieši spēj ietekmēt kā Latvijas, tā visas ES politiku. Aptaujas rezultāti.* 05.12.2019. [https://www.europarl.europa.eu/latvia/lv/jauniesiem/ep\\_vestnieku/epas-aptaujaa.html](https://www.europarl.europa.eu/latvia/lv/jauniesiem/ep_vestnieku/epas-aptaujaa.html)
- Central Bureau of Statistics of Latvia. *IRG120. Population of Latvia by citizenship and sex at the beginning of the year.* [https://data.csb.gov.lv/pxweb/en/iedz/iedz\\_\\_iedzrakst/IRG120.px/](https://data.csb.gov.lv/pxweb/en/iedz/iedz__iedzrakst/IRG120.px/)
- Central Election Commission. *Municipality elections.* <https://www.cvk.lv/en/elections/local-elections>
- Central Election Commission. *Parliament elections.* <https://www.cvk.lv/en/elections/saeima-elections>
- Central Election Commission. *European Parliament elections.* <https://www.cvk.lv/en/elections/ep-elections>
- EU Youth Strategy 2010–2018.* Official Journal of the European Union. [https://ec.europa.eu/youth/policy/youth-strategy/strategy-2010-2018\\_en](https://ec.europa.eu/youth/policy/youth-strategy/strategy-2010-2018_en)
- EU Youth Strategy 2019–2027.* Official Journal of the European Union. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:C:2018:456:FULL&from=EN>
- Flash Eurobarometer 455. European Youth. Fact Sheet Latvia. September 2017. <https://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/ResultDoc/download/DocumentKy/81441>
- Komolasari K., 2009. *The effect of Contextual Learning in Civic Education on Students' Civic Competence.* Journal of Social Sciences 5(4): 261–270. ISSN 1549-3652.
- The Treaty on the Functioning of the European Union.* Official Journal of the European Union. C 326/50. 26.10.2012. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:12012E/TXT&from=EN>
- Youth Participation in Democratic Life.* EACEA 2010/03. Final Report. February 2013. LSE Enterprise. [https://ec.europa.eu/assets/eac/youth/policy/youth\\_strategy/documents/youth-participation-study\\_en.pdf](https://ec.europa.eu/assets/eac/youth/policy/youth_strategy/documents/youth-participation-study_en.pdf)

# FINANCIAL LITERACY ANALYSES OF LATVIAN STUDENTS

**Jekaterīna Funte, Aina Čaplinska**

Daugavpils University, Parādes street 1, Daugavpils, Latvia, LV-5401, jekaterina.zu@inbox.lv

## Abstract

### Financial literacy analyses of Latvian students

**Key Words:** *financial literacy, students, credit loan, credit liabilities*

2/24/2014 The strategic partners have signed a memorandum on the implementation of the "Strategy for Financial Literacy of the Population of Latvia 2014–2020" (hereinafter – the Strategy) in order to promote a gradual increase in the level of financial literacy of the population.

Upon entering 2020, it can be concluded that due to the operation of the Strategy, the financial literacy index has increased from 20.6 points in 2014 to 1.1 in 2019 and currently stands at 21.7 points out of 99 possible. As can be seen, for six years the size of the index is still far from the maximum possible, so it is necessary to find a solution for further actions to improve the situation.

Purpose of the article: To analyze financial literacy of Latvian students, making accent on students' credit liabilities. In their work, the authors research the financial literacy of Latvian students, being aware that students' knowledge, skills and competence are the driving force for the future of our society. An analysis of students' financial literacy was performed on the basis of the data of a representative survey obtained by surveying respondents from 27 Latvian higher education institutions (public and legal higher education institutions, except colleges).

Methods used in the research: monographic method – theoretical description of financial literacy, graphical method – graphical representation of the obtained results, survey method (questionnaire) – obtaining the necessary information in the research, comparison method – description of obtained data and conclusions.

As a result of the survey, the students' current financial literacy was clarified; sources of information on financial literacy; an assessment of how sufficiently the necessary knowledge in various financial fields is acquired at the university and in which of them there is a lack of knowledge, competencies and skills. Students' attitudes towards financial risks, readiness to take credit obligations, what kind of loans are currently popular among students have been clarified.

Despite various campaigns on responsible borrowing and financial literacy in recent years, quick loans are still actively (not always prudently) used in Latvian society. For example, in the Latvian trade union credit union alone in 2019, 18% (every fifth) of the issued loans were "rescued from the debt yoke", quick loans were re-credited.

## Kopsavilkums

### Latvijas studentu finanšu lietpratības analīze

**Atslēgas vārdi:** *finanšu pratība, students, aizdevums, kredītsaistības*

24.02.2014. stratēģiskie partneri ir parakstījuši memorandu par "Latvijas iedzīvotāju finanšu pratības stratēģijas 2014–2020" (turpmāk – Stratēģija) ieviešanu, lai veicinātu iedzīvotāju finanšu pratības līmeņa pakāpenisku paaugstināšanu.

Iestājoties 2020. gadam var secināt, ka pateicoties Stratēģijas darbībai finanšu pratības indekss no 20.6 punktiem 2014.gadā līdz 2019.gadam ir palielinājies par 1.1 un pašlaik sastāda 21.7 punktus no 99 iespējamajiem. Kā redzams, sešu gadu garumā indeksa lielums joprojām ir tālu no maksimāli iespējamā, tāpēc ir nepieciešams rast risinājumu turpmākām darbībām situācijas uzlabošanai.

Darba mērķis: Analizēt Latvijas studentu finanšu lietpratību, akcentējot uzmanību studentu kredītpatībai. Autores savā darbā veic Latvijas studentu finanšu pratības izpēti, apzinoties, ka studentu zināšanas, prasmes un kompetence ir mūsu sabiedrības nākotnes virzītājspēks. Veikta studentu finanšu pratības analīze, pamatojoties uz reprezentatīvās aptaujas datiem, kas iegūti aptaujājot respondentus no 27 Latvijas augstskolām (valsts un juridisko personu augstskolas, izņemot koledžas).

Pētījumā izmantotās metodes: monogrāfiskā metode – finanšu pratības teorētiskais apraksts, grafiskā metode – iegūto rezultātu grafiskā attēlošana, aptaujas metode (anketēšana) – nepieciešamās informācijas iegūšana pētījumā, statistiskā metode – statistiskās informācijas analīze, salīdzināšanas metode – iegūto datu aprakstīšana un secinājumu izstrāde. Aptaujas rezultātā noskaidrota studentu šī brīža finanšu pratība; informācijas par finanšu pratību iegūšanas avoti; iegūts vērtējums, cik pietiekami augstskolā tiek apgūtas nepieciešamās zināšanas dažādās finanšu jomās un kurās no tām ir zināšanu, kompetenču un prasmju trūkums. Noskaidrota studentu attieksme pret finanšu riskiem, gatavība uzņemties kredītsaistības, kāda veida kredīti pašlaik ir populāri studentu vidū.

Neskatoties uz to, ka pēdējo gadu laikā ir bijušas dažādas kampaņas par atbildīgu aizņemšanos un finanšu pratību, Latvijas sabiedrībā joprojām aktīvi (ne vienmēr apdomāti) tiek izmantoti ātrie kredīti. Piemēram, vien Latvijas arodbiedrību krājaizdevu sabiedrībā 2019. gadā 18 % (katrs piektais) no izsniegtajiem aizdevumiem ir „glābjot no parādu jūga”, pārkreditēti ātrie kredīti.

## Introduction

2/24/2014 strategic partners (Financial and Capital Market Commission (hereinafter – FCMC), Ministry of Education and Science, State Education Content Center, Banking Institution of Higher Education, Consumer Rights Protection Center, Association of Latvian Commercial Banks and Latvian Insurers Association) have signed a memorandum in 2014–2020, which determines a common strategic approach for providers and developers of financial and economic education activities in Latvia to gradually increase the level of financial literacy of the population, defining the goals to be achieved, main directions and tasks, as well as the necessary resources and institutions involved in implementation of these activities. (Latvijas iedzīvotāju finanšu.. 2014–2020, 2. lpp).

More attention is paid to lending, one of the areas of financial literacy, because according to the 2017 study “Use of Distance or Quick Loans in Latvia” conducted by the Consumer Rights Protection Center and the Faculty of Business, Management and Economics of the University of Latvia, it was found that people do not plan and control their budget, do not make savings, but borrow and spend more than they earn (Distances jeb ātro.. 2017).

**Purpose of the article:** To analyze financial literacy of Latvian students, making accent on students’ credit liabilities.

### **Tasks set to achieve the goal:**

1. to research theoretical aspect of financial literacy;
2. to analyze the results or the research of financial literacy in Latvia and Europe focused on financial literacy of the youth;
3. to emphasize financial literacy topicality – credit literacy;
4. to conduct a survey of Latvian students to research their financial literacy;
5. to make conclusions and work out suggestions for students in the field of financial literacy.

**Description of research data and sources:** general and special literature, various Internet resources, research conducted by the authors (questionnaire).

**Methods used in the research:** monographic method – theoretical description of financial literacy, graphical method – graphical representation of the obtained results, survey method (questionnaire) – obtaining the necessary information in the research, comparison method – description of obtained data and conclusions.

## Discussion

Financial literacy was firstly introduced as a concept in the 1997 Jump Start financial literacy survey of high school students. In this study, Jump\$tart defined "financial literacy" as the ability to use knowledge and skills to manage one's financial resources effectively for lifelong financial security. The term 'financial literacy' has different meanings: it is used to refer to knowledge of financial products, knowledge of financial concepts, testing of mathematical or numeracy skills

required for effective financial decision-making, and it is involved in certain activities such as financial planning (Justine, Brigitte.. 2012, p. 5).

In order to find out people's attitude towards finances, money, their experience and behavior is, the concept of "financial literacy" has been introduced. At present, there is still no consensus on how to define and measure financial literacy in a better way. Such indicators as the ability to accumulate, successfully invest money or manage one's debt are used, mathematical knowledge is assessed, as well as knowledge of the main economic concepts (Titko, Ciemleja, Lace, 2014, p. 6). In other literature sources, financial literacy is defined as a specific type of knowledge, ability or skill to use knowledge, perceived knowledge, good financial behavior and experience in financial matters (Hung, Parker, Yoong, 2009, p. 5).

In 2012, the Association of Latvian Commercial Banks, in cooperation with the University of Latvia, conducted a survey of students' financial literacy aimed to find out the financial literacy of young people. And in 2017, an analysis of financial literacy trends among young people was conducted. A survey of Daugavpils student youth was conducted (Čaplinska, Ohotina 2019, 8 lpp).

Analyzing the data obtained in the survey conducted in 2012, it was found that the majority of students evaluate their financial literacy very critically, emphasizing that even if their knowledge and skills are sufficient for the current needs, it is significantly lacking for a successful financial future (Jauniešu finanšu lietpratība 2012, p. 7). Based on the results of a survey conducted in 2017: young people who are well informed about financial matters are not informed about financial products such as life insurance (61.5%), 3rd pension level (46.15%), long-term credit (46.15%), short-term loan (46.15%), savings account (46.15%) and mortgage loan (38.46%) (Čaplinska, Ohotina 2019, p. 10). This shows that pupils value their knowledge more realistically, but students tend to overestimate their knowledge.

Sources of financial information and skills among students include parents, banks, entrepreneurs and industry professionals, schools and Mass Media.

25% of respondents believe that universities provide sufficient information in the field of finance. 16% indicated that it was rather sufficient, 12% rather insufficient and 7% – insufficient (Čaplinska, Ohotina 2019, p. 8).

Based on the results of the survey, it was found that only 52% of respondents want to improve their financial knowledge, while 14% answered that they do not want to improve their financial knowledge. (Čaplinska, Ohotina 2019, p. 10). As pupils are critical of their financial knowledge, they also want to improve their knowledge so that it can be used effectively in the future.

There is no specific definition of the concept of creditworthiness. It is a set of measures that ensure the ability to borrow prudently, assess the need for credit and the ability to repay it in time



and without harm to your budget. To examine several credit institutions to choose the most favorable terms. PTAC: Apdomīga aizņemšanas).

It was studied that in order to promote the creditworthiness of the population and protect consumers, in 2019 the state amended the Consumer Protection Law, which limits the total cost of credit, prohibits advertising of credit services provided by credit institutions, and the creditor's obligation to rely only on consumer's ~~and~~ documented information.

## **Study**

In their work, the authors research the financial literacy of Latvian students, being aware that students' knowledge, skills and competence are the driving force of our future society. To receive data, a questionnaire was designed.

The target audience of the survey is Latvian university students. The questionnaire was sent to 27 representatives of the Latvian University, with a request to distribute it among university students. As a result, 397 students from 9 universities participated in the survey.

Students assessed how financial knowledge is acquired in their universities. Comparing all higher education institutions, it can be seen (see Figure 1) that the lowest level of knowledge in the field of finance was indicated by the students of J. Vītols Academy of Music. Only 19% of students indicated that they study financial issues at the university "rather enough". Others have indicated that knowledge is "rather not enough" – 37% and "not enough" – 44%. The reason for this is that the academy specializes in the acquisition of creative specialties, therefore the study programs do not include the study of financial issues. A similar situation is in Riga Stradiņš University, where the emphasis is on learning other subjects.

Students are most optimistic about the situation at Daugavpils University, where they acquire "enough" (21%) and "rather enough" (39%) of necessary knowledge. Similar assessments are at Riga Technical University. The indicators are also influenced by the fact that students who participated in the survey study finance-related specialties. For example, at Daugavpils University 29.4% of the surveyed students are future economists.

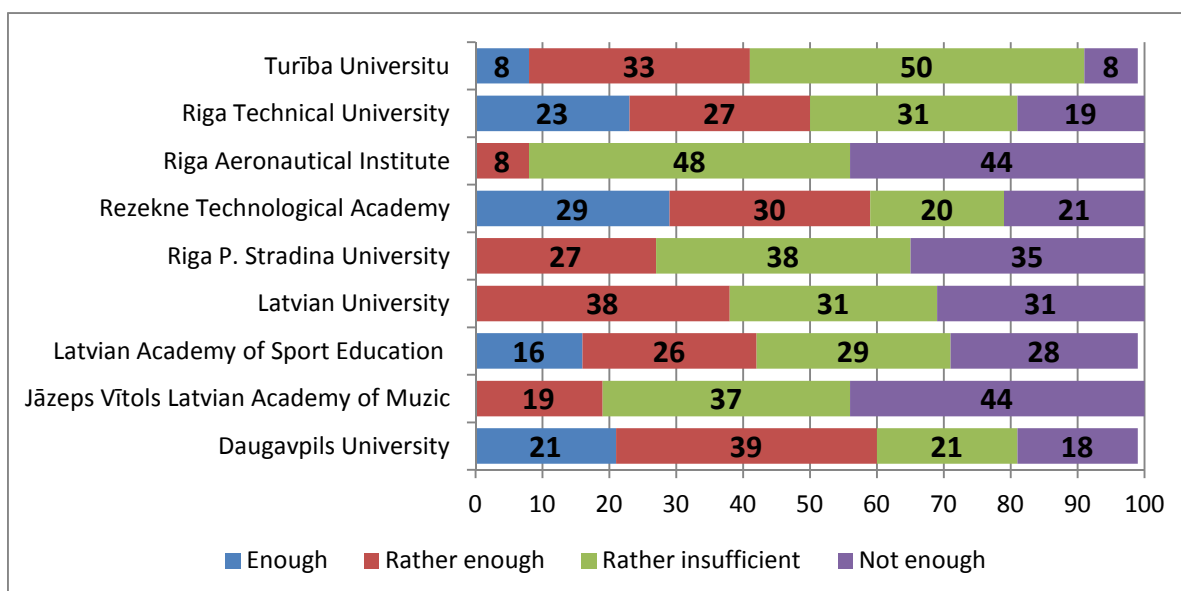


Figure 1. **Is the required knowledge in the field of finance sufficiently acquired at the university? (%)** (authors based on the results of the survey)

Although in the universities where the respondents acquire medical (e.g. P. Stradiņš University) and art profession (e.g. J.Vītols Musical Academy) students assessed financial literacy as low (see Figure 1), students' own financial literacy knowledge in the mentioned universities can be assessed as good. It was found out (see Figure 2) that students of medical, music and dance professions mostly obtain financial information from older friends and acquaintances, as well as from the Internet and from students' previous experience. Economics students, in their turn, receive knowledge from the Internet (30%), university (16%), from parents, friends and acquaintances (15%), from mass media (9%), from advertising (4%), from companies providing financial services (13%), and from own previous experience (9%).

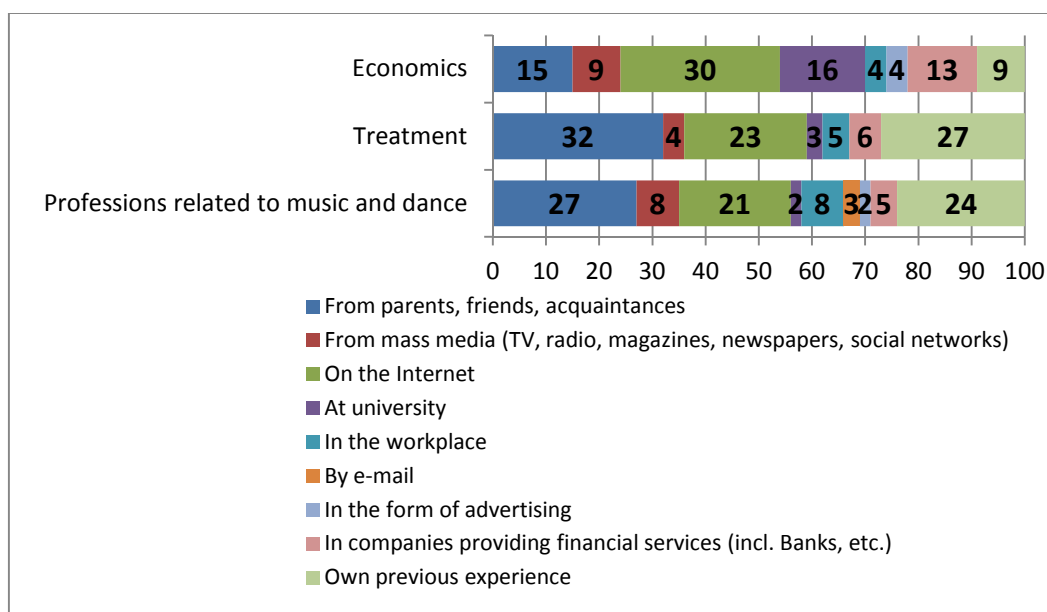


Figure 2. **Sources of obtaining financial information, %** (authors based on the results of the survey)

The majority of students 77% would like to supplement and improve their financial literacy knowledge. (see Figure 3) Knowledge about investments (19%) and operation in the stock market (16%) is the most necessary in the first place, because students do not face them on a daily basis. This is followed by financial planning / budgeting (18%) and provisioning (15%), which is the basis for efficient and prudent use of funds. Only 13% of students would like to expand their knowledge in the field of pensions, although this is knowledge that could be provided financially in old age. 10% of respondents would like to acquire knowledge about insurance issues, but only 7% of respondents would like to acquire knowledge about types of loans and their repayment.

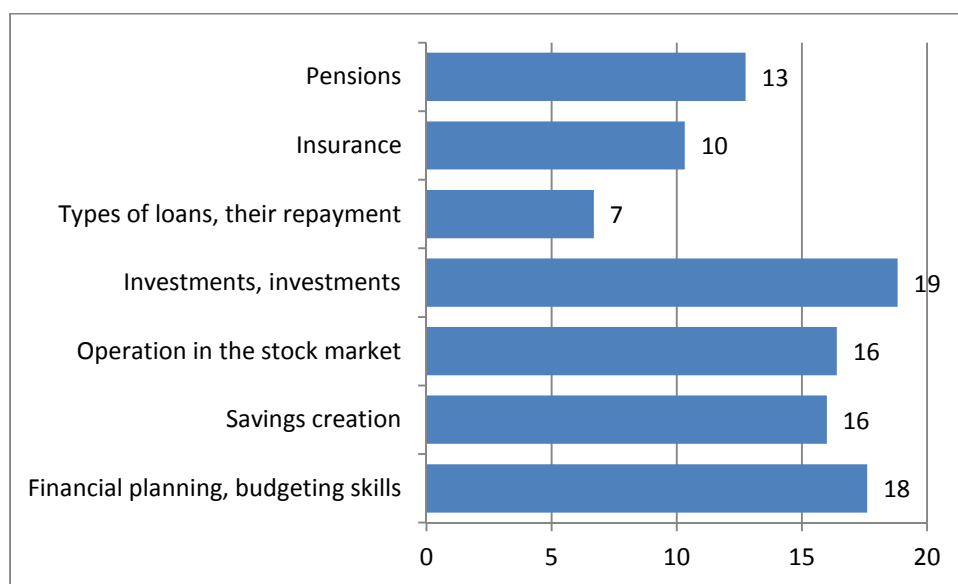


Figure 3. **What additional financial knowledge students would like to acquire, (%)**  
 (authors based on the results of the survey)

Analyzing the way of acquiring additional knowledge by age groups, it can be seen (see Figure 4) that as the age group increases, the number of information sources decreases. In the age group from 18 to 27 all possible ways of acquiring knowledge were chosen, but in the age group from 58 to 67 only one. There is a tendency that the younger the respondents, the fewer the options for acquiring information in person (i.e. in universities, courses ...) are chosen and, conversely, the acquisition of interactive e-learning courses increases.

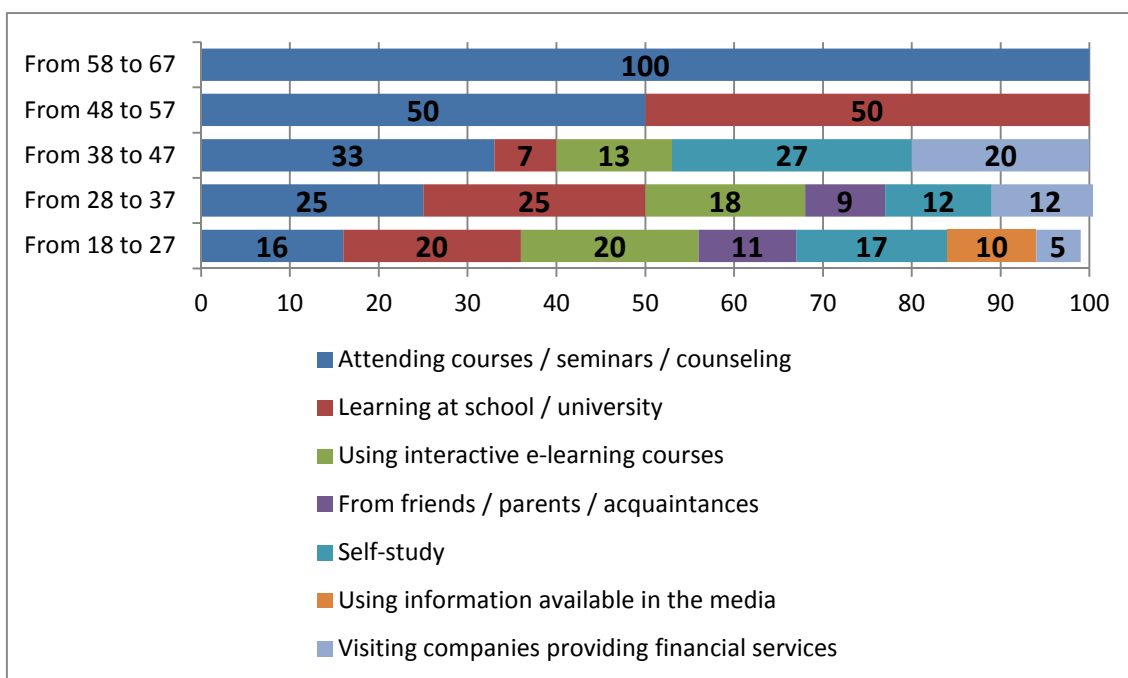


Figure 4. **Acquisition of additional financial literacy knowledge by age groups, %**  
 (authors based on the results of the survey)

Financial planning activities structure people: written accounting of personal income and expenses – helps to objectively assess the current financial situation, helps to determine how much can be set aside for savings. Saving from your income – creating an “airbag”. Money for realizing bigger goals, making purchases. Investing in a pension fund – gives confidence that the elderly will be provided with a pension. Compiling a shopping list when you go shopping helps you avoid wasting money and planning your part of the budget for shopping.

Most students perform most of the financial planning activities once a month (see Figure 5), because after receiving a salary, scholarship, etc., they plan their budget every month, make contributions and make savings from this amount. The exception is the compilation of a shopping list, which is mostly done once a week (52%).

Almost half of the respondents (49%) do not keep records of their income and expenses. The majority of students (69%) do not invest in a pension fund, which once again proves the opinion of global and European research that people do not think about securing their old age.

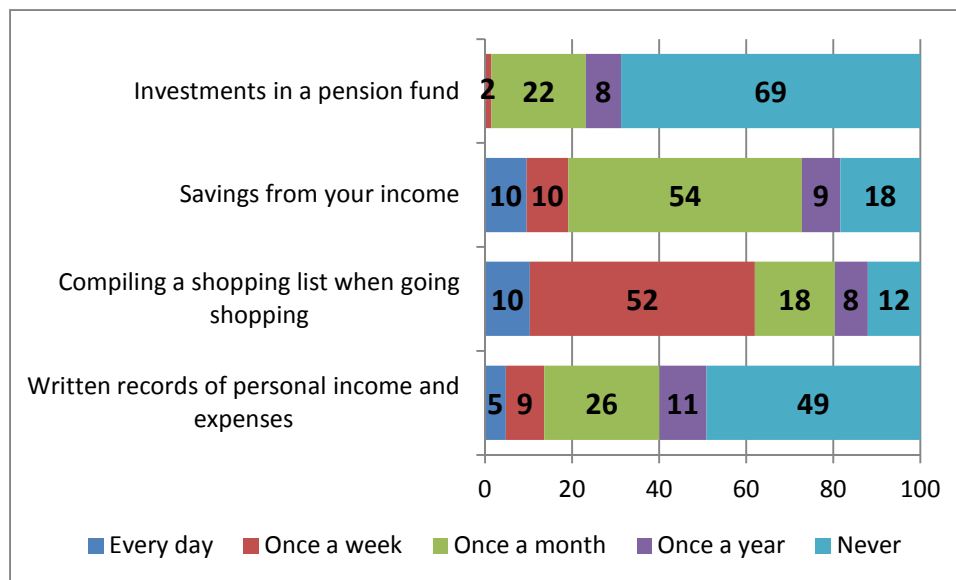


Figure 5. **How often respondents perform the following financial planning activities on a daily basis, %** (authors based on the results of the survey)

### Student credit literacy analysis

Ideally, the borrower would think not only about how to solve his current life problems, such as important purchases, health problems, tuition fees, property repairs, with the help of borrowed money, but also about how this borrowing will affect his life in the long run, such as months and years in the distant future. But in reality, people are not inclined to think about the future, when the borrowed money will have to be returned. All attention is paid to meeting current needs, because it is very easy to imagine what life will be like in the near future, when the current problem will be solved, but it is relatively difficult to think about a little further future. The easy availability of credit, in particular “Quick Credit”, further contributes to this psychologically long-term semi-adaptive decision-making strategy. (Distance jeb ātro.. 2017, 49. lpp).

72% of respondents who had or had a credit relationship never used ‘quick loans’. Almost a third of respondents use “fast lokans”. Most often, the main reason for choosing in favor of fast loans is convenient and fast loan processing, followed by – it is not necessary to explain for what purposes the money is taken and there is no sense of humiliation when applying for a loan. This is followed by arguments that it is not necessary to complete various formalities and opportunities to borrow small sums of money (Distances jeb ātro.. 2017, 32. lpp). 13% of respondents applied for such a loan once, 6% of students used 2–3 times; 3% applied 4–5 times, but 5% of respondents used 6 or more times.

With the existence of various credit institutions, it was found out which are the most popular among students. Most respondents (60%) noted that they borrowed from a commercial bank, because some customers (33%) have an account there, as well as the bank offers loans with a state

guarantee. Leasing company borrowed 14%, because when buying a product for a store a contract has been concluded with a particular leasing company. Quick loans "organizations chose to borrow 22% of respondents for various reasons, for example, it was the only credit institution where the customer approved the loan application, as well as under the influence of advertising.

Most of the respondents had not experienced a loan restructuring (see Figure 6). The customers of the leasing company (17%) restructured the loan due to a large monthly payment, the customers of the “quick loan” organization (22%) and the commercial bank (8%) also faced the same reason. In addition, 11% of “quick loans” and 16% of commercial bank customers were forced to restructure loans due to late payments.

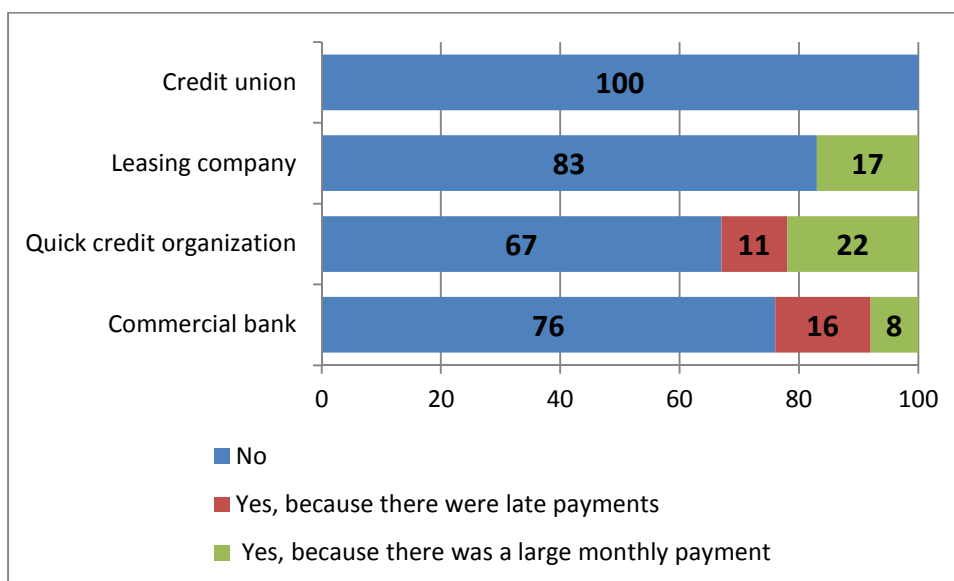


Figure 6. **Loan restructuring by types of credit institutions, %**  
 (authors based on the results of the survey)

The majority of respondents 78% analyze all possible options before taking a loan and only then decide on a credit institution where to borrow. 22% of respondents borrow recklessly and impulsively. They are mostly students in the 18–27 age group. The reason for this – not knowing how to plan your finances, inability to prudently evaluate loan offers.

Comparing the level of students' awareness of lending issues and the desire to explore all possible lending options before borrowing (see Figure 7), it can be concluded that respondents with the highest level of knowledge more often research all offers before making a decision. 57% of respondents with weak and 29% with very weak knowledge do not consider the offers of all credit institutions. However, 19% of respondents with a very good and 53% with a good level of awareness evaluate several options and choose the most advantageous one before taking a loan.

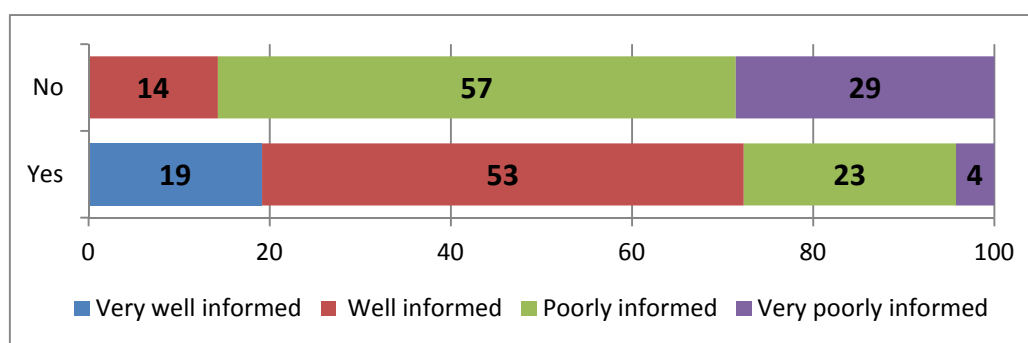


Figure 7. Do students research all possible options depending on their level of financial literacy before taking a loan,% (authors based on the results of the survey)

## Conclusions

1. In several Latvian higher education institutions (especially in the specialization of music, medical treatment), according to students, financial literacy issues are not sufficiently mastered, because 81% of J. Vītols Music Academy and 92% of Riga Stradiņš University students indicated insufficient financial skills. at the university.

*In all specialties to be acquired, it is necessary to introduce “financial literacy” classes for freshmen, which will promote students' awareness of various areas of finance that will be useful in everyday life.*

2. Only 10% of students contribute to pension funds, which proves the opinion of global and European research that people do not think about their future and old age provision. Of these, the younger generation of students, in the 18–27 age group, make the most contributions (72%) to pension funds to secure their old age. It could be justified by the fact that, according to studies carried out by the European Commission, in the future the proportion of the population over the age of 65 could reach almost 75%, i.e. there could be three retirees for every four people of working age.
3. The majority of respondents obtain information on financial literacy issues from parents, friends and acquaintances (on average 25%), the Internet (on average 25%), and their own previous experience (on average 20%). However, in addition to the acquisition of financial knowledge, there is a tendency, the younger the respondents, the fewer the options for acquiring information in person (i.e. in universities, courses ..) are chosen and, conversely, the acquisition of interactive e-learning courses increases.

*Develop a new e-learning course to improve financial literacy. At the beginning offer to choose a topic in which it is necessary to supplement knowledge. Then you will pass a test, according to the results of which it will be clear what the student's knowledge is and what aspects of the topic need to be mastered, it will also form the course content, which will be individually oriented to representatives of certain knowledge.*

4. Respondents with a higher level of knowledge are more likely to research all possible credit offers before making a credit decision. Before choosing a credit institution, 73% of students, with a good and very good level of financial knowledge, research all possible options and only then make a decision that shows the respondents' ability to borrow prudently. In turn, 22% of respondents borrowed recklessly and impulsively. They are mostly students in the 18–27 age group. The reason for this is not knowing how to plan your finances, inability to prudently evaluate loan offers.

*Full and objective information is needed to make an informed decision, however, it is currently relatively difficult to find a convenient way to compare credit conditions, total costs and terms. It would be useful to set up an electronic website that would allow everyone to easily compare credit terms between the various offers offered by non-banks and traditional banks.*

5. Students "fall" into the "quick credit" pit. 22% of respondents borrow from "Quick Loan" organizations, of which 14% of students used this type of loan two or more times and restructured the loan due to a large monthly payment.

*It would be useful to make changes to the legislation that would make it necessary for credit institutions to more seriously check customers' creditworthiness and other existing obligations before granting credit. This would protect people from falling into the credit crunch.*

## References

- Atbildīga aizņemšanās. Patērētāju tiesību aizsardzības centrs. [skatīts 2020. 15. maijā]. Pieejams (Accessed): <http://www.ptac.gov.lv/lv/content/atbild-ga-aiz-em-s>
- Caplinska A., Ohotina A., Entrepreneurship and sustainability issues. *Analysis of financial literacy tendencies with young people*. ISSN 2345-0282. [skatīts 2020. 15. maijā]. Pieejams (Accessed): [https://jssidoi.org/jesi/uploads/articles/24/Caplinska\\_Analysis\\_of\\_financial\\_literacy\\_tendencies\\_with\\_young\\_people.pdf](https://jssidoi.org/jesi/uploads/articles/24/Caplinska_Analysis_of_financial_literacy_tendencies_with_young_people.pdf)
- Distances jeb ātro kredītu izmantošana Latvijā. [skatīts 2020. 15. maijā]. Pieejams (Accessed): [http://www.parads.lv/Uploads/2018/02/12/distances\\_jeb\\_atro\\_kreditu\\_izmantosana\\_latvija.pdf](http://www.parads.lv/Uploads/2018/02/12/distances_jeb_atro_kreditu_izmantosana_latvija.pdf)
- Finanšu pratība. *Latvijas iedzīvotāju finanšu pratības stratēģijas 2014–2020*. [skatīts 04.03.2020]. Pieejams (Accessed): <http://www.finansupratiba.lv/strategija/>
- Hung, A., Parker, A., & Yoong, J. (2009). *Defining and Measuring Financial Literacy* (working paper) Pieejams (Accessed): [https://www.rand.org/content/dam/rand/pubs/working\\_papers/2009/RAND\\_WR708.pdf](https://www.rand.org/content/dam/rand/pubs/working_papers/2009/RAND_WR708.pdf)
- Jauniešu finanšu lietpratība. 2012. [skatīts 2020. 7. maijā]. Pieejams (Accessed): [https://www.antropologija.lu.lv/fileadmin/user\\_upload/lu\\_portal/projekti/antropologija/finansu\\_liet\\_pratiba.pdf](https://www.antropologija.lu.lv/fileadmin/user_upload/lu_portal/projekti/antropologija/finansu_liet_pratiba.pdf)
- Justine S., Brigitte C., William L. *Financial literacy, financial education and economic outcomes*. (2012). Working Paper 18412. [skatīts 2020. 5. maijā]. Pieejams (Accessed): <https://www.nber.org/papers/w18412.pdf>
- Latvijas Brīvo arodbiedrību savienību vēstis. *Arodbiedrību krājaizdevu sabiedrības – pozitīva alternatīva bankām*. Nr. 169, 2019. gada aprīlis, 15.lpp.
- Latvijas iedzīvotāju finanšu pratība 2014. *Finanšu pratības indekss 2014. gadā*. [skatīts 04.03.2020]. Pieejams (Accessed): [http://www.finansupratiba.lv/wpcontent/uploads/2018/03/04.05.02\\_793.2\\_Latvijas\\_iedzivotaju\\_finansu\\_pratiba\\_FKTK\\_2014.pdf](http://www.finansupratiba.lv/wpcontent/uploads/2018/03/04.05.02_793.2_Latvijas_iedzivotaju_finansu_pratiba_FKTK_2014.pdf) (13. lpp).



Latvijas iedzīvotāju finanšu pratība 2019. *Finanšu pratības indekss 2019. gadā*. [skatīts 04.03.2020]. Pieejams (Accessed): <http://www.finansupratiba.lv/wp-content/uploads/2020/01/Zinojums-Finansu-pratiba-2019-F.pdf> (12. lpp).

Latvijas iedzīvotāju finanšu pratība 2019. *Finanšu pratības indekss*. [skatīts 04.03.2020]. Pieejams (Accessed): <http://www.finansupratiba.lv/wp-content/uploads/2020/01/Zinojums-Finansu-pratiba-2019-F.pdf> (11. lpp).

Latvijas iedzīvotāju finanšu pratība 2019. *Finanšu pratības aptauja*. [skatīts 05.03.2020]. Pieejams (Accessed): <http://www.finansupratiba.lv/wp-content/uploads/2020/01/Zinojums-Finansu-pratiba-2019-F.pdf> (6. lpp).

Orlovska, A. *Statistika*. Rīga: RTU, 2007. 111 lpp.

Titko J., Ciemleja, G., N. Lāce „*Finanšu lietpratības novērtēšana*”. Metodiskais materiāls. Rīga: RTU, 2014, 60 lpp.

# ASSESSMENT AND DEVELOPMENT OF SMART ECONOMY IN LATVIA

**Nadežda Griškjāne**

Daugavpils University, Parādes street 1, Daugavpils, Latvia, LV-5401,  
nadezhda.grishkyane@gmail.com

## Abstract

### Assessment and development of smart economy in Latvia

**Key Words:** *smart economy, knowledge, innovation, index, Triple Helix Model*

The name of article is "Assesment and development of smart economy in Latvia". Nowadays a new economy way is developing – smart economy. Starting the transition to the smart economy is the increase of the population with higher education, as well as the transition from the "commodity society" to the "information / knowledge society". The smart economy is an economy based on knowledge and innovation. The question was how to measure this knowledge and innovation in a specific area. In this article, the author looked at international indexes of smart economy in Latvia, compared to other Baltic states and Central European countries, as well as business, university and government cooperation. The aim of the article is to analyze the development of the smart economy in Latvia. In order to achieve the aim of the article, the following tasks are determined: 1. to determine the concept and measuring tools of the development of the smart economy; 2. to analyze the development of the smart economy in Latvia, as well as in the Baltic States and Central European countries, using international indices; 3. to determine the level of cooperation of smart economy; 4. to draw conclusions. The following methods are used in the article: logical analysis and synthesis methods, theoretical and empirical sources of international level in monographic, analytical, logical-constructive, statistical quantitative data processing and analysis methods.

## Kopsavilkums

### Viedās ekonomikas novērtēšana un attīstība Latvijā

**Atslēgvārdi:** *viedā ekonomika, zināšanas, inovācijas, indekss, Triple Helix Model*

Raksta nosaukums ir "Viedās ekonomikas novērtēšana un attīstība Latvijā". Mūsdienās attīstās jauns ekonomikas virziens – viedā ekonomika. Sākot pāreju uz viedu ekonomiku, palielinās to iedzīvotāju skaits, kuriem ir augstākā izglītība, kā arī pāreja no "preču sabiedrības" uz "informācijas / zināšanas sabiedrību". Viedā ekonomika ir ekonomika, kuras pamatā ir zināšanas un inovācijas. Jautājums bija par to, kā noteikt šīs zināšanas un inovācijas noteiktā jomā. Raksta mērķis ir analizēt viedās ekonomikas attīstību Latvijā. Lai sasniegtu raksta mērķi, tiek noteikti sekojošie uzdevumi: 1.noteikt viedās ekonomikas attīstības jēdzienu un novērtēšanas instrumentus; 2.analizēt viedās ekonomikas attīstību Latvijā, kā arī Baltijas valstīs un Centrāleiropas valstīs, izmantojot starptautiskus indeksus; 3.noteikt viedās ekonomikas subjektu kooperācijas līmeni; 4.izdarīt secinājumus. Rakstā tiek izmantotās sekojošās metodes: loģiskās analīzes un sintēzes metodes, starptautiska līmeņa ekonomisko teorētisko un empīrisku avotu izpētes monogrāfiskā, analītiskā, loģiski-konstruktīvā, statistiskās kvantitatīvās datu apstrādes un analīzes metodes.

## Introduction

Nowadays, a new economic trend – the smart economy – is developing because of both quantitative and qualitative changes in the innovative direction. There are several reasons for the development of the smart economy – market behavior of consumers, companies and the state, globalization, etc. Consumers now need even more high-quality products, businesses need more highly-skilled workers, and the state is making even greater use of intellectual resources to solve national and global problems. All this is necessary for the sustainable development of the economy. Another reason is globalization. Globalization is characterized by openness and adaptation to the external environment. This creates a global structure for local and regional knowledge, information and experience exchange networks.

In Maksimova article (2011) was determined that in the future most of the workforce would work in the service and IT sectors (tertiary sector). Bell also identified a transition from a

"commodity society" to an "information or knowledge society". She argued that, firstly, research is the source of innovation, but secondly, social progress is characterized by knowledge of the share of economic sectors in GDP and the proportion of employees in the economy (Maksimova, 2011).

There is a direct link between IT usage and educational requirements. The population with tertiary education is increasing in all countries. Also in Latvia: since 2000, the population with higher education increased by 48.9% or 135.1 thousand people. This is the start of the transition to a new economy.

### Assessment and development of smart economy

Today, the economy will become increasingly innovative and intelligent. Thus, a new direction of the economy emerged – the smart economy. The smart economy is the development of the existing economy, using new knowledge and information. Smart economy is the development of the post-industrial economy. The road to the smart economy can be described by the theory of the evolution of economic development (see Table 1).

Table 1. **Evolutionary characteristics of economic development**

Characteristics	Preindustrial economy	Industrial economy	Post-industrial economy
The main economic factor	Land	Capital	Information and knowledge
The main sector of economy	Primary economic sector	Secondary sector	Tertiary sector
Technology	Physic work	Machines	IT technologies
The main labour resources	Craftsmen, farmers, unskilled workers	Engineers, medium-skilled workers	Scientists, high-skilled workers
The main production resources	Human physical work	Industrial energy (coal, oil, gas, nuclear)	Computer systems, new technologies
The main principle of economic development	Traditions	Economic growth	Growth of human well-being
The main sources of communication	Speaking, writing	Printing	Internet

**Source:** table created by the author

The idea of a smart economy first appeared in the first decade of the 21<sup>st</sup> century. Smart economy is based on three main ideas: mobility, the creation of new knowledge and the creation of a smart environment (Тихомиров В.П.). The smart economy is characterized by intellectualization, institutionalization, socialization and greening in all areas of society and the economy. The distinguishing feature of the smart economy is the increase in resource efficiency through innovation. According to the theory of the Austrian economist J.A.Schumpeter, innovations are divided into five groups: new goods, services, technologies and equipment, raw materials, organizational methods and markets. Innovation is a change in qualitative characteristics, such as transformation of technological processes, scientific progress, increase in production of goods and

services, change of organizational process, creation of innovative materials, taking into account consumer needs and demand.

Indrawati (Indrawati, 2018) proposed a model to measure a smart economy:

1. Innovative spirit (R&D expenditure in % of GDP, employment rate in knowledge-intensive sectors, number of intellectual property rights (including patent, trademark, etc.) per year),
2. Entrepreneurship (self-employment rate, new business registered per year, positive credit channel for venture capital),
3. International embeddedness (number of international corporations, air passengers and freight transportation),
4. Productivity (GDP regional per employed person, GDP regional per capita, GDP regional growth rate, Gross Fixed Capital Formation (% of GDP)),
5. Sustainability (renewable/non-renewable resources, integrated infrastructure, contribution of ICT category to GDP, potential distribution of local products),
6. Flexibility of the labour market (labor force participation rate, total vacancy available, rate of labour conflict),
7. Welfare (percentage of city poverty, unemployment rate, Gini ratio, index of happiness),
8. Economic image, trademarks (primary Industry, stability of Inflation, number of national brands coming from the city),
9. Ability to transform (number of active internet users, number of NGO/community that is support transformation, number of digital start-up, city achievement),
10. Tourism (domestic tourists annually, foreign tourists annually, number of tourist destinations).

Various indices are used to measure the level of development of the smart economy. This assessment is important both for making the necessary decisions for the development of the smart economy and for assessing the result obtained by the smart economy.

The measuring indexes of the smart economy can be divided into three groups:

1. Indices of the country's transition potential to the smart economy:
  - a. The Global Human Capital rating;
  - b. The Human Development Index;
  - c. The ICT development index.
2. Knowledge economy index.
3. Indexes of the benefits of the smart economy:
  - a. The ITIF's Bloomberg Innovation Index provides a list of the most innovative countries;
  - b. The Global Innovation Index;
  - c. List of TOP-100 Global Innovators.

In order to determine the territory's smart growth, Latvia has also developed a Smart Development Index within the EKOSOC-LV project, which shows the efficiency of the use of natural, population, government and e-environment resources and the progress of innovative business in the context of smart development. This index takes into account the quantity of resources and the efficiency of their use, the available road infrastructure, the knowledge, skills and activity of the population, the innovation and activity of companies, the competencies of local authorities and their compliance with modern environmental requirements, e-environment development. This index is based on the TDI (Territorial Development Index) methodology and takes into account four groups – resources (cultivated agriculture land, agriculture labor costs, woodland, mineral resource volume, road network density), management (volume of funds raised, activity, e-index changes, NGA zones), economy (proportion of innovative enterprises in total number of enterprises, turnover, number of employees, number of self-employed persons) and population (population with higher education, number of long-term unemployed, NGO). All this helps to determine the development tendencies of the regions of Latvia.

### Assessment of smart economy according to international indexes in Latvia

The index is a continuous assessment of individual indicators based on a methodology to determine the direction of smart economy development and the degree of smart economy development as a whole. Table 1 shows the assessment of the smart economy of Latvia and Central Europe according to international indexes.

Table 2. **International Indexes of the Smart Economy in the Baltic States and Central European Countries** (assessment and place in the index)

	Latvia	Lithuania	Estonia	Slovenia	Cyprus	Poland	Croatia	Slovakia	Hungary
<b>1. Indices of the country's transition potential to the smart economy:</b>									
The Global Human Capital rating, 2017	69.85 (28)	70.85 (25)	73.13 (12)	73.33 (9)	66.43 (38)	60.61 (31)	66.81 (37)	67.14 (36)	66.40 (39)
The Human Development Index, 2017	0.849 (39)	0.866 (34)	0.879 (30)	0.899 (24)	0.871 (31)	0.868 (32)	0.837 (46)	0.857 (36)	0.704 (43)
The ICT development index, 2017	7.26 (35)	7.19 (41)	8.14 (17)	7.38 (33)	7.77 (28)	6.89 (49)	7.24 (36)	7.06 (46)	6.93 (48)
<b>2. Knowledge economy index:</b>									
Knowledge economy index (World Bank), 2012	7.41 (37)	7.80 (32)	8.40 (19)	8.01 (28)	7.56 (35)	7.41 (38)	7.29 (39)	7.64 (33)	8.02 (27)
Knowledge economy index (EBRD), 2018	5.88 (4)	6.03 (3)	6.82 (1)	6.65 (2)	5.82 (5)	5.63 (6)	5.62 (7)	5.40 (8)	5.33 (9)

	Latvia	Lithuania	Estonia	Slovenia	Cyprus	Poland	Croatia	Slovakia	Hungary
<b>3. Indexes of the benefits of the smart economy:</b>									
The ITIF's Bloomberg Innovation Index, 2020	62.03 (37)	61.97 (38)	62.79 (36)	73.93 (21)	51.56 (48)	69.98 (25)	55.00 (43)	59.36 (41)	68.24 (28)
The Global Innovation Index, 2019	43.23 (34)	41.46 (38)	49.97 (24)	45.25 (31)	48.34 (28)	41.31 (39)	37.82 (44)	42.05 (37)	44.51 (33)
List of TOP-100 Global Innovators, 2020	–	–	–	–	–	–	–	–	–

**Source:** table created by the author

Table 2 shows that Latvia is ranked 34th in the world in the Global Innovation Index and 4th in the Knowledge economy index in EBRD countries. In other words: Latvia has a medium knowledge economy. According to the Human Development Index, Latvia ranks 39th among 130 countries in the world. However, according to the list of TOP-100 global innovators 2020, Latvia does not have such innovation products used in other countries of the world.

Innovative enterprises are found in all regions of Latvia: the highest share of high and medium high-technology enterprises in Kurzeme and Zemgale (6% and 5.8% respectively), but Latgale and Zemgale have more knowledge-based services (95.1% and 94.2% respectively) (Rivza, 2018).

**Table 3. Innovative enterprises in Latvian regions**

Rigas region	Vidzemes region	Kurzemes region	Zemgales region	Latgales region
Ltd. Sikamor Ltd. Hansa matrix Ltd. Satema Ltd. Baltrotors Ltd. Olaine Chemical Plant Biolars Ltd PharmIdea Ltd OlainFarm JSC Dinair Filton Ltd Reruza Ltd TIGER Ltd Preco Ltd. Arcus elektronika Ltd. Ltd. OSC Autoserviss Snores Ette Tete Ltd. Ltd. Sulas Ltd. Pall ogs Ltd. Fittero Ltd. CTCO Ltd.Digitec Ltd. Projekts Ocafe, Kingdom of Rabbits ABPark	Valpro Ltd. Fille 2000 Ltd. Artisan Metal Ltd. Baltijas Industriālais Serviss Ltd. Forma Machinery Ltd. Itk Serviss Ltd. efn NORD Ltd. CD2 Intellitech Revoltechon Ltd. Brutus Technologies Ltd. Ara Kalnozoks Ltd. Fabrika Rauna Ltd.	Diana candles Ltd. Malmar Sheet Metal Ltd. Ltd. SBE Latvia Ltd. Ltd. Ice Berry Ltd. AR Module Factory Ltd. Baltic Solar Ltd. 5dim	PET Baltija JSC Oshukalns Ltd. Linum Color Ltd. Dobeles Dzirnavnieks	Z-Light Ltd. Ltd. Green PIK Lat Ltd. "LAT Cosmetics" Ltd. "TFT.aero" Latgale eco-products Arnico Skriptis ItSeven Ltd. Art by Angel

**Source:** table created by the author by Rivza (2018)

## **Cooperation of smart economy**

One way to raise the level of knowledge and skills is through cooperation between companies and higher education institutions in the region. Universities can collaborate with companies by offering innovative products, technologies, specialists, while entrepreneurs can provide resource support, both in financing education, developing the material base and offering placements. Therefore, establishing stable and systematic cooperation between universities, businesses and other social partners is one of the key challenges (Rivza, 2018).

Until the beginning of the 21st century, it was not directly determined whether university-based innovation had an impact on the economy, standard of living and international competitiveness in the region. But in 1985, Lundvall wrote in his work "Product Innovation and User-Producer Interaction" about the innovative system and its members: universities, companies, research centers, public authorities and manufacturing companies (Ludvall, 1985). This cooperation depends on the region's economic development, implemented government policies and production potential. One of the first attempts to answer this question was the Triple Helix Model, developed by Henry Etzkowitz in the 1990s. This model was based on the theoretical statements of G. Zimmel, K. Marks and M. Weber. The Triple Helix Model is now actively used worldwide – for example, the EU has a Europe 2020 strategy that is needed for sustainable economic and innovative development. The Triple Helix Model was based on the fact that companies, universities and the state collaborated with each other, trying to play the role of another player, and thus, retain their leading role and identity. Businesses, universities and government are key players in each country's innovative system. Each of the three actors fulfills its role in the development of a particular innovative product: first, the government collaborated with the university, followed by the technology transfer between the university and the business, and until the consumer enters the product through government and business cooperation. So this model is needed for collaboration between universities, businesses and government to create innovation and apply it to the economy.

Andris Jaunsleinis (long-term chairman of the Latvian Association of Local and Regional Governments until August 18, 2017): "... future prospects are related to the ability to produce, provide services, earn as it generates tax revenue, short-term and long-term stability. But in order to do that, we need capable and strong universities, including in the regions, because that is a huge contribution to the area where the university is located. By its very nature, the term "regional university" is inaccurate and does not describe the educational establishment, because it is not the location but the supply and its level that determines everything (Rivza, 2018).

In total, there are 4 levels of cooperation between businesses, universities and government. University-business-government cooperation changed from time to time:

1. Individual level, isolated collaboration – consultancy, conferences and seminars, patent buying.
2. Individual / institutional levels, vertical collaboration – inviting university employees to companies, providing master classes and training for university employees.
3. Individual / institutional level, cooperation with competition – joint discussion on strategic plans.
4. Institutional level, horizontal Triple Helix Collaboration – investing in university equipments, regular procurement of university products, collaborating on projects, timely staff mobility between universities and businesses, tax benefits and rebates (Lavrinenko, Ohotina, Ruzha, Shmarlouskaya, Tumulavičius, 2015).

The driving force behind the Triple Helix Model is universities, the main source of knowledge, which carry out research, attract young people to new ideas, receive certain resources from government and business to conduct research, and set up research incubators. In their role as members of another cooperative model, they also retained their primary functions: universities transfer and retain knowledge, government is the guarantor of social norms and companies provide the production of goods and / or services. It follows that none of them interferes with the others, but that there is mutual co-operation.

The optimal Triple Helix Model is when all participants contribute equally. They usually need to review the mission and functions of the university. There is a transition from a traditional university to a business university. The University of Entrepreneurship was also engaged in providing educational services but for other purposes and at a different (higher) level. The Entrepreneurship University was engaged in the commercialization of new knowledge for economic growth. Universities play an important role in providing people with the education they need with advanced intuitive decision-making, the ability to make things happen autonomously, networking, taking initiative, being able to identify, creative problem solving and strategic thinking. Arnauts points out that for a university to become an entrepreneurial university, the university must demonstrate excellence at all levels with strong leadership, innovative faculties and a clear, tangible impact on staffing, greater engagement with students in diversity of learning opportunities, entrepreneurship and the local community, the involvement of higher education institutions in entrepreneurship, which will accordingly contribute to economic development. By the way, the university has close links with student incubators, science parks, etc. And it provides access to business incubation opportunities; the University is committed to collaborating and sharing knowledge with external stakeholders; University is a driving force for business development and can play an important role in the development of sustainable higher education (Bikse V., Rivza.B., Volkova.T. 2016). This model helps to maximize the use of human resources in the economy.



To compete in the global market requires the creation of clusters, global networks, partnership projects, etc. This means that there is a need for highly versatile business competencies – finance, manufacturing technology, partners and networks, legal, administrative, logistics, sourcing, marketing, etc. Business and science cooperation is and will continue to be one of the priorities of the Latvian and EU common economic development – establishment of training companies, creation of centers of excellence and science parks, etc. (Rivza, 2018).

An earlier study on SME cooperation between Latvia-Lithuania-Belarus cross-border regions in 2015 found that overall, the individual level of university-business-government cooperation was defined, while other levels of cooperation between universities, businesses and government were poorly developed. The most developed cooperation between enterprises and the government is consulting of special enterprises in public institutions, organization of seminars and forums between enterprises and the government, formal cooperation on the basis of agreements. The most developed cooperation between companies and universities are cooperation and internship agreements, seminars and conferences. The main reasons for the lack of cooperation between universities, companies and government in Latvia are high bureaucracy, lack of motivation, lack of information; In Lithuania – financial policy, corruption, lack of information, complicated legislation, lack of common goals, lack of motivation; In Belarus, poor legislation, bureaucracy, corruption, economic and currency instability, low pay in science, lack of motivation.

The Triple Helix Model has its advantages and disadvantages. One of the advantages is that in the background of mutual cooperation, the production costs of a new product are reduced, the assortment of the new product expands and economic efficiency increases. The disadvantage is that the impact of different social groups on the innovation process is not taken into account. Taking into account this, in 2009 A.Carayacsin and D.Cambella launched the Quad Helix Model, which also involves the society. The products that consumers need are displayed. It is worth noting that consumers can not only participate in the innovation process but also come up with their own ideas. The result is a link with universities, businesses and government.

According to the Latvian Smart Specialization Strategy (Viedās speciālizācijas stratēģija, 2013), this cooperation helps to achieve a productive innovation system and to move towards polycentric development. This is the path to the development of the smart economy.

## **Conclusions**

The smart economy is an economy based on knowledge and innovation. The key to the smart economy is knowledge and information, which will eventually become factors of production. Effective and competitive education systems, ICT infrastructure, collaboration between business and universities, and institutional environment are needed to promote knowledge and information

development. They need both the ability to acquire knowledge and information and the ability to use it.

According to international indices, Latvia has a medium knowledge economy and high-skilled people. However, Latvia does not have such innovation products used in other countries of the world.

Universities play a key role in generating innovation, but they also need the support of businesses, government and society. Improving the performance of the smart economy requires effective and sustainable collaboration between universities, businesses and the state, taking into account globalization, technological advances and demand for specific products.

The institutional level of cooperation between universities, companies and government can be characterized by special equipment in the company or university, the size of the investment in universities, regular procurement for university research, cooperation agreements, collaborative projects, staff mobility, start-ups, tax incentives, etc.

## References

- Olga Lavrinenko, Alina Ohotina u.c., 2015. "Cross Border Cooperation of Small and Medium Enterprises: Problems, Opportunities, Prospects". Available: [https://du.lv/wp-content/uploads/2016/01/B2B\\_Analiz\\_rus.pdf](https://du.lv/wp-content/uploads/2016/01/B2B_Analiz_rus.pdf)
- Baiba Rivža, 2018. "Zināšanu ekonomika Latvijas lauku un reģionu dzīvotspējai". Available: [file:///C:/Users/Nadezda/Desktop/m%C4%81c%C4%ABbas%20DU/doktorat%C5%ABra/doktoran tura%201/Monografija\\_Zinasanu\\_ekonomika\\_Latvijas\\_lauku\\_rejonu\\_dzivotspejai.pdf](file:///C:/Users/Nadezda/Desktop/m%C4%81c%C4%ABbas%20DU/doktorat%C5%ABra/doktoran tura%201/Monografija_Zinasanu_ekonomika_Latvijas_lauku_rejonu_dzivotspejai.pdf)
- Baiba Rivža, 2018. "Simtam pāri. Viedā Latvija. Valsts pātījumu programma EKOSOC-LV", Latvijas Zinātņu akadēmija.
- В.Ф.Максимова, 2011. «SMART (ИНТЕЛЛЕКТУАЛЬНАЯ) ЭКОНОМИКА: ЦЕЛИ, ЗАДАЧИ И ПЕРСПЕКТИВЫ». Available: [file:///C:/Users/Nadezda/Downloads/smart-intellektualnaya-ekonomika-tseli-zadachi-i-perspektiv%20\(1\).pdf](file:///C:/Users/Nadezda/Downloads/smart-intellektualnaya-ekonomika-tseli-zadachi-i-perspektiv%20(1).pdf)
- В.П. Тихомиров. «МИР НА ПУТИ SMART EDUCATION. НОВЫЕ ВОЗМОЖНОСТИ ДЛЯ РАЗВИТИЯ». Available: <file:///C:/Users/Nadezda/Downloads/mir-na-puti-smart-education-nov-e-vozmojnosti-dlya-razvitiya.pdf>
- Indrawati, Najih Azkalhaq, Husni Amani, 2018. "Indicators to Measure Smart Economy: An Indonesian Perspective". Available: [file:///C:/Users/Nadezda/Downloads/2018-b14Indicatorsto MeasureSmartEconomyanIndonesianPerspective%20\(1\).pdf](file:///C:/Users/Nadezda/Downloads/2018-b14Indicatorsto MeasureSmartEconomyanIndonesianPerspective%20(1).pdf)
- Bengt-Ake Lundvall, 1985. "Product Innovation and User-Producer Interaction". Available: [file:///C:/Users/Nadezda/Downloads/Product\\_Innovation\\_and\\_User-Producer\\_Interaction.pdf](file:///C:/Users/Nadezda/Downloads/Product_Innovation_and_User-Producer_Interaction.pdf)
- EUROPE 2020, 2010. A strategy for smart, sustainable and inclusive growth. Available: <https://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf>
- "Viedās speciālizācijas stratēģija", 2013. Izglītības un zinātnes ministrija. Available: [file:///C:/Users/Nadezda/Desktop/m%C4%81c%C4%ABbas%20DU/doktorat%C5%ABra/doktoran tura%201/IZM\\_Viedas\\_Specializ\\_strategija\\_2013.pdf](file:///C:/Users/Nadezda/Desktop/m%C4%81c%C4%ABbas%20DU/doktorat%C5%ABra/doktoran tura%201/IZM_Viedas_Specializ_strategija_2013.pdf)
- World Economic Forum, The Global Human Capital Report 2017, 2017. Available: <https://weforum.ent.box.com/s/dari4dktg4jt2g9xo2o5pksjpatvawdb>
- Human Development Report 2019. Human development Index trends 1990–2018, 2019. Available: <http://hdr.undp.org/en/content/table-2-human-development-index-trends-1990%E2%80%932018>
- ITU, ICT Development Index, 2017, 2017. Pieejams: <https://www.itu.int/net4/ITU-D/idi/2017/index.html>

World Bank, The World's Bank Knowledge Economy Index, 2012. Available: <https://knoema.com/aomssce/knowledge-economy-index?location=Latvia&indicator=Knowledge%20Economy%20Index>

EBRD, Introducing the EBRD Knowledge Economy Index, 2019. Available: [file:///C:/Users/Nadezda/Downloads/ebrd-knowledge-economy-index%20\(3\).pdf](file:///C:/Users/Nadezda/Downloads/ebrd-knowledge-economy-index%20(3).pdf)

Bloomberg Innovation Index, 2020. Available: <https://www.bloomberg.com/news/articles/2020-01-18/germany-breaks-korea-s-six-year-streak-as-most-innovative-nation>

Ramzi Haidamus, Derwent Top 100 Global Innovators 2020, 2020. Available: [https://clarivate.com/derwent/wp-content/uploads/sites/3/dlm\\_uploads/2020/02/Top100\\_FINAL\\_DigitalONLY.pdf](https://clarivate.com/derwent/wp-content/uploads/sites/3/dlm_uploads/2020/02/Top100_FINAL_DigitalONLY.pdf)

Global Innovation Index 2019 Rankings, 2019. Available: <https://www.globalinnovationindex.org/gii-2019-report>

# ADAPTATION OF NATO'S CYBER DEFENCE POLICY (2014–2018)

**Laura Done**

Riga Stradins University, Dzirciema street 16, Riga, LV-1007, Latvia, laura.done@gmail.com

## Abstract

### Adaptation of NATO's cyber defence policy (2014–2018)

**Key Words:** *deterrence, NATO, cyber defence, cyber threats, cyber space*

Cyber threats and cyber attacks have become a reality in our daily routine as well as one of the main security policy concerns globally. State sponsored cyber-attacks can be a part of hybrid warfare, an instrument to achieve states' geopolitical and economic goals. For these reasons, in recent years, cybersecurity has been on the agenda of many international organisations, including NATO. Crucial decisions have been taken, for instance, in 2014 NATO leaders agreed that a significant cyber-attack could invoke a collective response (Article 5) by NATO. Moreover, in 2016 Allies recognized cyberspace as a domain of operations. The objective of the article is to analyse how NATO's cyber defence policy has shifted from 2014 to 2018 in the light of adaptation of the Alliance's deterrence strategy. The author has put forward a hypothesis that NATO's cyber defence posture has transformed from "deterrence by denial" into a strategy where "deterrence by denial" is augmented by "deterrence by punishment", in response to Russia's illegal and illegitimate annexation of Crimea. Research results will explain the adaptive nature of NATO's cyber defence policy in the context of developments in the conventional domain and illuminate the challenges faced by the cyber deterrence posture.

## Kopsavilkums

### NATO kiberaizsardzības politikas adaptācija (2014–2018)

**Atslēgvārdi:** *atturēšana, NATO, kiberaizsardzība, kiberdraudi, kibertelpa*

Kiberdraudi un kiberuzbrukumi ir kļuvuši par vienu no būtiskākajiem starptautiskās drošības politikas izaicinājumiem. Valstu valdību atbalstīti kiberuzbrukumi var tikt izmantoti kā daļa no plašākas hibridās karadarbības. Tie var kalpot kā instruments, lai sekmētu valsts ģeopolitiskus un ekonomiskus mērķus, tāpēc pēdējo gadu laikā ar kiberdrošību saistīti jautājumi atrodas lielāko starptautisko organizāciju, tai skaitā NATO, darba kārtībā. Kiberdrošības jomā Alianse ir pieņēmusi virkni būtiskus lēmumus, kā, piemēram, 2014. gadā NATO dalībvalstu vadītāji nolēma, ka ievērojams kiberuzbrukums var izsaukt NATO kolektīvo atbildi (5. panta aktivizēšanu). Turklāt 2016. gadā NATO kibertelpu atzina par operāciju telpu. Rakstā tiek analizēts, kā NATO kiberaizsardzības politika ir mainījusies laika posmā no 2014. gada līdz 2018. gadam, kad notiek Alianses atturēšanas stratēģijas pielāgošanās izmaiņām drošības vidē. Rakstā tiek izvirzīta hipotēze, ka NATO kiberaizsardzības pieejas transformāciju no atturēšanas ar noliegumu uz atturēšanu ar noliegumu kombinācijā ar atturēšanu ar sodīšanu izraisīja 2014. gada Krievijas-Ukrainas konflikts. Raksta nobeigumā tiek skaidrota NATO kiberaizsardzības politikas pielāgošanās, ņemot vērā notikumu attīstību fiziskā vidē, un kiberatturēšanas stratēģijas problemātika.

## Introduction

While other international organizations like the European Union (EU) and the United Nations (UN) implement cyber diplomacy to advance responsible state behaviour in cyberspace, the North Atlantic Treaty Organization (NATO) must be able to protect its information and communication technologies (ICT) and respond to a significant cyber attack if one of its Allies is the target. NATO must constantly adapt to new security challenges, including those posed by cyber threats. Given the use of cyber attacks as an instrument of hybrid warfare, and the use of cyberspace as an environment in which states have demonstrated cyber aggression, cyber defence is essential for the Alliance to fulfil its core tasks, including collective defence and crisis management. Secure ICT systems are crucial for the effective functioning of modern combat weapons systems. For example, NATO's airborne early warning and control systems and missile defence systems are based on digital systems. The challenges in cyberspace are civilian and military in nature.

Malicious and disruptive cyber activities have the potential to destabilize international relations. Considering Russia's aggression against Ukraine and illegal and illegitimate annexation of Crimea in 2014 using hybrid methods of warfare (including cyber attacks), and the subsequent measures to strengthen NATO's collective defence (including cyber defence), it is possible to put forward a hypothesis that NATO's cyber defence posture has transformed from "deterrence by denial" into a strategy where "deterrence by denial"<sup>15</sup> is augmented by "deterrence by punishment"<sup>16</sup>, in response to Russia-Ukraine conflict in 2014. The Alliance has decided that cyber defence is part of NATO's core task of collective defence. In this context, resilience and effective cyber defence policies are important elements. Since the NATO Summit in Prague in 2002, when for the first time Alliance recognized the need to strengthen protection against cyber attacks, NATO's cyber defence policy has evolved. Important decisions have been taken at almost every following summit, especially in Wales (2014), Warsaw (2016) and Brussels (2018).

## **Discussion**

National cyber security strategies have traditionally been implemented over a period of four to ten years, but the Alliance has adopted three cyber defence policies over a six-year period (2008–2014), which demonstrates NATO's efforts to adapt to challenges posed by cyber threats. Considering the growing presence of cyber dimension in conflicts, NATO's approach to cyber defence has transformed in order to deter cyber attacks and to reduce the asymmetric advantage of a potential opponent.

At the Wales Summit in 2014, NATO made essential decisions to strengthen its collective defence capabilities and to enable the Alliance to better address current and future threats. At the Wales Summit Allies endorsed an enhanced NATO Cyber Defence Policy. The new approach to cyber defence provides that cyber defence is part of NATO's core task of collective defence (NATO 2014: 72). The most remarkable outcome of the Summit is the decision that a significant cyber attack may trigger the invocation of Article 5 (NATO 2014: 72). With this decision NATO's cyber defence posture has transformed from deterrence by denial to deterrence by denial in combination with deterrence by punishment. The declaration also stresses the primary responsibility of Allies for the protection of their own ICT systems and networks (NATO 2014: 72). By 2014 an understanding of the applicability of international law to cyberspace has been developed which contributes to the decision to adopt cyber deterrence by punishment.

With the decision to apply Article 5 to a significant cyber attack, NATO faces new challenges. In order to respond to a significant cyber attack, NATO Allies must unanimously agree

---

<sup>15</sup> According to the deterrence strategy and Joseph S. Nye Jr. (2016) deterrence by denial in this article is understood as protection and resilience of organisation's ICTs and networks.

<sup>16</sup> According to the deterrence strategy and Joseph S. Nye Jr. (2016) deterrence by punishment in this article is understood as the use of threats/threat of retaliation as a deterrent to cyber attacks.

on attribution of cyber attack. The sharing of the technical evidence may be limited even among the Allies, given the secrecy of the methods and cyber weapons used to gain the evidence. It could affect the credibility of the invocation of Article 5, as a potential opponent may consider that the Alliance will not be able to reach consensus regarding a joint attribution. Gaining high confidence attribution is a complex process. Because of the nature of cyberspace, it is time-consuming to trace the origins of cyber attacks.

The cyber defence-related decisions taken at the Wales Summit are further developed and strengthened at the Warsaw (2016) and Brussels (2018) Summits. At the Warsaw Summit in 2016, NATO recognized cyberspace as an area of operations in which it must defend itself as effectively as in any other area of operations (NATO 2016: 70), thus, indirectly indicating about the potential use of offensive capabilities, as in other domains of operations when necessary. That strengthens the deterrence by punishment, as it provides a space where offensive operations can potentially be carried out. The decision to recognize cyberspace as a domain of operations is an important step for the Alliance's future cyber activities, as NATO is expected to perform similar activities in cyberspace as in any other domain of operations. It follows from the Communiqué that the decision to recognize cyberspace as an area of operations stems from Wales' decision to include cyber defence as part of NATO's collective defence. Decisions taken at the Warsaw Summit are part of NATO's long-term adaptation, including in cyber defence policy.

An important outcome of the Warsaw Summit is the Cyber Defence Pledge, which reflects NATO's stance that resilience of the organisation's cyber defence depends on the organisation's members (NATO 2016: 71). Allies are committed to strengthening their cyber defences on an individual basis, thus strengthening overall cyber defence of the Alliance.

In 2018, when the Heads of State and Government of the member countries of NATO met in Brussels, hybrid threats, disinformation and malicious cyber activities were among the main challenges to Alliance. In the Brussels Summit Declaration Russia has been defined as the main challenge to the Euro-Atlantic security (NATO 2018: 2–6). The Alliance reaffirms the important role of cyber defence in NATO's collective defence and that it strengthens the organisation's overall deterrence and defence strategy (NATO 2018: 20). In Brussels, NATO's cyber defence policy continues to evolve: Alliance agrees to integrate Allies' cyber capabilities into NATO missions and operations (NATO 2018: 20). Alliance is able to respond in-kind in the case of a significant cyber attack against one of its Allies. With the availability of offensive cyber capabilities (offered by Allies on a voluntary basis), NATO will be able to deter an adversary in cyberspace with the same type of response.

The Brussels Summit declaration announced the establishment of NATO Cyberspace Operations Centre, signalling that the Alliance is developing the capacity to deploy cyber operations more

effectively and with high credibility. The establishment of the Cyberspace Operations Centre will ensure effective coordination of cyber capabilities and the implementation of cyber operations, although full readiness of the centre is expected only in 2023. The cyber defence-related decisions, taken at Brussels Summit, demonstrate the Alliance's gradual cyber adaptation and cyber capacity-building.

Following the Warsaw and Brussels summits, the Alliance is implementing a combined approach to cyber deterrence, significantly strengthening the credibility of cyber deterrence by punishment. The Warsaw and Brussels Summits build on the decisions taken at the Wales Summit to strengthen collective security, including cyber defence. The Warsaw and Brussels summits raise awareness of the use of cyber attacks as part of hybrid warfare activities.

Applicability of Article 5 to a significant cyber attack is important in the context of hybrid warfare, as cyber attacks can be part of hybrid threats. In the Wales Summit Declaration, cyber attacks are less associated with hybrid threats, but at the Warsaw and Brussels Summits, the Alliance reflects a greater understanding of the link between cyber attacks and hybrid threats. Unlike the Strasbourg/Kehl Summit Declaration in 2009 (following Russia's aggression against Georgia), the Wales Summit Declaration (following Russia's aggression against Ukraine and illegal and illegitimate annexation of Crimea) defines Russia as an aggressor. Following the Russia-Georgia conflict, the text of the Strasbourg/Kehl Summit Declaration did not define Russia as an aggressor and Alliance continued practical cooperation. It was only after Russia's aggression against Ukraine that NATO foreign ministers decided to suspend practical cooperation with Russia. The Russia-Ukraine conflict confirms that the cyber component in conflicts is not a separate, isolated case, but it is a trend. Cyberspace is a platform on which Russia projects its power and pursues strategic interests. Events in Georgia and Ukraine have led NATO to rethink its vision of how an opponent can use cyber capabilities.

## **Conclusions**

Over the past 16 years, NATO's cyber defence policy has experienced strategic and operational developments. By adopting enhanced NATO Cyber Defence Policy in 2014, NATO's approach to cyber deterrence has transformed. It can be concluded that the hypothesis that NATO's cyber defence posture has transformed from deterrence by denial into a strategy where deterrence by denial is augmented by deterrence by punishment, in response to Russia's illegal and illegitimate annexation of Crimea, is partially confirmed.

NATO's cyber defence posture has transformed from deterrence by denial to deterrence by denial in combination with deterrence by punishment in 2014. In response to Russia's aggression against Ukraine NATO has significantly reinforced its collective defence, including cyber defence. From 2002 to 2013 NATO has implemented cyber deterrence by denial, focusing more on technical cyber-related issues. Since 2014, Alliance has implemented a more effective cyber deterrence strategy by combining both: deterrence by denial and deterrence by punishment. NATO implements

activities that can deter an opponent from hostile actions in cyberspace. Cyber deterrence by denial can be categorized as strictly defensive decisions and activities, for example, strengthening the protection of the organization's ICT systems and increasing resilience by developing cyber defence capabilities; strengthening Allies' individual cyber defence capabilities; promoting academic research at NATO's Cooperative Cyber Defence Centre of Excellence; cooperation with other international organizations, industry and partner countries; exchange of information, best practices and cyber threat assessments; participation in international cyber exercises like Locked Shields and Cyber Coalition. Such defensive actions are ensuring that NATO has well developed cyber defence capabilities potentially capable of blocking the enemy's offensive cyber capabilities, denying the opponent of gains in cyberspace. NATO cyber deterrence by punishment takes the form of more offensive decisions and activities, for example, the threat of retaliation which means potential invocation of Article 5; the integration of Allies' individual cyber capabilities, including offensive ones, into NATO missions and operations, establishment of the Cyberspace Operations Centre. Such potentially offensive and more proactive actions are signalling to a potential opponent a credible threat of retaliation, which may result in costs that far outweigh the benefits.

However, the transformation of the cyber deterrence approach has been caused by a number of reasons that have created a "snowball" effect, starting from the cyber attacks against Estonia in 2007 to the hybrid war in Ukraine in 2014. The Russia-Ukraine conflict confirms Russia's tendency to use offensive cyber capabilities to achieve military strategic goals. Following the cyber attacks on Estonia in 2007, the Alliance responded by adopting the first Cyber Defence Policy. Following the case of Georgia in 2008, when Russia conducted cyber attacks for the first time in conjunction with conventional attacks in the physical environment, the Alliance acknowledged that also state actors can be responsible for cyber attacks. The Alliance has gradually recognized that foreign military and security services can be used for state-sponsored cyber attacks. In 2007 and 2008 the lack of attribution experience and insufficient understanding of international law applicability to cyberspace may have hindered the Alliance to adopt cyber deterrence by punishment.

## References

- NATO, Brussels Summit Declaration. Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Brussels 11–12 July, 2018. 11.07.2018. [https://www.nato.int/cps/en/natohq/official\\_texts\\_156624.htm#28](https://www.nato.int/cps/en/natohq/official_texts_156624.htm#28) [13.05.2020.].
- NATO, Wales Summit Declaration. Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Wales. 05.09.2014. [https://www.nato.int/cps/en/natohq/official\\_texts\\_112964.htm?selectedLocale=en](https://www.nato.int/cps/en/natohq/official_texts_112964.htm?selectedLocale=en) [10.07.2020.].
- NATO, Warsaw Summit Communiqué. Issued by the Heads of State and Government participating in the meeting of the North Atlantic Council in Warsaw 8–9 July, 2016. 09.07.2016. [https://www.nato.int/cps/en/natohq/official\\_texts\\_133169.htm?selectedLocale=en](https://www.nato.int/cps/en/natohq/official_texts_133169.htm?selectedLocale=en) [18.05.2020.].
- Nye Jr., Joseph S. Deterrence and Dissuasion in Cyberspace. *International Security*, Vol. 41, No. 3. Winter 2016/17. 44–71. [https://www.mitpressjournals.org/doi/pdf/10.1162/ISEC\\_a\\_00266](https://www.mitpressjournals.org/doi/pdf/10.1162/ISEC_a_00266) [01.06.2020.].



# MENEDŽMENTS / MANAGEMENT

## MANAGEMENT CONSTRAINTS TOWARDS PROVISION OF INCLUSIVE EDUCATION FOR PEOPLE LIVING WITH DISABILITIES IN NIGERIA

**Rasaq Ajibola Sijuola**

Daugavpils University, Vienības street 13, Daugavpils, LV-5401, Latvia, [rasaqsijuola@gmail.com](mailto:rasaqsijuola@gmail.com)

### Abstract

**Management constraints towards provision of inclusive education for people living with disabilities in Nigeria**

*Key Words: management, constraints, inclusive, education, disabilities*

This study examines various constraints that hinder the provision of inclusive education for people living with disabilities in Nigeria. While it is confirmed that the number of people living with disabilities is growing on a regular basis, less effort is made to help them to live a quality life and access education in the same way people living without disabilities can afford to live a quality life and access education. People living with disabilities are faced with societal and economic challenges from time to time. So, in this study, the concept of people living with disabilities and inclusive education are discussed from the views of different scholars to enhance the understanding of the readers. Similarly, extant studies, both empirical and narrative, that pointed out specific constraints to the provision of inclusive education for people living with disabilities are reviewed. These constraints are extracted from studies done in several developing countries – Kenya, Zimbabwe, Botswana and Nigeria. However, there is a serious dearth of works on constraints that undermine the provision of inclusive education for people in Nigeria. Hence, this study fits the time and help to point some of the constraints on the provision of inclusive education in Nigeria accompanied by pertinent recommendations that can help in the drive for inclusive education.

### Kopsavilkums

**Pārvaldības ierobežojumi iekļaujošas izglītības nodrošināšanai cilvēkiem ar invaliditāti Nigērijā**

*Atslēgvārdi: pārvaldība, ierobežojumi, iekļaujošs, izglītība, invaliditātes*

Šajā pētījumā aplūkoti dažādi ierobežojumi, kas kavē iekļaujošas izglītības nodrošināšanu cilvēkiem ar invaliditāti Nigērijā. Lai gan tiek apstiprināts, ka cilvēku skaits ar invaliditāti pieaug regulāri, tiek pieliktas mazākas pūles, lai palīdzētu viņiem dzīvot kvalitatīvu dzīvi un piekļūt izglītības procesiem. Cilvēki ar invaliditāti, laiku pa laikam, saskaras ar sociālām un ekonomiskām problēmām. Tāpēc, šajā pētījumā tiek spriests par jēdzienu cilvēkiem ar invaliditāti un iekļaujošu izglītību no dažādu stipendiātu viedokļa, lai vairotu lasītāju izpratni. Līdzīgi tiek pārskatīti pastāvošie pētījumi, gan empīriskie, gan stāstījumi, kuros norādīts uz īpašiem ierobežojumiem iekļaujošas izglītības nodrošināšanā cilvēkiem ar invaliditāti. Šie ierobežojumi izriet no pētījumiem, kas veikti vairākās jaunattīstības valstīs – Kenijā, Zimbabvē, Botsvānā un Nigērijā. Tomēr, pastāv bažas par ierobežojumiem, kas apdraud iekļaujošas izglītības nodrošināšanu Nigērijas iedzīvotājiem. Tādējādi, šis pētījums ir piemērots mūsdienām un palīdz norādīt dažus šķēršļus iekļaujošas izglītības nodrošināšanai Nigērijā, ko papildina atbilstoši ieteikumi, kas var palīdzēt virzībā uz iekļaujošu izglītību.

### Background of the study and statement of the problem

Education is invariably the key to personal and national development, and it is the right of everyone – children, youths and adults – to have it. However, according to UNICEF (2012), Nigeria has the highest number of out-of-school children globally. These children are not in school because they are females; they are from poor homes; they have some disability or they are from the minority in the society (Cornelius-Ukpepi and Opuwari 2019). The educational gap between children with disabilities and those without disabilities is widening by the day with little or no efforts to close it (Ibok 2015). Undoubtedly, children with disabilities have limited access to education due to a number of factors among which are limited access to schools and learning materials, discriminatory

attitude of teachers and fellow students, poor educational funding (Cornelius-Ukpepi and Opuwari 2019). Children with disabilities are offered education and engage in learning process in classrooms different from those of the children without disabilities and are less attended to (Dibu 2015).

Over the years, stakeholders in education and activists are clamouring for quality education which will be beneficial to all learners regardless of their physical wholeness or otherwise and gender. And quality education is appraised to be possible through inclusive education. The argument for inclusive education which allows all children, notwithstanding their gender, race, colour and physical disabilities, to engage in a similar learning process and in the same learning environment has been on the rise in recent times (Adibsereshki and Salehpour, 2014; Ugwu 2015). Due to the prospect of inclusive education, government has made conscious efforts to incorporate children with disabilities into the same class with children without disabilities (Charles 2013). In defence of the government, FRN (2013) shows that a decree No. 96 that mandates the provision of inclusive education was made with serious legal support. However, inclusive education is bewildered by some challenges. These challenges or constraints are not limited to Nigeria only. It is common in many developing countries of the world (Mapuranga and Nyakudzuka 2014; Nyangia and Orodho 2015). The focus of this study, therefore, is on constraints that make the provision of inclusive education for people with disabilities difficult. It is quite challenging for people with disabilities to access quality education alongside their counterparts who have no disabilities in the same learning environment, using the same educational equipment.

### **Objective of the study**

The main objective of this study is to explore constraints that undermine the implementation of inclusive education for individuals with disabilities by drawing the evidence from Nigeria.

### **Research questions**

The central question this study aims to answer is “what are the management constraints to implanting inclusive education for people with disabilities?”. Thus, this question guides the direction of this study in the sense that, an intensive review of extant studies is done to get a sufficient answer.

### **Literature review**

Several extant studies, across the world, that underline the benefits of inclusive education and various constraints to the provision of inclusive education for People Living with Disabilities (PLDs) are reviewed. Both old and emerging studies are reviewed critically and classified according to their status in the world. The aim of this style of review is to identify constraints that resonate with different categories of countries in the world and then, narrow these constraints down to developing countries, particularly, Nigeria. However, inclusive education cannot be achieved overnight. It is a long process that comes with challenges and opportunities. Hence no government can abruptly switch its educational system to that of an inclusive one.

## **Inclusive educations: A conceptual review**

It is perceived as an approach that ensures that all students, without any discrimination, are given access to education. Education can take place in a formal or an informal setting such as an Internally Displaced People Camp. Inclusive education ensures that the structure of education, policies and practices are adjusted and designed in such a way that it accommodates students from different backgrounds, cultures and abilities (Cornelius-Ukpepi and Opuwari 2019). Sightsavers (2011) posited that inclusive education offers everyone equal opportunities to undertake education, however, assistance and provisions are offered for individuals who need them without any alteration to the learning framework. UNESCO (2011) pointed out the key elements of inclusive education: (1) equal right to education and its provision without any form of discrimination; (2) a central vision for education that considers that everyone as equal; (3) schools have the responsibility of educating people, children inclusive, considering the stated human right principles; (4) unwavering attention being paid to the needs of all learners notwithstanding their diversities – age, gender, disabilities, language, health status and so on. In other words, inclusive education requires that all learners are allowed to share the same educational opportunities and facilities without any discrimination.

Ahmad (2010) explains that inclusive education enables children and young people, regardless of their challenges, to learn together at all levels of education – primary, secondary, post – secondary education and with pertinent supports. Okwudire and Okechukwu (2018) see inclusive education as a persistent rise in the students' participation in the teaching and learning process accompanied by a persistent reduction in discriminations or exclusions from educational learning opportunities, curricula and schools. Ibok (2015) sees inclusive education as the provision of equitable learning opportunities for all students including the physically challenged people. The opportunities enshrined in inclusive education are not limited to the provision of quality education with necessary apparatus and support services to students of similar age groups with the sole aim of preparing them for a productive life in the society. At the centre of the campaign for inclusive education is the need to enhance the capacity of the educational system of any country to accommodate a wide range of learners for the sake of national development. In other words, the increasing capacity to accommodate different learners increases the literacy level and make people to be enlightened which is a plus to the national development of any country. Any attempt to leave some people out of the educational system because of personal and physical deficiencies will undermine the development of such a nation. Ibok (2015) stresses further the central theme of inclusive education which is the right of all learners to quality education that enhances the quality of lives of learners. It comprises access to education and removal of barriers to quality education.

Inclusive education ensures that individuals with special needs, who are prone to exclusion, are able to benefit from a complete school experience just like their counterparts who have no

visible disabilities that require peculiar attention (Cornelius-Ukpepi and Opuwari 2019). Inclusive education is an attempt to merge learners with disabilities with their counterparts who have no disabilities in the same learning environment, giving them the opportunities to have similar learning experience (Michael and Oboegbulem 2013). Ahmad (2000) restricts inclusive education to children and young people only, with and without disabilities. According to him, inclusive education allows them to learn together without any discrimination and at all levels of education and with adequate supports.

### **People living with disabilities: A conceptual review**

It is generally accepted that disabilities are integral parts of human condition and people are bound to experience them at some points in their life (WHO and World Bank 2011). They may be obvious to the eyes and they may not be obvious; they may be permanent or temporary; and they take different forms in people (WHO and World Bank 2011). People or children living with disabilities are many and diverse in our modern society (Al Ju'beh 2015). Hence, it is difficult to give a single definition for disability (Mitra 2006).

WHO and World Bank (2011:3) confirm that explaining disability is 'complex, dynamic, multidimensional and contested' while the UN Convention on the Rights of Persons with Disabilities (UNCRPD) sees it as an emerging concept in the society? In its report, (UNCRPD, 2006: 4) explains people with disabilities to include "those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others." Disabilities and impairments are closely related (Schulze 2010). An impairment only results into a disability when some parts of the environment cannot be accessed by impaired people and issues such as stereotypes and condescending treatments are unleashed on the disabled (Schulze 2010; Al Ju'beh 2015).

Premised on the variations of views on disability, it is explained from selected models – charity, medical, social, human rights, and interactional model.

**Charity model:** this model perceives people with disabilities as victims, and people in poor conditions who need attention and care (Al Ju'beh, 2015).

**Medical model:** this model underlines disability as a problem caused a disease or injury or illness which requires medical attention such as "treatment and rehabilitation" (Mitra 2006: 237). This model emphasizes that disability can be corrected or cured (Al Ju'beh 2015).

**Social model:** this model is a response to the approach adopted by the charitable and medical models, but it focuses on human rights of disabled people (Al Ju'beh 2015; Rimmerman 2013; Woodburn 2013). It explains disability as an act caused by the social environment that alienates people with disabilities from social activities due to "attitudinal, environmental and institutional barriers" (Mitra, 2006: 237).

**Human rights model:** it is a model that campaigns against unjust practices meted on people with disabilities and premises its ideology on the notion of UNCRPD about people with disabilities. It sees disabled people as individuals who are decision makers and have rights equal to the rights of other people who have no disabilities (Al Ju'beh 2015).

In a nutshell, the concepts of inclusive education and people with disabilities are explained extensively. While disabilities take different forms, inclusive education creates a level playing ground for them to interact and learn within the same environment with their counterparts who have no disabilities.

### **Management constrains towards the provision of inclusive education for people living with disabilities in developing and emerging countries**

Achieving inclusive education is, no doubt, possible but challenging. While the prospects of inclusive education are numerous and pivotal to national development, many developing countries including Nigeria are finding it difficult to achieve. Some scholars have identified major constraints to the provision of inclusive education in developing countries.

In Kenya, Eunice, Nyangia and Orodho (2015) assessed the challenges of implementing an inclusive educational programme in Kenyan public secondary schools, using Rongo Sub-County, Migori County as the study area. A mixed research method was adopted and research tools such as questionnaire, interview guide and observation were employed. A total number of 170 students and 3 teachers selected from each school in the county who participated in the survey. The outcomes of the study revealed that inadequate educational resources, inadequate number of specialised staff and poor attitude from the educators and parents undermine the implementation of inclusive education in the country. UNESCO (2009) pointed out the issue of poor funding as the bane of inclusive education in Kenya. Realistically, inclusive education is expensive to implement because it requires appointing specialists, creation of additional classrooms, and provision of support for individual students. Cortiella (2009 as cited in Eunice, Nyangia and Orodho 2015) asserts that major constraints are lack of educational and instructional materials, lack of school facilities, and lack of well-trained teachers.

In a similar study done in Kenya, Eunice and Orodho (2014) adopted a purposive sampling and engaged students with special needs, teachers, principals and officials of the Ministry of Education. The outcomes of the study show that inclusive education was halted by a lack of suitable physical and instructional facilities and qualified teachers, and poor attitude from the parents.

In Zimbabwe, Mapuranga and Nyakudzuka (2014) stated that a lack of expertise in handling inclusive education, inadequate educational resources, poor supervision, monitoring and evaluation of the inclusive educational system frustrated the implementation of inclusive education in the country. Badza and Tafangombe (2010) posited that the implementation of inclusive education is generally hampered by poor funding, policy problems, large class size and people's negative attitude towards individuals with mental disabilities.

In Nigeria, it is obvious that there is a dearth of research outputs on constraints to the effective provision of inclusive education for people with disabilities. Perhaps, it is due to the fact lip service is being paid to the issue of inclusive education in Nigerian schools. However, Michael and Oboegbulem (2013) who dare to assess inclusive education in the country pointed out seven (7) problems that bedevil the implementation of inclusive education in the country. They are poor planning to identify children with learning disabilities; locating schools for students with disabilities in urban areas only; parent’s lack of awareness of special education services offered in the country; preference for alms begging by individuals with disabilities over education; inadequate provisions for the maintenance of educational centres; and poor financial supports from parents; and lack of strategies to search and identify children who do not attend schools.

In the overall, these developing countries have similar issues undermining the implementation of inclusive education in their respective countries. There is no significant difference between the challenges of inclusive education in developing countries.

### Outcomes of the systematic review

The constraints on the implementation of inclusive education in developing countries, Nigeria inclusive are numerous. These studies pointed out that inclusive education is hard to implement because of the underlying problems. In the overall, the table below shows the summary of constraints on inclusive education in the affected countries.

Table 1. **Constraints of inclusive education in developing countries**

The Central Concept	Countries	Constraints
Inclusive Education	Kenya	<ul style="list-style-type: none"> <li>• Inadequate educational resources,</li> <li>• Inadequate number of specialised staff,</li> <li>• Poor attitude from the educators and parents,</li> <li>• A lack of suitable physical and instructional facilities and qualified teachers, and</li> <li>• Poor attitude of the parents</li> </ul>
	Zimbabwe	<ul style="list-style-type: none"> <li>• A lack of expertise in handling inclusive education,</li> <li>• Inadequate educational resources, and</li> <li>• Poor supervision, monitoring and evaluation of the inclusive educational system</li> </ul>
	Nigeria	<ul style="list-style-type: none"> <li>• Poor planning for the identification of children with learning disabilities,</li> <li>• The situation of special schools in urban areas only,</li> <li>• Parent’s lack of awareness of special education services offered in the country,</li> <li>• The preference for individuals with disabilities for alms begging over education,</li> <li>• Inadequate provision for the maintenance of educational centres,</li> <li>• Poor financial supports from parents, and</li> <li>• A lack of strategies to search and identify children who do not go to schools.</li> </ul>

**Source:** Compiled by the author

## Recommendations

Premised on the findings of the studies examined and reviewed in this paper, the following recommendations are made in order to reduce or eliminate these constraints completely. Firstly, it is suggested that the government of Nigeria and other developing countries should do adequate planning for the implementation of inclusive education. The planning should include the identification of people or children with disabilities; raising of awareness about inclusive education; adapting existing schools' facilities to suit inclusive education and identifying sources of funds for the implementation of inclusive education.

Secondly, inclusive education requires adequate instructional resources. Schools are to be provided with resources that will make inclusive education possible across the country. Resources such as braille, hearing aid tools and other resources that will enable children with disabilities to sit comfortably in the same class with children without disabilities without stalling their progress should be made available.

Thirdly, there is a need for initial and constant funding for inclusive education. The implementation of inclusive education requires huge capital so also its continuous sustenance. As more children with disabilities are infused into classes, schools will need more funding to make their learning environment conducive or else they will be disadvantaged.

Lastly, trained and qualified personnel are to be provided for inclusive education. It is not all teachers that can teach classes that have both children with and without disabilities conveniently. Inclusive education is more demanding and needs a higher teaching and management skill. Hence current teachers are to be adequately trained and student teachers are to be equipped with the skills to manage inclusive education.

## Conclusions

Inclusive education is essential in this dispensation where individuals, agencies and government policies are combatting injustice and inequity in the society. It makes it possible for all students regardless of their disabilities and abilities to co-inhabit the same classrooms and have access to the same form of education and educational resources. It provides a solid foundation for the fight against discrimination and unfairness in the system. Inclusive education has the potential to eliminate all discriminatory tendencies in the society and it should be adopted.

## References

- Adibsereshki, N., & Salehpour, Y. 2014. Peer acceptance of students with and without inclusion experience towards students with special needs in unisex schools of Tehran. *Education*, 313, 42(6), pp. 575–588.
- Ahmad, A. 2010. *Inclusive education for children with special needs: Problems and prospects*. A paper presented at The 11th National Council for Exceptional Children's Annual Conference. Okene.

- Ainscow, M. 2014. Inclusive education for students with disabilities in Nigeria: Benefits, challenges and policy implications. *International Journal of Special Education*, Vol. 3(4), 1117.
- Al Ju'beh, K. 2015. *Disability inclusive development toolkit*. Bensheim: CBM. [skatīts 04.03.2020]. Pieejams (Accessed): <http://www.cbm.org/article/downloads/54741/CBM-DID-TOOLKIT-accessible.pdf>
- Anaduaka, G. & Okafor, H. 2013. *Universal basic education: A flagship Programme of the Federal Government of Nigeria*.
- Badza, A. M., & Tafangombe, J. 2010. *Inclusion and the Zimbabwean Situation*. Harare: Zimbabwe Open University.
- Berhanu, D. S. 2015. Psychosocial challenges of women with disabilities in some selected Districts of Gedeo Zone, SNNPR. *International Journal of Criminal Justice Sciences*, Vol. 10(2), Dilla, Ethiopia.
- Burstein, N., Sears, S., Wilcoxon, A., Cabello, B., & Spagna, M. 2004. Moving toward inclusive practices. *Remedial and Special Education*, Vol. 25(2), pp. 104–116.
- Charles, H. J. 2013. Teaching special needs: integration and reference. *Journal of Advocacy and Rehabilitation of Special Education*, Vol. 2(4), pp. 30–33.
- Chiwandire, D., & Vincent, L. 2019. Funding and inclusion in higher education institutions for students with disabilities. *African Journal of Disability*, Vol. 8(0), pp. a336.
- Cornelius-Ukpepi, B. U., & Opuwari, O. S. 2019. Determinants of Effective Implementation of Inclusive Education at the Basic Education Level in Nigeria. *British Journal of Education*, Vol. 7(8), pp. 34–44.
- Croft, A. 2010. *Including disabled children in learning: Challenges in developing countries*. Create pathways to access: Research monograph No. 36, University of Sussex, Falmer, Brighton BN1 9RH, United Kingdom.
- DFID. 2000. *Disability, poverty and development*. DFID. [skatīts 04.03.2020]. Pieejams (Accessed): <http://www.make-developmentinclusive.org/docsen/DFIDdisabilityPovertyDev.pdf>
- Dibu, S. R. 2015. *Challenges of mainstreamed visually impaired students enrolled in University of Maiduguri, Nigeria*. Unpublished Manuscript.
- Ejere, E. I. 2011. An examination of critical problems associated with the implementation of the Universal Basic Education (UBE) programme in Nigeria. *International Educational Studies*, Vol. 4(1), pp. 221–129.
- Eskay, M. 2009. *Special education in Nigeria*. Koln, Germany: Lambert Academic Publishing.
- Etuk, N. K., Ering., A. & Ajake, F. 2012. *Mid-term evaluation of the EFA fast track Initiative Country Case Study: Nigeria*. Abuja: FTI-Nigeria Report Document.
- Eunice, L. A., & Orodho, J. A. 2014. Effective provision of inclusive education: Coping with constraints in public secondary schools in Rongo District, Migori County, Kenya. *Journal of Education and Practice*, Vol. 5(18).
- Eunice, L. A., Nyangia, E. O., & Orodho, J. A. 2015. Challenges facing implementation of inclusive education in public secondary schools in Rongo Sub-County, Migori County, Kenya. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, Vol. 20(4), pp. 39–50.
- Federal Republic of Nigeria. 2013. *National Policy on Education Section 10: Special Needs Education*. Abuja, Nigeria NERDC.
- Federal Republic of Nigeria 2013. *National Policy on Education*. 4th edition, NERDC press.
- Groce, N., Kett, M., Lang, R., & Trani, J. F. 2011. Disability and poverty: the need for a more nuanced understanding of implications for development policy and practice. *Third World Quarterly*, Vol. 32(8), pp. 1493–1513.
- Hardman, M. I., Drew, C. L., & Engan, M. W. 1996. *Human exceptionality society school and family*. 6th Edition. Boston: Allyn and Bacon.
- Ibok, R. L. 2015. Reformation of primary school curriculum: A panacea for social change for 21st century. *Journal of Education Research*, Vol. 4(2), pp. 1–17.



- Jolleya, E., Lynch, P., Virendrakumara, B., Rowec, S., & Schmidta, E. 2018. Education and social inclusion of people with disabilities in five countries in West Africa: a literature review. *Disability and Rehabilitation*, Vol. 40(22), pp. 2704–2712.
- Mapuranga, B., & Nyakudzuka, J. 2014. The Inclusion of children with mental disabilities: A teacher's perspective. *International Journal of Humanities Social Sciences and Education (IJHSSE)*, Vol. 1(2), pp. 65–75.
- Michael, E., & Oboegbulem, A. 2013. Learners with disabilities in an inclusive education Setting in Nigeria: Implications for Administrators. *US-China Education Review B*, Vol. 3(5), pp. 313–318.
- Mitra, S. 2006. The capability approach and disability. *Journal of Disability Policy Studies*, Vol. 16(4), pp. 236–247.
- Mitra, S., Posarac, A. & Vick, B. 2013. Disability and poverty in developing countries: A multidimensional study. *World Development*, Vol. 41, pp. 1–18.
- Mont, D. 2014. *Employment policy approaches and multisectoral implementation in low-and middle-income countries*. In J. Heymann, M.A. Stein, & G. Moreno (Eds). Disability and equality at work. New York: Oxford University Press.
- Morgon Banks, L., & Polack, S. 2014. *The economic costs of exclusion and gains of inclusion of people with disabilities: Evidence from low- and middle-income countries*. CBM, International Centre for Evidence in Disability, London School of Hygiene & Tropical Medicine. [skatīts 04.03.2020]. Pieejams (Accessed): <http://disabilitycentre.lshtm.ac.uk/files/2014/07/Costs-of-Exclusion-and-Gains-of-Inclusion-Report.pdf>
- Mukhopadhyay, S., Nenty, H. J., & Abosi, O. 2012. Inclusive Education for Learners with Disabilities in Botswana Primary Schools. *SAGE Open*, pp. 1–9.
- Okwudire, A. M., & Okechukwu, O. 2018. Inclusive education prospects for Children with autism and challenges for educational planners. *The Exceptional Child*, Vol. 10(2), pp. 370–377.
- Oluigbo, R. 1986. *Statistics of special education development in Nigeria, 1986: A case study*. Lagos, Nigeria: Federal Ministry of Education, Special Education.
- Otor, D. 2015. Attitudes toward Inclusive Education in Africa Scale (ATIAS): An instrument to measure teachers' attitudes toward inclusive education for students with disabilities. *Journal of Research and Development in Education*, 5, pp. 1–15.
- Peters, S. 2004. *Inclusive education: an EFA strategy for all children*. World Bank Michigan, USA.
- Rimmerman, A. 2013. *Social inclusion of people with disabilities: National and international perspectives*. CUP.
- Rischewski, D., Kuper, H., Atijosan, O., Simms, V., Jofret-Bonet, M., Foster, A., & Lavy, C. 2008. Poverty and musculoskeletal impairment in Rwanda. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 102, pp. 608–617.
- Ryndak, D. L., Jackson, L., & Billingsley, F. 2000. Defining school inclusion for students with moderate to severe disabilities: What do experts say? *Exceptionality*, Vol. 8(2), pp. 101–116.
- Saliho, J. & Jamil, T. 2015. *Widening participation for social justice: Poverty and access to Education*. Paris: Kaven Publication.
- Santoli, S. P., Sachs, J., Romey, E. A., & McClurg, S. 2008. A successful formula for middle school inclusion: Collaboration, time, and administrative support. *Research in Middle Level Education Online*, Vol. 32(2), pp. 1–13.
- Schulze, M. 2010. *Understanding the UN convention on the rights of persons with disabilities*. Handicap International. [skatīts 04.03.2020]. Pieejams (Accessed): [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/HICRPDManual2010.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/HICRPDManual2010.pdf)
- Schwab, S., Gebhardt, M., Krammer, M., & Klicpera B. G. 2015. Linking self-rated social inclusion to social behaviour. An empirical study of students with and without special education needs in secondary schools. *European Journal of Special Needs Education*, Vol. 30(1), pp. 1–14.
- Sedeto, M. H., & Dar, M. J. 2019. Socio-Economic Challenges of Persons with Disabilities: A Case Study of Ethiopia. *Global Journal of Human – Social Science: C Sociology & Culture*, 19(1).
- Sightsaver, C. O. 2011. Education and civic responsibility: can the Schools Compensate for the Nigeria society? *Nigerian Journal of Curriculum and Instruction*, Vol. 11(1), pp. 31–36.

- Striully, C. J. 2016. *The complete guide to special education: study of differences*. Port Harcourt: TNDPRESS.
- Tony, S. T. 2015. *Role of Social Studies in development of good citizenship of secondary school students*. Unpublished M. Ed thesis, University of Lagos.
- Trani, JF. & Loeb, M. 2012. Poverty and disability: a vicious circle? Evidence from Afghanistan and Zambia. *Journal of International Development*, Vol. 24(S1), pp. S19–S52.
- Udo, T. O. 2012. Inclusive education in implementation of Universal Basic Education in Oyo State. *Journal of Education Research*, Vol. 8(8), pp. 55–89.
- Ugwu, C. J. 2015. *Special education study of differences*. Port-Harcourt: ND press, Rumuobiakani Port harcourt.
- UNCRDP. 2006. *Convention on the rights of persons with disabilities and optional protocol*. New York: UN [skatīts 04.03.2020]. Pieejams (Accessed): <http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>
- UNESCO 2000. *Dakar framework for action*. Paris.
- UNESCO 2009. *Defining an inclusive education agenda: Reflections around the 48th session of the International Conference on Education*. Geneva: UNESCO IBE.
- UNESCO 2011. *Policy Guidelines on Inclusion in Education*. Paris, France. Retrieved from [skatīts 04.03.2020]. Pieejams (Accessed): <http://unesdoc.unesco.org/images/0017/001778/177849e.pdf>
- UNICEF 2012. *World conference on special needs education access and quality Salamanca*.
- UNICEF 2013. *Children and young people with disabilities*. Disabilities Fact sheet – UNICEF. [skatīts 04.03.2020]. Pieejams (Accessed): <https://www.unicef.org>.
- United Nations 2006. *Convention on the rights of persons with disabilities*. New York.
- WHO & World Bank. 2011. *World report on disability*. Geneva: WHO. [skatīts 04.03.2020]. Pieejams (Accessed): [http://www.who.int/disabilities/world\\_report/2011/report.pdf](http://www.who.int/disabilities/world_report/2011/report.pdf).
- Woodburn, H. 2013. Nothing about us without civil society: The role of civil society actors in the formation of the UN Convention on the Rights of Persons with Disabilities. *Political Perspectives*, Vol. 7(1), pp. 75–96.
- World Health Organization 2011. *World report on disability*. Retrieved from: [skatīts 04.03.2020]. Pieejams (Accessed): [http://www.who.int/disabilities/world\\_report/2011/en/](http://www.who.int/disabilities/world_report/2011/en/)
- Yetneberish, N. 2013. *General overview of Disability in Ethiopia*. ECDD.

**8. STARPAUGSTSKOLU PEDAGOĢIJAS UN  
IZGLĪTĪBAS ZINĀTNES MAĢISTRANTŪRAS LASĪJUMI  
“INOVĀCIJAS UN TRANSFORMĀCIJA  
SKOLOTĀJU IZGLĪTĪBĀ” /  
8<sup>TH</sup> INTER UNIVERSITY PEDAGOGY AND  
EDUCATIONAL SCIENCE MASTER’S DEGREE  
READINGS “INNOVATIONS AND TRANSFORMATION  
IN TEACHER EDUCATION”**

**POSSIBILITIES FOR DETERMINATION OF  
HEALTHY LIFE STYLE HABITS AMONG YOUTH**

**Aļona Pavlova**

Daugavpils University, Parādes street 1, Daugavpils, Latvia, LV-5401, [alse2@inbox.lv](mailto:alse2@inbox.lv)

**Abstract**

**Possibilities for determination of healthy life style habits among youth**

**Key Words:** *healthy lifestyle, habits, students, questionnaire*

Nowadays one of the most topical problems among young people is the right approach of following a healthy lifestyle. As one of the main reasons for society, the author could mention the rapid introduction of fast food services and new technologies into the life of young people. This generally could be reflected in youth healthy diet, physical activities and daily routine.

The aim of the research it self is to provide suggestions for the improvement of the content of the Rezekne Secondary School No.3 basic school curriculum (grades 7) in healthy lifestyle training.

During the development of the questionnaires, two pilot researches were conducted, where questionnaires were used to test questionnaires for young people's self-esteem, parents and educators' assessment of healthy lifestyle habits. The first pilot research was conducted in January 2020 and the second in February. Pilot researches were organized in Rezekne Secondary School No. 3. The first pilot research involved 5 pupils of 7th grade, 5 parents of these pupils and 5 teachers of this school. The second pilot research involved 10 pupils of grade 7, 10 parents and 10 teachers of this school. The content of the Healthy Lifestyle questionnaire for young people is based on scientific knowledge about healthy lifestyle. To obtain more accurate information, were made corrections of the questionnaires, which were based on the analysis of the obtained questionnaire results.

The results of the research indicate that after the first pilot research, it was necessary to make corrections to the questions and elaborate them with additional sub-questions in order to obtain more accurate information. The second pilot research indicated that young people had some difficulties in understanding the nature of the questions in order to answer more precisely. Therefore, some questions require minor corrections to make the question simpler and easier to understand.

The pilot researches carried out have created all the prerequisites for the final development of correct questionnaires. By implementing the developed questionnaires practically in Rezekne Secondary School No.3 it will be possible to determine healthy lifestyle habits of young people, which in Rezekne Secondary School No.3 will allow us to improve and supplement our knowledge about healthy lifestyle.

**Kopsavilkums**

**Veselīga dzīvesveida paradumu noteikšanas iespējas jauniešu vidū**

**Atslēgvārdi:** *veselīgs dzīvesveids, paradumi, studenti, anketa.*

Mūsdienās viena no aktuālākajām problēmām jauniešu vidū ir pareiza pieeja veselīga dzīvesveida ievērošanai. Kā vienu no galvenajiem iemesliem autore varētu minēt ātrās ēdināšanas pakalpojumu un jauno tehnoloģiju ātru ieviešanu jauniešu dzīvē. Parasti to var atspoguļot jauniešu veselīgajā uzturā, fiziskās aktivitātēs un ikdienas gaitās. Patstāvīgā pētījuma mērķis ir sniegt priekšlikumus Rēzeknes 3. vidusskolas mācību programmas satura uzlabošanai veselīga dzīvesveida apmācībā.

Anketas izstrādes laikā tika veikti divi eksperimentālie pētījumi, kur anketas tika izmantotas, lai pārbaudītu anketas jauniešu pašnovērtējumam, vecākiem un pedagogiem veselīga dzīvesveida paradumu novērtēšanai. Pirmais eksperimentālais pētījums tika veikts 2020. gada janvārī, bet otrs – februārī. Pilotpētījumi tika organizēti Rēzeknes 3.

vidusskolā. Pirmajā eksperimentālajā pētījumā piedalījās 5 7. klašu skolēni, 5 šo skolēnu vecāki un 5 šīs skolas skolotāji. Otrajā eksperimentālajā pētījumā piedalījās 10 7. klases skolēni, 10 vecāki un 10 šīs skolas skolotāji. Jauniešiem paredzētā veselīga dzīvesveida anketas saturs ir balstīts uz zinātniskām atziņām par veselīgu dzīvesveidu. Lai iegūtu precīzāku informāciju, tika veiktas anketu korekcijas, kuru pamatā bija iegūto anketēšanas rezultātu analīze. Pētījuma rezultāti norāda, ka pēc pirmā eksperimentālā pētījuma bija nepieciešams veikt labojumus jautājumos un papildināt tos ar papildu apakšjautājumiem, lai iegūtu precīzāku informāciju. Otrajā eksperimentālajā pētījumā tika norādīts, ka jauniešiem bija zināmas grūtības izprast jautājumu būtību, lai precīzāk atbildētu. Tāpēc dažiem jautājumiem nepieciešami nelieli labojumi, lai jautājumu padarītu vienkāršāku un saprotamāku. Veiktie eksperimentālie pētījumi ir radījuši visus priekšnoteikumus pareizu anketu galīgajai izstrādei. Īstenojot izstrādātās anketas praktiski Rēzeknes 3. vidusskolā, būs iespējams noteikt jauniešu veselīga dzīvesveida paradumus, kas Rēzeknes 3. vidusskolā ļaus uzlabot un papildināt zināšanas par veselīgu dzīvesveidu.

## Introduction

According to the observations of the author, the following problems can be identified:

1. Young people do not understand and are not interested in organizing a healthy lifestyle in their daily lives.
2. There is not enough purposeful, systematic work with youth in school, family, promotion of healthy lifestyle and creation of healthy eating habits.
3. Young people are not aware of the consequences of restricting the use of unhealthy products and of restricting access to them, just as the desire for unhealthy products is as strong as it suppresses the need for conscientiousness.
4. In school, in the family and among youth, there is insufficient talk about promoting physical activity, as well as there is no talk about healthy eating and lifestyle.

The author believes that young people are not sufficiently informed in school, in the family about an active, healthy lifestyle, as well as in the surrounding everyday environment, there are enough positive examples to encourage the introduction and observance of a healthy lifestyle. Young people like to prefer a variety of quick-cooked foods, which results in problems such as being overweight, and in the further course they have diseases that are associated with acne, heart, etc. It has been extensively studied and confirmed that the food offered by fast food companies has an effect on physical health, indicating the risk of developing type 2 sugar diabetic, obese, as well as irritating the heart, blood vessels, heart and blood vessels. c. (Oberst, 2017)

Young people should have the opportunity to choose and analyze the environment – how accessible is the range of fast food company services, the life and food of parents and their example. In England, there is a growing number of adults and young people who take home or take away food at least once a week. (Tedsone, 2016)

In the United States, young people belonging to the millennium generation spend 45% of their food budget on food outside the home. (Butler, 2015) As well, many young people currently lack physical activity and rest regimen.

An important role in maintaining the health of young people is the misunderstanding of a healthy lifestyle. This understanding was formed and is being developed in childhood and school

age. Great attention needs to be paid to training of well-trained health education teachers. When teaching health education in schools, teachers should not only tell about a healthy lifestyle, but also set and try to set a personal example so that students can follow them. (Proškuvienė et al, 2004).

**The aim of the study:** To investigate whether young people have sufficient support in school and family to promote a healthy lifestyle.

**Research methodology:**

- Mixed methods approach study.
- Sociological methods – observations, survey, processing of actual materials.
- Analysis of literature sources.
- Document analysis.

**Discussion**

Habit is a feature of a person's personality, but in literature, there is no unified view among psychologists not only on the theory that explains the essence of personality, but also on its definition. Based on the vocabulary of pedagogy, one can conclude that what is done in action is what is often repeated and automated, becoming a necessity of life.

It must be emphasized that habit is the basis for formation of attitudes, moreover, attitude is what constitutes the experience of experience, knowledge acquisition and will in the unit of effort. Thus, the attitude and will that is formed through experience, knowledge, decision-making and realization of action are some of the elements in the system of formation. It is involuntarily called a mental process, which manifests itself in the actions of a conscious and purposeful person and is associated with overcoming difficulties. Analyzing the will as a psychological process, I can distinguish several steps in it. In the simplest acts of the will, there are only two: the goal setting and implementation. Since such actions are associated with a great deal of effort, some psychologists do not consider them to be an act of will, but only a purposeful and conscious act.

For young people who dedicate part of their time to active lifestyles, health, success in sport and training, they need simple preconditions: a good diet, a healthy environment and a rational daily routine. Adults and children themselves need to work hard to ensure that these preconditions are met. The diet should be adequate for the needs of the body and be in a sufficient quantity.

A child begins to push himself into a sedentary lifestyle in early childhood, as she does not yet know how to read and count, but has already learned to play games. Movement continues to develop and strengthen at home and at school. Until then, serious health threats are being created for a lifetime (Jankovskis, 2009).

Maintaining and improving physical activity is a prerequisite for health at any age, but especially for children. It has been proven that a physical activity plays a leading and decisive role in human development and the maintenance of a healthy lifestyle. It manifested itself in life of a

child during the period of adulthood and development at different ages, as well as in the life of an adult (Mauriņa, 1999).

School, as a place where the student passes the most time of the daytime, is a very important chain link in order to give students the best support, information and tools to invite healthy life style habits in to their daily routines. A positive emotional background is an important part of school pedagogical practice. Students' emotions in performing physical activities and interest in physical activities in the context of physical activity are essential elements in the formation of a paradigm. On the part of the sports teacher, both emotions and interests can be promoted by emphasizing the development of a positive micro-environment (in class), the formation of a constructive resilience, and the development of a positive micro-environment.

The author conducted a survey to help investigate healthy life style habits of youth – The young people of Rezekne Secondary School No. 3, 7th grade, parents of these young people and school teachers took part in the survey created by the author. The results of the survey were answered by 10 students, 10 parents of these students and 10 teachers. Since the sample size of the answers obtained from each group of respondents is the same, it is possible to perform a quantitative comparison of the answers to the sample samples. The total number of respondents according to all groups of respondents in total was 30 respondents.

Based on the answers provided by 10 respondents (in the group of parents), 50% of respondents included the topic “repetitive and wholesome nutrition” in their daily conversations with their children, as did 70% of respondents in the group of teachers answered to include the theme of “a healthy and wholesome diet” in their classes. 60% of parents explain to their children on a daily basis how important it is to eat regular meals, while only 10% of teachers talk about the importance of regular meals. 50% of parents emphasize that regular physical activity is important for the development of human organs, but only 20% of teachers talk about physical activity and its significance in human life in their classes. In general, it is possible to conclude that support is provided to young people, but that is only a partial of the support that could be provided for to youth in regards to healthy life style habits.

Based on the answers provided by 10 respondents (in the group of students), 80% of respondents know what a healthy diet is, but only 40% of respondents use a correct and complete diet on a daily basis. Although no answer was received about someone not knowing what a healthy diet is, unfortunately, 10% of students have answered that they do not follow a proper and complete diet. 70% of students know that regular physical activity can have a detrimental effect on the human body. However, only 50% of students like to attend sports classes at school regularly. Although most students are aware of the importance of regular physical activity, 20% of respondents answered that they are reluctant to go to sports class. 70% of students answered that they know the

meaning of the term “day mode”, but only 20% of all respondents in the group of students follow a different day mode. This is a huge affliction, as evidenced by a very negative trend among young people. Based on these statistical data, this is possible to conclude that only half of the young people, or even a little bit less are able to follow a healthy lifestyle on a daily basis, even though they know about its significance and positive effect on the organism.

## **Conclusions**

Based on the obtained results, this is possible to conclude that in Rezekne Secondary School No. 3, students know what a healthy lifestyle is, but they do not always pay attention to it, as they also know the meaning of the term “Day mode”, but it is often difficult to observe it. Pupils enjoy attending sports lessons and are happy to try to do sports outside of school hours. The responses of parents and teachers show a similar trend, and more scepticism about the students knowledge and life style habits is observed. The responses will allow teachers in Rezekne Secondary School No. 3 to enrich the curriculum with topics on a healthy lifestyle, as well as to encourage young people to obtain information on a healthy and active lifestyle. It would be necessary for students' parents to rethink what habits to introduce in the family, to encourage young people's desire to be healthy and active, to support them by all possible means.

Nowadays, young people are given great opportunities to attend various health-promoting events that promote a healthy lifestyle, develop and introduce healthy life style habits into their lives. But young people don't want to visit them. Many young people simply do not want to be informed, so the author believes that schools must have access to and provide sufficient information about the kind of activities that teachers also need to teach their students.

Students' understanding of a healthy lifestyle is based on the stereotypes accepted in the society, separate components of a healthy lifestyle are listed, with the emphasis on physical activity and the importance of healthy lifestyle, healthy eating. If more information around us would involve the message that being healthy is beneficial, good and worthy, then maybe youth would slowly take it into account and start acting towards getting their life on healthier tracks.

Parents have to include more everyday conversation topics about healthy food, physical activities while communicating with their children. When that would be implemented, then positive behaviour from the parents would have a huge effect on youth. By seeing others do taking care of their health, that benefits the quality of their lives and may impact how youth sees healthy lifestyle as such.

## References

- Butler, N. 2018. The facts of fast food on the body. [skatīts 30.05.2020]. Pieejams (Accessed): <https://www.envirotech-online.com/news/business-news/44/breaking-news/how-does-fast-food-impact-the-environment/48286>
- Jankovskis, G., Beldava, I., Līviņa, B., Strēlis, K., Čūriškis, A. 2009. Skelets kustībā un veselība. Rīga: LU Akadēmiskais apgāds.
- Mauriņa, L., Tripāne, T. 1999. Ieteicamās fiziskās aktivitātes bērniem ar dažādiem veselības traucējumiem. Rīga: Madris.
- Oberst, L. 2017. Fast Food Health Risks That Will Shock You. [skatīts 30.05.2020]. Pieejams (Accessed): <https://foodrevolution.org/blog/food-and-health/fast-food-health-risks/>
- Omarova, S. 2003. Cilvēks runā ar cilvēku. Rīga: Kamene.
- Proškuvieni, R., Zlatkuvieni, V., Černiauskieni, M., Kalinkevičieni, A. (2004) Health Education in the Public. Rīga: Petrovskis.
- Tedstone, A. 2016. Obesity and the environment – the impact of fast food. [skatīts 30.05.2020]. Pieejams (Accessed): <https://publichealthmatters.blog.gov.uk/2016/10/21/obesity-and-the-environment-the-impact-of-fast-food/>