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#### DAUGAVPILS UNIVERSITĀTES ZINĀTŅU DAĻA SCIENCE DEPARTMENT OF DAUGAVPILS UNIVERSITY

## DAUGAVPILS UNIVERSITĀTES 64. STARPTAUTISKĀS ZINĀTNISKĀS KONFERENCES RAKSTU KRĀJUMS

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Daugavpils Universitātes 64. 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 64<sup>th</sup> International Scientific Conference of Daugavpils University*.

Proceedings of the 64<sup>th</sup> International Scientific Conference of Daugavpils University are published in three parts: part A. Natural sciences; part B. Social Sciences; part C. Humanities.

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## IZGLĪTĪBAS ZINĀTNES UN PSIHOLOĢIJA / EDUCATIONAL SCIENCES AND PSYCHOLOGY

# CARING FOR FAMILY MEMBERS SUFFERING FROM CHRONIC HEALTH DISORDER: LITERATURE REVIEW

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#### Abstract

#### Caring for family members suffering from chronic health disorder: review of the literature

Key Word: care, family caregivers, chronic health disorders, quality of life, literature review

Chronic mental or physical illness of a family member causes significant disruption of the family system, has a significant impact on the quality of life of all involved and causes a heavy emotional and psychological burden. Recently, the interest of researchers in the role of people who support their family members with chronic health problems has increased significantly. This support is linked to the social, psychological, and emotional context of the caregiver's life, as well as ways to combine caregiving with work life and successful cooperation with healthcare professionals. To better understand the themes, methodologies, and results of the research in the global context, it is necessary to review the literature on psychological studies that focus on caregivers of their long-term chronically ill family members. The literature review aims to compile and analyze studies on the social, psychological, and emotional needs and quality of life of chronic patients and their family caregivers. The article will review the main fields of research on this topic, including areas such as chronic patients and their needs, stress, disease management, and care strategies in the family, quality of life of family caregivers, psychological well-being and resilience, and relationships between caregiver and dependent. Care of a chronic patient has a significant impact on the general family system, internal and external relations, and the situation of life of all involved. However, people can find healthy solutions in difficult life situations, so it is important to consider the resilience of caregivers. Studies have already identified a variety of factors that affect the quality of life of caregivers of chronically ill family members. The results of this investigation will be used to select an appropriate methodology for a future empirical study related to the care of family members suffering from chronic health disorders in Latvia.

#### Kopsavilkums

#### Ar hroniskiem veselības traucējumiem sirgstoša tuvinieka aprūpe: literatūras pārskats

Atslēgvārdi: aprūpe, aprūpējošie ģimenes locekļi, hroniski veselības traucējumi, ilgstoši sasirgušie tuvinieki, dzīves kvalitāte, literatūras pārskats

Ģimenes locekļa hroniska psihiska vai fiziska saslimšana bieži rada nozīmīgus traucējumus ģimenes sistēmā, kas būtiski ietekmē visu iesaistīto dzīves kvalitāti, radot lielu emocionālo un psiholoģisko slodzi. Pēdējos gados ir augusi pētnieku interese par tuvinieku lomu, sniedzot atbalstu ģimenes locekļiem ar hroniskiem veselības traucējumiem. Šāda atbalsta sniegšana ir saistīta ar aprūpētāja sociālo, psiholoģisko un emocionālo dzīves kontekstu, kā arī iespējām apvienot aprūpi ar darba dzīvi un veiksmīgu sadarbību ar medicīnas darbiniekiem. Lai gūtu priekšstatu par pētījumu tēmām, pētījumu metodoloģiju un rezultātiem pasaules kontekstā, nepieciešams veikt literatūras apskatu par pētījumiem psiholoģijas jomā saistībā ar ģimenes locekļiem, kuri aprūpē savus ilgstoši hroniski slimojošos tuviniekus. Literatūras pārskata mērķis ir apkopot un izanalizēt pētījumus par hronisko slimnieku un viņus aprūpējošo ģimenes locekļu sociālām, psiholoģiskām un emocionālām vajadzībām un dzīves kvalitātes nosacījumiem. Rakstā tiks aplūkoti galvenie šīs tēmas izpētes virzieni, ietverot tādas jomas kā hroniskie slimnieki un viņu vajadzības, stresa, slimības pārvarēšanas un aprūpes stratēģijas ģimenē, aprūpējošie tuvinieki un viņu dzīves kvalitāte, psiholoģiskā labizjūta un dzīvesspēks, aprūpētāja un aprūpējamā sociālo attiecību analīze. Hroniska slimnieka aprūpe būtiski ietekmē ģimenes kopējo sistēmu, iekšējās un ārējās attiecības, kā arī visu iesaistīto dzīves situāciju. Pētījumi liecina, ka cilvēki smagās dzīves situācijās ir spējīgi rast tām veselīgus risinājumus, tādēļ ir svarīgi ņemt vērā arī aprūpētāju dzīvesspēka nozīmi. Pētījumi par aprūpējošiem ģimenes locekļiem jau identificējuši daudzveidīgus faktorus, kas ietekmē hroniski sasirgušo tuvinieku aprūpētāju dzīves kvalitāti. Šī literatūras pārskata rezultāti tiks izmantoti, lai izvēlētos atbilstošu metodoloģiju turpmākajam empīriskajam pētījumam par ar hroniskiem veselības traucējumiem sirgstoša tuvinieku aprūpi Latvijā.

#### Introduction

Research in Europe and the USA focuses not only on the well-being of the doctor or patient but also on the well-being and psychological care of the patient's close caregivers.

In addition to the treatment of the relative's chronic illness, the well-being and adaptability of other, relatively healthy, relatives in a difficult everyday situation are also important. Access to the necessary information and social support, both from the healthcare system and socially and psychologically, is important (Scherer & Lampert, 2017).

In Latvia, there is little research on family caregivers, so it is important to study this group of participants and their experiences; there is also a stigma and lack of public awareness of the mental and physical state of the caregiver, so research in this field would also help improve the understanding of the problem among all the professionals involved, including clinicians, promoting communication, and preventing emotional burnout of the family caregiver.

#### **Good Health and Healthcare**

Today, health is understood as a multidimensional construct and many approaches or models to understanding health exist simultaneously. Health is more than the absence of disease. Social, psychological, and cultural factors are vital dimensions of health and their impact on health is well documented in the scientific literature. For example, WHO programs (World Health Organisation) programs are effective because they consider social and cultural factors and scientific research findings when designing interventions. This approach implies a deep and detailed understanding of the conditions and environment in which diseases develop, including socioeconomic factors, community dynamics, social support, mutual respect, access to health infrastructure, etc. Cultural understanding and competence, taking into account contextual, social and nursing care conditions, also lead to more effective treatment services (Clark, Ghiara & Russo, 2019).

Health can be defined as a state or process throughout a person's life. For example, as mentioned above, health is characterised by the absence of disease, a person's ability to function effectively with minimal medical care, and a person's positive appraisal of his or her health status (Howell, Kern, & Lyubomirsky, 2007 as cited in Mārtinsone & Sudraba, 2019). Good health is defined as a state of well-being, a general good, and a valuable resource for all sectors of society. Good health is an indispensable aspect of life for every individual, family, and community, as well as for the economic and social development of society (WHO, 2013). The biopsychosocial model of health and its approach are also central to contemporary health research, suggesting that chronic diseases depend on the interaction of multiple factors (biological, psychological, social) (Zārde & Bus, 2019).

One of the major public health challenges is the stigma that still exists in society towards people with mental or rare chronic somatic illnesses, the lack of health literacy, and the lack of serious or delayed referral for help for health problems (Scherer & Lampert, 2017).

However, in recent years, an increasing importance has been placed on public awareness of health literacy or psychological support to support others in their health problems.

#### People with Chronic Health Conditions, Family and Professional Care

A chronic mental or physical illness in a family member often causes significant disruption in the family system, affecting the quality of life of all involved and causing great emotional strain. Daily care, the sense of responsibility for the future, the loss of opportunities for the ill person and for career development, lack of leisure, increased expenses, and a difficult psychological situation reduce the quality of life in these families (Fleischmann & Klupp, 2004).

Over the past 50 years, there has been a growing interest in research on the role of relatives in providing support and care to their family members affected by a serious chronic illness. The provision of support is closely linked to the social, psychological, and emotional context of life, as well as to the possibilities of combining care for the family member with work life and successful cooperation with health professionals.

This review of the literature explores the main research areas that characterize this topic, including chronic patients, their needs, stress, coping and care strategies, caring relatives and professionals, quality of life, psychological well-being, life force, personality and social relationships, social relationships, and interpersonal communication.

#### **Aim and Research Questions**

In Latvia, relatively little research has been conducted on the role of psychological support and quality of life for family members who voluntarily and long-term care for their chronically ill relatives. One example of such research that focuses specifically on mental health is the article "Patient satisfaction with mental health care in Riga" by I. Broka, I. Damberga, and I. Bite (2016).

As recent scientific advances come mainly from original research, a review of the literature can provide new integrated insights into the problem. The need for a literature review on the author's chosen research topic was determined by the large number of international scientific publications over the past fifty years. The literature review included a regular review of recent literature summaries, meta-analyses, and individual psychological research publications that evaluated the effectiveness of an intervention or prevention program in a mental health, care, social services, or human resources context (Pipere, 2021).

To gain insight into the research methodology and findings (outcomes) used in the relevant studies, a review of the literature on psychological support options for family members caring for their long-term chronically ill loved ones, as well as the experiences of care professionals, is needed. To focus the review and relate it to the research topic, the following research questions were identified:

1. What are the quality of life characteristics described in scientific publications about family members' experiences of caring for their chronically ill relatives (Multiple Sclerosis, oncological, cardiological, mental illness, functional impairment, dementia, etc.)?

- 2. How is the process of care for the ill relatives itself, its structure, content, and social context reflected in scientific publications?
- 3. What research methodology is used in publications on the topic?

#### Methods and Procedure of the Literature Review

The review of literature contained in this article was based on the following methods and procedures:

- A systematic literature and information extraction and analysis were applied.
- APA PsychNet, Google Scholar, Thieme-Verlag (Germany), Scopus, EBSCO.
- The literature searches were based on the following key words: caregiving, family caregivers, chronic health conditions, long-term ill relatives, quality of life.

Selection and inclusion criteria: 1) publication period: 2009–2022, 2) articles in Latvian, English, or German, 3) relevance to the topic of the study (family members' experience of long-term care for their chronically ill relative; the chronically ill relative's experience and the expert clinician's experience in the context of the disease situation).

- The sample of 46 articles was selected according to the topic of the study, providing information on research and development trends in the chosen topic.

The literature review was also based on the conclusions and recommendations of scientific articles related to interdisciplinary care, psychological, and quality of life of chronic patients and their relatives (carers) in long-term care processes. The remainder of the paper will sequentially address the answers to the research questions posed above.

#### **Quality of Life for Family Caregivers**

The concept of quality of life is a complex, multidimensional, and multidisciplinary construct with many interpretations. Quality of life is essentially a subjective sense of well-being that includes physical, psychological, social, and spiritual dimensions (Escobar-Ciro, 2012).

Quality-of-life research observes and records the multiple social changes taking place in society, informing society accordingly about the causes and predictions related to these social changes.

Quality of life and psychological well-being have become particularly important in recent decades in Latvia, and in this context also in social research on the quality of human life. Health is recognized as one of the main factors that characterizes quality of life. For example, the NAP (National Development Plan, 2006) defines the concept of quality of life as follows: "Quality of life is a complex social, economic, and political concept that covers a wide range of living conditions of a country's population", as well as the possibility of living a long and healthy life. Health is described as a value and resource related to quality of life and as an important indicator of human development.

Whether quality of life is stable, has changed or deteriorated over the course of long-term care can be observed depending on the duration of care. The social aspect of this question relates to what and how society is able or unable to accept the issues raised by the research. This includes the perception of the care recipients and their carers of their own life situation, as well as public opinion, stereotypes, and preconceptions.

Research findings suggest that the quality of life of caregivers is also important for the care they provide to their loved ones with dementia or other chronic conditions (Caqueo-Urízar, Gutiérrez-Maldonado, & Miranda-Castillo, 2009; Escobar Ciro, 2012; Fleischmann & Klupp, 2004; Hazzan, Dauenhauer, Follansbe, Hazzan, Allen, & Omobepade, 2022; Heumann, 2016).

Research has highlighted the need to provide much needed support to caregivers and people who are actually coping with their diagnoses (Angermeyer, Diaz Ruiz de Zarate, & Matschinger, 2000; Bangerter, Griffin, & Dunlay, 2018; Boston, Bruce, & Schreiber, 2011; Fraser & Warr, 2009; Fleischmann & Klupp, 2004; Hasselkus & Murray, 2020; Langschwert, 2014; Liu, Heffernan, & Tan, 2020).

The above issues were particularly important during and after the Covid -19 pandemic. An example of such research is the article "Perceptions of quality of life among family caregivers of adults with cancer" (Escobar-Ciro, 2012). This quantitative descriptive statistics study involved interviews with 209 people who had been caregivers of family members with cancer for more than three months and attended oncology support programs in four institutions in Medellin, Colombia. The PULSES rating scale (Ferell et al., 2009) and the Quality of Life – Family Version questionnaire (Ferell et al., 2009 as cited in Escobar-Ciro, 2012) were used to collect data. According to the results of the given study, the dimensions of quality of life perceived as the most affected and influenced by the participants were physical (83.2%), psychological (80.9%) and social well-being (75.6%). Spiritual dimension was the least affected (9.1%). The authors conclude that caregivers of adult cancer patients have negative perceptions of their quality of life and that nurses need to provide more support to these caregivers.

A review of the various publications on the relationship between psychological well-being, quality of life, and the care provided to family members with chronic illness shows that the most relevant research topics at the moment are related to illness types such as dementia care, care for mental disorders, chronic, oncological diseases, or palliative care. Regarding the experience of care itself and quality of life, for example, the following themes were frequently highlighted and repeated in scientific publications:

- 1) the needs of the chronically ill person;
- 2) the ability of caregivers to cope with the progressive needs of the care recipient;

- 3) awareness, communication with professionals, availability of social support, and accessibility to the carer;
- 4) unmet needs of the carer;
- 5) the carer's capacity and life force.

For example, a qualitative study on the quality of life and care of family caregivers for older people with dementia, involving 23 caregivers and analysing their interviews, concluded that the quality of life of caregivers is important specifically for the care they provide to their loved ones with dementia. The study highlights the need to provide much needed support to caregivers and older people living with dementia (Hazzan et al., 2022).

#### Process, Structure, Content, and Social Context of Care

Scientific publications reflect on the process of care itself, its structure, content, and social context. For example, in the study "Higher levels of unmet support needs in spouses are associated with poorer quality of life: a descriptive cross-sectional study in the context of palliative home care" (Norinder et al., 2021) 114 family carers completed the Carers Support Needs Assessment Questionnaire (CSNAT) and the Quality of Life in Life-threatening Illness – Family Carer Version (QOLLTI-F) and 43 of them also provided their reflections on their situation. Descriptive statistics, multiple linear regression analyzes, and qualitative content analysis were used to explore the relationship between family caregiver support needs and quality of life when caring for a spouse receiving specialized palliative care at home.

The results showed that higher levels of unmet support needs were significantly associated with a poorer quality of life. All CSNAT support scores were significantly associated with one or more quality of life scores on QOLLTI-F, except for the quality of life article related to distress about the patient's condition. However, family caregivers indicated that their life was disrupted by their relative's life-threatening illness and its consequences. The caregivers of the family most reported the need for more support for themselves to know what to expect in the future, which they also described as worried about what the illness would mean for them and the ill relative in the future. The lowest quality of life was reported in relation to the health of the relative and the physical and emotional health of the family caregiver. The authors conclude that a deeper understanding of the complexities of supporting family caregivers in palliative care could help health professionals improve the quality of life of family caregivers by uncovering their problems and concerns. Therefore, tailored support is needed for your situation (Norinder et al., 2021).

It is important to note that several studies have also focused on the importance of family caregiving, health maintenance, and healthy relationships, as well as life force (e.g. Kunzler, Skoluda, & Nater, 2018).

As the analysis of the reviewed literature shows, researchers' interest in the study of kinship care has been linked to the care experiences of family members, which in turn allow them to develop their own social support system, also to accumulate new knowledge and teaching experiences, and to persevere through the many challenges of caring for a chronically ill loved one.

In selected research articles related to the process, structure, content and social context of care, the research focuses on themes including family members' experiences and wellbeing when caring for a loved one, motivation to take responsibility for their loved ones with mental or other chronic conditions, and palliative care (Bangerter, Griffin, & Dunlay, 2018; Barratt, et al., 2018; Bengel, et al. 2003; Caqueo-Urzar, Gutiérrez-Maldonado, & Miranda-Castillo, 2009; Des Ordons, Sinuff, Stelfox, Kondejewski, & Sinclair, 2018). Other common themes include: the limits of the carer's personal strain and resilience, knowledge and information about the support on offer, experiences with institutions, psychological support and support groups for relatives, notions of self-help, and the experiences, opinions and attitudes of patients themselves and expert carers (Berg Research, 2018, Gensluckner & Holzer, 2005; Heumann, 2016, Nowack et al., 2013, Schmid et al., 2005).

#### Research Methodology and Design

In scientific publications, authors use both qualitative data, which provide information on contexts and processes, and quantitative data to investigate a given topic, as well as mixed research approaches and meta-analyses, which provide generalisations or specific results.

Research articles using qualitative methodology, mixed research methodology, and quantitative research methodology, literature reviews or meta-analyses were selected and reviewed. The samples of the studies reviewed are mainly composed of people who are closely involved in their daily lives with their chronically ill family members or relatives and their care processes – care recipients, close carers, health professionals – as experts and their experiences.

The descriptive value of the data, its variety and depth, is important in *qualitative research*, allowing the use of relatively unstructured research strategies and the generation of new concepts or theories (Howitt 2010 as cited in Zuitiņš, Pipere, & Sudraba, 2018). Qualitative research aims to elucidate the unique phenomena under study, the context and meaning of what is happening in carers' lives, their lived experiences in the fields of social and health psychology, as well as in areas that have been little explored to date. The understanding of the research process by the individuals themselves as experts in their personal and professional life experiences is important (Zuitiņš, Pipere, & Sudraba, 2018).

Qualitative research methodology, in the context of the given research topic, aims to clarify the phenomena under study, the context of the carers' living environment and the meaning of what is happening. The experiences of family members, their motivation to take responsibility for the care of their loved one with a mental disorder are relevant.

As already mentioned, qualitative research on the topic of chronically ill family members' care experiences is widely conducted worldwide. In terms of the methodology of such studies, for example, the qualitative study of carers of mentally ill family members conducted by Veltman, Cameron, & Stewart (2002) initially focused on the caregiving histories of relatives, and the authors adopted a qualitative research approach for their study, where data were collected from 20 in-depth interviews. In contrast, Fraser and Warr's (2009) qualitative study of the caregiving experiences of men in a rural area caring for their mentally ill spouse or children used a focus group approach. A qualitative study in Hong Kong on the experience of a family member with dementia (Chan, Mok, Wong, Pang, & Chiu, 2010), which demonstrates that the Asian context is as challenging as other cultures, used a phenomenological analysis approach, drawing data from four focus group interviews. In contrast, a recently published qualitative study, Voices of family caregivers of seniors with chronic illness: a window on their experiences (Bremault-Phillips, 2016), used an ethnographic design, involving two focus groups and thematic analysis of the resulting qualitative data.

Examples of qualitative research in this area can also be found in other publications (see. Barratt et al., 2018; Carter, 2008; Hazzan, Dauenhauer, Follansbee, Hazzan, Allen, & Omobepade, 2022; Hasselkus & Murray, 2020; McLennan, Doig, Rasmussen, Hutcheon, & Urichuk, 2012, etc.). The differences between qualitative and quantitative methods provide an opportunity to gain a more diverse and broader perspective on the field of study (Flick, 2002).

The essence of *quantitative* methods is reflected in positivist views of the human psyche: research considers well-defined human characteristics and assumptions that they are the same in form for all people but vary in quantity and that the extent of these characteristics can be quantified and measured. Quantitative research methods most often examine one aspect of social relationships or care in a particular occupational situation or group or measure the relationship of one aspect of care to other quantitative measures (Purvlīce, Mārtinsone, Pipere, & Bortaščenoks, 2018). Examples of the use of quantitative methods include the aforementioned study by Norinder and colleagues ((Norinder et al., 2021) or the description of the quality of life situation of caregivers in Colombia (Escobar-Ciro, 2012). Examples of quantitative research on this topic are also reported in other scientific publications (e.g. Angermeyer, de Zarate, & Matschinger, 2000; Wilms, Mory, & Angermeyer, 2004).

A *mixed-methods research* strategy involves the use of qualitative and quantitative research methods in a single study. A mixed methods research design, on the other hand, is characterized by the collection, analysis and combination of quantitative and qualitative data within a study with the

aim of solving a research problem or implementing a single research programme (Mārtinsone & Pipere, 2021).

As an example of the use of a mixed research strategy within the given topic, the authors (Bangerter, Griffin, & Dunlay, 2018) chose a sequential explanatory mixed research design where both data extraction and analysis strategies – quantitative and qualitative – are integrated in the interpretation phase (Mārtinsone & Pipere, 2021). Using this design, the study evaluated the benefits (self-efficacy) of exploring the positive experiences and self-perceptions of family caregivers of loved ones with heart failure. Caregivers were surveyed (n = 108) and qualitative semi-structured interviews with some of these caregivers (n = 16). The quantitative results of the present study indicate that spouse caregivers and caregivers with higher training and greater mastery were more likely to report higher personal benefits. The content analysis of the qualitative data revealed three themes related to caregivers' personal gain: caregiving to improve relationships, caregiving facilitates conversations about caregiving and healthy behaviors in people with heart failure, caregiving as a means to prepare caregivers for the future. The authors concluded that caregivers experience a range of positive personal benefits and can find meaning in the stressful role of caring. Carers' ability to derive significant benefits from their role can also provide significant benefits after the end of caring.

Examples of mixed methods research related to the topic can be observed in other scientific publications (Barratt et al., 2018; Bengel (u.a. Hrsg.), 2003; Kaimal, Caroll-Haskins, Mensinger, Dieterich-Hartwell, Manders, & Levin, 2019, etc.).

The results of the meta-analysis can be quantitative but also qualitative and reveal biases, strengths, and weaknesses of existing research. Meta-analysis is a quantitative research design (methodology) with the aim of quantitatively (systematically) summarizing a certain number of previous studies (publications) on a specific topic (Pipere, 2021). It is the use of statistical methods in a systematic review to integrate the results of the included studies (Mārtinsone & Pipere, 2021).

For example, a systematic review and meta-analysis (Färber & Rosendahl, 2018) included articles on life force with the aim of exploring the association between life force and mental health in patients with somatic diseases or health problems. Life force refers to an individual's ability and positive adjustment to the experience of difficulties. Maintaining mental health is generally considered a sign of successful coping with difficult life situations under adverse circumstances. Studies were included in a particular meta-analysis if they reported an association between life force, assessed using a version of the *Wagnild and Young Life Force Flexibility Scale*, and self-rated mental health. Despite substantial heterogeneity between studies, the findings suggest a strong association between life force and mental health in somatically ill people. In clinical practice, a lack

of life force as a resource for successful coping may indicate the need for psychosocial support during the treatment of somatic illness.

Meta-analyzes are also reflected in examples of other scholarly publications on similar topics (e.g. Canalhe Garcia, 2013; Harandi, Taghinasab, & Nayeri, 2017).

Literature reviews – The publications of the scientific articles reviewed often included literature reviews related to the author's chosen article topic or variations on it. For example, the authors of the 2011 study Existential suffering in palliative care settings: an integrated literature review (Boston, Bruce, & Schreiber, 2011), by searching and selecting scientific articles in different databases, thus reflect the dynamics of scientific research and its publications. For this study, a systematic approach was used as a method to identify emerging themes in the literature. Keywords existential suffering, existential pain, palliative care and end of life were searched in databases using CINAHL (1980–2009), MEDLINE (1970–2009), PsychINFO (1980–2009) and the Google Scholar search engine. The results of this comprehensive review reveal that existential suffering and deep personal distress at the end of life are some of the debilitating conditions that patients experience, and the way in which this suffering is treated in the last days is, however, not well understood. It concludes that palliative care clinicians must periodically and critically assess treatment and care options.

Examples of literature reviews on the topic are summarized in other scientific publications (see Des Ordons, Sinuff, Stelfox, Kondejewski, & Sinclair, 2018; Fleming & Ledogar, 2008; Jungbauer, Bischkopf, & Angermeyer, 2001; Lalani, Duggleby, & Olson, 2018; McKenna, Fakolade, Cardwell, Langlois, Jiang, & Pilutti, 2021; Palmer, Kavanagh, Visram, Bourke, Forrest, & Exley, 2022; Wong, Paul & Yu, 2021).

#### Conclusions

In conclusion, the aim of the paper has been achieved and all research questions have been answered. The first conclusion is that the results reflect the fact that the intentionally involved relatives provide significant support and input to the treatment process. Studies provide more insight into the feelings and psychological needs of chronically ill patients, but the quality of life of caregivers themselves is also very important and important to maintain.

A review of the various publications on the relationship between psychological well-being, quality of life of the caregiver, and the care provided to family members with chronic illness shows that particular emphasis is placed on topics related to dementia, mental disorders, chronic, oncological, or palliative care, as well as life force.

Trends in the practical application of the research suggest that medical professionals and experts need to change their views on care, as well as their perceptions and attitudes towards working with the relatives of the chronically ill person, seeing other options or approaches to care

that make a difference. The scientific articles reviewed identify health-preserving lifestyles, quality of life, and awareness as important for people with chronic health conditions and their family caregivers.

In selected scientific publications, the authors use a variety of methodological approaches to study the topic, ranging from collecting and analysing qualitative data that provide information on contexts and processes to collecting and analysing quantitative data, to using mixed research approaches that combine the advantages of quantitative and qualitative data. Meta-analyses and literature reviews are also carried out, providing generalisations or specific results.

In conclusion, it should be pointed out that values in Latvian society have also changed significantly in recent decades. In everyday life, we can observe a different attitude and a new understanding of the relationships between chronically ill people, their relatives, and professionals, as well as the importance of good communication. In a democratic society, respectful relationships and individual self-determination form the basis for living together. Personal autonomy allows for the coexistence of different lifestyles, which consequently also determines the diversity of society (Scherer & Lampert, 2017).

The results of this review of the literature will be used to develop the research methodology and design for an empirical study on family caregiving for chronically ill relatives and also including topics such as chronically ill people, their needs, stress, coping and care strategies, caring relatives and care professionals, quality of life, psychological well-being, interpesonal and social relations, analysis of social relations and mutual comunication.

#### References

Angermeyer, M. C., Diaz Ruiz de Zarate, J., & Matschinger, H. 2000. *Informations und Unterstützungsbedarf von Angehörigen psychiatrischer Patienten* [Educational and Service Needs among Relatives of Psychiatric Patients], *Gesundheitswesen*, 62, 483–486. Stuttgart, New York: Georg Thieme Verlag.

Ārstniecības likums. http://likumi.lv/doc.php?id=44108 (Skatīts 01.09.2020).

Bangerter, L. R., Griffin, J. M., & Dunlay, S. M. 2018. Positive experiences and self-gain among family caregivers of person with heart failure. *Center for the Science of Health Care Delivery, Department of Cardiovascular Medicine, and Department of Health Sciences Research*, Mayo Clinic, Rochester, Minnesota.

Barratt, S., Morales, M., Speirs, T., Al Jboor, K., Lamb, H., Mulholland, S., Edwards, A., Gunary, R., Meek, P., Jordan, N., Sharp, C., Kendall, C., & Adamali, H. 2018. Specialist palliative care, psychology, interstitial lung disease (ILD) multidisciplinary team meeting: a novel model to address palliative care needs. *BMJ Open Respiratory Research*, 5,1, p. e000360, Bristol, UK.

Bengel, J. (u.a. Hrsg.) 2003. *Chronische Erkrankungen, psychische Belastungen und Krankheitsbewältigung* [Chronical Diseases, Psychological Distress and Coping Challenges for Psychosocial Care in Medicine], Psychotherapie, Psychosomatik, Medizinische Psychologie, (*Psychter Psych Med*), 53 (2): 83–93, Originalarbeit. Stuttgart, New York: Thieme Verlag KG.

Ben-Zur, H., Duvdevany, I., & Lury, L. 2005. Associations of social support and hardiness with mental health among mothers of adult children with intellectual disability. *Journal of Intellectual Disability Research*, 49, 54–62. https://doi.org/10.1111/j.1365-2788.2005.00662.x

Berg Research, SIA 2018. Emocionālo vajadzību izpēte mērķa auditorijas segmentos: personas ar garīga rakstura traucējumiem, bērni ar funkcionāliem traucējumiem, bērni ārpusģimenes aprūpē. Rīga.

Boston, P., Bruce, A., & Schreiber, R. 2011. Existential suffering in the palliative care setting: an integrated literature review. *Division of palliative care, Department of Family Practice, University of British Columbia, Vancouver; and School of Nursing, University of Victoria, Victoria, British Columbia, Canada.* 

Brémault-Phillips, S., Parmar, J., Johnson, M., Huhn, A., Mann, A., Tian, V., & Sacrey, L. A. 2016. The voices of family caregivers of seniors with chronic conditions: a window into their experience using a qualitative design. SpringerPlus, 5, 620. https://doi.org/10.1186/s40064-016-2244-z

Broka, I., Damberga, I., & Bite, I. 2016. Pacientu apmierinātība ar psihiskās veselības aprūpi Rīgā. *Latvijas Universitātes Raksti*, 810. sēj. Psiholoģija. Rīga: LU izdevniecība.

Carter, R. 2008. Addressing the Caregiving Crisis, *Centers for Disease Control and Prevention*, Atlanta, USA. www.cdc.gov/pcd/issues/2008/jan/07\_0162.htm,

Catanzano, M., Bennett, S. D., Kerry, E., Liang, H., Heyman, I., Coughtrey, A. E., Fifield, K., Taylor, C., Dalgleish, T., Xu, L., & Shafran, R. 2020. Evaluation of mental health drop-in centre offering brief transdiagnostic psychological assessment and treatment for children and adolescents with long-term physical conditions and their families: A single-arm, open, non-randomised trial. *Child and Adolescent Mental Health*, 24(1): 25–32. https://ebmh.bmj.com/content/24/1/25

Caqueo-Urízar, A., Gutiérrez-Maldonado, J., & Miranda-Castillo, C. 2009. Quality of life in caregivers of patients with schizophrenia: a literature review. *Health and Quality of Life Outcomes*, 7, 84. https://doi.org/10.1186/1477-7525-7-84

Chan, W., Mok, C., Wong, F., Pang, S., & Chiu, H. 2010. Lived experince of caregivers of persons with dementia in Hon Kong: A qualitative study. *East Asian Archive of Psychiatry*, 20, 163 – 168. https://pubmed.ncbi.nlm.nih.gov/22348924/

Clarke, V., & Braun, V. 2015. Thematic analysis: 500 words commentary for special edition on qualitative research of the Journal of Positive Psychology (ed. by Kate Hefferon & Le Waters).

Cowen, E. L., & Wyman, P. A. 1998. Resilience in children: The nature and the importance of the concept. *Psicologia Escolar e Educacional* 2: 247–256. https://pubmed.ncbi.nlm.nih.gov/24264860/Crisp, A. H., Gelder, M. G., Rix, S., Meltzer, H. I., & Rowlands, O. J. 2000. Stigmatisation of people with mental illnesses. *British Journal of Psychiatry*, 177, 4–7. https://doi.org/10.1192/bjp.177.1.4

Dieterich, M. 2012. *Handbuch Psychologie & Seelsorge* [Handbook of Psychology and mental care]. Witten: SCM R. Brockhaus.

Des Ordons, Sinuff, T., Stelfox, H. T., Kondejewski, J., & Sinclair, S. 2018. Spiritual distress within inpatient settings – A scoping reviews of patients and families experiences. *Journal of Pain and Symptom Management*, 56(1): 122–145. https://europepmc.org/article/med/29548894

Escobar-Ciro, C. L. 2012. Perception of the quality of life of family caregivers of adults with cancer. *Investigatcion y Education en Enfermeria*, *30*(3): 320–329, Medellin. https://www.redalyc.org/pdf/1052/105224976006.pdf

Färber, F., & Rosendahl, J. 2018. *Zusammenhang von Resilienz und psychischer Gesundheit bei körperlichen Erkrankungen, Systematisches Review und Metanalyse. Originalarbeit* [The connection between resilience and mental health in the somatically ill – a systematic review and meta-analysis], *Deutsches Ärzteblatt*, Jg. 115, Heft 38. DOI: 10.3238/arztebl.2018.0621

Fleisch, E., Haller, R., & Heckmann, W. (Hrsg.)1997. *Suchtkrnakenhilfe, Lehrbuch zur Vorbeugung, Beratung und Therapie* [Help for addicts, prevention and therapy]. Weinheim und Basel: Beltz Verlag.

Fleischmann, H., & Klupp, A. 2004. *Zur Lebensqualität der Angehörigen psychisch Kranker* [Quality of Life of Relatives of Mentally Ill People]. Psychiatrische Praxis (*PsyciatPrax*), 31: 114–116. Stuttgart, New York: Georg Thieme Verlag KG.

Fleming, J., & Ledogar, R. J. 2008. Resilience, an evolving concept: A review of literature relevanttoaboriginal research. *Pimatisiwin*,6(2),7–23. https://pubmed.ncbi.nlm.nih.gov/20963184/

- Fielden, A. L., Sillence, E., & Little, L. 2011. Children's understanding' of obesity: A thematic analysis. *International Journal of Qualitative Studies on Health and Well-being*, 6(3), 10.3402/qhw.v6i3.7170. https://doi.org/10.3402/qhw.v6i3.7170
- Fraser, C., Warr, D. J. 2009. Challenging roles: Insights into issues for men caring for family members with mental illness. *American Journal of Men's Health*, *3*(1), 36–49. https://journals.sagepub.com/doi/abs/10.1177/1557988307311353
- Fredrickson, B. L. 2004. *The broaden-and-build theory of positive emotions*. The Royal Society, Departament of Psychology, University of Michigan, USA.
- Geske, A., & Grīnfelds, A. 2001. Izglītības pētījumu metodoloģija un metodes. Rīga: RaKa.
- Gensluckner, C., & Holzer, J. 2005. *Pflege aus Sicht der pflegenden Angehörigen (Laienpflege), Empirische Untersuchung bezüglisch Belastungen pflegender Angehörigen und deren Entlastungsmöglichkeiten* [Nursing from the point of view of the caring the relatives (lay care), empirical study regarding the burden on caring relatives and their relief options]. Kufstein: Gesundheits-und-Krankenpflegeschule. https://www.yumpu.com/de/document/view/4821398/pflege-aus-sicht-der-pflegenden-angehorigen-laienpflege
- Harandi, T. F., Taghinasab, M. M., & Nayeri, T. D. (2017). The correlation of social support with mental health: A meta-analysis. *Electronic Physician*, 9(9), 5212–5222. https://doi.org/10.19082/5212
- Hazzan, A. A., Dauenhauer, J., Follansbee, P., Hazzan, J. O., Allen, K., & Omobepade, I. 2022. Family caregiver quality of life and the care provided to older people living with dementia: qualitative analyses of caregivers interviews. *BMC Geriatrics*, 22 (1): 86, https://europepmc.org/article/med/35101000
- Hasselkus, B., & Murray, B. J. 2007. Everyday occupation, well-being, and identity: The experience of caregivers in families with dementia. *The American Journal of Occupational* Threapy, Jan-Feb; 61(1): 9–20. https://pubmed.ncbi.nlm.nih.gov/17302101/
- Heumann, K. 2016. Auswirkungen von Peer-Begleitung für Angehörige auf Belastung und Lebensqualität, Eine Pilotstudie [A pilot study of peer support for relatives of individuals with severe mental health problems: Effects on burden and quality of life], Zeitschrift für Psychiatrie, Psychologie und Psychotherapie, 64, pp. 45–53, Hogrefe AG, Hamburg. https://doi.org/10.1024/1661-4747/a000259
- Hobfoll, S. E., Hall, B. J., Canetti-Nisim, D., Galea, S., Johnson, R. J., & Palmieri, P. 2007. Refining our understanding of traumatic growth in the face of terrorism: Moving from meaning cognitions to doing what is meaningful. *Applied Psychology: An International Journal*, *56*, 345–366. https://doi.org/10.1111/j.1464-0597.2007.00292.x
- Hoenig, J., Hamilton, M. W. 1966. The schizophrenic patient in the community and his effect on the household. *International Journal of Social Psychiatry*, 12(3), 165–176. https://doi.org/10.1177/002076406601200301
- Howitt, D. 2010. Introduction to qualitative methods in psychology. Pearson Education Ltd. Essex, UK
- Jungbauer, J., Bischkopf, J., & Angermeyer, M. C. 2001. *Belastungen von Angehöriger psychisch Kranker, Entwicklungslinien, Konzepte und Ergebnisse der Forschung* [Burdens on Relatives of Patients with Psychiatric Disorders Development, Concepts and Results of Research]. *Psychiatrische Praxis, PschiatPrax:* 8, 105–114, New York Georg Thieme Verlag KG Stuttgart.
- Kaimal, G., Caroll-Haskins, K., Mensinger, J. L., Dieterich-Hartwell, R. M., Manders, E., & Levin, W. P. 2019. Outcomes of art therapy and coloring for professional and informal caregivers of patients in a radiation oncology unit: A mixed methods pilot study, *European of Journal of OncologyNursing*, Oct;42: 153–161, DOI: 10.1016/j.ejon.2019.08.006,
- Kassper, S., Haring, C., Marksteiner, J., Sachs, G., Tölk, A., & Wroble, M. 2008. *Das Resilenzkonzept bei psychischen Erkrankungen* [The concept of resilience of mental illness]. *ClinicumNeuropsyExpertise, Das Medium für Psychiatrie und Neurologie, Sonderausgabe*, November, S. 1–6, Wien. https://oegpb.at/wp-content/uploads/2016/11/GPB-Expertise-Resilienz-2008.pdf

- King, G., King, S., Rosenbaum, P., & Goffin, R. 1999. Family-centered caregiving and well-being of parents of children with disabilities: linking process with outcome. *Journal of Pediatric Psychology*, 24, 41–53. https://doi.org/10.1093/jpepsy/24.1.41
- Kunzler, A., Skoluda, N., Nater, U. M. 2018. *Die Bedeutung von Resilienzfaktoren für pflegende Angehörige von Demenzpatienten eine Übersicht zu ausgewählten Faktoren* [The role of resilience factors in informal caregivers of dementia patients A review on selected factors]. Psychotherapie, Psychosomatik, Medizinische Psychologie, *PsychoterPsychMed*, 68, 10–21, Stuttgart, New York: Georg Thieme Verlag KG.
- Krüger, M. 2015. Affektivität und Therapieerfolg in der Tagesklinischen Behadlung [Affectivity and Therapy Outcome in the Everyday Psychiatric Treatment], Friedrichshafen, Verhaltenstherapie, Psychosoziale Praxis, 47. Jg.(1), 143–152.
- Labklājības ministrija. 2012. *Labklājības ministrijas ziņojums*. Pieejams: http://www.lm.gov.lv/news/id/2637.
- Lalani, N., Duggleby, W., & Olson, J. 2018. Spirituality among family caregivers in palliative care: an integrative literature review. *International Journal of Palliative Nursing*, 24(2). Published Online: https://doi.org/10.12968/ijpn.2018.24.2.80
- Langschwert, I. 2014. *Trialog unterstützt Angehörige psychisch Kranker* [Trialog support of relatives of the mentally ill]. *Psychiatrische Pflege*, (*PsychPflege*), 20, 82–83, Stuttgart, 83, *Aus der Praxis*), New York: Georg Thieme Verlag KG.
- Lazarus, R. S. 2006. Emotions and interpersonal relationships: toward a person-centered conceptualization of emotions and coping. *Journal of Personality*, 74(1), 9–46.
- Lehtinen, V., Riikonen, E., & Ahonen, J. etc. 1999. Framework for promoting mental health in Europe. *National Research and Development Centre for Welfare and Health, Hamina, Finnland*
- Leimane-Veldmeijere, I., & Veits, U. 2006. *Psihiatrijas pakalpojumu lietotāju vajadzības*, *izvērtējums*. Rīga: Latvijas cilvēktiesību centrs.
- Liu, Z., Heffernan, C., & Tan, J. 2020. Caregiver burden: A concept analysis. *International Journal of Nursing Sciences*, 7(4), 438–445. https://doi.org/10.1016/j.ijnss.2020.07.012
- Lu, Y.F.Y, & Haase, J. E. 2009. Experince and perspectives of caregivers of spouse with mild cognitive impairment. *Author Manuscript, NIH Public Access, Current Alzheimer Research*, (4),384–391.
- Luthans, F., Vogelgesang, G. R., & Lester, P. B. 2006. Developing the psychological capital of resiliency. *Human Resource Development Review* 5(1), 25–44.
- Maddi, S. R. 2002. The story of hardiness: Twenty years of theorizing, research, and practice. *Consulting Psychology Journal: Practice and Research*, *54*(3), 173–185.
- Mārtinsone, K., & Pipere, A. (Zin. red). 2021. Zinātniskās darbības metodoloģija: starpdisciplināra perspektīva. Rīga: RSU.
- Mārtinsone, K. (Sast.) 2021. *Pašpalīdzības un pašvadības iespēju arsenāls krīzes un tranformāciju laikā: Metodes ikvienam.* Rīga: RSU.
- Mārtinsone, K., & Regzdiņa-Pelēķe, L. 2020. *Personība un psiholoģiskā palīdzība Latvijā: (paš)-pieredzes stāsti.* Rīga: RSU.
- Mārtinsone, K., & Sudraba, V. 2019. *Veselības psiholoģija, Teorijas un prakses starpdisciplinārā Perspektīva.* Rīga: RSU. Mārtinsone, K., Pipere, A., & Kamerāde, D. 2016. *Pētniecība: Teorija un prakse.* Rīga: RaKa.
- Mathilde, A., & Lina, K. B. 2006. The adaptation of mothers of children with intellectua disability in Lebanon. *Journal of Transcultural Nursing*, 17, 375–380.
- McKenna, O., Fakolade, A., Cardwell, K., Langlois, N., Jiang, K. & Pilutti, L. A. 2021. Towards conceptual convergence: A systematic review of psychological resilience in family caregivers of persons livingwith chronic neurological conditions, *Review Article*, Interdisciplinary School of Health Sciences, Faculty of Health Sciences, University of Ottawa, Canada.
- McLennan, J. D., Doig, J., Rasmussen, C., Hutcheon, E., & Urichuk, L. 2012. Stress and relief: Parents attending a respite program. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, *21*, 261–269. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3490527/

Ministru kabineta noteikumi *Nr. 1529. Veselības aprūpes organizēšanas un finansēšanas kārtība*. http://likumi.lv/id263457-veselības-aprūpēšanas-un-finansesanas-kartiba (Skatīts 05.11.2020).

Nowack, N., Müller, K., Oberste-Ufer & Schulz, W. 2013. Die Kooperetion von Angehörigen Psychisch Kranker und Fachkräften im Rehabilitationsprozess – Ergebnisse einer Interviewstudie in zwei stationären Einrichtungen der sozialpsychiatrischen Eingliederungshilfe [Cooperation between relatives of mentally ill patients and specialists in the rehabilitation process – a study of interviews in two social psychiatry inpatient facilities]. Praxis Klinische Verhaltensmedizin und Rehabilitation, 91, 50–57

Norinder, M., Arestedt, K., Lind, S., Axelsson, L., Grande, G., Ewing, G., Holm, M., Öhlen, J., Benkel, I., & Alvariza, A. 2021. Higher levels of unmet support needs in spouses are associated with poorer quality of life – a descriptive cross-sectional study in the context of palliative home care. *BMC Palliative Care*, 20, 132.

Özdemir, F., Ali, S. D., & Atavoglu, T. 2020. Psychosocial problems of family caregivers of palliative care patients and their spiritual coping styles, *PerspectPsyciatrCare*, Jul; 56(3): 636–641, https://doi.org/10.1111/ppc.12479.

Paičs, I., Mārtinsone, K., & Ļubenko, J. 2018. Pašpalīdzības prakses: Literatūras apskats. SOCIETY. INTEGRATION. EDUCATION. *Proceedings of the International Scientific Conference. Volume VII, May 25–26*, pp. 169–207.

Palmer, E., Kavanagh, E., Visram, S., Bourke, A. M., Forrest, I., & Exley, C. 2022. Actors influence the quality of end-of-life care in interstitial lung disease? A systematic review with narrative synthesis, *Palliative Medicine*, *36*(2): 237–253. https://doi.org/10.1177/02692163211059340 Patino, C. M., & Ferreira, J. C., 2018. Inclusion and exclusion criteria in research studies: Definitions and why they matter. *Sociedade Brasiliera de Pneumonologia*, *44*(2), 84. http://dx.dol.org

Plaveniece, M., & Škuškovnika, D. 2002. Sociālā psiholoģija pedagogiem. Rīga: RaKa.

Pipere, A. 2016. Kvalitatīvie pētījumi un to perspektīvas veselības psiholoģijā. DU HSZI, Latvija.

Pipere, A. 2021. Rakstu veidi. DU HSZI, Latvija. Presentation.

*Psihiskā veselība Latvijā 2016. gadā.* Tematiskais ziņojums. Slimību profilakses centrs, 17. izdevums, Rīga, https://www.spkc.gov.lv/lv/media/2722/download

*Psihiskās veselības aprūpe Latvijā*, 2006.–2007. 8. *izdevums*, Statistikas gadagrāmata, 2008. Sabiedrības Veselības Aģentūra, Rīga.

Purvlīce, B., Mārtinsone, K., Pipere, A., & Bortaščenoks, R. 2018. Psiholoģiskās palīdzības profesionāļu Grupu identitāte: Literatūras pārskats. SOCIETY. INTEGRATION. EDUCATION. *Proceedings of the International Scientific Conference. Volume VII, May 25–26*, pp. 229–239. Rave – Schwank, M. 2002. *Was ich von den Angehörigen gelernt habe, Zur Überwindung der Kluft zwischen Angehörigen und Professionellen*. [Facts the Relatives have Taught me Comments on Closing the Gap Between Relatives and Professionals]. Psychiatrische Praxis (*PsychiatPrax*) 29, 116–118. Stuttgart, New York: Georg Thieme Verlag KG.

Scherer, E., & Lampert, T. 2017. *Basiswissen, Angehörige in der Psychiatrie* [Basic knowledge of the field of psychiatry for relatives]. Köln: Psychiatrie Verlag.

Schmid, R., Spießl, H., & Cording, C. 2005. Zwischen Verantwortung und Abgrenzng: Emotionale Belastungen von Angehörigen psychisch Kranker [Between Responsibility and Delimitation: Emotional Distress of Caregivers]. Psychiatrische Praxis (PsychiatPrax) 32, 272–280. Stuttgart, New York: Georg Thieme Verlag KG.

Schwarzer, R. 2004. *Psychologie des Gesundheitsverhaltens: Einführung in die Gesundheitspsychologie* [The Psychology of Healthy Attitudes: An Introducion to Health Psychology]. Göttingen: Hogrefe Verlag.

Seifert, J. 2004. *Das Angehörigenbuch* [A book for relatives]. Fernwald: Ehgart & Albohn., Georg Thieme Verlag KG Stuttgart, New York.

Stenberg, J., & Stenberg, J. H. 2019. *Kā es pielāgošos slimībai? Tuviniekiem. Pašpalīdzības grāmata par slimības pielāgošanos pacientiem un viņu tuviniekiem.* Rīga, Sanofi Genzyme, Empowering life.

Straub, J., Kempf, W., & Werbik, H. 2005. *Psychologie, Eine Einführung, Grundlagen, Methoden, Perspektiven* [Psychology, Introducion, basic principles and methods]. Deutscher Taschenbuch Verlag, München.

Svence, G. 2015. *Dzīvesspēka kategorija pozitīvās psiholoģijas skatījumā*. Rīga: Zinātne. Svence, G. 2009. *Pozitīvā psiholoģija*. Rīga: Zvaigzne ABC.

Šica, K., Pulmanis, T., & Taube, M. 2017. *Psihiskā veselība Latvijā 2016. gadā*. Tematiskais ziņojums. Rīga: SPKC.

Štāle, M., Skrule, J., & Taube, M. 2008. *Darbspējīgā vecuma iedzīvotāju garīgā veselība*. Rīga: Sabiedrības veselības aģentūra.

Tronick, E. Z. 1998. Dyadically expanded states of consciousness and the process of therapeutic change. *Infant Mental Health Journal*, 19, 290–299.

Van Wijngaarden, E., van der Wedden, H., Henning, Z., Komen, R., & The, A. M. 2018. Entangled in uncertainty: The experience of living with dementia from the perspective of family caregivers. *PloS one*, *13*(6), e0198034. https://doi.org/10.1371/journal.pone.0198034

Veltman, A., Cameron, J. I., & Stewart, D. E. 2002. The experience of providing care to relatives with chronic mental illness. *The Journal of Nervous and Mental Disease*, Vol. 190(2), p. 108–114.

Veselības aprūpe personām ar invaliditāti — profilakse un veselības veicināšana: riska faktoru mazināšana, veselīga dzīvesveida un fizisko aktivitāšu veicināšana 2019. Mācību materiāls, LR Veselības ministrija, Rīga.

Vidnere, M. 2014. Pārdzīvojumu pieredzes psiholoģija. Rīga: RaKa.

Werner, E. E. 2001. *Journeys from childhood to midlife: Risk, resilience and recovery.* Ithaca, New York: Cornell University Press.

Wilms, H. U., Mory, C., & Angermeyer, M. C. 2004. *Erkrankungsbedingte Kosten für Partner psychisch Kranker: Ergebnisse einer Mehrfacherhebung* [Costs of illness for relatives of the mentally ill: results of exploratory surveys]. *Originalarbeit,Psychiatrische Praxis, 31*,177–183. Stuttgart, New York: Georg Thieme Verlag KG.

Wiegand-Grefe, S., Geers, P., Rosenthal, S., & Plaß, A. 2009. *Kinder psychisch kranker Eltern – Risiko, Resilienz und Prävention* [Children of mentally ill parents – risks, vitality and prevention]. *Originalarbeit*, Köln, Deutscher Ärzte-Verlag.

Wittmund, B., Bause, B., & Angermeyer, M. C. 2005. *Alltagsbelastungen von Partnern psychisch Kranker – Ansätze für eine nutzerorientierte Angehörigenarbeit* [Daily workload for partners of mentally – guidelines ill patients – guidelines for orientation in working with family members], *Originalarbeit, PsychiatPrax, 32*, 233–238. Stuttgart, New York: Georg Thieme Verlag. Wong, P., & Yu, T. 2021. Existential suffering in palliative care: An existential positive psychology perspective. *Medicina (Kaunas, Lithuania), 57*(9), 924. https://doi.org/10.3390/medicina57090924 World Health Organization. 2004. Prevention of mental Disorders. Effective Interventions and Policy Options. *Summary Report*. Geneva.

World Health Organization, & World Bank (Eds.). 2013. World report on disability. Geneva, Switzerland: World Health Organization.

World Health Organization, & World Bank (Eds.). 2011. World report on disability. Geneva, Switzerland: World Health Organization.

Zārde, I., & Bušs, J. 2019. Specifisko prasmju attīstīšana darbā ar psihiski slimām personām, Mācību materiāls, Rīga, LR Veselības ministrija, Eiropas Sociālā fonda projekts. Nr. 9.2.6.0/17/I/001, "Ārstniecības un ārstniecības atbalsta personāla kvalifikācijas uzlabošana".

Zārde, I. 2016. *Padomi saskarsmē, komunikācijā un sadzīvē ar cilvēkiem ar dažādām psihiskām saslimšanām*. Rīga: LR Veselības ministrija, Slimību profilakses un kontroles centrs.

Zuitiņš, J., Pipere, A., & Sudraba, V. 2019. Interpretatīvās fenomenoloģiskās analīzes pielietojums paliatīvā aprūpē esoša bērna tēvu pieredzes izpētē. *Proceedings of the International Scientific Conference, Volume VII, May,* 24–25, 2019. Rēzeknes Tehnoloģiju akadēmija, 163–174, Rēzekne.

Zuitiņš, J., Pipere, A., & Sudraba, V. 2018. Fenomeneoloģiskās pieejas izvēle dzīves pieredzes izpētei: Metodoloģiskais salīdzinājums. *International Scientific Conference*, *Volume VII*, May 25–26, 2018, p. 307–319, Rēzeknes Tehnoloģiju akadēmija, Rēzekne.

## TIESĪBU ZINĀTNE / LAW

### HISTORICAL DEVELOPMENT OF THE NOTION OF EPIDEMIOLOGICAL SAFETY

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#### **Abstract**

#### Historical development of the notion of epidemiological safety

**Key Word:** development curve, epidemiological safety, legal means, society, spread of infectious disease
Regardless of the development of society, the spread of infectious diseases still remains relevant. On the one hand, up to now, society has been relatively successful at fighting the spread of infectious diseases. On the other hand, however, new preconditions for the spread of infectious diseases continue to appear, calling for continuous attention to the matters of epidemiological safety.

Analysis of the historical development of the notion of epidemiological safety shows that elaborations of this notion are found in every historical period in accordance with the specific nature of each period. Moreover, patterns are found throughout the overall development process of the notion of epidemiological safety which form a specific development curve.

The conclusions offered allow predicting the possible future development trend of the notion of epidemiological safety and its basic principles.

The research aim is to analyse the historical development of the notion of epidemiological safety, evaluate its principles and patterns, and offer a possible model of the future development of the notion of epidemiological safety. The following most significant methods were used in the study: the analytical, historical, systemic, and teleological methods.

#### Kopsavilkums

#### Epidemioloģiskās drošības idejas vēsturiskā attīstība

Atslēgvārdi: attīstības līkne, epidemioloģiskā drošība, infekcijas slimības izplatība, sabiedrība, tiesiskie līdzekļi Neskatoties uz sabiedrības attīstību, joprojām saglabā aktualitāti infekcijas slimību izplatība sabiedrībā. No vienas puses, sabiedrība samērā veiksmīgi cīnījās ar līdzšinējo infekcijas slimību izplatību. Tomēr, no otras puses, sabiedrībā rodas aizvien jauni priekšnosacījumi infekcijas slimību izplatībai, nepārtraukti pievēršot uzmanību epidemioloģiskās drošības jautājumam.

Analizējot epidemioloģiskās drošības idejas vēsturisko attīstību, ir konstatējamas šīs idejas iestrādnes katrā vēstures posmā atbilstoši konkrētā vēstures posma specifikai. Turklāt epidemioloģiskās drošības idejas kopējā attīstības gaitā ir konstatējamas likumsakarības, iezīmējot šīs idejas konkrētu attīstības līkni.

Izvirzītie secinājumi ļauj prognozēt epidemioloģiskās drošības idejas iespējamo nākotnes attīstības virzienu un tā pamatprincipus.

Pētījuma mērķis ir analizēt epidemioloģiskās drošības idejas vēsturisko attīstību, vērtēt tās principus un likumsakarības, kā arī piedāvāt epidemioloģiskās drošības idejas iespējamo nākotnes attīstības modulāciju. Pētījumā tika izmantotas sekojošas būtiskākās metodes: analītiskā, vēsturiskā, sistēmiskā un teleoloģiskā metode.

#### Introduction

Regardless of the rapid development of science in the modern day, the issue of epidemiological safety still remains relevant and significant. On the one hand, the medical science is developing, as well as patient healthcare and medical treatment, which also affects and improves the effectiveness of epidemiological safety measures and epidemiological safety of society in general. On the other hand, however, there are still cases when epidemiological safety of society is threatened, even nowadays, by the spread of infectious diseases, such as Legionnaires' disease, HIV/ AIDS, as well as the COVID-19 virus. Thus, this requires continuous mobilisation of

society – through exploring epidemiological safety risk factors as well as improving the existing epidemiological safety system and developing new epidemiological safety measures and legal remedies.

Analysis of the historical development of the notion of epidemiological safety shows that its importance was already understood and appreciated in ancient times. In such an early historical period, society already took measures to protect epidemiological safety. Although every historical period has its own special features, it also contributed to the creation of the epidemiological safety system as a reflection of the historical development curve of the notion of epidemiological safety.

Modern events in society also create new challenges related to epidemiological safety. On the one hand, new epidemiological safety risks appear under the influence of modern society, and on the other hand, this calls for new solutions for the protection of epidemiological safety. This creates grounds to believe that the understanding of epidemiological safety and the means to ensure it are constantly developing.

The research aim is to analyse the historical development of the notion of epidemiological safety, evaluate its principles and patterns, and offer a possible model of the future development of the notion of epidemiological safety. The following most significant methods were used in the study: the analytical, historical, systemic, and teleological methods.

#### **Discussion**

The principles of the mutual relationships in primeval society show indirect progression towards the notion of epidemiological safety. This time period was characterised by collective medical treatment, which was initially performed by experienced elders and later by professional religious faith servants, who also performed the duties of medical treatment (Сорокина 1988: 22, 23; Derums 1988: 41, 42). If a patient did not comply with treatment, it was considered as disobedience to supernatural powers, which could be followed by curses or gods' punishment. This approach is also supported by God's Ten Commandments (Desmit baušļi 2007: 39, 40), where a person's actions had to be subordinate to God's will only. Thus, religious faith involved the fulfilment of specific procedures and requirements which, despite the lack of medical knowledge, may have been instinctively guided towards epidemiological safety, such as the requirement for cleanliness or separation in the fulfilment of a religious ritual.

Whereas antique society was already characterised by actions directly related to epidemiological safety. Hippocrates (400 BC) noticed a link between the origin of diseases and the environment in which people lived (Barreto, Teixeira, Carmo 2006: 192; Dicker 1998: 4; *Hipokrātiskie raksti* 2003: xxxiv; Hipokrāts 2003: II–VI). With the development of this idea, society started creating regulations which included requirements related to the environment in order to decrease the negative effect of the environment on people's health as much as possible. For

example, in Mesopotamia, bathhouse attendants had the right to treat people by performing surgical operations (Мейер-Штейнер 1999: 14, 15; The Code of Hammurabi 1755–1750 BC: s. 215.–227); in Rome, it was forbidden to bury or burn cadavers in urban territories, and sewerage and water supply were created (Мейер-Штейнер 1999: 85); in India, regulations were introduced regarding the use of food products (*The Laws of Manu*: s. 207, IV); in Greece, a doctor dedicated several rooms in his or her living space for patient treatment, separating a patient from society during treatment (Мейер-Штейнер 1999: 38; Abse 1984: 18). Although in antient times the amount of medical knowledge did not yet allow for comprehensive justification of the role of the environment in the spread of diseases, the link was still noticed, which was followed by corresponding behaviour of society with signs of epidemiological safety, even with the registration of the requirement for such behaviour in normative regulations.

In the Middle Ages, overcoming the obstacles of the time period, the development of the notion of epidemiological safety continued and first epidemiological safety measures were introduced into social relationships. Despite the predominance of religion in the Middle Ages, which generally hindered the development of medicine as a science (Указ Вильгельма I, отделяющий церковные суды от светских 1999: 85; Саксонское зерцало 1999: 437; Balodis 2000: 75; Зудгоф 1999: 18; Сорокина 1988: 41; Harington 1920: 76, 77), there was a turn in the Late Middle Ages (the Age of Enlightenment) which brought science and the ideas of humanism to the foreground (Viduslaiku Vēsture II 1972: 316, 324, 325; Ideju vārdnīca 1999: 210, 212). These changes promoted the revival of the development of medicine. This resulted in the discovery of an important idea, which still could not be explained scientifically, that some diseases can be transmitted from person to person (Fracastoro, 1546, Italy) (Barreto, Teixeira, Carmo 2006: 192), i.e., the understanding of infectious disease from the modern point of view. It was an important discovery because it partially explained the plague pandemic in the Middle Ages (e.g., the Justinianic plague in 542, "Black Death" in Western Europe in 1348) (Γοφφ 2000: 223 – 226). The spread of diseases was also promoted by intensive formation of cities in Western Europe, where conditions were unsanitary (e.g., there was no water supply, no sewerage; waste was thrown into the streets) (Viduslaiku Vēsture I 1971: 208; Сорокина 1988: 41). Thus, it was realised that remedies are required directly aimed at preventing the spread of disease among people.

Measures were introduced in two directions, and their direct goal was to limit and stop the spread of disease. First, measures were taken against a specific infectious patient, which was practically realised as isolation. For example, lepers: 1) were expelled from society and placed in a leprosarium (shelter); 2) these patients were considered dead to the state and society, and they were not allowed to work, to inherit; they were only allowed to beg at public roads, which was their only subsistence; 3) had to wear special clothes and make a sound as a warning to others of their

арргоасh; 4) could only enter the city on certain days (*Viduslaiku Vēsture I* 1971: 208; Сорокина 1988: 41); quarantine measures were introduced which involved isolation of people at state border crossing points for 40 days; first lazarettes were also created for patients on ships on St. Lazarus Island near Venice (Γοφφ 2000: 223 – 226). In practice, isolation of infectious patients was only for the benefit of public interests because isolated patients were generally not treated (at least at the beginning). One objective explanation for such an approach is that medical practitioners lacked the medical knowledge required for the treatment of severe infectious diseases. Therefore, such measures were virtually the only way to limit and stop the spread of infectious diseases, thus protecting public interests.

Second, specialised hospitals were created which were focused on solving important social issued, including hospitals for infectious patients (Зудгоф 1999: 8). It can therefore be concluded that first epidemiological safety measures were introduced in the Middle Ages, thus developing the notion of epidemiological safety at a new level.

In the early modern period and in the contemporary modern period, the understanding of the nature of infectious diseases advanced, which promoted further development of the notion of epidemiological safety measures. This time period began with revolutions (17<sup>th</sup> century in England, 18<sup>th</sup> century in France), which promoted the transition from feudalism to free society, thus opening the opportunities for rapid development of science and cooperation in making discoveries (Антология мировой правовой мысли: в 5-и т 1999: 5, 6; История государства и права зарубежных стран II 1999: 516, 518; Jauno laiku vēsture (1871 – 1917) 1989; Jauno laiku vēsture. 2. daļa 1977; Jaunāko laiku vēsture (1814 – 1947) 1993; Jaunāko laiku vēsture (1939 – 1986) 1987; Michel 2005: 173 – 181). In the 19<sup>th</sup> century, John Snow, when conducting practical research during the London cholera epidemic, for the first time discovered a specific route of transmission of an infectious disease among people (Westin 2015: 39; Barreto, Teixeira, Carmo 2006: 192; Dicker 1998: 4). At the end of the 19<sup>th</sup> century, Koch and Pasteur discovered microscopic infectious disease pathogens, including the scientific understanding and explanation of the cause of infectious diseases (Barreto, Teixeira, Carmo 2006: 192). This research led to the conclusion that infectious diseases are not limited to specific countries and to successfully limit the spread of such diseases, the health of all society needs to be considered, creating the understanding of public health (Fidler 2005: 329; Bedford, Farrar, Ihekweazu, Kang, Koopmans, Nkengasong 2019: 131; Westin 2015: 39). Thus, from the 19<sup>th</sup> century, international law focused on the issue of limiting the spread of infectious diseases, harmonising the normative regulation of European states (e.g., regarding quarantine), establishing exchange of information between countries on infectious diseases, creating international healthcare organisations and standardising their monitoring (Aginam 2002: 946; Toebes 2015: 300; Gostin, Burris, Lazzarini 1999: 77). It can thus be concluded that under the influence of science as a precondition, the interpretation of epidemiological safety measures in the early modern and contemporary modern period changed from national to international, viewing health as a value characteristic of society as a whole.

It is also important that the most significant international institution was created and the central international legislation for the implementation of epidemiological safety on the global scale was adopted. First, in 1922, the Health Committee of the League of Nations and its Health Bureau was created for the prevention and control of infectious diseases. These institutions were created at the same time when the International Health Office was created in 1908, however, due to disagreement between countries, it was not related to the task of the Bureau summarise and disseminate the information provided by the health institutions of the countries. After the reorganisation of the League of Nations, on the basis of its health institutions, on 7 April 1948, the World Health Organisation was created (hereinafter – the WHO) as a structural unit of the United Nations Organisation (UNO) in order to coordinate the control of the international spread of infectious diseases, also designing corresponding regulations (*The League of Nations* 1919–1946; IHR 2005; *Constitution of the World Health Organization* 1946: a.21(a)).

Second, in 1851 in France, with representatives of 11 European states participating, the first International Sanitary Conference took place, which started the cycle of 10 conferences (1851 – 1900), and as a result of these conferences, the WHO in 1951 adopted the International Sanitary Regulations, which were renamed as International Health Regulations (hereinafter - IHR) and amended (in 1963, 1973, 1981), also becoming binding on the WHO member states since 1997. These regulations were directed at the global monitoring of specific infectious diseases (Aginam 2002: 946, 947; Fidler 2005: 328). With the appearance of new infectious diseases and the revival of the earlier ones (see: Bedford, Farrar, Ihekweazu, Kang, Koopmans, Nkengasong 2019: 131; Bloom, Cadarette 2019: 3; Reingold 2000: 57; Dicker 1998: 8), in 1995, the World Health Assembly adopted the Resolution on the necessity to improve the IHR, which was done by the WHO, with the participation of the WHO member states (Aginam 2002: 948; WHA48.7 1995). In 2005, the improved IHR were adopted and came into force on 15 June 2007. Despite the criticism received [the IHR are criticised because they are not directed against the causes of infectious diseases and do not contain the WHO sanctions if the Regulations are not observed (Fidler 2005: 389; Aginam 2002: 949)], the IHR contain significant improvements for the implementation of the epidemiological safety system – the Regulations apply not only to specific infectious diseases but to any infectious disease; the government has the duty to create a specific minimum epidemiological safety system; the government has the duty to inform about any circumstances that may threaten public health on the international scale; the duty to observe human rights when implementing epidemiological safety measures; the duty to create a national IHR focal point and WHO IHR

contact points for the exchange of information between the WHO and its member states (IHR 2005: Foreword, Preamble; IHR 2018: 6). Thus, the WHO and the IHR adopted by it formed the core for the implementation of the epidemiological safety system on the global scale.

Considering the impact of infectious diseases on public health and public safety at all levels, a scientific field was created to study the origin, distribution, and control strategies of infectious diseases, namely, epidemiology (Greek "epi" - "upon", "demos" - "people"; "logos" - "study"; "epidēmia" - "epidemic") (Baldunčiks, Pokrotniece 1999: 201; SV 1969: 181; Dicker 1998: 2). On the one hand, with increased attention to infectious diseases through improving sanitary conditions, observing hygiene measures, access to clean water, food, and vaccination, invention of antibiotics, creation of a healthcare system, and growth of income in society, the spread of infectious diseases decreased (Bloom, Cadarette 2019: 2; Gostin, Burris, Lazzarini 1999: 77), which was in fact promoted by the general development of society. On the other hand, infectious diseases still have not been exterminated because these are related to a broad range of new problems in society which promote the spread of infectious diseases, i.e.: climate change, followed by extreme weather conditions (EP Rezolūcija 2012: Preambulas O. pk.); natural and human-caused disasters with farreaching long-term consequences in the future (Lēmums 2013: Preambula (1)); bioterrorism (Fidler 2005: 342); population growth, urbanisation, civil conflicts, possible laboratory leaks, changes in the nature of transmission of infectious disease pathogens between people and animals (Bedford, Farrar, Ihekweazu, Kang, Koopmans, Nkengasong 2019: 130; Bloom, Cadarette 2019: 1); existence of infectious diseases that have no treatment or vaccine (Bloom, Cadarette 2019: 4); reduction in the number of vaccinated people in Europe (EP Rezolūcija 2019: Preambulas G pk., 18. pk.); appearance of new infectious diseases (e.g., COVID-19 and its mutations) (Ieteikums 2021: Preambula (5); Krämer, Akmatov, Kretzschmar 2009: 97; Direktīva 2020: Preambula (1), (6); Ieteikums 2020: Preambula (8)); reappearance of infectious diseases (Lēmums 2018: Preambula (7)); mobility of people, shrinking immunity (Ieteikums 2018: Preambula (10)); appearance of resistant infections (EP Rezolūcija 2019: Preambula; Nicolau 2011: S1, S2; Bedford, Farrar, Ihekweazu, Kang, Koopmans, Nkengasong 2019: 131; Fidler 2003: 831); infectious diseases can promote infection with other infectious diseases (coinfection) (McArdlea, Turkovab, Cunnington 2018: 210, 213). This gives grounds for believing that nowadays and at least in the near future there will be no way of preventing infectious diseases. The idea is supported that society has to adapt by developing new means of controlling infectious diseases, for example, using telemedicine technologies and research laboratories (Fidler 2005: 392; Bedford, Farrar, Ihekweazu, Kang, Koopmans, Nkengasong 2019: 133, 135; EP Rezolūcija 2012: 20. pk.; Lēmums 2013: 9. pk.; Ieteikums 2020b): Preambula (3); Ieteikums 2018: Preambula (15)).

Epidemiology as a science in its substantial interpretation is also developing. First, modern epidemiology is not limited to the study of infectious diseases because at the same time it also looks at the link between infectious diseases and other dependent health issues (such as chronic diseases, death, birth) (Chnstoffel, Teret 1991: 1665; Dicker 1998: 3; Reingold 2000: 62; Mountcastle: 1; Lebrun 1971: 1285; Goodman 2007: 155), even offering to introduce a new term to denote epidemiology – "nosonomy" ("laws that regulate diseases") (Lebrun 1971: 1285; Fre´rot, Lefebvre, Aho, Callier, Astruc, Aho Gle le´ 2018). Second, considering that the safety of public health can only be reached by interdisciplinary means, it is suggested that a new notion is introduced – "legal epidemiology", which would assess the development and application of legal measures to reduce and prevent the spread of infectious diseases (Mountcastle: 3; Chnstoffel, Teret 1991: 1665; Gostin, Burris, Lazzarini 1999: 61, 127; Broadbent 2011: 10; Barata 2013: 11; Ramanathan, Hulkower, Holbrook, Penn 2017: 69; Burris, Ashe, Levin, Penn, Larkin 2016: 139, 142; Mountcastle: 1, 4; Goodman 2007: 153). Thus, a direction for the expansion of the substantial understanding of epidemiology is appearing, not restricted to the narrow study of infectious diseases but accepting a broader interdisciplinary view of the control of the spread of infectious diseases.

#### **Conclusions**

- 1. At every stage of historical development of society, elaborations are found for the protection of epidemiological safety in accordance with the specific nature of each historical period. First, primeval society applied such measures to govern social life that may have been unawares and indirectly directed at epidemiological safety in its modern interpretation. Second, antique society began apprehending the notion of epidemiological safety, and although the direct goal of specific measures governing society was not epidemiological safety, still these measures already had the signs or characteristics of epidemiological safety. Third, in the Middle Ages, countries introduced first internal epidemiological safety measures in accordance with the development level of society and science in this historical period. Fourth, in the early modern period and in the contemporary modern period, the application of epidemiological safety measures was registered on the global scale, creating the core of the epidemiological safety system international institutions and international normative regulations.
- 2. Analysis of the historical development of the notion of epidemiological safety shows certain patterns. The historical development of this notion has progressed as an ascending curve.
- 3. When modelling the future direction of the development of the notion of epidemiological safety, there are grounds to believe that the ascending development curve will continue. Despite the relatively successful attempts at controlling the spread of existing infectious diseases, new preconditions continue to appear in society, which continue promoting the spread of infectious diseases. This causes the substantial understanding of epidemiology as a scientific field to

expand, suggesting updates for the design and application of legal measures to reduce and prevent the spread of infectious diseases.

#### References

Abse D. 1984. Doctors and patients. Oxford: University Press.

Aginam O. 2002. International law and communicable diseases. *Bulletin of the World Health Organization*, Nr. 80(12), pp. 946 – 951.

Baldunčiks J., Pokrotniece K. 1999. *Svešvārdu vārdnīca: vairāk nekā 15 000 citvalodu cilmes vārdu un terminoloģisku vārdkopu*. Zin. red. Baldunčiks J. Rīga: Jumava.

Balodis R. 2000. Valsts un Baznīca. Rīga: Nordik.

Barata R. B. 2013. Epidemiology and public policies. *Brazilian Journal of Epidemiology*, Nr. 16(1), pp. 3-17.

Barreto M. L., Teixeira M. G., Carmo E. H. 2006. Infectious diseases epidemiology. *Journal of Epidemiology and Community Health*, Nr. 60, pp. 192 – 195.

Bedford J., Farrar J., Ihekweazu C., Kang G., Koopmans M., Nkengasong J. 2019. A new twenty-first century science for effective epidemic respons. *Nature*, Vol. 575, 7 November, pp. 130 – 136.

Bloom D. E., Cadarette D. 2019. Infectious Disease Threats in the Twenty-First Century: Strengthening the Global Response. *Frontiers in Imunology*, March, Vol. 10, pp. 1 – 12.

Broadbent A. 2011. *Epidemiology, risk and causation. Conceptual and methodological issues in public health science.* Cambridge: PHG Foundation.

Burris S., Ashe M., Levin D., Penn M., Larkin M. 2016. A Transdisciplinary Approach to Public Health Law: The Emerging Practice of Legal Epidemiology. *Annual Review* of *Public Health*, Nr. 37, pp. 135 – 148.

Chnstoffel T., Teret S. P. 1991. Epidemiology and the Law: Courts and Confidence Intervals. *American Journal of Public Health*, Dec, Vol. 81, Nr. 12, pp. 1661 – 1666.

Constitution of the World Health Organization. 1946. The World Health Organization. https://www.who.int/governance/eb/who\_constitution\_en.pdf [03.01.2022].

Derums V. 1988. Baltijas sencilvēku slimības un tautas dziedniecība: monogrāfija. Rīga: Zinātne.

Desmit baušļi. 2007. No: Blūzma V., Zemītis G., Osipova S. Ārvalstu tiesību vēstures avoti (no vissenākajiem laikiem līdz 1689. gadam). Rīga: Turība.

Dicker R. C. 1998. *Principles of epidemiology*. Atlanta, Georgia: U.S. Department of Health and Human Services.

Direktīva. 2020. Komisijas 2020. gada 3. jūnija Direktīva (ES) 2020/739, ar ko attiecībā uz SARS-CoV-2 iekļaušanu to bioloģisko aģentu sarakstā, par kuriem ir zināms, ka tie var inficēt cilvēkus, groza Eiropas Parlamenta un Padomes Direktīvas 2000/54/EK III pielikumu un groza Komisijas Direktīvu (ES) 2019/1833. *Eiropas Savienības Oficiālais Vēstnesis*, L 175/11, 04.06.

EP Rezolūcija. 2012. Eiropas Parlamenta 2011. gada 8. marta rezolūcija par nevienlīdzības samazināšanu veselības jomā ES (2010/2089(INI)). *Eiropas Savienības Oficiālais Vēstnesis*, C 199 E/26, 07.07.

EP Rezolūcija. 2019. Eiropas Parlamenta 2018. gada 19. aprīļa rezolūcija par vilcināšanos vakcinēties un vakcinēšanās līmeņa pazemināšanos Eiropā (2017/2951(RSP)). *Eiropas Savienības Oficiālais Vēstnesis*, C 390/141, 18.11.

Fidler D. P. 2003. Public Health and National Security in the Global Age: Infectious Diseases, Bioterrorism, and Realpolitik. *The George Washington International Law Review*, Vol. 35, pp. 787–856.

Fidler D. P. 2005. From International Sanitary Conventions to Global Health Security: The New International Health Regulations. *Chinese Journal of International Law*, Vol. 4, Nr. 2, pp. 325 – 392.

Fre'rot M., Lefebvre A., Aho S., Callier P., Astruc K., Aho Gle'le' L. S. 2018. What is epidemiology? Changing definitions of epidemiology 1978–2017. *PLoS ONE*, Dec 10, pp. 1–27.

Goodman R. A. 2007. Epidemiology 101: An Overview of Epidemiology and Its Relevance to U.S. Law. *Journal of Health Care Law and Policy*, Vol. 10, Issue 1, pp. 153 – 163.

Gostin L. O., Burris S., Lazzarini Z. 1999. The Law and the Public's Health: A Study of Infectious Disease Law in the United States. *Columbia Law Review*, Jan., Vol. 99, Nr. 1, pp. 59 – 128.

Harington J. 1920. The Salerno Book of Health. Images from History of the School of Salernum.

Hipokrātiskie raksti. 2003. Gaile A., van Hofa A. tulk. no sengrieķu val., ievads un komentāri. Rīga: Liepnieks & Rītups.

Hipokrāts. 2003. Par gaisiem, ūdeņiem un vietām. No: *Hipokrātiskie raksti*. Gaile A., van Hofa A. tulk. no sengrieķu val., ievads un komentāri. Rīga: Liepnieks&Rītups, 48. lpp.

*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.

Ieteikums. 2018. Padomes 2018. gada 7. decembra Ieteikums par pastiprinātu sadarbību, kas vērsta pret vakcīnnovēršamām slimībām (2018/C 466/01). *Eiropas Savienības Oficiālais Vēstnesis*, C 466/1, 28.12.

Ieteikums. 2020. Komisijas 2020. gada 22. decembra Ieteikums (ES) 2020/2243 par koordinētu pieeju ceļošanai un transportam, reaģējot uz Apvienotajā Karalistē novēroto SARSCOV-2 variantu. *Eiropas Savienības Oficiālais Vēstnesis*, L 436/72, 28.12.

Ieteikums. 2020b). Komisijas 2020. gada 8. aprīļa Ieteikums (ES) 2020/518 par vienotu Savienības rīkkopu tehnoloģiju un datu izmantošanai ar mērķi apkarot Covid-19 krīzi un iziet no tās, it īpaši attiecībā uz mobilajām lietotnēm un anonimizētu mobilitātes datu izmantošanu. *Eiropas Savienības Oficiālais Vēstnesis*, L 114/7, 14.04.

Ieteikums. 2021. Padomes 2021. gada 1. februāra Ieteikums (ES) 2021/119, ar ko groza Ieteikumu (ES) 2020/1475 par koordinētu pieeju brīvas pārvietošanās ierobežošanai sakarā ar Covid-19 pandēmiju. *Eiropas Savienības Oficiālais Vēstnesis*, L 36 I/1, 02.02.

IHR. 2005. International Health Regulations. World Health Organization.

IHR. 2018. *IHR* (2005) monitoring and evaluation framework. Geneva: World Health Organization. *Jauno laiku vēsture* (1871 – 1917). 1989. Red. I. Krivoguzs. Rīga: Zvaigzne.

Jauno laiku vēsture. 2. daļa. 1977. Red. V. Hvostovs. Rīga: Zvaigzne.

Jaunāko laiku vēsture (1814 – 1947). 1993. Sast. E. Nagobads. Rīga: Zvaigzne.

Jaunāko laiku vēsture (1939 – 1986). 1987. Red. V. Furajevs. Rīga: Zvaigzne.

Krämer A., Akmatov M., Kretzschmar M. 2009. Principles of Infectious Disease Epidemiology. In: Krämer A., Kretzschmar M., Krickeberg K. (eds) *Modern Infectious Disease Epidemiology. Statistics for Biology and Health*. New York, Springer, pp. 85 – 99.

Lebrun A. J. 1971. To Define Epidemiology. *American Journal of Public Health*, July, p. 1285.

Lēmums. 2013. Eiropas Parlamenta un Padomes 2013. gada 17. decembra lēmums Nr. 1313/2013/ES par Savienības civilās aizsardzības mehānismu. *Eiropas Savienības Oficiālais Vēstnesis*, L 347/924, 20.12.

Lēmums. 2018. Komisijas 2018. gada 22. jūnija Īstenošanas ieteikums (ES) 2018/945 par infekcijas slimībām un ar tām saistītajiem īpašajiem veselības jautājumiem, uz kuriem attiecinās epidemioloģisko uzraudzību, kā arī par attiecīgo gadījumu definīcijām. *Eiropas Savienības Oficiālais Vēstnesis*, L 170/1, 06.07.

McArdlea A. J., Turkovab A., Cunnington A. J. 2018. When do co-infections matter? www.co-infectiousdiseases.com, Vol. 31, Nr. 3, June, pp. 209 – 215.

Michel W. 2005. Western Medicine and Pharmaceutics in 17th Century Japan. *Proceedings of the Tenth International Conference on the History of Science in East Asia*. Shanghai Jiao Tong University Press, pp. 173 – 181.

Mountcastle S. B. Introduction to Forensic Epidemiology. Focus on Field Epidemiology, Vol. 2, Issue 5, pp. 1-5.

Nicolau D. P. 2011. Current challenges in the management of the infected patient. *Current Opinion in Infectious Diseases*, Nr. 24, Suppl. 1, pp. S1 – S10.

Ramanathan T., Hulkower R., Holbrook J., Penn M. 2017. Legal Epidemiology: The Science of Law. *The Journal of law, medicine & ethics: a journal of the American Society of Law, Medicine & Ethics*, Nr. 45, Suppl. 1, pp. 69 – 72.

Reingold A. L. 2000. Infectious Disease Epidemiology in the 21st Century: Will It Be Eradicated or Will It Reemerge? Epidemiologic Reviews, Vol. 22, Nr. 1, pp. 57 – 63.

SV. 1969. Svešvārdu vārdnīca: ap 16 500 citvalodu cilmes vārdu un terminoloģisku savienojumu. Zin. red. Žukovs L. Rīga: Liesma.

*The Code of Hammurabi*. 1755–1750 BC. https://avalon.law.yale.edu/ancient/hamframe.asp [03.01.2022].

The Laws of Manu. https://www.sacred-texts.com/hin/manu.htm [03.01.2022].

*The League of Nations*. 1919–1946. Health and Social Questions Section. https://biblioarchive.unog.ch/detail.aspx?ID=405 [03.01.2022].

Toebes B. 2015. International health law: an emerging field of public international law. *Indian Journal of International Law*, Nr. 55(3), pp. 299 – 328.

Viduslaiku Vēsture I. 1971. S. Skazkina zin. red. Rīga: Zvaigzne.

Viduslaiku Vēsture II. 1972. S. Skazkina zin. red. Rīga: Zvaigzne.

Westin S. 2015. Epidemiology and health policy: How to avoid becoming prisoners of the proximate. *Norsk Epidemiologi*, Nr. 25 (1–2), pp. 39 – 45.

WHA48.7. 1995. *Revision and updating of the International Health Regulations*. Resolutions and decisions annexes, WHA48/1995/REC/1, Forty-eighth World Health Assembly, World Health Organization, Geneva.

Антология мировой правовой мысли: в 5-и т. 1999. Т. III. Европа. Америка. XVII–XX вв. Отв. ред. Жидков О. А. Национальный общественно-научный фонд. Москва: Мысль.

Гофф Ж. Ле. 2000. Цивилизация средгевекового Запада. Сретенск: МЦИФИ.

Зудгоф К. 1999. Медицина средних веков и эпохи возрождения. Москва: Вузовская книга.

*История государства и права зарубежных стран II.* 1999. Науч. ред. Крашенникова Н. А., Жидкова О. А. Москва: НОРМА-ИНФРА.

Мейер-Штейнер Т. 1999. Древняя медицина. Москва: Вузовская книга.

Саксонское зерцало. 1999. Из: Антология мировой правовой мысли: в 5-и т. Т. 2. Европа V– XVII вв. Рук. науч. проекта  $\Gamma$ . Ю. Семигин; Национальный общественно-научный фонд. Москва: Мысль.

Сорокина Т. С. 1988. История медицины. Москва: Ун-т дружбы народов.

Указ Вильгельма I, отделяющий церковные суды от светских. 1999. Из: *Антология мировой правовой мысли: в 5-и т. Т. 2. Европа V–XVII вв.* Рук. науч. проекта  $\Gamma$ . Ю. Семигин; Национальный общественно-научный фонд. Москва: Мысль.

# THE PROGRESSIVE SENTENCE EXECUTION OF LIFE SENTENCED PRISONERS IN LATVIA

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#### **Abstract**

#### The progressive sentence execution of life sentenced prisoners in Latvia

**Key Word:** progressive sentence execution, life sentenced prisoner, reducing the recidivism risk of criminal offence, mitigation of a sentence serving regime, evaluation commission

The mitigation of a sentence serving regime (within the progressive sentence execution system) not always contributes to the reduction of the recidivism risk of criminal offence (further – recidivism) committed by life sentenced prisoners. The author considers that for the evaluation commission of a penal institution, it is difficult to adopt objective decisions about the mitigation of a sentence serving regime of life sentenced prisoners without having information about the dynamics of recidivism risks during the time they serve their sentence. By introducing the criteria for the dynamics of recidivism risks into the Cabinet of Ministers regulations, the evaluation commission would have the opportunity to more qualitatively assess convicted person's behavior in penal institutions, therefore the author considers it necessary and offers amending the Cabinet of Ministers regulations Nr 345 of 30.06.2015 "Regulations on the membership of evaluation commission, procedure of activity and criteria for a decision adoption in penal institutions" by adding to them the sub-point Nr 31.4 in the wording as follows: "the convicted person's dynamics of the recidivism risk".

#### Kopsavilkums

#### Uz mūžu notiesāto soda progresīvā izpilde Latvijā

**Atslēgvārdi:** soda progresīvā izpilde, uz mūžu notiesātais, noziedzīgā nodarījuma recidīva riska mazināšana, soda izciešanas režīma mīkstināšana, izvērtēšanas komisija

Soda izciešanas režīma mīkstināšana (soda progresīvās sistēmas ietvaros) ne vienmēr sekmē uz mūža notiesātā noziedzīgā nodarījuma recidīva (turpmāk – recidīva) riska mazināšanai. Autore uzskata, ka brīvības atņemšanas iestādes izvērtēšanas komisijai ir grūti pieņemt objektīvu lēmumu par soda izciešanas režīma mīkstināšanu uz mūžu notiesātajam bez informācijas par recidīva riska dinamiku soda izciešanas laikā. Ieviešot recidīva riska dinamikas kritēriju Ministru kabineta noteikumos, izvērtēšanas komisijai parādītos iespēja kvalitatīvāk izvērtēt notiesātā uzvedību brīvības atņemšanas iestādē, tāpēc autore uzskata par nepieciešamu un piedāvā grozīt Ministru kabineta 30.06.2015. noteikumus Nr. 345 "Noteikumi par brīvības atņemšanas iestādes izvērtēšanas komisijas sastāvu, darbības kārtību un lēmumu pieņemšanas kritērijiem", papildinot tos ar apakšpunktu Nr. 31.4 šādā redakcijā: "notiesātā recidīva riska dinamiku".

#### Introduction

The aim of this paper is to study whether the mitigation of the sentence serving regime contributes to the reduction of recidivism risk among the life sentenced prisoners. To achieve this aim, the following tasks are set: 1) to study the normative acts which regulate the progressive sentence enforcement for life sentenced prisoners; 2) to establish the risk of recidivism among the life sentenced prisoners and analyze whether the mitigation of sentence serving regime promotes reducing the recidivism risk.

We cannot deny the fact that the life sentence is the heaviest criminal punishment imposed in Latvia, and the execution of this punishment requires a special approach (Zahars & Stivrenieks 2016).

Point 8 of the recommendations Rec (2003) given by the Committee of Ministers of the Council of Europe to 23 member states about prison administration's treatment of life sentenced and long-term prisoners prescribes that "The surveillance of the implementation of sentence

enforcement activities for life sentenced and long-term prisoners should be carried out with the aim to ensure prisoners' progressive transference within the system of prisons – the principle of the progressive sentence execution".

Latvian Sentence Enforcement Code (further – LSEC) formulates the principle of a progressive punishment for a criminal offence, according to which the convicted person's legal status has to improve and the scope of guaranteed rights should increase if this person's behavior during serving their sentence can be assessed as positive, or, on the contrary, it can be reduced, if the convicted person has committed some offence (Judins 2006).

The first section of LSEC article 50. states that "The progressive sentence execution is based on the differentiation of convicted persons within the frame of each kind of penal institution and regime, as well as on convicted persons' transference from one type of prison to another type of prison, taking into account the part of a sentence the person has already served and the convicted person's behavior. It is aimed at achieving conformity of the penal regime with the convicted person's behavior and level of resocialization, thereby ensuring the sentence execution and this person's optimal adapting to life after their discharging from prison".

The fourth section of LSEC article 50.8 states that "A life sentenced prisoner starts serving the sentence on the lowest level of the sentence serving regime of a particular section. From the lowest level of the sentence serving regime of a particular section, a life sentenced prisoner can be transferred to the highest level of the sentence serving regime of a particular section, if a life sentenced prisoner, while being in the lowest level of the sentence serving regime of a particular section, has served at least seven years of the imposed sentence. The part of the sentence that has to be served on the lowest level of the sentence serving regime of a particular section incorporates the time spent in custody. From the highest level of the sentence serving regime of a particular section, the life sentenced prisoner can be transferred to the highest level of the sentence serving regime of the closed prison, if a life sentenced prisoner, while being in the highest level of the sentence serving regime of a particular section, has served at least three years of the imposed sentence, or can be conditionally discharged before the appointed time as enforced by law".

The fifth section of LSEC article 50.8 states that "From the highest level of sentence serving regime of a closed prison, the life sentenced prisoner can be transferred to the highest level of sentence serving regime of a partly closed prison, if the life sentenced prisoner, while being in the highest level of sentence serving regime of a closed prison, has served at least seven years of the imposed sentence, or can be conditionally discharged before the appointed time as enforced by law. From the highest level of sentence serving regime of a partly closed prison, the life sentenced prisoner can be conditionally discharged before the appointed time as enforced by law. A life sentenced prisoner is not transferred to the open prison for serving the sentence further".

#### **Discussion**

The progress of a convicted persons within the frame of a progressive system of sentence execution is determined by the evaluation commission. Point 31 of the Cabinet of Ministers regulations Nr 345 of 30.06.2015 "Regulations on the membership of the evaluation commission, procedure of its activities and criteria for decision adoption" (further – regulations on evaluation) state that the commission has to evaluate the behavior of a convicted person in penal institutions according to such criteria:

- 31.1. the convicted person's participation in solving employment, educational, psychological care and social problems and in leisure time spending activities organized in penal institutions, as well as the results achieved by them;
- 31.2. violation of the requirements of the sentence serving regime committed by the convicted person, their nature;
- 31.3. other information that characterizes the convicted person's behavior and fulfilment of activities defined in the resocialization plan of the penal institutions.

We can conclude that the criteria mentioned above do not include the criterion for lessening the recidivism risk. This implies that the resocialization measures for the life sentenced prisoners are implemented without receiving feedback about whether the implementation of these measures can reduce recidivism risks. Later, when analyzing the process of life sentenced prisoners' sentence serving, it might be interesting to explore whether the decisions of the evaluation commission have been objective and valid at assessing the results of resocialization for every convict. If in the result of implementing the resocialization measures the risk of recidivism remains unaffected or increases, it implies that it would not be right for the evaluation commission to adopt decisions concerning the mitigation of sentence serving regime for the life sentenced prisoners, since this contradicts the basic principles of a progressive sentence execution. Actually, by mitigating the sentence serving regime, the evaluation commission draws the life sentenced prisoner nearer to a conditional early release (further – CER) or to the integration into the society.

Section 4, point 3.<sup>1</sup> of article 61 in the criminal law specifies that "CER with the electronic surveillance can be initiated when the convicted person has in fact served no less than 24 years of his penal sentence, if a convict is a person who has received a life sentence". In turn, section 3, point 4 of article 61 states that "CER can be initiated when the convicted person has actually served twenty-five years of his sentence in imprisonment, if a convict is a person who has received a life sentence".

The recommendations Rec(2003) of the Committee of Ministers of the Council of Europe for 22 member states about point 3 of CER specify that "CER should be aimed at helping the convicted persons to transfer from their life in imprisonment to a law-abiding life in the society in compliance

with the regulations of discharge, and that such end would contribute to society's security and would reduce crime in the society". The author concludes that the lack of assessment of how the recidivism risk of a life sentenced prisoner changes during the imprisonment, the adoption of an objective decision (if the specific prisoner has achieved the prescribed resocialization result during the sentence serving) about CER is impossible, since it is not known what danger the life sentenced prisoner can pose for the society.

Minister of Justice of the Republic of Latvia, Jānis Bordāns, admits that "It is just the qualitative process of a sentence execution that enables to make society's life securer by not allowing recidivisms. It is vital that a person who has committed a crime would not do it again" (Bordans 2014).

In case a life sentenced prisoner can lay claim to NEC, his behavior during the sentence serving has been evaluated positively. There are objective criteria which a prison's evaluation commission applies at adopting the decision about the mitigation of the sentence serving regime, but of no lesser importance is the answer to the question: "Have the measures of resocialization applied to a life sentenced prisoner and further progress within the frame of a progressive system of sentence execution contributed to reducing the recidivism risk?"

Point 8 in the Cabinet of Ministers regulations Nr 191 of 09.04.2013 "Procedure of a convicted person's resocialization" specifies that the convicted person's resocialization in the penal institution is started by evaluating risks and needs.

The first and second sections of LSEC article 61.<sup>5</sup> state that "In two months' time after the convicted person is put in a penal institution for serving the sentence, head of this institution provides the evaluation of risks and needs for this person (further – RNE), thus defining the convicted person's resocialization needs, and the degree of risk of antisocial behavior and recidivism of criminal offence. A repeated convicted person's RNE is carried out at least once a year during the whole time of serving the sentence. In compliance with the results of RNE, the changes in convicted person's resocialization plan are made".

By the order Nr 231, the administration of places of imprisonment (further- AIP) have introduced RNE into their work. The RNE instrument in AIP has three recidivism risk categories – low, middle and high. The prisoners whose numerical indicator of recidivism risk during the RNE was lower than 33 points were classified as belonging to the lower level of a recidivism risk. To the middle level of risk belong those convicted persons who during RNE were assessed by 34 to 73 points of a numerical indicator of recidivism risks. To the highest level of risk belong those prisoners whose RNE numerical indicator of recidivism risk was above 73 points.

To fulfil the second task set for a scientific paper, research was carried out. The base of the research was AIP Daugavgrivas prison. At the beginning of 2022, 57 life sentenced prisoners served

their sentence in this place of imprisonment, which constitutes more than 80% of all life sentenced prisoners in Latvia. Besides, Daugavgrivas prison provides conditions for distributing life sentenced prisoners both in the open and partly closed prison, thereby it is possible to follow each prisoner's progress within the frame of progressive sentence execution system.

The research involved studies of the RNE of 9 (nine) life sentenced prisoners, who at present in a closed prison serve their sentence in the highest level of the sentence serving regime (for further serving of their sentence they have been transferred from a separate section to premises where in a closed prison convicted persons not being life sentenced serve their sentence, within the period of 2015 - 2020).

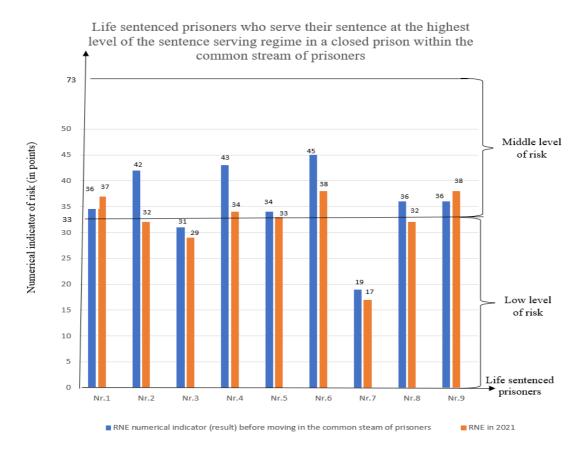


Diagram 1

To provide person's data security, each life sentenced prisoner, who serves his sentence in a closed prison in the highest level of the sentence serving regime (within the common stream of convicts), was given an identity number from one to nine. During the research, the result of a life sentenced prisoner's RNE obtained before transferring the prisoner to the common stream of convicts (numerical indicator of a recidivism risk) was compared with the result of a repeated (last) RNE obtained in 2021, after that the analysis was made and conclusions drawn.

The analysis reveals that in case of life sentenced prisoners Nr. 2, Nr. 4 and Nr. 6 (Diagram 1) the decrease in the numerical risk indicator during their sentence serving can be observed, and this

should be evaluated positively. The author considers that the prison administration has to continue the resocialization process of life sentenced prisoners Nr. 2, Nr. 4, and Nr. 6 and offer them the opportunity of participating in measures that can reduce the risk of recidivism.

At evaluating the RNE results of life sentenced prisoners Nr. 3, Nr. 5, Nr. 7 and Nr. 8 (Diagram 1) obtained in 2021, the author concludes that after including the prisoners mentioned above into the common stream of prisoners, the measures of resocialization (included in the resocialization plans of these convicts) have not given the desired decrease in the numerical risk indicator, since the numerical indicator of recidivism risk has reduced only from one to four points. This decrease cannot be assessed as essential. Another important factor which derives from RNE results of 2021 may indicate to the fact that the prison administration lacks adequate resocialization measures that would enable them to decrease the numerical indicator of recidivism risk for life sentenced prisoners Nr. 3, Nr. 5, Nr. 7 and Nr. 8. In practice, we may have a situation that though a prison administration has applied to the life sentenced prisoners all available resocialization measures, but these measures have not yielded the expected result (decrease of recidivism risk). The author admits that one of the important factors, which has to be taken into account at transferring the life sentenced prisoners to the common stream, is to provide that such transferring should promote prisoner's resocialization.

The prison administration should pay a special attention to life sentenced prisoners Nr. 1 and Nr. 9 (Diagram 1). Being in a closed prison in the highest level of the sentence serving regime and in the general stream of convicted persons, the numerical risk indicator of these life sentenced prisoners increased, which implies the necessity of paying attention to those risks where the increase of risk numerical indicator has been identified, to draw conclusions about which resocialization measures would be necessary to include in the resocialization plan of the life sentenced prisoners (with the aim of reduce the risk of recidivism).

#### **Conclusions**

Mitigation of the sentence serving regime does not always promote reducing the recidivism risk for the life sentenced prisoners. The obtained data testify to the fact that in isolated cases the risk of recidivism (after a convicted person's transfer to the common stream of convicts) may even increase.

The prison's evaluation commission finds it difficult to take a valid decision about the life sentenced prisoners' progress within the frame of a progressive sentence execution system without evaluating the dynamics of criminal offence according to the recidivism risk criterion.

The introduction of the criterion of the dynamics of recidivism risk into evaluation regulations would enable the evaluation commission to more qualitatively assess the convicted person's behavior in a penal institution, thereby having the opportunity to adopt an objective decision about

the convicted person's progress within the frame of a progressive sentence execution system. Therefore, the author finds it necessary and offers to amend the Evaluation Regulations by adding to them sub-point Nr 31. 4. in a wording as follows: "convicted person's dynamics of the recidivism risk".

#### References

Bordāns J. (2014) Atjaunot sabiedrības ticību tiesiskumam. [Reinstating Society's Trust in Rule of Law] (In Latvian) Pieejams internētā: http://bordans.lv/atjaunojot-sabiedribas-ticibu-tiesiskumam/ Judins A. (2006) Nosacīta pirmstermiņa atbrīvošana no brīvības atņemšanas soda izciešanas. [A Conditional Dicharge from sentence serving before time] Latvijas Cilvēktiesību centrs. (In Latvian) Zahars, V.; Stivrenieks, M. 2016. Security and safety enforcment: execution peculiatities, Journal of Security and Sustainability Issues 6(1): 71–83. DOI: http://dx.doi.org/10.9770/jssi.2016.6.1(5) Eiropas padomes Ministru komitejas Ieteikums Rec(2003)23 dalībvalstīm par cietuma administrācijas izturēšanos uz mūžu ieslodzītajiem un ilgtermiņa ieslodzītajiem. [Recommendation Rec(2003) of the Committee of Ministers of the Council of Europe to 23 member states about the behavior of prison's administration towards life-sentenced and long-term persons] Tulkošanas un terminoloģijas centrs, 2006. (In Latvian)

Krimināllikums. (In Latvian) Pieejams internetā: https://likumi.lv/doc.php?id=88966

Latvijas Sodu izpildes kodekss. (In Latvian) [Sentence Execution Code of Latvia] Pieejams internetā: https://likumi.lv/doc.php?id=90218

Ministru kabineta 09.04.2013. noteikumi Nr. 191 "Notiesātā resocializācijas īstenošanas kārtība" (In Latvian) [Regulations Nr191 ofthe cabinet of Ministers of 09.04.2013 about "The Procedure a convicted person's resocialization] Pieejams: https://likumi.lv/doc.php?id=256000

Ministru kabineta 30.06.2015. noteikumi Nr. 345 "Noteikumi par brīvības atņemšanas iestādes izvērtēšanas komisijas sastāvu, darbības kārtību un lēmumu pieņemšanas kritērijiem" (In Latvian) [Regulations Nr345 of the Cabinet of Ministers of 30.06.2015 "Regulations about the Evaluation Commission's membership, proedure of its activity and criteria for adopting decisions"] Pieejams internetā: https://likumi.lv/ta/id/275022

COUNCIL OF EUROPE COMMITTEE OF MINISTERS Recommendation Rec(2003)22 of the Committee of Ministers to member states on conditional release. Avalaible on the Internet: https://rm.coe.int/16800ccb5d

#### PREPARING PRISONERS FOR RELEASE

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#### **Abstract**

#### **Preparing Prisoners for Release after Serving their Sentence**

Key Word: resocialization, preparing for release, cross-institutional cooperation, reintegration, social needs
Many countries give close attention to preparing prisoners for their release, and prisoners also receive support from the state and local authorities. While under detention, it is impossible to solve issues of prisoners' social reintegration to a full extent, therefore a network of cross-institutional collaboration is being created. Cross-institutional collaboration has been recognized as the most effective model of preparing prisoners for release and reintegration into society. In Latvia, there is a strong need for developing a model of cross-institutional collaboration between places of detention and national (municipal) institutions to prepare the prisoners for their release, including the assessment of prisoners' social needs, as well as specific strategies for reducing risks and satisfying needs.

#### Kopsavilkums

#### Notiesāto sagatavošana atbrīvošanai pēc soda izciešanas

Atslēgvārdi: resocializācija, sagatavošana atbrīvošanai, starpinstitūciju sadarbība, reintegrācija, sociālās vajadzības Daudzās valstīs notiesāto sagatavošana atbrīvošanai ir pievērsta īpaša uzmanība, kā arī notiesātajiem ir pieejams valsts un pašvaldību atbalsts. Atrodoties ieslodzījuma vietā, nav iespējams pilnā apjomā atrisināt notiesāto sociālās integrācijas jautājumus, tādēļ tiek attīstīts starpinstitūciju sadarbības tīkls. Starpinstitucionālā sadarbība ir atzīta par visefektīvāko modeli notiesāto sagatavošanā atbrīvošanai un reintegrācijai sabiedrībā. Latvijā ir nepieciešams izveidot starpinstitūciju sadarbības modeli starp ieslodzījuma vietām un valsts (pašvaldību) iestādēm notiesāto sagatavošanā atbrīvošanai, paredzot ieslodzīto sociālo vajadzību novērtējumu, ka arī konkrētas stratēģijas risku mazināšanai un vajadzību apmierināšanai.

The paper is aimed at studying legal regulations specifying the ways of preparing prisoners for release and kinds of social support which Latvian municipalities render ex-prisoners after they have been released from places of detention. To achieve this aim, the following tasks are set: 1) to study normative acts and literature sources which regulate the preparation of prisoners for their release; 2) to define kinds of social support which Latvian municipalities provide the ex-prisoners with, after they have been released from places of detention.

#### Introduction

Every year, about 2500 persons are released from prison, and after having been released one third of the ex-prisoners do not have a permanent place of residence (National Control 2019).

It is worth mentioning that in a ten-year period (from 2010 to 2020), the number of prisoners in the Republic of Latvia has decreased by 54%, however the comparison of resultative indicators of 2010 with those of 2010 allows concluding that the number of released prisoners has grown by 13% (see Table 1).

Table 1. The number of persons imprisoned and released from places of detention

Year	Number of convicts	Number of the released		
2010	6780	2315		
2020	3104	2648		

<sup>\*</sup>Table produced by the author on the basis of public surveys of 2010 and 2020 provided by the administration of places of detention.

In annual public surveys provided by the administration of places of detention (PD) precise information about the distribution of prisoners has been missing since 2017, namely:

- The number of prisoners released from the investigation prison is unknown;
- The number of prisoners released on parole before serving their sentence is unknown;
- The number of prisoners released from prison after serving whole sentence is unknown.

The author draws a conclusion that because of the lack of data it is impossible to analyze which group of prisoners (released prisoners, prisoners on parole released before serving their sentence or prisoners released after serving whole sentence) includes the greatest number of the released persons.

The analysis of information about prisoners who were in the institutions of imprisonment by December 31, 2020, which is available in the PD public annual survey of 2020, allows the author to conclude that 47% of prisoners are in the place of detention for the third, fourth or more times. By the distribution of prisoners according to the length of the imposed sentence, for 53% of the prisoners (of these 3% serve a death sentence) the term of punishment is more than 5 years (PD administration 2020).

I the long run, ex-prisoners' social needs have not changed. The research "When the gate of prison opens. Reintegration of ex-prisoners from Valmiera prison into the community and labor market" carried out by Vidzeme Higher Education Institution in 2005 – 2006, has identified the lack of finances, housing and employment as being the released persons' principal social needs (research by Vidzeme Higher Education Institution, 2005–2006). "A study on the opportunities for persons released from places of detention to get into labor market" done by the European Social Fund revealed that after coming out of prison ex-prisoners have to face social, employment, psychological, addiction, education, material and medical care needs. The problems of housing, as well as material, psychological and addictive ones, are among most difficult to resolve (ESF research, 2005). Authors of "A study on the public opinion about activities for popularization of a good practice of changing stereotypes about ex-prisoners", done in 2018, have come to a conclusion that "the most necessary kinds of assistance after person's release from places of detention are: practical help to find a job, treating addiction, treating mental diseases, and practical assistance to find housing" (Research on public opinion, 2018).

Drawing from studies mentioned above, the author of this paper comes to a conclusion that after being released from PD, persons face a number of social, economic and personal challenges which make their reintegration considerably more difficult. Many of them are not able to handle social problems and properly address their needs.

In her "Research on the opportunities of persons released from PD to join the labor market" carried out in 2005, G. Žlabe maintains that ex-prisoners' successful reintegration is possible, if:

a) Through the system of legislation and services of social rehabilitation, the state creates conditions for satisfying ex-prisoners' basic needs and restoration of their social skills;

- b) Society is ready to accept ex-prisoners and support them;
- c) Ex-prisoner has changed his/her value system, desires to integrate into the society, has acquired, improved and developed his/her skills and abilities.

Within the frame of this research, the author G.Žlabe has arrived at the conclusion that "Currently, the state does not have a unified system to address the problem of reintegrating exprisoners into the society. The assistance they receive quite frequently does not resolve the problems in point of fact, but gives them only a short-time opportunity to satisfy the most urgent needs. Such insufficient help does not facilitate ex-prisoners' reintegration into labor market and society" (Žlabe 2005).

#### **Discussion**

On January 9, 2009, the Cabinet of Ministers (KM) confirmed regulations No. 7 "The conception of resocialization of persons sentenced to imprisonment" which envisaged the introduction of a new resocialization model for persons sentenced to imprisonment, making the process of serving the sentence more effective, reducing recidivism of criminal offence and thereby enhancing social security and economizing financial and human resources.

Latvia's Code of Punishment Enforcement (LCPE), Article 61, states that resocialization is a body of social behavior correction (means to promote prisoner's legal behavior and prevent reasons for illegitimate behavior) and social rehabilitation (to maintain or acquire social skills, professional or general knowledge and abilities) measures aimed at promoting convict's legal behavior and shaping a socially positive value understanding.

MK regulations No. 580 (October 24, 2015) "On the guidelines about prisoners' resocialization for 2015 – 2020" state that the existing resocialization model does not include prisoner's support/monitoring stage after serving the whole sentence, namely: "At present, no institution has been entitled the competence to render support to ex-prisoners so that to avert those risks of criminal behavior which have not been averted during the imprisonment, although achieving the resocialization aim, including integration into the labor market, would require the continuation of ex-prisoner's resocialization also after returning in the society".

In 2018, auditing "The effectiveness of prisoners' resocialization measures implemented in the country" The National Control has come to the conclusion that: "Since the introduction of a resocialization model, the situation has not changed essentially, because the number of those persons who commit crime repeatedly is great. The policy of development still does not include the integration of ex-prisoners into the community. There is still no unified system within whose frame the prisoners will be provided support and services after their release from PD when they have served their sentence, so that to promote their reintegration into the society. (National Control 2018).

Besides, factors and motives for committing criminal offence repeatedly as well as the effectiveness of resocialization measures in PD are being studied insufficiently as yet, consequently there is lack of empirically valid conclusions about risk factors and the necessary improvements in resocialization measures.

The Cabinet of Ministers regulations No. 810, December 13 2016, "Regulations on the classification of posts of officials with special ranks working in the system of Ministry of the Interior institutions and in administration of places of detention" specify that the preparation of prisoners for their release is the competence of both the Resocialization sector's senior inspector and the Resocialization sector's senior inspector (social worker). The senior inspector (social worker) of the Resocialization sector prepares prisoners for the release, informs them about the opportunities of receiving social services and social assistance after release, and, within their competence, collaborates with national and municipal institutions.

Social workers started to work in PD at the beginning of 2005, within the framework of the European Community EQUAL project "New solutions to promoting ex-prisoners' employment". Since 2007, the post of social worker has been on the position list of the PD administration.

Since 2018, senior inspectors (social workers) of the PD Resocialization sector are officials who basically are responsible for:

- assessing risks and needs of prisoners;
- addressing social problems and social cases;
- preparing prisoners for release;
- informing about the opportunities of receiving social services and social support after release from PD;
- rendering assistance at drawing up identity and pension (old age, invalid's, survivor's) documents:
- giving assistance at solving issues of housing;
- improving, restoring prisoners' social skills and developing new skills by working in groups and individually.

LCPE Article 118, part one, states: "A person who is released from PD is provided with clothing and footwear adequate for a season and suitable for wearing, if this person does not have such clothing and footwear." In turn, LCPE Article 118, part two, provides that: "Cabinet of Ministers define the scope of the material support mentioned in part one of this Article as well as procedure how persons who are released from PD receive this assistance."

It should be noted that the Cabinet of Ministers regulations No. 351 of October 12, 1999 "On material assistance for persons who are released from PD" lost validity on June 26, 2021, and new Cabinet of Ministers regulations have not been adopted as yet.

To provide PD officials' unified approach and attitude to all prisoners who are prepared for release, in 2008 the Resocialization Service of PD Administration developed an internal normative act "Methodological recommendations for the social rehabilitation sector officials of prisons and education institutions for juveniles on preparing prisoners for release" (further – Methodological recommendations).

Methodological recommendations, part one, point 3, state: "Seeking for an individual approach to every prisoner, the PD official collaborates with the institutions providing social services and assistance, with charity organizations, national and municipal institutions. At preparing prisoners for release, a special attention is given to circumstances pertaining to satisfying prisoner's basic needs immediately after the release". Until now, these methodological recommendations have not been improved or reconsidered in compliance with the existing normative acts.

The research was carried out to fulfil the second task set for the scientific paper. The research base was Daugavgrīva prison and social services of municipalities.

Daugavgrīva prison is one of the biggest in Latvia where about 900 prisoners serve their sentence.

The analysis of the number of persons released from Daugavgīva prison during recent 5 years allowed concluding that every year, at an average, 300 persons were released after serving their sentence. About 1/3 (or 33%) of the released prisoners have no housing. It would be wrong to assume that these figures fully reflect the relevance of a housing problem, since taking into account the current collaboration with municipalities and information accessible for PD, cases when the declaration of the place of residence is relevant have not been identified, however, for the exprisoners to return to the place of residence mentioned above is impossible due to different reasons:

- The legal foundation has been lost;
- Place of residence is not suitable for living;
- Place of residence has been expropriated;
- Court decision on temporary protection, banning to be in the place of residence, is still valid;
- Owner of the flat or family members do not want it.

After serving the imposed sentence in Daugavgrīva prison, persons with the last place of residence in Riga, Daugavpils, Liepāja, Jūrmala, Jelgava and Rēzekne most frequently "are at the disposal of the city council/municipality".

The author has carried out a questionnaire survey among the municipality social services which was aimed at identifying kinds of social assistance offered by Latvia's municipalities to exprisoners after their release from prison. Belove, the information about the opportunities of social assistance in a specific municipality provided by social services of the biggest municipalities of Latvia will be summarized (Table 2).

Table 2. Kinds of social assistance provided by Latvia's municipalities to ex-prisoners after their release from prison

Name of municipality	Mean number of prisoners released from Daugavgrīva prison annually	The annual number of ex- prisoners asking municipalities for assistance	Existence of extraordinary allowance in municipality and its scope (euro)	Services of lodging and night asylum (night lodging, supper, breakfast, personal hygiene, consultations with a social worker)			
Riga	30	No data	no	Are available			
Daugavpils	9	30	40	Are available			
Liepāja	5	No data	109	Are available			
Jelgava	4	10	50	no			
Rēzekne	3	5	no	no			
Jūrmala	3	15	109	no			

The information provided in Table 2 allows concluding that the scope of social assistance rendered by the biggest municipalities of Latvia is not the same and depends on the internal normative acts of municipality. The worst situation is in Rēzekne where the social service cannot offer allowance, home or night asylum services to ex-prisoners.

"The research on social opinion about the activities for popularizing a good practice to change stereotypes about ex-prisoners", carried out in 2018, reveals that: "Social workers of municipalities are potentially most essential support points for former prisoners, however at present, social workers are poorly informed about the resocialization activities carried out in PD and consequently they cannot successfully continue work with ex-prisoners. Municipalities maintain that to be able to do their job more successfully it would be reasonable, if at informing about the person to be released the administration of PD informed municipalities about the needs of this person, namely, what the former prisoner lacks, what he/she needs after the release and which municipality services would be useful for this person" (Research on social opinion 2018).

National Control admits that municipalities do not accumulate information about the target group of "ex-prisoner", and do it only about low-income and special support-groups of population (National Support 2019).

At summarizing municipality opinions about the additional information which would be necessary for them about the client to help the former prisoner reintegrate into the community, we see that mainly it is the information about the basic needs, marital status, vision of future, behavioral problems and kind of the committed crime.

The interviews with the Resocialization sector's senior inspectors (social workers) of Daugavgrīvas prison showed that social workers do not have adequate tools for evaluating prisoners' social needs after their release and helping this person develop an action plan to deal with the problems. Besides, the collaboration between the senior inspectors (social workers) of Resocialization sector of Daugavgrīvas prison and Municipality Social Service employees is poor and does not promote solving ex-prisoners' social problems and their reintegration into society.

Social service officials are of opinion that the necessary improvements are:

- A timely reception of information from PD;
- A closer collaboration with social workers of PD;
- A closer cooperation with the potential employers of ex-prisoners;
- Development of guidelines for work with ex-prisoners;
- Enforcement of National Rehabilitation program for ex-prisoners;
- Provision of mechanisms for action in case the municipality cannot render support (where to seek for alternatives?);
- Increasing the scope of opportunities for preserving ex-prisoners' working skills;
- Motivating the former prisoners to obtain a legal employment.

#### **Conclusions**

Not all municipalities offer social assistance for providing ex-prisoners' basic needs, if this person does not have housing and a supportive person. The cooperation between Resocialization sector's senior inspectors (social workers) of Daugavgrīva prison and municipality social service officials is poor and does not promote solving ex-prisoners' social problems and their reintegration into the community.

Senior inspectors (social workers) of Resocialization sector in Daugavgrīva prison do not have adequate tools for assessing ex-prisoners' social needs and helping former prisoners develop an action plan for problem solving and successful reintegration.

Taking into consideration the valid normative regulations on preparing prisoners for release, the author arrives at the conclusion that there is an urgent need to develop a cross-institutional model in Latvia for collaboration between places of detention and national (municipal) institutions on issues of preparing ex-prisoners for release, including in this model the assessment of former prisoners' social needs and specific strategies for reducing risks and satisfying ex-prisoners' needs.

#### References

Latvijas Sodu izpildes kodekss [Latvian Penitentiary Code] (in Latvian). Retrieved 16.01.2022 from https://likumi.lv/ta/id/90218-latvijas-sodu-izpildes-kodekss

Ministru kabineta noteikumi Nr. 810 Par Iekšlietu ministrijas sistēmas iestāžu un Ieslodzījuma vietu pārvaldes amatpersonu ar speciālajām dienesta pakāpēm amatu klasifikāciju [Regulations of the Cabinet of Ministers No. 810 on the Classification of Positions of Officials of the Institutions of the System of the Ministry of the Interior and Prisons Administration with Special Ranks] (in Latvian). Retrieved 19.01.2022 from https://likumi.lv/ta/id/287499-noteikumi-par-iekslietu-ministrijas-sistemas-iestazu-un-ieslodzijuma-vietu-parvaldes-amatpersonu-ar-specialajam-dienesta-pakapem Ministru kabineta rīkojums Nr. 580 Pamatnostādnēm ieslodzīto resocializācijas pilnveidošanai ieslodzījuma laikā un pēc atbrīvošanas no 2015. gada līdz 2020. gadam [Order of the Cabinet of Ministers No. 580 Guidelines for Improving the Resocialization of Prisoners During Imprisonment and After Release from 2015 to 2020] (in Latvian). Retrieved 06.01.2022 from https://likumi.lv/ta/id/276740-par-ieslodzito-resocializacijas-pamatnostadnem-2015-2020-gadam

Metodiskās rekomendācijas cietumu un AIeN sociālās rehabilitācijas daļas amatpersonām notiesāto sagatavošanai atbrīvošanai. Ieslodzījuma vietu pārvalde, 2008 (nepublicēts materiāls) [Methodological Recommendations for Prison and AIeN Social Rehabilitation Department Officials to Prepare Convicts for Release. Prison Administration, 2008 (unpublished material)] (in Latvian). Sabiedriskās domas pētījums par labās prakses popularizēšanas pasākumiem stereotipu mainīšanai par bijušajiem ieslodzītajiem. Gala ziņojums (2018). [Public Opinion Survey on Measures to Promote Good Practice to Change Stereotypes about eEx-prisoners. Final report]. Rīga (in Latvian). Retrieved 09.01.2022 from https://www.ievp.gov.lv/lv/media/2557/download

Valstī īstenoto notiesāto personu resocializācijas pasākumu efektivitāte Latvijas Republikas Valsts kontrole (2018). [Effectiveness of Resocialization Measures of Convicted Persons Implemented in The State Audit Office of the Republic of Latvia]. Rīga (in Latvian). Retrieved 05.03.2022 from file:///C:/Users/anatolijs.capkevics.TS/Downloads/RevZin\_Resoc\_28102019.pdf

Žlabe G. (2005). ESF Projekts "Pētījuma veikšana par sociāli atstumto grupu iespējām darba tirgū" "Pētījums par no ieslodzījuma vietām atbrīvoto personu iespējām, iekļaušanos darba tirgū (atskaite)" [ESF Project "Carrying out a Study on the Opportunities of Socially Excluded Groups in the Labor Market". Study on the opportunities of persons released from prisons, integration into the labor market (report)] (in Latvian). Retrieved 12.01.2022 from http://petijumi.mk.gov.lv/sites/default/files/file/11.pdf

Žlabe G. (2000). Sociālā darba funkcijas ar brīvības atņemšanu sodīto personu sociālās dzīves normalizācijā [Functions of Social Work in the Normalization of Social Life of Persons Sentenced to Imprisonment]. Rīga: Attīstība (in Latvian).

# EKONOMIKA UN MENEDŽMENTS / ECONOMICS AND MANAGEMENT

# ASSESSMENT OF THE INNOVATION POTENTIAL PROCESS COMPONENT OF THE LATVIAN, LITHUANIAN AND BELARUSIAN REGIONS

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#### Abstract

Assessment of the innovation potential process component of the latvian, lithuanian and belarusian regions

**Key Word:** innovation potential, process component, survey of experts, structure of the process component, assessment of process component

The article examines the structure and peculiarities of the innovation potential process component of the regions of Latvia, Lithuania and Belarus. The author conducts a survey of experts in the regions of Latvia, Lithuania and Belarus, dividing the factors promoting and hindering the development of the innovation process component into blocks. The obtained data are collected and evaluated. For a more convenient interpretation of the obtained results, the author presents the data in the form of a diagram and with a cartographic method.

#### Kopsavilkums

Latvijas, Lietuvas un Baltkrievijas reģionu inovācijas potenciāla procesu komponenta novērtēšana

**Atslēgvārdi:** inovācijas potenciāls, procesu komponents, ekspertu aptauja, procesu komponenta struktūra, procesu komponenta novērtēšana.

Rakstā tiek pētīta Latvijas, Lietuvas un Baltkrievijas reģionu inovācijas potenciāla procesu komponenta struktūra un īpatnības. Autors veic ekspertu aptauju Latvijas, Lietuvas un Baltkrievijas reģionos, iedalot inovācijas potenciāla procesu komponenta attīstību sekmējošus un kavējošus faktorus blokos. Iegūtie dati tiek apkopoti un izvērtēti. Ērtākai iegūto rezultātu interpretācijai autors atspoguļo datus diagrammas veidā un ar kartogrāfisko metodi.

The development of the concept of innovation potential is related to the end of the XX century-the early XXI century, although the phenomenon itself has always existed. However, scientists and researchers have not paid due attention to the role of the state and society in development. It is only at the beginning of the 21st century that more and more scientists are beginning to explore the potential of innovation and its structural components. However, the innovation potential in today's world is mostly seen as a resource or outcome, which the author thinks is too narrow interpretation of the given concept, and does not emphasize the transition from the resource component, which often reveals a wide range of regional innovation potential development problems.

Within the framework of this research, the author does not find a suitable definition of innovation potential and offers his own. Thus, the author defines the innovation potential of a region as the region's readiness for innovation, which is the region's chance and ability to transform the initial resources available to the region into a competitive and market-demanded innovation - a new product or service.

The author conducts an expert survey as a part of the study.

The circle of experts consists of 30 persons, among whom are the following specialists:

state and local government administration employees,

employees of scientific institutions (researchers, lecturers, professors, etc.),

business representatives.

The author of the expert survey is divided into four blocks. The author in each block identifies the factors that promote and hinder the development of innovation potential.

The first block is dedicated to economic and technological components:

existence of a financial reserve.

existence of a reserve of material and technical means,

the modern technologies,

the existence of the necessary economic infrastructure,

the necessary scientific and technical infrastructure,

cooperation between different bodies,

lack of funds to finance innovation projects,

insufficiency of material base,

Insufficient scientific and technical base,

lack of spare capacity,

dominance of current production interests.

The second block reflects the socio-psychological and cultural components:

moral remuneration of participants in the innovation process,

public recognition,

possibility of self-realization,

opportunity for creative work,

normal psychological climate in the work team,

resistance to changes that may lead to changes in the status of employees,

resisting change that may necessitate finding a new job,

resistance to changes that may lead to the restructuring of new jobs,

resistance to changes that may lead to the restructuring of certain activities,

resistance to changes that can lead to breaches of behavioral stereotypes and established traditions,

fear of uncertainty,

fear of penalties for failure.

The third block consists of organizational and management components:

flexibility of the organizational structure,

democratic leadership style,

predominance of horizontal information flows,

self-planning,

allowing adjustments,

decentralization,

autonomy,

formation of target work groups,

the existence of a motivation policy for the creation of clusters,

a constant organizational structure of the company,

excessive centralization,

authoritarian leadership style,

predominance of vertical information flows,

secrecy of public authorities,

difficulties in cross-sectoral and inter-organizational interactions,

rigor of planning,

focusing on existing markets,

focus on short-term repayment,

difficulties in reconciling the interests of innovation actors,

cluster formation – lack of motivation to create clusters.

The fourth block consists of the components of the policy and legal framework:

legislative measures (especially incentives) that encourage innovation,

state support of innovation,

policy to support transnational economic cooperation,

antitrust restrictions,

tax law restrictions,

restrictions on depreciation legislation,

restrictions on licensing patent law,

political barriers to transnational economic cooperation.

The author evaluates the regional innovation potential process component with the help of an integral indicator, determining the range of indicator values in the interval [0; 10], as well as dividing the innovation potential process component value series into quintiles to ensure comparison and analysis.

Table 1. Normalized values and quintile groups of the innovation potential process components of the regions of Latvia, Lithuania and Belarus, 2017

Region	Normalized values	Quintile groups		
Riga Region	8,87	4		
Pieriga Region	7,37	4		
Vidzeme Region	1,58	2		
Kurzeme Region	2,95	4		
Zemgale Region	1,11	1		
Latgale Region	0,57	1		
Alytus County	2,40	4		
Kaunas County	5,31	4		
Klaipeda County	8,29	4		
Marijampole County	2,18	3		
Panevėžys County	1,91	3		
Siauliai County	3,28	4		
Tauragė County	2,28	3		
Telšiai County	2,09	3		
Utena County	1,82	2		
Vilnius County	8,18	4		
Brest Region	0,75	1		
Vitebsk Region	2,33	3		
Gomel Region	1,29	2		
Grodno Region	1,36	2		
Minsk	10,00	5		
Minsk Region	0,00	1		
Mogilev Region	1,17	2		

Source: author's calculations based on the data of Latvia, Lithuania, Belarus regions, using the author's innovation potential assessment methodology

In order to provide a more convenient and easier analysis of the obtained results, the author presents the obtained results in the form of a diagram.

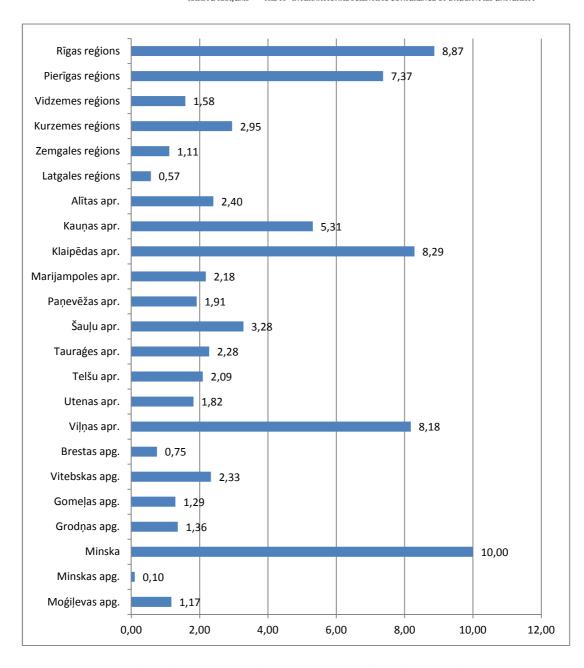


Figure 1. Evaluation of the innovation component of the innovation potential processes in the regions of Latvia, Lithuania and Belarus

Source: made by the author based on the data of the regions of Latvia, Lithuania, Belarus, using the innovation potential assessment methodology developed by the author

The highest value of the innovation component of the process potential is obtained by Minsk (10,00 normalized values), Riga Region (8,87 normalized values), Klaipeda County (8,29 normalized values), Vilnius County (8,18 normalized values), Pieriga Region (7,37 normalized values). The lowest value of the process component of the innovation potential is obtained by Minsk Region (0,00 normalized values), Latgale Region (0,57 normalized values), Brest Region (0,75 normalized values), Zemgale Region (1,11 normalized values), Mogilev Region (1,17 normalized values), Gomel Region (1,29 normalized values), Grodno Region (1,36 normalized values).

For a more detailed analysis of the obtained results, the author creates a quintile map of the regions of Latvia, Lithuania and Belarus.

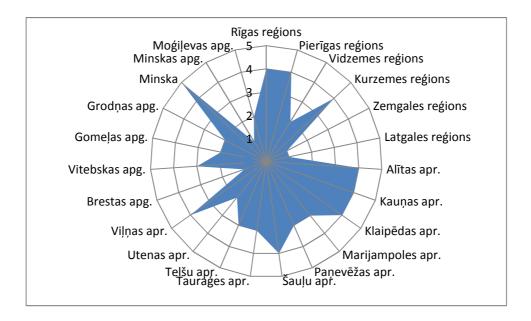


Figure 2. Map of quintile groups of innovation potential process components of Latvian, Lithuanian, Belarusian regions

Source: developed by the author, based on the data of the regions of Latvia, Lithuania and Belarus, using the methodology for assessing the innovation potential developed by the author

The first quintile group includes Zemgale Region, Latgale Region, Brest Region and Minsk Region. The second quintile includes Vidzeme Region, Utena County, Gomel Region, Grodno Region, Mogilev Region. The third quintile includes Marijampole County, Panevėžys County, Tauragė County, Telšiai County, Vitebsk Region. The fourth quintile includes Riga Region, Pieriga Region, Kurzeme Region, Alita County, Kaunas County, Klaipeda County, Šauliai County, Vilnius County. The fifth quintile includes Minsk.

According to the values of the integral of the process component of the innovation potential, the highest rating is obtained in Minsk (5<sup>th</sup> quintile). This is largely due to the fact that the Byelorussian China Innovation Center in Belarus is located in Minsk, which was established in 2010 as a part of the National Innovation Development Program of the Republic of Belarus for 2007–2010 (Главное управление науки БГУ: 2022). The purpose of establishing the Center is to promote the expansion of business and scientific relations between the structural units of the State University of Belarus and scientific institutions and enterprises of the People's Republic of China and to develop effective coordination of joint scientific and technical projects. The founders of the Beyelorussian Innovation Center in Belarus are the State University of Belarus and the Science and Technology Administration of the People's Government of Harbin City, Heilongjiang Province.

The following documents were signed during the operation of the Center (Министерство образования Республики Беларусь: 2020):

Agreement on the establishment of a joint China-Belarus institute with the Polytechnic University of Dalian;

Memorandum of cooperation in education and science with Zhejiang University of Science and Technology;

Memorandum on a long-term scientific and technical cooperation program with the Institute of Petrochemistry of Heilongjiang Academy of Sciences;

Protocol on cooperation in the field of polymer synthesis with the Mongolian Institute of Synthetic Chemistry;

Cooperation memorandum with Keqiao Industrial Region.

As a result of the transfer of innovation potential resources, the regions of Riga, Pieriga, Kurzeme (Republic of Latvia), Alytus, Kaunas, Klaipeda, Siauliai and Vilnius counties are also well managed (Republic of Lithuania). They have several functioning innovation development centers.

#### **Conclusion**

There is a high level of development of the process component of innovation potential in capital cities and large urban regions, which can be explained by the one-way effect of various factors. Of course, the innovation potential must be developed in these regions as well, and there are many problems in developing the innovation potential. State and local government institutions should develop new and promote existing programs to even out regional quantitative and structural differences, develop recommendations for more efficient use of various factors of the innovation potential process component and acquisition of EU structural funds. Economic policy-making institutions must develop a system for monitoring and controlling innovation potential, monitor innovation potential in the national and regional context, based on statistical data. Public administration institutions, regional self-government structures must elaborate development programs, including cross-border development programs, within which funding is attracted for various types of projects, including attracting cross-border funding, developing economic and cultural links, improving the region's image and raising its profile, all this will contribute to the development of the economy, science and other resources as a whole.

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#### References

Centrālās statistikas pārvaldes datubāze. (2018). Viewed on December 27, 2018 on www.csb.gov.lv

Lietuvos statistikos departamentas. (2018). Statistical Yearbook of Lithuania 2018. Vilnius.

Главное управление науки БГУ (2022). Белорусско-Китайский инновационный центр. Available at: http://research.bsu.by/innovative-activity/int\_sci\_tech\_cooperation/inter-innov-centre/belchine-centr/ Viewed on March 9, 2022.

Национальный статистический комитет Республики Беларусь. (2018). Регионы Республики Беларусь. Социально-экономические показатели. Минск.

# MARKETING ACTIVITIES IN COMPANIES: EXPERIENCE OF VALMIERA REGION

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#### **Abstract**

#### Marketing activities in companies: Experience of Valmiera region

Key Word: Marketing, Generation marketing, Marketing strategy, Marketing activities

Competition between different products and services is growing, and in order to succeed in the industry and other day-to-day processes, companies need to define a marketing strategy that is tailored to their needs and target audience. Targeting is a crucial task for marketers and it is important in identifying a consumer profile that consists of different generations. This paper aims to investigate marketing activities and their use in daily processes across companies in the region of Valmiera. The most important aspects of this paper are to find out if company leaders or marketing specialists have a strategy to reach their customers, how they monitor it and whether companies are interested in working with the latest consumer group – Generation Z born from 1995 to 2010.

#### Kopsavilkums

#### Mārketinga aktivitāšu pielietojums uzņēmumos: Valmieras novada uzņēmumu pieredze

Atslēgvārdi: Mārketings, Paaudžu mārketings, Mārketinga stratēģija, Mārketinga aktivitātes Konkurence dažādu produktu un pakalpojumu vidū aizvien pieaus, lai veiksmīgi darbotos

Konkurence dažādu produktu un pakalpojumu vidū aizvien pieaug, lai veiksmīgi darbotos nozarē un citos ikdienas procesos uzņēmumiem ir jānosaka mārketinga stratēģija, kas pielāgota tieši viņu vajadzībām un mērķauditorijai. Mērķauditorijas atlase ir mārketinga speciālistu uzdevums un šobrīd arī būtisks, lai identificētu patērētāja profilu, kas var sastāvēt no dažādu paaudžu pārstāvjiem. Publikācijas mērķis ir izpētīt Valmieras novada uzņēmumus un mārketinga aktivitātāšu izmantošanu ikdienas procesos. Svarīgākie šī darba aspekti ir noskaidrot, vai uzņēmumu vadītājiem vai mārketinga speciālistam ir stratēģija, kā sasniegt savus klientus un uzraudzīt rezultātus, tāpat noskaidrot vai uzņēmumi ir ieinteresēti strādāt ar jaunāko patērētāju grupu Z paaudzi, kas dzimuši no 1995. līdz 2010. gadam.

#### Introduction

Competition between different products and services is increasing. According to lursoft.lv data, 350 companies (limited liability company) were registered in Latvia during the last five years. In 2020, Valmiera was in second place after the capital of Latvia, Riga, in terms of the number of economically active companies per 1,000 inhabitants according to data.stat.gov.lv information. In order to be successful in the industry and in other day-to-day processes, companies need to define awareness-raising activities that are tailored to their business goals and target audience (Purworusmiardi, Artaya, 2021). One of these processes is marketing as it pairs the capabilities of a company and the wants of the customers. The creation and delivery of unique value to prospective customers and acquiring a sustained competitive advantage are of prime importance in marketing (Londhe, 2014). Achieving these marketing goals requires a strategy that includes a variety of complex measures. Different tools and tactics can be used depending on the form of entrepreneurship and the organizational structure. One of these tactics accepted by many researchers in this field (Bennett 1997, Chong, 2003, Londhe, 2014, etc.) is a marketing complex (mix). The name "complex" reminds us to strike the right balance between the various elements of marketing. In the sense of classical marketing, a marketing complex (mix) is a set of management measures taken by organizations to achieve the desired customer attitude towards the products

offered (Sashi, 2012). Kotler points out that a marketing complex is a set of company tools used to achieve marketing goals in the market. The main goal of the marketing complex is to provide a competitive advantage and help businesses gain a stable position in the market (Kotler, 2011). The "4 Ps" (Price, Promotion, Place, and Product) proposed by Jerome McCarthy in the 1950s are the cornerstone of the modern "marketing mix", although other complexes have since been introduced (Owomoyela, Oyeniyi, & Ola, 2013).

This study identified the knowledge of entrepreneurs about the use of marketing in their companies, the target audiences of entrepreneurs. It also looked at how business owners work with target groups and how they are reached, including an in-depth focus on the target group of consumers born between 1995 and 2010 also known as Generation Z. Altough the emergence of the new generation is differently dated across various sources, Western sociologists claim it might be 1995 (Targamadze, 2015). At present, it is not the largest and most influential group of consumers in Latvia, but their influence is already felt in the work environment and elsewhere, according to a study conducted by the State Revenue Service (vid.gov.lv). In contrast, the mccridle.com study shows that Generation Z is the largest generation ever, accounting for almost 30% of the world's population, including a forecast that Generation Z will account for 27% of the world's workforce by 2025 (McCrindle, 2022) and that it is already affecting the consumer market and the way businesses communicate with their customers. Generation Z are defined as a tech-savvy generation and have understood technology far better from the previous generations. It was also found in their work that proactivity, sovereignty and recognition are the most sought elements for Generation Z when it comes to engaging them in a workplace. This audience prefers technology integration while products for this generation can sell better on online platforms (Thomas, Mathew, 2018). Although in Latvia more attention is paid to generational differences in the work environment, marketing agencies are increasingly emphasizing differences that also affect marketing activities and strategies. A study by Mercuri Latvia shows that Generation Z most often communicates on Facebook, WhatsApp and similar messaging platforms and can be reached there faster than via email. As a result, sales teams are increasingly using tools like WhatsApp. This generation responds to e-mails rather slowly (Mercuri Latvia) in terms of marketing. Several researchers (Babin & Harris, 2016, Kardes, Cronley un Cline, 2014 etc.) predict that this generation will be one of the most dynamic consumers in five to ten years and will be little affected by classic sales and marketing activities.

The **research problem** has been confirmed in several studies (Londhe, 2014, Šedik etc., 2018 etc.) that emphasize the constant need to find and apply new marketing, communication and sales activities, strategies and methods to reach and retain consumers.

The **aim** of the article is to study the experience of comanies in the region of Valmiera in relation to the application of marketing activities of their products and services and the use of marketing strategy on a daily basis.

The quantitative research method was used – a survey among entrepreneurs from the region of Valmiera. The results were processed with static analysis methods in MS Excel and SPSS programs. In addition, a monographic method, comparison, generalization, graphical analysis and survey methods were used.

#### **Discussion**

The consumer behavior is the dynamic sum of the range of political, economic, technological, demographic, and socio-environmental influences. The essential condition for a professionally managed company to grow and keep growing is an understanding of marketing. The strategy for seizing a market niche requires an understanding of important marketing concepts and strategies based on segmentation. Considering the market as segmented into a host of individual homogeneous elements implies a clear identification of the customers and is vital for any company to survive. This may also require the development of an optimal distribution mechanism framework to ensure the quality of company offerings (Kautish, 2014).

In order to find out general information about companies in the Valmiera region, their goals, type of activity, knowledge about marketing activities and their application in companies, as well as to study the target audiences defined by entrepreneurs and opportunities to work with GenerationZ a survey was conducted between the beginning of August 2021 and the end of September 2021. Electronic survey questionnaires were sent to entrepreneurs by e-mail, entrepreneurs were collected from the national database on www.lursoft.lv. A total of 64 completed and valid questionnaires were received. Selection criteria – all active companies and institutions (without encumbrances) registered in the Valmiera region. In total, 2438 such companies were registered in Valmiera region on 28.07.2021 (www.lursoft.lv).

The questionnaires were completed by respondents from 12 different locations – 65,6% from the city of Valmiera, 4,7% from each – Rūjiena, Mazsalaca, Matīšu parish and Valmiermuiža. 3,1% from Rīga, despite the fact that Rīga does not belong to the region of Valmiera the place of registration for these businesses were in the Valmiera region. Also 3,1% from from Rencēni and 3,1% from Kocēni parish, 1,6% from each – Dikļi, Rubene, Bērzaine and Skaņkalnes parish.

According to cfla.gov.lv the size of companies in Latvia is divided as follows – Microenterprise (<10 employees, annual balance sheet/company turnover <2 million), Small company (<50 employees, annual balance sheet/company turnover <10 million), Medium enterprise (<250 employees, company turnover <50 million, annual balance sheet <43 million) Large company (> 200 employees, company turnover> 55 million, annual balance sheet> 56 million). The distribution

of respondents is as follows -70.3% were micro-enterprises, 23.4% were small businesses, 4.7% were medium-sized enterprises and 1.6 % large companies.

Limited liability company where represented for 87,5% companies from – Agriculture, forestry and fishing (3,6%), Mining and quarrying (1,8%), Manufacturing (7,15%), Electricity, gas, steam and air conditioning supply (5,4%), Water supply: sewage, waste management and remediation activities (1,8%), Construction (10,7%), Wholesale and retail trade: repair of motor vehicles and motorcycles (5,4%), Transport and storage (5,4%), Accommodation and food services (5,4%), Information and communication services (8,9%), Education (7,1%), Health and social work (1,8%) and Arts, entertainment and recreation (7,1%) industry. Joint Stock Company (JSC) where represented for 1,6% by company from – Accommodation and food services (100%) industry. Individual (family) companies where represented for 1,6% by company – Professional, scientific and technical services (100%) industry and Farmer's or fisherman's holding were represented for 9,4% by companies from Agriculture, forestry and fishing (83,3%) and Activities of households as employers; Undifferentiated goods- and services-producing activities of private households for own use (16,7%) industry.

According to the survey data, it can be seen that in general, entrepreneurs understand what segmentation means – 48.4% entrepreneurs working in the B2B (business to business) segment, 75,0% entrepreneurs working in the B2C (business to customer), 4,7% working in the B2G (business to government). 3,1% of entrepreneurs did not know what segmentation means, those companies were micro-enterprises and small businesses. Small business leaders do not have enough knowledge, often because of the lack of information and help from a specialist (Blackburn, 2012). By dividing the market into segments, marketing managers can acquire a better understanding of the needs and wants of their customers. This enables them to customize or to 'tailor' the company's marketing activities more accurately and responsibly to the individual customer's liking. Segmentation marketing supports businesses in meeting and exceeding their customers' requirements. Customer segmentation enables marketers to adopt a more systematic approach when planning ahead for the future. This leads to better exploitation of marketing resources, resulting in the development of a more finely-tuned marketing programme. For example, businesses' integrated marketing communications can be better organised, as targeted advertising and promotional activities can be directed at individual customers (Schegg & Stangl, 2017; Camilleri 2016 and 2017 etc.)

Customer segmentation is closely related to marketing strategy and money-consuming marketing activities. In an analysis of the respondents' opinion on whether the marketing strategy and a designated employee in the company promotes its development, sales, and visibility, 21.9% answered that mostly yes. The Chi-square test (p-value = 0.294) indicated that in companies in

which the importance of the marketing strategy is valued, but the correlation shows that there are no statistically significant differences between those who have a marketing strategy and a suitable employee and those who do not. However, 50% of the respondents did not answer the question whether the marketing strategy and the employee contributes to the development of the company.

While comparing whether companies have a marketing strategy and how much is spent on marketing activities, the results showed that companies that have a marketing strategy and use it do not always invest financial resources (excluding employee salaries, if there are any) – 5.0% cases do not spent money for marketing, in 30% of cases they are less than 500 EUR per year, in 5% of cases they are 500–1000 EUR per year, in the majority – 45% of cases they are 1000–5000 euros per year, 5000–10000 EUR per year 10% of businesses and 50,000–100,000 EUR per year only 5% of the surveyed companies. Companies that do not have and do not use a marketing strategy do not spend any money during the year – 30.6% of cases, 36.1% of cases, without a marketing strategy spend up to 500 EUR per year, 5.6% spend 500–1000 EUR, 19.4% of cases spend 1000–5000 EUR and 8.3% spend 5000–10000 EUR.

However the value of the Pearson Chi-Square is 18,4 and p = 0.261 shows that there is no statistical difference between how much a company spends on marketing activities and whether or not the company has a marketing strategy, however companies without any marketing strategy spend money intuitively, not efficiently. Based on developing an early understanding of different advantages and disadvantages of varied management scenarios, and initial insights on how to balance between such scenarios (Uhde, Hahn, etc., 2015), a planning process analyzes the alternative options to recognize the most cost-effective option to achieve an organizational goal. As a result, the planning process itself enables marketers to develop early insights on the marketing management problem and associated challenges and opportunities, related to a particular organizational goal (Czinkota, Kotabe etc., 2021).

According to a searchenginejournal.com survey of 350 USA small and medium business (SMB) owners, 50% did not have a marketing plan for 2019. 55% of SMB owners spend less than 5% of annual revenue on marketing, by comparison, only 50% of respondents who invested less than 5% of revenue into marketing experienced revenue worth.

And the other answers from Valmiera region survey showed that the company is on the way to a marketing strategy or they have a marketing strategy but is not used did not show significant results.

The common interest of the surveyed companies is making a profit as one of the main business goals set by 73,4% businesses, competitiveness prioritized by 35,9%, sustainability growth by 62,5%, reaching the target group by 29,7%, successful customer service by 70,3%, resource productivity by 15,6% and attracting and retaining employees was important to 15,6%. Achieving a

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company's goals requires a strategy, including in marketing. However, the study found that not all entrepreneurs have an understanding of this process nor how to use it in their daily business. For example, when entrepreneurs were asked what kind of marketing complex a company uses to establish a communication link with a customer and increase the demand for its products or services, 31.3% answered that they hear about such complexes for the first time, but work to promote their products on a daily basis, pricing policies, etc. aspects. 25% stated that they are aware of the complexes but do not use them on a daily basis in their company. In 18.8% cases, entrepreneurs work with the marketing 4C – consumer, cost, communication, convenience and in 7.8% cases the marketing mix 4Ps – product, price, location, positioning. 17.2% of entrepreneurs do not use any of the offered complexes. Available resources, for example human resources and knowledge, can influence a company's development, in this case the use of a marketing mix. any researchers acknowledged that it is an essential element of a company's ability to be competitive and successful. The reasons why not all entrepreneurs in the Valmiera region use the marketing mix may be different, including a lack of knowledge, no marketing specialists and time, reluctance, etc. An in-depth research would be required to evaluate this problem. This may also be related to the answers to the next question where analysis of the respondents' use of company marketing strategy and a person in a suitable position was conducted. The Chi-square test (p value=0,001) revealed that companies without a marketing strategy (85.7% cases) also do not have a suitable executor (50% of cases) and in 30,6% marketing issues are handled by the head of the company. In companies that have a marketing strategy and it is used (50% of cases), there is a person in a suitable position (83.3% of cases), while in 35% of companies leave the management of marketing issues to the head of the business (31.8%). Yet, the correlation analysis showed that the relationship (p=0,002) was weak, because there is a statistically significant difference between the answers of entrepreneurs who have a marketing strategy and who do not know whether there is a suitable person in the company who is responsible for promotion activities. It is difficult to say whether companies that do not have a marketing strategy lack the knowledge to create it and use it or do not have the will and resources to do so. Comparative results showed that most commonly marketing strategy is not in place in micro-enterprises 62.2% and in small enterprises 46.7%.

As can be seen in Table 1, the answers of the respondents are ambiguous as to which marketing tasks are less and more important. Given that most respondents work in the B2C segment, then quality customer service is a fundamentally important marketing task.

Table 1. Created by author

Choice Marketing tasks	1 <sup>st</sup> choice	2 <sup>nd</sup> choice	3 <sup>rd</sup> choice	4 <sup>th</sup> choice	5 <sup>th</sup> choice	6 <sup>th</sup> choice	7 <sup>th</sup> choice
Profit	18,8%	14,1%	9.4%	6.3%	20.3%	6.3%	25.0%
Sales Promotion	25,0%	14,1%	12,5%	3,1%	18,8%	6,3%	20,3%
Development of new products	20,3%	14,1%	9,4%	6,3%	23,4%	10,9%	15,6%
Pricing policy	15,6%	7,8%	21,9%	17,2%	15,6%	9,4%	12,5%
Quality customer service	39,1%	6,3%	12,5%	9,4%	6,3%	9,4%	17,2%
Stimulating sales	17,2%	14,1%	12,5%	12,5%	7,8%	21,9%	14,1%
Introduction of new types of services	10,9%	14,1%	17,2%	12,5%	18,8%	15,6%	10,9%

The most common choice

The arest choice

It is difficult to comment on other options, as they are too contradictory not only to the analysis of the theory, but to the respondents' own answers to other questions.

The study found that the majority (31.3%) of respondents use both advertising and direct sales as elements of marketing communication, 21.9% use public relations, at least 6.4% use sales promotion elements – coupon, promotions, etc., while 7.8% do not use any elements of marketing communication, while one plans to develop a marketing strategy. One company did not reply to the question. Comparing the answers to the question whether the company has a marketing strategy, it can be concluded that despite the fact that the companies do not have a marketing strategy they use communication elements – personal sales 38.9%, advertising 27.8%, public relations 16.7%. Also Chi-square value shows = 28.13, while p = 0.021, which indicates that regardless of whether the company has a marketing strategy or not, different elements of marketing communication are used. The answers show that some companies act intuitively, because they do not have a marketing strategy, but want to achieve the company's goals. This may explain why companies do not tailor activities to different marketing audiences. Although research has shown that segmentation of consumers by age and appropriate use of marketing activities in different age groups contributes to the achievement of the company's goals, successful segmentation is not possible in the company without a marketing strategy.

The results revealed that 43.8% of entrepreneurs adapt activities to different audiences, 23.4% do not adapt activities, 15,6% were unable to answer tp such a question, while 17.2% work with only one target audience.

The comparative results revealed that in addition to the marketing strategy, 30.6% adapt their activities to different target audiences, while those who do not adapt their activities 22.2% do not use a marketing strategy.

The most popular age group that businesses target is 27 to 41 years of age (45.3%). The age group of 42 to 66 years is important for 37.5% of respondents. 17.2% noted that they work with the 12–26 age group, the least entrepreneurs focus on very young and older consumers – 4.7% target the under –11s, for 7.8% the target group is 75+ years of age, while 12.5% are consumers in the age group of 67 to 74 years. 35.9% of entrepreneurs do not target their customers.

As 17.2% of entrepreneurs work with Generation Z, which is now becoming a globally important consumer group, it was explored how companies choose sales and promotion activities and strategies to reach this target group audience. 15.6% admit that they are doing what they can afford to do well, 12.5% gather information about the consumer group, evaluate it and act accordingly, 10.9% entrepreneurs try to reach this audience based on the information researched on the Internet on modern trends, only 6.3% admitted that they trust the knowledge of the company's marketing specialist, 3.1% work with marketing agencies to reach Generation Z, while 9.4% don't think about what to do to get to know this audience. 28.1% of entrepreneurs do not work with this target audience, but 4.7% plan to work with this group in the future. Despite the different ways in which companies choose to reach Generation Z, the most common activities are the use of social media, (9,4%) advertising (3,1%) and, in some cases, meeting young people in schools (3,1%). However, it is not enough that the activities are carried out in order to work successfully with consumers in the future, it is important to do research or the existing marketing activities are working. And 29.7% companies admitted that they do not compile statistics which therefore does not allow them to say whether the existing activities are successful, of them 31.6% have used a marketing strategy, while 42.1% do not have a marketing strategy. 7.8% answered positively, of which 80% also had a marketing strategy, while 1.6% negatively, respectively, that this audience is not reached.

Of the companies that used the services of marketing agencies to reach their target audience, 15.6% acknowledged that they had used such services 1 to 5 times, and 10.9% concluded that they can do by themselves activities that was made by marketing agencies.

#### **Conclusions**

Despite the business development in the region of Valmiera, the research data showed that not all entrepreneurs have a clear vision of marketing processes and their contribution. The study found that entrepreneurs are not interested or willing to implement a marketing strategy, create a marketing plan, and hire the right person, but are willing to spend resources and managerial time to reach an audience in most cases does not work as proved in other authors' studies. This is due to the fact that not all entrepreneurs — mostly they are micro or small enterprise leaders — have an understanding of what is a marketing process, activities, complex and what is market segmentation.

As a result, only a fraction of entrepreneurs know what kind of audience they want to reach, with what activities and are also able to ascertain whether it has succeeded.

Comparative results showed that most commonly marketing strategy is not in place across micro-enterprises 62.2% and in small enterprises 46.7%, after which it can be concluded that it is in this form of business that entrepreneurs need additional knowledge and information to understand why marketing is vital in achieving the company's goals and audience.

As previous research showes, Generation Z use social media, also the Valmiera region's entrepreneurs who would like to reach this group use social media and advertising. The research conducted in the companies of Valmiera region proved that the determination of the marketing strategy is important for the company in order to successfully produce and perform exchanges and reach the target markets, marketing strategy is required to appropriately measure the success of marketing activities.

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#### References

Babin B. J., Harris E. G. 2015. Consumer Behavior.

Bennett, A. R. 1997. The five Vs – A buyer's perspective of the marketing Mix. Marketing Intelligence & Planning, 15(3), 151–156.

Blackburn R. A. 2012. Segmenting the SME Market and Implications for Service Provision: A Literature Review. DOI: 10.13140/RG.2.2.18121.57443 [12.11.2021.].

Camilleri M. A. 2017. Market Segmentation, Targeting and Positioning. DOI: 10.1007/978-3-319-49849-2\_4. [10.11.2021.].

Camilleri, M. A. 2018. Market Segmentation, Targeting and Positioning. In Travel Marketing, Tourism Economics and the Airline Product Chapter 4, pp. 69–83.

Chong, K. W. 2003. The Role of Pricing in Relationship Marketing – A Study of the Singapore Heavy Equipment Spare Parts Industry, PhD Dissertation, International Graduate School of Management, University of South Australia.

Czinkota M., Kotabe M., Vrontis D., Shams R. 2021. Marketing Planning. DOI: 10.1007/978-3-030-66916-4\_2 [11.11.2021.].

IstyariniI W., Artaya P., Purworusmiardi., Sukoco A., Kamisutara M. 2021. Marketplace Effectiveness in Increasing Sales Concentration of Small Business Products During the Covid19 https://www.researchgate.net/publication/352222567\_Marketplace\_ Pandemic. Accessed: Effectiveness\_in\_Increasing\_Sales\_Concentration\_of\_Small\_Business\_Products\_During\_the\_Covi d19 Pandemic [10.11.2021].

Kardes F., Cronley M., Cline T. 2014. Consumer Behavior. Accessed: http://perpus.ipdynamic.com/resource1/EKONOMI/E01345.%20Frank%20Kardes,%20Maria%20Cronley,%20Th omas%20Cline%20-%20Consumer%20Behavior-Cengage%20Learning%20(2010).pdf [10.11.2021.].

Kautish P. 2014. Niche Marketing Strategies for Business Growth: An Experiential Journey. DOI: 10.4018/978-1-4666-4357-4.ch014 [02.11.2021.].

Mccrindle M., Fell A. (2022) Generation Alpha. Understanding our children and helping them thrive.

Malhotra (Ed.), Review of Marketing Research: Special issue – Marketing legends, pp. 87–120.

Londhe B. 2014. Marketing Mix for Next Generation Marketing. Procedia Economics and Finance 11:335–340. DOI: 10.1016/S2212-5671(14)00201-9 [10.11.2021.].

Owomoyela, S. K., Oyeniyi, K. O., Ola, O. S. 2013. Investigating the impact of marketing mix elements on consumer loyalty: An empirical study on Nigerian Breweries Plc. Interdisciplinary Journal of Contemporary Research in Business, 4, pp. 485–496.

Sashi, C. M. 2012. Customer engagement, buyer-seller relationships, and social media. Management Decision, 50, pp. 253–272.

Sceulovs D., Gaile-Sarkane E. 2010. Mārketinga komplekss elektroniskajā mārketingā. file:///E:/promija%20AKTU%C4%80LAIS/Promocijas%20darbs/pub9600.pdf [12.11.2021.].

Schegg, R., & Stangl, B. 2017. Information and Communication Technologies in Tourism 2017. Proceedings of the International Conference, January 24–26, Rome, Italy.

Šedik P., Horska E., Balint Illes C., Skowron-Grabowska B. 2018. Generation marketing in strategic marketing management: Case study of honey market. Polish Journal of Management Studies 18(1): 326–337. DOI: 10.17512/pjms.2018.18.1.24 [11.11.2021.].

Targamadze V., Minkutė-Henrickson R. 2015. COGNIZABLE OR YET NOT DISCOVERED GENERATION Z: VIEWPOINT OF COMPREHENSIVE SCHOOL TEACHERS (CASE OF LITHUANIA). DOI: 10.22333/ijme.2015.6003 [02.11.2021.].

Thomas M. R., MP S. 2020. Customer Profiling of Alpha: The Next Generation Marketing. Ushus – Journal of Business Management 19(1): 75–86. DOI: 10.12725/ujbm.50.5 [01.11.2021.].

Uhde, B., Hahn, W. A., Griess, V. C., & Knoke, T. 2015. Hybrid MCDA methods to integrate multiple ecosystem services in forest management planning: A critical review. Environmental Management, 56, pp. 373–388.

Deloitte. 2021. The Transformation of Marketing: Emerging Digital, Social, and Political Trends. The CMO Survey. Accessed: https://cmosurvey.org/wp-content/uploads/2021/02/The\_CMO\_Survey-Highlights\_and\_Insights\_Report-February-2021.pdf [12.11.2021.].

Gaile-Sarkane E. 2005. Elektroniskā komercija. Rīga: RTU izdevniecība. 47 lpp.

Informatīvs materiāls par mikro, mazā un vidējā uzņēmuma un grūtībās nonākuša uzņēmuma statusa noteikšanu. 2021. Accessed: https://www.cfla.gov.lv/lv/media/2946/download [11.11.2021.].

Lursoft datu bāze. Accessed: https://www.lursoft.lv/adrese/valmiera/uznemumi [05.05.2021.].

Mercuri international pētījums. Accessed: https://mercuri.lv/insights/861-2/[01.11.2021.].

Oficiālās statistikas portāls. Accessed: https://data.stat.gov.lv/pxweb/lv/OSP\_PUB/START\_\_ ENT UZ UZS/UZS040/table/tableViewLayout1/ [01.11.2021.].

Outbound Engine. Stress, Time & Growth: Factors Affecting Small Business Marketing in 2019. Accessed: https://www.outboundengine.com/wp-content/uploads/2019/03/OutboundEngine-Marketing-Survey-2019.pdf [02.11.2021.].

VID 2018. Valsts ieņēmumu dienesta pētījums. Accessed: https://www.vid.gov.lv/sites/default/files/4 x y z paaudzes.pdf [02.11.2021.].

# LABOR TAX EVASION IN LATVIA: DESCRIPTIVE EVIDENCE FROM DATA ON TAX AUDITS<sup>1</sup>

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#### **Abstract**

#### Labor tax evasion in latvia: descriptive evidence from data on tax audits

Key Word: tax evasion, envelope wages, administrative data, tax audits.

Tax evasion is a major policy issue especially prevalent in transition and post-transition countries. The practice that is particularly widespread in Eastern Europe is the so-called 'envelope wages', i.e., an unreported part of remuneration that is paid in addition to the official wage. In this paper, we use Latvian State Revenue Service's data on tax audits carried out in 2013–2020 and administrative firm-level data on wages and employment to infer the prevalence of envelope wages across NACE sectors and across firms with different characteristics. We show that the sectors most prone to labor tax evasion are accommodation and catering, administrative and support service activities, transportation and storage, construction, and agriculture, forestry and fishing.

#### Kopsavilkums

Atslēgvārdi: izvairīšanās no nodokļu maksāšanas, aplokšņu algas, administratīvie dati, nodokļu auditi.

Izvairīšanās no nodokļu maksāšanas ir nozīmīga problēma, kas ir īpaši izplatīta pārejas un pēcpārejas valstīs. Austrumeiropā īpaši izplatīta prakse ir tā saucamās "aplokšņu algas", t. i., nereģistrēta atalgojuma daļa, kas tiek maksāta papildus oficiālajai algai. Šajā darbā mēs izmantojam Latvijas Valsts ieņēmumu dienesta datus par 2013.–2020. gadā veiktajiem nodokļu auditiem un administratīvos uzņēmumu līmeņa datus par algām un nodarbinātību, lai novērtētu aplokšņu algu izplatību NACE nozarēs un uzņēmumos ar dažādām raksturīpašībām. Mēs parādām, ka nozares, kurās visbiežāk notiek izvairīšanās no darbaspēka nodokļu maksāšanas, ir izmitināšana un ēdināšana, administratīvo un apkalpojošo dienestu darbība, transports un uzglabāšana, būvniecība, kā arī lauksaimniecība, mežsaimniecība un zivsaimniecība.

#### Introduction

Tax evasion is a major policy issue especially prevalent in transition and post-transition countries. The practice that is particularly widespread in Eastern Europe is the so-called 'envelope wages', i.e., an unreported part of remuneration that is paid in addition to the official wage (European Commission, 2014, 2020). In Latvia, the share of unreported wages is estimated to exceed 20% (Putnins and Sauka, 2021). Gavoille and Zasova (2021a) show that 37% of firms (employing 24% of employees) in Latvia underreport wages, but Gavoille and Zasova (2021b) study wage underreporting in domestically- and foreign-owned firms and show that households where the head is an employee of a domestically owned firm underreport about 26% of their earnings.

In this paper, we use Latvian State Revenue Service's data on tax audits and administrative firm-level data on wages and employment to infer the prevalence of labor tax evasion across firms working in different NACE sectors and firms with different characteristics. We show that sectors most prone to tax evasion are accommodation and catering (I), administrative and support service

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activities (N), transportation and storage (H), construction (F), and agriculture, forestry and fishing (A). We also show that firms officially reporting lower wages are more likely to be engaged in labor tax evasion, and this result holds for most major NACE sectors. Notable exceptions are catering, real estate activities and construction of buildings: in these sectors, firms that incurred fines or additional charges as a result of an audit generally report higher wages than firms that were audited but incurred no penalties. Our results can be used by fiscal authorities to improve the effectiveness of additional monitoring effort. Given that tax audits are costly, a more effective targeting of audits toward firms with a higher risk of tax evasion can improve audit effectiveness.

The paper proceeds as follows. Section 2 provides a brief description of the dataset, Sections 3 and 4 present our results by NACE sectors and firm characteristics, respectively, Section 5 concludes.

#### Data

In this paper, we use administrative data provided by the Latvian State Revenue Service (hereinafter – VID, *Valsts Ieṇēmumu Dienests*) on a special request (State Revenue Service, 2021). The dataset contains information on all personal income tax (PIT), social security contributions (SSC), and VAT audits carried out during the period from 2013 to July 2020. The dataset also contains information on firm-level employment and average wage, covering both audited firms and not audited firms working in the same industries.

The dataset on audits contains information about 8246 audits, which were initiated in January 2013 – July 2020, i.e., firms received a notification about VID's decision to undertake an audit during this period. The database includes 1791 PIT audits, 1790 SSC audits and 4665 VAT audits. In most cases (59% of all audits), VID performed audits of all three taxes at the same time. 37% of audits cover episodes when only VAT was examined, and 4% of audits cover only PIT and SSC audits. The number of audited firms in the database is 4175, of which 523 firms (12.5%) were audited more than once.

#### Tax evasion by NACE sectors

We begin by analyzing tax audits across firms operating in different NACE sectors. Table A.1 in the appendix shows the distribution of audits by NACE sector. The biggest share of audits (especially VAT audits) was done in wholesale and retail trade and repair of motor vehicles and motorcycles. Other sectors making up large shares of audits are construction, administrative and support service activities, and transportation.

69% of all performed audits have resulted in fines, charges or assessed extra payable taxes. In what follows, for simplicity, we call such audits "successful". The share of successful VAT audits is twice as high as that for PIT and SSC audits (89% vs. 42% and 43%, respectively), and this pattern is similar across all NACE sectors. Figure 1 plots the share of audits which resulted in fines or

additional charges, in ten sectors with the largest number of audits (these ten sectors cover 96% of all audits).

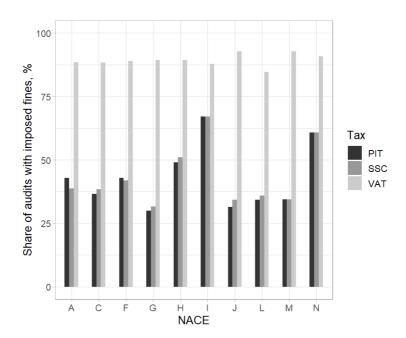


Figure 1. Shares of audits with imposed fines, charges or assessed extra payable taxes by NACE sectors,  $\%^2$ 

Source: authors' calculations based on VID data (State Revenue Service, 2021)

The fact that the share of successful VAT audits is so high suggests that VID specifically targets firms with a high risk of VAT evasion. Audits of PIT and SSC are rarely done alone, and the relatively low share of imposed penalties allows us to cautiously interpret the share of successful PIT and SSC audits as an indicator of the prevalence of tax evasion in separate NACE sectors. We do realize the shortcomings of this approach, though. First, various types of tax evasion are likely to be interrelated. Hence firms with a high risk of VAT evasion tend to evade labor taxes at a higher rate than other firms in the economy. Second, any possible changes in VID approach to selecting firms for audits will result in changes in the shares of successful audits that are not related to changes in the prevalence of tax evasion *per se*. Finally, a firm can still evade taxes even if tax evasion is not detected during an audit.

Keeping in mind these limitations, we use the relative shares of successful PIT and SSC audits across sectors as an (imperfect) indicator of the relative prevalence of tax evasion. As shown in Figure 1, the sectors where the share of successful PIT and SSC audits are the highest are

activities.

<sup>&</sup>lt;sup>2</sup> Note: PIT – personal income tax, SSC – social security contributions; NACE sectors: A – Agriculture, forestry and fishing, C – Manufacturing, F – Construction, G – Wholesale and retail trade, repair of motor vehicles and motorcycles, H – Transportation and storage, I – Accommodation and food service activities, J – Information and communication, L – Real estate activities, M – Professional, scientific and technical activities, N – Administrative and support service

accommodation and catering (I), administrative and support service activities (N), transportation and storage (H), construction (F), and agriculture, forestry and fishing (A). This observation is consistent with findings from the survey data for the sectors that are directly comparable: both survey and administrative audit data suggest that the prevalence of tax evasion in construction tends to be higher than in manufacturing (Putnins and Sauka, 2021).

Next, we look at the changes in the number of audits and the shares of successful audits<sup>3</sup>. The number of audits dropped in 2017 (see Figure 2.a; note that the number of PIT and SSC audits is almost the same), especially the number of performed VAT audits. This pattern is likely to reflect the effect of the strategy "Consult first" ("Konsultē vispirms"), which VID (and other public administration institutions) has pursued since 2017 with a view to strengthening the consulting role of VID and reducing the burden of fines imposed on the Latvian companies.

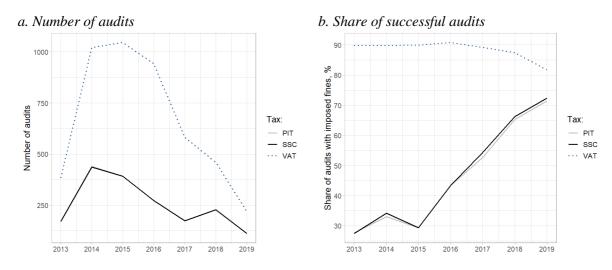


Figure 2. Number of audits and share of successful audits in 2013–2019, by year and type of audit

Source: authors' calculations based on VID data (State Revenue Service, 2021)

The decline in the number of audits coincides with a gradual reduction in the share of successful VAT audits and growth in the share of successful PIT and SSC audits (Figure 2.b). A similar pattern is observed across all sectors with the largest number of audits (Figure 3), likely signaling changes in VID's approach to choosing firms for audits.

<sup>&</sup>lt;sup>3</sup> We exclude 2020 here because we do not have full data on audits initiated in 2020 (the last audit in the database was initiated in July 2020).

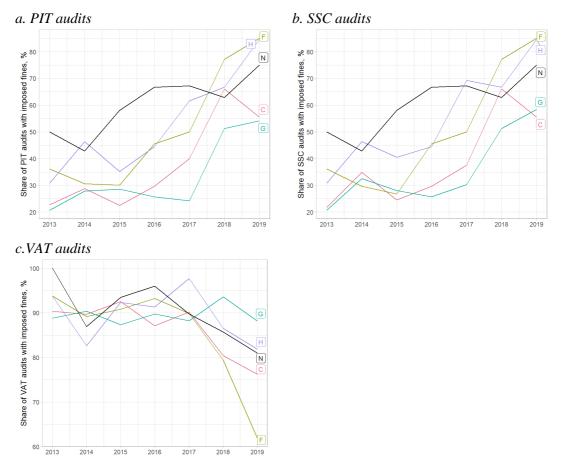


Figure 3. Share successful PIT and SSC audits by year and NACE sector, %<sup>4</sup>

Source: authors' calculations based on VID data (State Revenue Service, 2021)

#### Tax evasion by company characteristics

We next turn to the analysis of the characteristics of the audited firms. We compare firms that incurred fines or additional charges as a result of an audit with firms that incurred no fines, and focus on two firm characteristics: firm size measured by the number of employees in a firm and firm-level average wage.

We measure both characteristics in the month preceding the month in which the firm is notified of the audit. This is done to ensure that firm size and wages are not affected by any possible changes in firm behavior in response to the audit notification. For the same reason, in this section, we limit our sample to firms that in 2013–2020 were audited only once. We further restrict the sample to wage tax audits and exclude episodes when a firm underwent a VAT audit without PIT and SSC audits.

First, we look at the changes in firm characteristics through time (Figure 4). Wages in firms that have incurred fines are consistently lower than wages in firms facing no fines, which is consistent with the idea that firms paying lower wages are more likely to underreport wages, and

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<sup>&</sup>lt;sup>4</sup> Note: F – Construction, H – Transportation and storage, N – Administrative and support service activities, G – Wholesale and retail trade, repair of motor vehicles and motorcycles, C – Manufacturing

hence are more likely to incur a penalty after an audit. Employment, however, is somewhat higher. A similar conclusion stems from the by-sector comparison (Figure 5): wages in firms facing fines are lower in six out of ten sectors with the largest number of audits, but employment is higher in all sectors. The latter finding contrasts with the existing literature, which shows that smaller firms are more likely to engage in tax evasion than larger firms (see e.g., Kleven et al, 2016). A possible explanation for our results is that firms paying envelope wages are more likely to manipulate declared working hours, thereby reporting more part-time employees. Such behavior can artificially increase the reported firm's size since we cannot distinguish full- and part-time employees in our data.

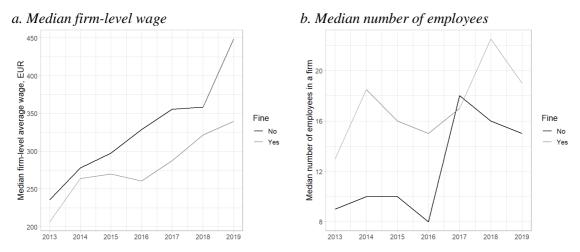


Figure 4. Median firm-level wage and employment in firms incurring fines and additional charges vs. firms incurring no fines after audits, by years

Source: authors' calculations based on VID data (State Revenue Service, 2021)

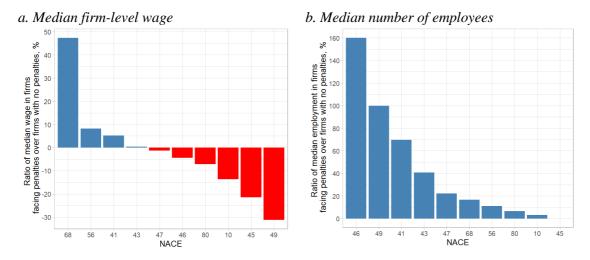


Figure 5. Median firm-level wage and employment in firms incurring fines and additional charges vs. firms incurring no fines after audits, by NACE sectors<sup>5</sup>

Source: authors' calculations based on VID data (State Revenue Service, 2021)

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<sup>&</sup>lt;sup>5</sup> Note: 10 – Manufacture of food products, 41 – Construction of buildings, 43 – Specialised construction activities, 45 – Wholesale and retail trade and repair of motor vehicles and motorcycles, 46 – Wholesale trade, except motor vehicles and motorcycles, 47 – Retail trade, except motor vehicles and motorcycles, 49 – Land transport and transport via pipelines, 56 – Food and beverage service activities, 68 – Real estate activities, 80 – Security and investigation activities.

#### **Conclusions**

In this paper, we analyze VID data on tax audits carried out in 2013–2020 and administrative data on firm-level reported wages and employment to infer evidence for the relative prevalence of 'envelope' wages across NACE sectors and firms with different characteristics. We use data on wage tax audit outcomes to classify firms as likely evaders: we assume that firms that incurred fines and additional tax charges after an audit are likely to be evaders, while firms incurring no fines or additional charges are likely to be clean.

Our results on NACE sectors suggest that the sectors most prone to labor tax evasion are accommodation and catering, and administrative and support service activities (around 60% of all wage tax audits in these two sectors resulted in fines), transportation and storage (50%), construction, and agriculture, forestry and fishing (40%). The sectors with the smallest share of successful wage tax audits are the trade and ICT sectors (30%). We also show that firms likely to be evading generally report lower average wages. Our findings in terms of reported employment are mixed: while we show that evading firms report a higher number of employees than other firms, we conjecture is that this result might be driven by the fact that evading firms are more likely to underreport work hours, which inflates the number of employees in our data because we cannot distinguish full- and part-time employment.

#### Acknowledgement

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#### References

European Commission, 2020. Undeclared Work in the European Union, Special Eurobarometer 498. Report. European Commission

European Commission, 2014. *Undeclared Work in the European Union, Special Eurobarometer* 402. Report. European Commission

Gavoille, N., Zasova, A., 2021a. What we pay in the shadow: Labor tax evasion, minimum wage hike and employment. SSE Riga/BICEPS Research Papers 6. Baltic International Centre for Economic Policy Studies (BICEPS).

Gavoille, N., Zasova, A., 2021b. Foreign ownership and labor tax evasion: Evidence from Latvia. Economics Letters 207, 110030.

Kleven, H. J., Kreiner, C. T., Saez, E., 2016. Why Can Modern Governments Tax So Much? An Agency Model of Firms as Fiscal Intermediaries. Economica 83, 219–246.

Putnins, T. J., Sauka, A., 2021. Shadow Economy Index for the Baltic Countries, 2009–2020. Report. SSE Riga.

State Revenue Service, 2021. Firm-level anonymized database on tax audits, employment and average wages provided by the Latvian State Revenue Service on a special request within the State Research Programme "Reducing the Shadow Economy to Ensure Sustainable Development of the Latvian State"; project No VPP-FM-2020/1-0005.

# Appendix

Table A.1. Distribution of audits by NACE sectors in 2013–2020

NACE code	NACE sector	PIT audits	SSC audits	VAT audits	All audits
A	Agriculture, forestry and fishing	2.7	2.7	3.5	3.2
В	Mining and quarrying	0.5	0.5	0.6	0.5
C	Manufacturing	13.3	13.4	12.1	12.7
D	Electricity, gas, steam and air conditioning supply	0.2	0.2	0.2	0.2
Е	Water supply, sewerage, waste management and remediation activities	0.7	0.7	0.7	0.7
F	Construction	18.9	18.9	13.4	15.8
G	Wholesale and retail trade, repair of motor vehicles and motorcycles	26.9	26.7	39.7	34.1
Н	Transportation and storage	8.3	8.3	7.2	7.7
I	Accommodation and food service activities	5.1	5.1	2.5	3.6
J	Information and communication	2.0	2.0	2.6	2.3
K	Financial and insurance activities	0.2	0.2	0.6	0.4
L	Real estate activities	2.1	2.2	3.3	2.8
M	Professional, scientific and technical activities	3.4	3.4	3.8	3.6
N	Administrative and support service activities	13.1	13.1	7.6	10.0
O	Public administration and defence, compulsory social security	0.1	0.1	0.0	0.0
P	Education	0.2	0.2	0.1	0.2
Q	Human health and social work activities	0.1	0.1	0.1	0.1
R	Arts, entertainment and recreation	0.9	0.9	0.9	0.9
S	Other services	1.4	1.3	0.9	1.1
T	Activities of households as employers	0.1	0.1	0.0	0.0

Source: authors' calculations based on VID data (State Revenue Service, 2021)

# IMPACT OF PERSONAL VALUES AT WORK

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#### **Abstract**

#### Impact of personal values at work

Key Word: development, competencies, personal values, public administration

Human personal values affect not only personal life but also professional life. Personal values are created for a small child – family, school, studying, working. The personal value criterion of each person crystallizes the experience of life. Over time, they can change, but there are values that are independent. Therefore, each person is special, and their views, opinions, actions and attitudes to one situation may be different. For example, this also applies to the development of competences aimed at improving professional competence at work in order to improve the quality and efficiency of work. National regulatory authorities are concerned about improving the competence of employees, high funding and other resources are provided to ensure that the skills, knowledge and skills of specialists in the institution meet today's requirements. The quality, satisfaction and direction of the work of national government employees is important for achieving the objective pursued by the authority and for competent specialists to work in the institution. But with restrictions introduced by the COVID-19 virus, the daily lives of each employee have changed. Thus, by assessing their priorities, interests and desires, by putting aside cases which do not play an important role in their lives, such as the acquisition of new knowledge, skills and skills at work. Improving competence can affect each person's personal values, while at the same time the value is influenced by changing attitudes and vision, the person can focus on learning by getting new, unknown, up-to-date offers and information. By identifying the personal values of employees, it will be easier for the person responsible to work individually with each employee of the institution, by applying the most appropriate method to facilitate the development of professional competence.

#### Kopsavilkums

#### Personīgo vērtību ietekme darbā

Atslēgvārdi: attīstība, kompetences, personīgās vērtības, valsts pārvalde

Cilvēka personīgās vērtības ietekmē ne tikai personīgo dzīvi, bet arī profesionālo dzīvi. Personīgās vērtības veidojas jau mazam bērnam — ģimenē, skolā, studējot, strādājot. Katra cilvēka personīgais vērtību kritērijs izkristalizējas dzīves pieredzē. Laika gaitā tās var mainīties, bet ir vērtības, kuras ir patstāvīgas. Tādēļ katrs cilvēks ir īpašs, un to uzskati, viedoklis, rīcība un attieksme pret vienu situāciju varbūt atšķirīga. Piemēram, tas attiecas arī uz kompetences attīstību, kura ir vērsta, lai uzlabotu profesionālās kompetences darbā, lai uzlabotu darba kvalitāti un efektivitāti. Valsts pārvaldes iestādes rūpējas par nodarbināto kompetences uzlabošanu, tiek nodrošināts liels finansējums un citi resursi — lai iestādes speciālistu prasmes, zināšanas un iemaņas atbilstu mūsdienu prasībām. Valsts pārvaldes nodarbināto darba kvalitāte, apmierinātība un virzība ir svarīga, lai sasniegtu iestādes izvirzīto mērķi, un iestādē strādātu kompetenti speciālisti. Bet, līdz ar COVID-19 vīrusa ieviestiem ierobežojumiem, ir izmainījusies katra nodarbinātā dzīves ikdiena. Tādejādi, izvērtējot savas prioritātes, intereses un vēlmes, atliekot maliņā lietas, kuras to dzīvē neieņem svarīgu lomu, kā piemēram, jaunu zināšanu, prasmju un iemaņu apgūšanu darbā. Kompetences pilnveidošana var ietekmēt katra cilvēka personīgās vērtības, vienlaikus vērtību ietekmē, mainoties attieksmei un redzējumam, cilvēks var pievērsties mācībām, iegūstot jaunus, nezināmus, aktuālus piedāvājumus un informāciju. Apzinot nodarbināto personīgās vērtības, atbildīgajam būs vieglāk strādāt ar katru iestādes nodarbināto individuāli, piemeklējot atbilstošāko metodi, lai veicinātu profesionālās kompetences pilnveidošanu.

## Introduction

Due to the rapid development of information technologies today, the development of competence in the course of day-to-day work has played an important role in adapting to all working conditions and in working with new working methods and the knowledge acquired to improve the performance of job tasks. Improving regular competence makes all employees more confident and skilled in their positions. Therefore, the treatment of capacity building needs to be open in order to avoid missing and maintain existing competences in a timely manner. In order to ensure a regular improvement of the skills of employees, it must be possible to take care of the development of knowledge and skills, and the benefits of the learning process depend on the

individual expectations, interests and attitudes of each person. In general, the development of competence depends on the criterion of individual personal values, so that, based on the impact of values, a person can focus on learning and acquire the necessary skills and skills for work, or on the contrary, did not care or care about their development. This alone confirms that the result of the development of competence depends on the personal values of the individual, which lead to attitudes and behaviour in different situations, by taking the action and decision that they prescribe. Accordingly, it reflects the fact that personal values are interrelated, since they can affect not only professional life but also personal life.

Each person, able to identify or detect gaps in both their skills and knowledge, but to successfully fulfil their job responsibilities, these gaps need to be improved. For example, restrictions introduced by COVID-19 have promptly forced digital technology skills to be acquired, and not all employees have a successful transition to the remote environment. Because knowledge and skills are different, just like that, not everyone is able to adapt quickly to innovation. Consequently, a critical approach to the assessment of skills and knowledge is needed to address their shortcomings in a timely manner. Show personal initiative and a desire to develop personal and professional competences.

The above justify the choice and the spotlight of the subject of the study.

The purpose of the study is to clarify the impact of personal values employed by the Latvian Public Administration in professional development. The study used the method and survey of document analysis.

# **Material and Methods**

The value of each institution shall be the staff of the institution pursuing the objective or task for the common forces. In order for an institution to be able to achieve its objective, it is necessary to be able to work both on the team and on an individual basis. Adequate knowledge, skills and skills, as well as experience, will make it possible to achieve the tasks of the institution which are geared towards achieving the objective. In order to be able to achieve this, it is necessary to ensure that all employees of the institutions are regularly developed in all specialties. Today's rapid times of change and societal demand are key factors in the need to develop competences. Human skills are evolving and evolving throughout their lives: learning, acquiring practical experience and learning skills. It is also influenced by the environment, society, human interests, needs and objectives. A person learns and accumulates the knowledge and skills he needs, is interested in, and even develops. Values of life arise in childhood thanks to the surrounding atmosphere. Ultimately, assessing whether the acquired knowledge, skills and skills are needed to be improved and what their benefits will be. This means that values are central to human life, and on the basis of personal values, a person evaluates what he needs to learn or improve in life, and what will not be necessary.

And according to his values, a man makes a career (Allport 1961). Personal values are influenced by a wide variety of factors, so they can change over time, for example, by changing values with family growth, where the family becomes more important than professional development at work. Values are formed by involving an individual in other living conditions who need new values. Consequently, a person evaluates, considers his desires, interests and needs, and sometimes refuses something. Therefore, human personal values are the main factor in life, influenced by which a person makes decisions, acts, presents himself and aims (Rokeach 1973). Because there is not always an opportunity to achieve and fulfill your goals and desires, the way it is conceived. On the other hand, human values can create a heart. Therefore, the development of the competence of employees is influenced by personal values and is an integral part of their professional life. Because it creates human attitudes, behaviour, action and decisions in a given situation. People's attitudes and assessments of cases begin in their early childhood, as do the development of competences, only skills can be learned through regular learning, development and enrichment of experience. If all that is said and done is in line with our desires, life is right and meaningful and we are ourselves satisfied and confident in ourselves.

The definition of the values of scientist M. Rokeach was based on five value assumptions:

- 1. the total number of human values is relatively small;
- 2. people have the same values but different degrees;
- 3. values are arranged in value systems;
- 4. the causes of the creation of values must be found in culture, society, its institutions and personality;
- 5. values affect almost all of the phenomena studied by social sciences (Rokeach 1973).

M. Rokeach's value theory was further studied in detail by the S. H. Schwartz with colleagues who distributed four categories of values: self-development, openness to change, conservatism and spiritual values. Schwartz also studied the individual's social values, the impact of individual differences at work and the importance of cultural value (Schwartz 2012). Schwartz distributed ten fundamental values that can help a person to recognize their own and other intrinsic values and their potential impacts. Schwartz's core values are:

- 1. Safety it's important to feel safe, stable, be in a clean and orderly environment, take care of your and other safety, both at work and in private life. To feel in harmony with yourself.
- 2. Goodness openness, relief, the ability to forgive others. Credibility and openness to help others without waiting for reimbursement.
- 3. Conformism disciplinarity, obedience and civility. The duties shall be fulfilled in compliance with the requirements that they are not infringed.

- 4. Traditions adopting and respecting traditional cultural and religious customs and ideas. Accept and accept living conditions and modesty. Shows respect for religion and tradition of faiths. Limits feelings and behaviour by controlling them.
- 5. Hedonism a desire to meet your personal needs and desires.
- 6. Achievements a desire to achieve the goal by targeting skills improvements. Relentless and diligent, demonstrate his success and work. Tends to drive and influence others. An ambitious person.
- 7. Stimulation aspires to an exciting lifestyle, challenges, innovation. Don't be afraid to try something new and unprecedented, gaining experience.
- 8. Self-fulfilment the ability to think creatively when you go outside normal frames. A desire to study, explore, and acquire new knowledge and information about the unknown. He sets his own goals and aims for them.
- 9. Universality understanding and tolerance for different ideas and beliefs. A serious view of life, the principle of equality, the desire to care and protect the weaker. Concern for nature and peace.
- 10. Power seeking power and authority, wanting to be focused and controlling others, running a team, taking responsibility. And care about material and financial stability.

Any human attitude and behaviour is most often associated with the effects of more than one value (Schwartz 2006). The achievement of the target in a given situation is therefore linked to values expressed in human attitudes, behaviour and behaviour and encouraging it to be active. This means that human personal values and their relevance to work needs can lead to success at work (Atchison 2007). For this reason, the values and priorities of personal life are just as important: achievements, success, family, leisure, friends, integrity, money and material, a desire to help (serve) others, a god. It is understood that the values of personal life, when you go to work, do not go away, are values that spend a person every day and have priority in his or her life. Because, in the knowledge of his values, he feels stable and able to make decisions that seem important and necessary to him; such personal values are expressed in the quality of work and in the improvement of its developments. As public administrations are interested in educating employees so that they acquire additional knowledge and new skills in promoting the quality of work, the attitudes of employees in terms of training, knowledge acquisition and use in the performance of work tasks are important.

When analysing the working conditions of a scientific publication, comfort and safety, skills learning and professional development (Lawton, Chernyshenko 2008) can be considered as essential values, as a person spends most of his or her life in the workplace, and it is important for him to be safe and satisfied. At the same time, the employee's attitudes and values to work can only

be changed by the driver – he must be focused on the employee's competence and happiness (Kuroda, Yamamoto 2018), because the employee wants to be motivated (Graves, Sarkis 2018). This is why the driver should contribute to the development of employees (Anton, Shikov 2018), boost productivity and try to ensure prosperity (Kuroda, Yamamoto 2018). Similarly, think K. E. Lavton and O. S. Chernishenko (Lawton, Chernyshenko 2008), who highlights the importance of comfort, development, growth opportunities and family support at work. Scientific articles mention many times a good relationship with the manager so that employees are generally satisfied and motivated to work (Graves, Sarkis 2018) with full return. Authors L. M. Graves and J. Sarkiss (2018) points out that the most important environmental values of employees are those that motivate work staff and which are influenced by decisions, a certain attitude towards work and the driver arises. Author S. K. Parker (Parker 2007) stressed in her article that the role of the work is important, as it reflects human power and the effectiveness of the work. People who are open to change are changing their values by taking on a new role, problems and pursuing career growth (Groves 2016).

Various scientific articles refer to the factors that influence the basic values of work, which highly reflect human personal values. At the moment, it is difficult to separate and determine what values would be most important in the workplace for each person, because they are influenced by human age, gender, status, mentality, perception of life, knowledge acquired over time according to individual criteria and are influenced by decisions, there are certain actions, attitudes and behaviour. Acquire new knowledge and develop competences — one of the tools for the future of public administration to create a new, powerful specialist. But the competence of each person drastically demonstrates the different perceptions and abilities (Chong 2013). Personal values are known to be the benchmarks that people use to assess their behaviour and to improve self-esteem (Wang et al. 2011). The authors, D. Gursoy, C. Geng-Qing Chi and E. Karadag (Gursoy, Geng-Qing Chi, Karadag 2013) stressed that the values are different and relate to human characteristics and age. L. E. Palberg and J. L. Perry (Paarlberg, Perry 2007) thinks that if a person wants to do good work in his life, he feels motivated and pleased about every job he has done.

The authors, G. Graf and H. Panakera (Graaf, Paanakker 2015), talk about the fact that the public administration inevitably limits its tendency to certain other values, such as equality, honesty, openness and efficiency. In his article, the author, H. J. Lee (Lee 2007), stressed that the employees of the public authority have a higher emotional status as they are focused on serving society, but this causes stress, excitement and frustration in the working environment. Authors J. R. Tredwell and L. A. Lenert (Treadwell, Lenert 1999) stated in their article that people appreciate their health as it reflects the quality of human life.

Authors J. C. Hansen and M. E. Leuty (Hansen, Leuty 2012) stressed that the difference in values is always determined by generational change, because the values are changing over time, and

their effects are different due to intergenerational differences. The human has an important balance between work and private life (Hansen, Leuty 2012). As an example, unconventional sexual orientation partly creates human prejudices, personal negative perceptions and unequal treatment (Ozturk 2011). In today's social environment, it is possible to see different attitudes towards such people, so inequalities cannot be avoided. Unfortunately, it is no longer possible to avoid such attitudes in working life, because each person has his own personal opinions and attitudes towards people who are otherwise thinking and living.

By analysing scientific articles, it is possible to draw conclusions that the personal value of a person at work cannot be distinguished from private life. Consequently, a man as an individual is with his attitude, beliefs, opinions, behaviour and behaviour, which have formed from the foundations. And, consequently, knowledge, skills, skills and experience have formed on the basis of which it is reflected in activities. The impact of the values of the staff of an institution at work is an integral part, including the development of professional competence in its own specialty. And in the 21 st century, it is important for a person to be in continuous development and to acquire new skills, knowledge and skills that will facilitate work and make it possible to work from anywhere. As digitisation will continue to play an important role, the development of adequate digital skills in public administration will be one of the prerequisites for development in the future. For example, the impact of COVID-19 has already accelerated the uptake of digital skills by optimising processes and services in public administration, while also highlighting the lack of digital skills of employees. In order to avoid burdening job tasks, the lack of competence requires timely prevention and regular care to improve them. Skills are improved so that people systematically adapt to future requirements and needs, and the individual who cares about developing skills is aware of the necessary skills and skills.

#### **Results**

In order to find out the development of the competence of employees of the Latvian public administration, in 2021 the author conducted a survey on the influence of the personal values of the employees in the development of competence. The survey involved 864 employees. The survey identified the problems faced by employees in the performance of their work duties in an emergency. 47% responded (see Figure 1) that "it's difficult to focus solely on work" in home conditions. 26% said there were problems with organizing working time. 19% – "difficulty accessing the working environment". And 8% have reported that they are experiencing "insufficient digital skills." It should be acknowledged that it is easier to focus when working in the workplace, because the environment and influencing factors do not prevent thoughts from working, as is the case at home. Consequently, there are also problems with the organisation of working time. As well, the data confirm that not all of their job responsibilities are able to be carried out at home and

therefore plans to work in person. And relatively few people have indicated insufficient digital skills, which means that employees did not have problems learning about new programmes and changes in the work process have not caused problems in the performance of their jobs.

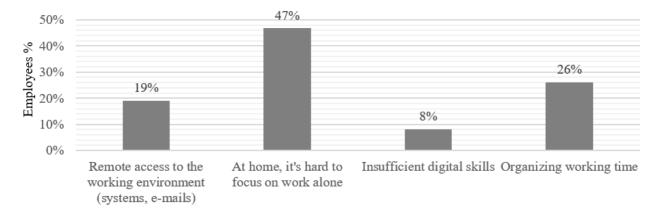


Figure 1. **Deficiencies in the form of remote working** (autor reserch)

During the survey, 52% of those surveyed were identified (see Figure 2) organise and perform their work independently, sometimes in consultation with the direct manager, while 17% do the work independently without informing the driver, 23% inform the driver once a week of the planned and accomplished tasks, while 8% of those surveyed are checked and controlled by the driver. The data confirm that the employees are familiar with their duties, so that the driver is consulted as necessary. But, as the problem is seen here, communication flaws because an employee with a manager doesn't maintain regular communication, so that at some point you can face a lack of information.

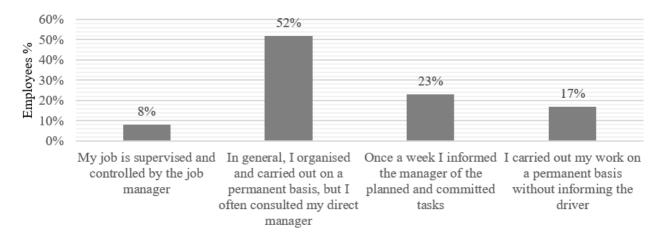


Figure 2. Work organisation and performance control (autor reserch)

Through years of working and day-to-day meetings with colleagues, friendly relationships, shared interests, pleasant conversations, and working issues were also dealt with face-to-face. But when carrying out work duties remotely, it is inevitable to experience problems with work

organisation and a lack of communication. 52% reported during the survey (see Figure 3) that there is a lack of face-to-face communication, but 32% noted in the questionnaire that a remote form of work does not affect cooperation and communication. 12% said that relations with colleagues are very good, while 4% of employees will not contact their counterparts. Successful workplace performance requires successful virtual communication and collaboration with colleagues and institutions beyond national borders (Akdere et al., 2021). Successful communication between colleagues and collaborators is the basis for achieving a positive aim. There should be no such problem in teamwork, so it is necessary to fix it in good time. And, as far as possible, mutual contact and communication must be developed so that it does not at any time interfere with the performance of work duties and does not damage the working relationship.

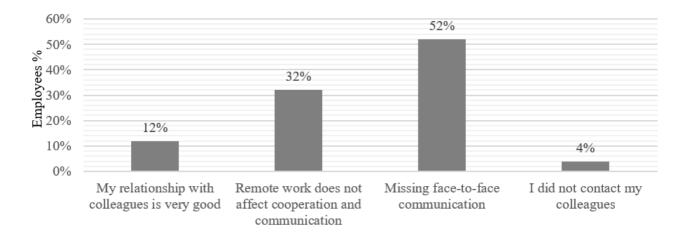


Figure 3. Remote working form contact with colleagues (autor reserch)

Although 56% of respondents replied that the rules announced in the state of emergency did not affect the personal values of employees (see Figure 4), however, more time is needed to carry out work by postponing their personal interests, needs mentioned by 26% of those surveyed. Only 6% reported that they focused more on personal needs, interests than work, and 12% – that they sometimes fail to decide whether to prefer work or better for private life.

Although most of the employees surveyed have responded that their personal values have not changed in remote working mode, it can be concluded from the answers to previous questions that they have transformed because, for example, there are problems in the organisation of working time, a lack of time. It should be accepted that the personal values of a person with the values of an institution (workplace) are balanced so that there is no conflict between them. Human personal values cannot be detached from working life, as decisions are made, attitudes and behaviour are formed. For example, the COVID-19 pandemic created a positive experience for many employed people connecting working life with private life (Appel-Meulenbroek et al., 2022). People are known to be different and their interests and needs are different, so there are no people who have

fully returned to their work responsibilities, or those who do not experience changes in their rhythms, although some individuals are still feeling and unable to live with them.

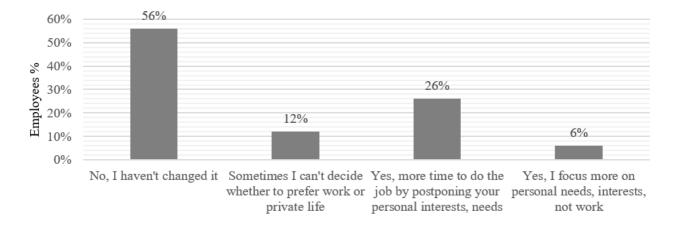


Figure 4. The impact of remote work on personal values (autor reserch)

Although the limits of the pandemic have changed the rhythm of life for most people and each person feels these changes individually, 28% noted (see Figure 5) that they have neutral feelings about the situation, while 33% said they were missing public events, while 17% were depressed, while 22% enjoyed the silence and peace created by remote work. Each is experiencing this time as determined by the values of the individual's personal life and by the ability to accept change.

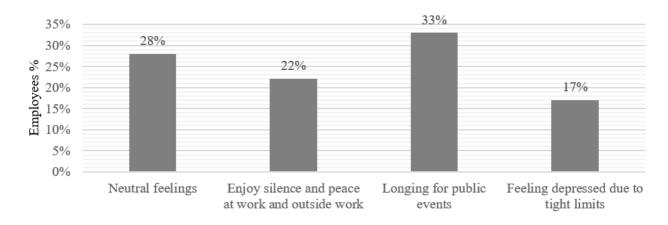


Figure 5. The impact of the restrictions announced in the emergency on personal self-being (autor reserch)

In view of the remote working arrangements, employees have the opportunity to develop their skills and develop new skills. The survey shows that only 29% of the people surveyed have applied for training to improve their skills, while 71% have shown no initiative to improve their skills. The driver needs a more critical assessment of the development of the skills of employees, since there is a possibility that 71% still need to improve their competences. It is also necessary for educational

establishments focused on training for the development of employees to develop new, up-to-date workshops, in line with demand and needs, in order to attract specialists from any sector.

Employees who have applied for training have willingly expressed an interest in learning digital skills – 57% of those surveyed – while 19% of employees in foreign languages, project management – 15% and time management – 9%. Of course, this does not mean that only the lessons mentioned in the questionnaire should be learned, since their offer is great, such as studies at university, college, attendance at various workshops or courses, such as management science and skills, team management, contacts and conflict management in the field of procurement, personnel management, and other professional and personal training for the development of competences.

In response to the question of why workers have not applied for training, 32% of those surveyed have chosen the answer that they do not offer the necessary online training, while 43% of those surveyed have missed time, while 20% have mentioned that there is no suitable programme for the specialty, while 5% of those surveyed reported that the training is being conducted in a low quality (see Figure 6).

Lack of time may not always exist as an excuse, as each person plans his or her time at his or her discretion and desires. There is no denying that a person with a large amount of work has no time to do things. But the lack of time cannot be long-lasting, because then it would mean that job tasks have not been correctly asked and needed to be reviewed. When assessing the situation related to online training, the author considers that the Covid-19 restrictions introduced rapid changes in all sectors, part of the industry quickly adapted to changing conditions, but part has not yet been able to fully switch to remote work; the same applies to all training programmes in employment, due to different specifications. But with time, it would be necessary to solve this problem so that any lead can attend both on-site and online training. In addition, training institutions should review the current nature of training programmes and find out what training programmes are required or interested in order to enable any specialist to learn them.

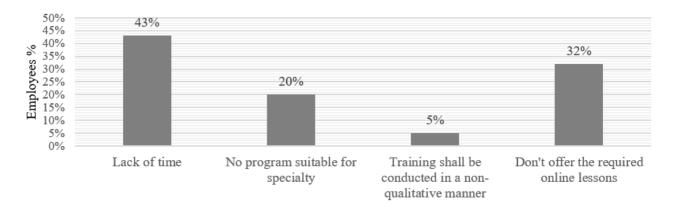


Figure 6. **Reasons for not attending the training of employees** (autor reserch)

As you would like, working life is an integral part of your personal life, so that working life will reflect the criterion of human personal value in their attitudes, behaviour and decision-making. Personal values are what people consider important in their lives, which sets out the objectives and motives of his actions that they dream of, and which play an important role in their lives. Each person has criteria for the value of his life, his or her priorities for working life. Therefore, each person is special with his attitude, character, temperament brought into his working life and with which the head of the institution and colleagues must be able to work together, adapt and accept him as a personality. Not everyone can be open to the purpose of the institution, the values of the institution, and this can in some way disrupt working conditions and move together to achieve the objective. Therefore, the head of the institution must be able to work and establish good contact with any employee of the institution and to pursue jointly the objective of promoting and inspiring professional development of workers, so that the development of their competence helps and improves the quality of their work responsibilities. Public administrations are interested in the training of employees, namely the expansion of knowledge and skills. And equally important is the attitudes of employees towards learning visits, knowledge gains and exploitation in the performance of job tasks. The knowledge acquired in the private sector cannot be fully helped to carry out the functions of the public sector (Gesk, Leyer, 2021). Cooperation must therefore be able to find a balance between the manager and the employee in order to work together successfully and to pursue the institution's objective together.

# **Conslusions**

The importance of personal values can be influenced by differences between generations, but in order to improve the quality of work, all employees must be satisfied and motivated to work, which is understood by the fact that managers should develop their competences in order to have an understanding of the different personal values of generations, which would help to demonstrate attitudes to cooperation, and to establish successful communication.

Professional and personal development not only improves quality of life, but enhances well-being and confidence in the working environment, and helps to achieve the intended objectives conscientiously, maintain the current standard of living and provide opportunities for growth.

Regardless of the field of work, good communication and mutual understanding show that the working environment is the most important component. During the study, it was found that communication deficiencies (52%) in all employees, including between the manager and the subordinate, were inevitable, which could affect the employment relationship and the performance of the terms of reference accordingly.

Data from the study confirms that personal interests affect work (18%), because remote work is confronted with the organisation of working time (26%), as well as experiencing a lack of time

(43%), resulting in no time left, or finds a reason to give up personal and professional competence, thus 71% of respondents have not shown an incentive to improve competences.

In order to successfully conduct the management process, the driver must first start to develop his or her competences, paying particular attention to the competences that cause problems working with people and encouraging employees to attend professional development training.

#### References

Akdere M., Acheson K., Jiang Y. (2021). An examination of the effectiveness of virtual reality Technology for intercultural competence development. International Journal of Intercultural Relations 82 (2021) pp. 109–120.

Anton C., Shikov A. 2018. The method of personalized corporate e-learning based on personal traits of employees. Procedia Computer Science, Vol. 136, pp. 511–521.

Allport G. W. 1961. *Pattern and growth in personality*. NewYork: Holt, Rinehart and Winston, pp. 608.

Appel-Meulenbroek R., Kemperman A., van de Water A., Weijs-Perr´ee M., Verhaegh J. (2022). How to attract employees back to the office? A stated choice study on hybrid working preferences. Journal of Environmental Psychology 81 (2022) 101784.

Atchison G. M. (2007). Values Congruency: a Qualitytive Investigation into How First Level Managers View Congruence Between Personal Values and Corporate Values. Capella University, UMI Microform 3263174, 162 p.

Chong, E. 2013. Managerial competencies and career advancement: A comparative study of managers in two countries. Elsevier, Journal of Business Research, Vol. 66, pp. 345–353.

Gesk T. S., Leyer M. (2022). *Artificial intelligence in public services: When and why citizens accept its usage*. Government Information Quarterly, Sciences, Available online 5 April 2022, 101704. Retrieved from https://www.sciencedirect.com/science/article/pii/S0740624X22000375.

Graves L. M., Sarkis J. 2018. *The role of employees' leadership perceptions, values, and motivation in employees' provenvironmental behaviors*. Journal of Cleaner Production, Volume 196, 20 September 2018, Pages 576–587.

Graaf G., Paanakker H. 2015. *Good Governance: Performance Values and Procedural Values in Conflict.* American Rewiew of Public Administration, 2015, Vol. 45(6) 635–652.

Groves K. S. 2016. *Testing a moderated mediation model of transformational leadership, values, and organization change.* SAGE, Journal of Leadership & Organizational Studies 2020, Vol. 27 (1), pp. 35–48.

Gursoy D., Geng-Qing Chi C., Karadag E. 2013. *Generational differences in work values and attitudes among frontline and service contact employees*. International Journal of Hospitaly Management, 32, 920130, pp. 40–48.

Hansen J. C., Leuty M. E. 2012. Work values across generations. SAGE, Journal of Career Assessment, 20 (1), pp. 34–52.

Kuroda S., Yamamoto I. 2018. *Good boss, bad boss, workers' mental health and productivity: Evidence from Japan*. Japan and the World Economy, Volume 48, December 2018, Pages 106–118.

Lawton K. E., Chernyshenko O. S. 2008. Examining determinants of employee benefit preferences: Joint effects of personality, work values, and demograhics. Asia Pacific Journal of Human Resources, Vol. 46 (2), 220–240 p.

Lee H. J. 2007. How emotional intelligence relates to job satisfaction and burnout in public service jobs. International Review of Administrative Sciences, 2018, SAGE, DOI: 10.1177/0020852316670489, Vol. 84 (4), pp. 729–745.

OECD 2019. *Shaping the future of work in the public sector*. [skatīts 22.02.2022]. Accessed: https://www.oecd.org/gov/pem/recommendation-on-public-service-leadership-and-capability.htm.

Ozturk M. B. 2011. Sexual orientation discrimination: Exploring the experiences of lesbian, gay and bisexual employees in Turkey. SAGE, Human Relations, 64 (8), pp. 1099–1118.

Parker S. K. 2007. *That is my job': How employees' role orientation affects their job performance*. Human Relations, SAGE Publications, The Tavistock Institute, Vol. 60 (3), pp. 403–434.

Paarlberg L. E., Perry J. L. 2007. *Values management aligning employee values and organization goals*. The American Review of Public Administration, Vol. 37, No. 4, December 2007, pp. 387–408.

Rokeach M. 1973. *The nature of human values*. New York: The Free Press. Rundmo T., & Iversen I. (2004). Risk perception and driving behaviour among adolscents in two Norwegian counties before and after a traffic safety campaign. Safety Science, 42, pp. 1–21.

Schwartz S. H. 2006. *Measuring Attitudes Cross-Nationally: Lessons from the European Social Survey. Value Orientations: Measurment, Antecendents and Consequences Across Nations.* Edited by Roger Jowell, Caroline Roberts, Rory Fitzgerald, Gillian Eva, SAGE, ISBN 978-1-4129-1981-4, 170 p.

Schwartz S. H. 2012. *An Overview of the Schwartz Theory of Basic Values*. Online Readings in Psychology and Culture, 2 (1). http://dx.doi.org/10.9707/2307-0919.1116.

Treadwell J. R., PhD Lenert L. A., MD., MS. 1999. *Health values and prospect theory*. Ideas at Issue, Vol. 19, No. 3, Jul-Sep, pp. 344–352.

Wang L., Howell J. P., Hinrichs K. T., Prieto L. 2011. *Organizational citizenship behavior: The role of value/identity-based motivation*. SAGE, Journal of Leadership & Organizational Studies, 18 (1), pp. 14–24.

# LAGGING BEHIND REGIONS IN THE BALTICS: EMIGRATION AND REMITTANCES ANALYSIS

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#### **Abstract**

## Lagging behind regions in the baltics: emigration and remittances analysis

Key Word: Remmittances, emigration, Baltic countries, lagging behind regions

This paper presents an analysis of emigration's impact on the economies of three Baltic countries and specifically on three lagging behind regions. Analysis of emigration outflows shows significant changes in its pattern throughout the Baltic countries in last 5 years. It is as well obvious that lagging behind regions are even more hit by the economic conditions and shrinking amounts of remittances.

The regional scope of this research is linked with distinctive economically lagging behind regions: Estonian Narva, Latvian Daugavpils and Lithuanian Visaginas. In this research paper author is measuring the behavior of the emigration in the Baltic countries and comparing the overall impact of emigration in economically lagging behind regions. Evaluation is based on weighting comparing negative and positive factors of emigration.

Emigration certainly has an economic impact, moreover on economies of lagging behind regions. This paper concludes that negative effects of emigration increases, if the level of life/ salary grows in emigration-source country. Overall economies of Baltic countries receive fewer transfers from abroad, than taxes, which could have been paid by current emigrants. However, situation is different in economically lagging behind regions, where salaries are smaller and remittances have relatively higher value. That is why regional economies are gaining much more from remittances, than they could have earned from taxes of current emigrants, at least in current socio-economic environment.

#### Kopsavilkums

Atslēgavārdi: Emigrācija, Baltijas valstis, naudas pārvedumi, reģioni ar zemo ekonomisko aktivitāti

Šajā rakstā ir analizēta emigrācijas ietekme uz triju Baltijas valstu ekonomikām un konkrēti uz trim atpalikušajiem reģioniem. Emigrācijas un transfermaksājumu analīze liecina par būtiskām pārmaiņām visās Baltijas valstīs pēdējo 5 gadu laikā. Acīmredzams, ka atpalikušos reģionus vēl vairāk ietekmē ekonomiskais slogs un sarūkošais naudas pārvedumu apjoms.

Pētījumā autors analizē trīs reģionus ar zemu ekonomisko intesitāti: Igaunijas Narva, Latvijas Daugavpils reģions un Lietuvas Visaginas reģions. Darbā tiek apskatīta emigrācijas ekonimisko ietekmi uz Baltijas valstīm un salīdzina kopējo ietekmi uz ekonomiski atpalikušajiem reģioniem. Vērtējums balstas uz emigrācijas negatīvo un pozitīvo faktoru salīdzīnājumu. Tika izstrādātas divas kvantitatīvie modeļi, lai izmērītu emigrācijas ietekmi uz izvēlētajām Baltijas valstu ekonomikām. Katrs no šiem modeļiem satur dažādus parametrus un to kombinācijas raksturo migrācijas ekonomisko ietekmi.

Emigrācijas ekonomiskā ietekme uz Baltijas valstīm un uz reģioniem ar zemo ekonomisko aktivitāti būtiski atšķiras. Darbā secināts, ka emigrācijas negatīvās sekas palielinās, ja emigrācijas izcelsmes valstī pieaug dzīves/algas līmenis. Kopumā Baltijas valstu ekonomikas no ārvalstīm saņem mazāk pārskaitījumu nekā nodokļu apjoms, ko būtu varējuši samaksāt pašreizējie emigranti. Taču situācija ir atšķirīga reģionos ar zemo ekonomisko aktivitāti, kur algas ir mazākas un naudas pārvedumiem ir salīdzinoši lielāka vērtība. Reģionālās ekonomikas no naudas pārvedumiem iegūst daudz vairāk, nekā tās būtu varējušas nopelnīt no pašreizējo emigrantu nodokļiem, vismaz pašreizējā sociāli ekonomiskajā situācijā.

## Introduction

Emigration's impact on domestic economies is underestimated. On one hand, economies of the migration source-countries are losing labour force and the taxes, which could have been paid from the salaries and their spend. On the other hand, unemployment is reduced and these economies are gaining extensive remittance flows from current emigrants. In this paper both impacts are taken in consideration and compared between three Baltic countries.

In this paper three lagging behind regions are analysed and compared: Estonian Narva, Latvian Daugavpils and Lithuanian Visaginas. All of these three regions for a long time were showing comparatively high unemployment rates, low GDP and lower average&minimal salaries.

Another common feature is its socio-linguistic environment – these regions have high density of Russian speaking minority population, but in this research the socio-linguistic factor won't be take In consideration.

The aim of this article is to measure the overall effect of the emigration on the economies of the Baltic countries and its lagging behind regions. In this paper author is drawing on comparison of positive and negative impacts of the emigration in the Baltic countries and particularly on lagging behind regions. Economic impact is considered by weighting different factors: remittances, migration flow size, Gross domestic product, level of average and minimal salaries, labour and Value Added Taxes. All of these have an impact on local economies/communities.

Two quantitative mathematical models (Figure Nr. 1) were developed in order to measure emigration's impact on the selected Baltic economies. Each of these models contains different set of parameters and these combinations describe economic impact of the migration. Both models are taking in consideration the same amount of remittances as a positive element of emigration. The difference comes, when negative element of the emigration is measured: in the first model it is equalized with minimal salary taxes and consumption tax. In the second model average salary is used instead of the minimal one.

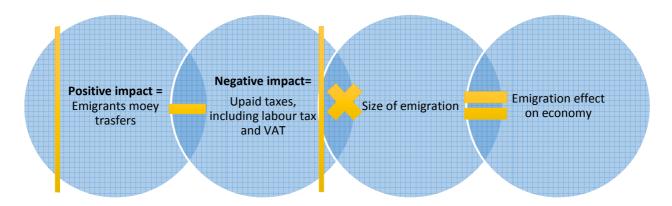


Figure 1. Mathematical model. Source: Developed by the author

In order to measure emigration's economic impact on lagging behind regions, it was crucial to link distribution of remittances with the regions of the Baltic countries. Official statistics is lacking such depth details, so author created a comparable model in order to spread the remittances across the lagging behind regions. In this model regional share of GDP is equalized with a regional share of remittances.

This paper is mainly using the data from the national statistical bureaus of the Baltic countries. Data about remittances and its distribution was provided by Central Banks of three Baltic countries. Data on remittances is available in open-source, but in the country balance of payments sheet it is presented in non-aggregated form, so it was specifically requested from each individual National Central Bank.

# **Discussion**

Three Baltic countries since 2015 share similar trends: the pace of emigration is slowing down, economies are showing constant positive growth and volume of remittances is decreasing. Since 2015 the population of the Baltic countries shrunk by 2,8% and is a bit over 6 mln. people. At the same time amount of remittances had a much sharper drop from 2,57 bln. EUR down to 1,83 bln EUR, which is almost 29% downslide. Although Baltic countries were depopulating and losing remittances, the economies of the Baltic trio were developing rapidly, in 2015 Baltic GDP was 82,4 bln EUR and in 2020 it grew by 33,5% to the level of 110,05 bln EUR (Table 1).

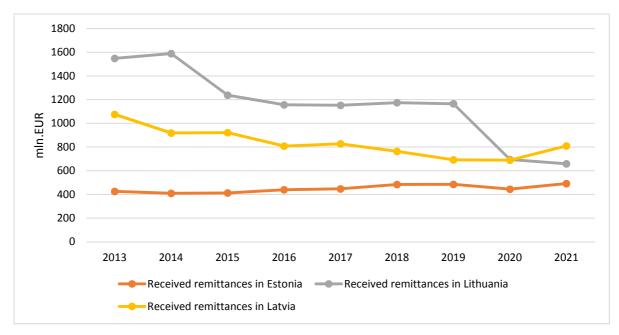
Tab. 1. Dynamics in the Baltic countries: population, GDP and remittances

Dynamics of the Baltic population (mln.)								
2015	2016	2017	2018	2019	2020			
6,21	6,15	6,10	6,06	6,04	6,03			
Dynamics of Baltic GDP (bln.)								
2015	2016	2017	2018	2019	2020			
82,41	92,24	99,46	93,82	100,57	110,05			
Total amount of remittances sent to the Baltic countries (mln.)								
2015	2016	2017	2018	2019	2020			
2570,82	2403,59	2425,25	2420,66	2341,05	1827,14			

Source: author's calculations based on CSB; stat.ee; stat.gov.lt

Estonia is the only country among the Baltic neighbors, who recorded population net growth since 2015. Although on National level the situation has a positive net growth, regions are depopulating and this trend is similar among all three Baltic countries. The size of the population of Ida-Viruma shrunk by 10%, Latgale by 6% and Utenas region by 9%.

The usual trend of the remittances volume since 2015 is a decrease: remittances sent to Latvia decreased by 25%, to Lithuania by 57%. Estonia seen a slight increase in the volume of received transfers by 15%.



Graph. 1. Remittances received in Baltics, 2013 – 2021

Source: author's calculations based on CSB; stat.ee; stat.gov.lt

Although, when regional data is taken in consideration it becomes obvious that all three lagging behind regions in the Baltics received fewer remittances from abroad in 2020 in comparison with 2015. The proportion of lagging behind regions in National GDP is declining and that is why the regions are not able to attract more remittances. This is another confirmation that (a) lagging behind regions are following similar economic paths among three Baltic countries and (b) distribution of wealth is uneven.

Tab. 2. Volume of the remittances received in the lagging behind regions of the Baltic countries

Mln. EUR'	2015	2016	2017	2018	2019	2020
Remittances adjusted to Daugavpils region	26,7	23,4	22,3	18,3	18,0	18,3
Remittances adjusted to Visaginas region	38,4	33,5	32,3	36,8	35,3	18,3
Remittances adjusted to Narva region	26,8	26,4	26,8	30,5	28,6	25,7

Source: author's calculations based on CSB; stat.ee; stat.gov.lt

This research is based on two models with a simulation of two impact scenarios for Baltic economies and lagging behind regions. These models are considering a limited number of factors: economic and demographic indicators. With this approach we are able to measure only short-term impact of the emigration. In a long-term calculation, more factors should be considered.

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# Model Nr. 1: (EM) x [(IZT\_MIN) x (PVN)]

## Model Nr. 2:

 $(EM) \ x \ (MIN\_ALG) \ x \ (\boldsymbol{IIN} + \boldsymbol{VSAOI\_DD} + \boldsymbol{VSAOI\_DN} + \boldsymbol{RNL}) + \\$ 

(EM) x ([MIN\_ALG-MIN\_ALG x (VSAOI\_D $\mathring{N}$  + IIN)] \* VAT)

where,

**EM** – average emigration size (Latvia, Lithuania or Estonia);

IZT\_MIN – subsistence minimum;

MIN\_ALG – minimal salary;

VID\_ALG – average salary;

VSAOI\_DD – labour tax paid by employer;

VSAOI\_DŅ – labour tax paid by employee;

RNL – risk tax.

In the model Nr. 1 minimal negative economic impact is considered on Latvian economy. It is simulated that if all the emigrants stayed in Latvia they would have earned a minimal wage and paid salary taxes and VAT from their spend to the country's budget. This model shows that in 2020 one emigrant would have generated approximately 3452 EUR in taxes only (Table 3). On average during last 5 years every emigrant would approximately generate 3119 EUR paid as VAT and other salary taxes. Alternatively, one emigrant, on average, in one year sends more than 3577 EUR as remittances. In terms of factors included in first model, Latvian emigrants, under current economic circumstances, bring more benefits for the origin-country than they could give by returning to Latvia.

Tab. 3. Model Nr. 1 of a minimal negative impact of emigration on Latvian economy

"EUR	Minimal wage	VAT	VSAOI	IIN	Monthly loss from 1 emigrant	Annual loss from 1 emigrant	Annual loss from 220 thousands emigrants (mln. EUR)
2014	320	0,21	0,3409	0,24	214,1	2568,6	565,10
2015	360	0,21	0,3409	0,24	240,8	2889,7	635,73
2016	370	0,21	0,3409	0,24	247,5	2970,0	653,39
2017	380	0,21	0,3409	0,24	254,2	3050,2	671,05
2018	430	0,21	0,3409	0,24	287,6	3451,6	759,35
2019	430	0,21	0,3409	0,24	287,6	3451,6	759,35
2020	430	0,21	0,3409	0,24	287,6	3451,6	759,35
			Average impact		259,9	3119,0	686,2

Source: author's calculations based on CSB; stat.ee; stat.gov.lt

Similar observations through the first model are made about emigration's minimal impact on Lithuanian and Estonian economies. Under current economic circumstances national economies of Lithuania and Estonia are gaining more benefits by receiving remittances, than from taxes of possible returnees.

However, the level of remittances sent to Lithuania in last 5 years declined by almost 50% and the average positive impact from 1 emigrant in Lithuania dropped to 2954 EUR. In terms of indicators included into first model, Lithuanian economy annually is losing 2824 EUR. If the trend continues, then in next couple of years remittances will not be able to substitute the loss of unpaid taxes.

The second model with simulated average negative impact scenario on Lithuanian economy shows, that one emigrant in economic terms for the Lithuanian budget equals to 6477 EUR in unpaid taxes annually. This model projects that each year the Lithuanian budget loses around 2,27 bln. EUR from 350 thousand emigrants (Table 4).

Remittances sent from abroad are still supporting Lithuanian society, but since 2015 remittances were under massive trend of decline. If in 2015 Lithuanian economy was benefiting 1,24 bln EUR worth package of remittances, then in 2020 it dropped down to 658 mln. EUR. In terms of factors included in the second model that means that emigration is not any more beneficial for the economy of the origin-country. Lithuania could have gained almost threefold more in economic terms If all emigrants returned and earned an average salary.

Tab. 4. Model Nr. 2 of an average negative impact of emigration on Lithuanian economy

"EUR	Average salary	VAT	VSAOI	IIN	Monthly loss from 1 emigrant	Annual loss from 1 emigrant	Annual loss from 350 thousand emigrants (mln. EUR)
2014	670,7	0,21	0,3136	0,15	386,5	4637,8	1623,24
2015	699,8	0,21	0,3136	0,15	403,3	4839,1	1693,67
2016	748	0,21	0,3136	0,15	431,0	5172,4	1810,33
2017	817,6	0,21	0,3136	0,15	471,1	5653,6	1978,78
2018	895,2	0,21	0,3136	0,15	515,9	6190,2	2166,59
2019	1296	0,21	0,3136	0,15	747,0	8964,5	3137,58
2020	1429	0,21	0,3136	0,15	823,2	9878,9	3457,61
			Average impact		539,7	6476,7	2266,8

Source: author's calculations based on CSB; stat.ee; stat.gov.lt

When applying second model to assess emigration's impact on Latvian economy, one emigrant in economic terms for the Latvian budget equals in average to 7358 EUR of unpaid taxes annually (Table 5). This model projects that each year, on average, Latvian budget loses around 1,6 bln. EUR from 220 thousand emigrants. On the other hand, annually, Latvia is receiving 787 mln. EUR in remittances, which is two times less, than it could have made if all emigrants returned and earned an average salary.

Tab. 5. Model of an average loss & beneit of emigration on Baltic economies

EUR''	Annual loss from 1 emigrant	Annual benefit from 1 emigrant		
Average impact on Latvian economy	7358,4	3577,3		
Average impact on Lithuanian economy	6476,7	2954,1		
Average impact on Estonian economy	9128,9	9143,1		

Source: author's calculations based on CSB; stat.ee; stat.gov.lt

When Estonian economy observed through the factors of the average loss&benefit model, then currently the value of received remittances is almost the same with unpaid taxes. The volume of both benefit&loss is little bit more than 9100 EUR. Overall an economic effect of unpaid taxes from 50 thousand migrants annually was constantly growing during last five years and in 2020 reached 542 mln. EUR. At the same time Estonia was the only country out of the Baltic, who observed remittances growth in last five years – from 412 Mln EUR in 2015 up to 444 mln. EUR in 2020. However, on average emigration's benefit and loss seem to compensate each other, but the actual annual figures present a similar observation of the other two Baltic countries. Estonian economy could have benefited 100 mln. EUR more, if emigrants returned and earned an average salary.

Tab. 6. Adjusted volume of remittances received in the lagginng behind regions

Mln. EUR'	2015	2016	2017	2018	2019	2020
Remittances adjusted to Daugavpils	26,7	23,4	22,3	18,3	18,0	18,0
Remittances adjusted to Visaginas	38,4	33,5	32,3	36,8	35,3	18,3
Remittances adjusted to Narva	26,8	26,4	26,8	30,5	28,6	25,7

Source: author's calculations based on CSB; stat.ee; stat.gov.lt

Having a regional outlook into the lagging behind regions of the Baltic countries, all three regions are still receiving declining, but a substantial proportion of remittances. Out of 15,9 bln EUR, which Baltic countries received in remittances since 2015, 486 mln. EUR reached lagging behind regions (Table 6).

Tab. 7. Elaboration on the average negative impact through the 2nd Model

EUR'	Monthly loss from 1 emigrant	Annual loss from 1 emigrant	Annual loss from average size emigration wave (mln. EUR)
Average impact on Daugavpils	613,2	7358,4	64,2
Average impact on Visaginas	539,7	6476,7	15,1
Average impact on Narva	760,7	9128,9	65,5

Source: author's calculations based on CSB; stat.ee; stat.gov.lt

Both minimal and average impact scenarios indicated, that regionally emigrants could heavily support Estonian Narva, Latvian Daugavpils and Lithuanian Visaginas, if they stayed and paid at least VAT from a minimal or average salaries. Envisaged impact on regional economies from unpaid taxes in average impact scenario is measured from 15,1 mln. EUR up to 65,5 mln. EUR annually (Table 7). The impact is dependent on the size of the emigration and the level of wages.

# **Conclusions**

- 1. Economically lagging behind regions in the Baltics are sharing similar problems, like comparatively small size and even smaller share of remittances, high emigration rates and limited opportunities.
- 2. During the last 5 years the volume of the remittance flow dropped severely in Latvia (-25%) and Lithuania (-57%) during last 5 years of observation. In Estonia there is an increase of the size of remittances by 15%.
- 3. The current trend shows that remittance distribution within the Baltic countries is uneven and that the overall volume of remittances distributed in the lagging behind regions is decreasing in all three Baltic countries. Remittances adjusted to Daugavpils dropped by 33%, to Visaginas by 52% and to Narva by 4%.
- 4. In the light of economic growth of Baltic economies, the decrease of the total volume of remittances and growth of the salaries, the total value of unpaid taxes is increasing and the average value of each emigrant-returnee is growing rapidly.
- 5. Estonia during last 5 years on average was receiving 457 mln. EUR in remittances, Latvia 787 mln. EUR and Lithuania 1,03 bln. EUR. With current socio-economic environment benefit from remittances is rapidly decreasing and the total amount of unpaid taxes is smaller only in case If considering that all emigrants-returnees are doing low-qualification jobs with minimal enumeration.
- 6. If considered that emigrants-returnees receive average salary, then the total volume of unpaid salary and spending tax is threefold higher than received remittances in Lithuania, twofold higher in Latvia. In Estonia volume of unpaid tax and remittances is balanced.
- 7. Among three Baltic countries the most generous emigrants are from Estonia, generating 9143 EUR annually in form of remittances. Emigrants from Latvia are on average sending 3577 EUR and emigrants from Visaginas 2954 EUR.
- 8. Model of emigration's average-impact scenario on Baltic regions showed that amount of tax, which emigrants could have paid is by 51% higher of the current remittances in Latvia, 54% higher in Lithuania and even in Estonia.
- 9. It is important to mention, that this research is based only on two mathematical models. Both of these scenarios are taking into account a limited number of factors, which makes it possible to measure only short-term impact of the emigration. In a long-term calculation many more factors must be considered, such as profile of the society, emigrants' intellectual capacity, possible value adding production, investments in social care, education and others.

10. Calculated positive effect of remittances in the Baltics may be reversed if more factors are considered.

#### References

Barcevičius, Egidijus. 2015. "How Successful Are Highly Qualified Return Migrants in the Lithuanian Labour Market?" [Online] Available: https://onlinelibrary.wiley.com/doi/pdf/10.1111/imig.12224 [Accessed May 15th, 2022].

Borjas, G. J. 1995, "The economic benefits from immigration", *Journal of Economic Perspectives* 9 (2, 3). pp. 22.

Hazans, M. 2013. "Emigration from Latvia: Recent trends and economic impact," *Coping with Emigration in Baltic and East European Countries*. OECD Publishing. pp. 65–110.

Hazans, M. 2012. Selectivity of migrants from Baltic countries before and after enlargement and responses to the crisis. Intra-EU Migration in Troubled Times: Skills Mismatch, Return Migration and Policy Responses. Farnham, UK: Ashgate. p. 169–207.

Hazans, M. 2011. The changing face of Latvian emigration, 2000–2010. Zepa,B (red.), Latvia. Human Development Report 2010/2011: National Identity, Mobility and Capability. Riga: Advanced Social and Political Research Institute of the University of Latvia. 77–101.

King, R., Skeldon R., Vullnetari, J. 2008, "Internal and International Migration: Bridging the Theoretical Divide," Sussex Centre for Migration Research, University of Sussex, UK.

Krasnopjorov, O. 2011, Cik cilvēku pameta Latviju un cik vēl pametīs? (How many people emigrated from Latvia and how many are planning to do so?). [Online] Available: http://www.makroekonomika.lv/cik-cilveku-latviju-pameta-un-cik-vel-pametis [Accessed May 15th, 2022].

Niessen, J. 2014. Labour migration in the Baltic Sea countries Dealing with the consequences: integration and citizenship. p. 30.

Ratha,D., Mohapatra,S., Scheja, E. 2011, "Impact of Migration on Economic and Social Development: A Review of Evidence and Emerging Issues", Worldbank policy researh working paper Nr. 5558.

Schoeni, R. F. 1997. The Effect of Immigrants on the Employment and Wages of Native Workers: Evidence from the 1970s and 1980s". The RAND Corporation, March.

Sjaastad, L. A. 1962. The Costs and Returns of Human Migration. Journal of Political Economy. p. 80–93.

European Comission, 2017, 'Competitiveness in low-income and low-growth regions.' [Online] Available: https://ec.europa.eu/regional\_policy/sources/docgener/studies/pdf/lagging\_regions%20 report\_en.pdf [Accessed April 18th, 2022].

Migration Policy Centre, 2013, The politics of European Union migration governance. [Online] Available: http://cadmus.eui.eu/handle/1814/57305?show=full [Accessed May 21st, 2022].

Latvian central statistics office, 2022, [Online] Available www.csb.lv [Accessed May 10th, 2022]. Lithuanian official statistics portal, 2022, [Online] Available https://www.stat.gov.lt [Accessed May 10th, 2022].

Estonian official statistics portal, 2022, [Online] Available https://www.stat.ee/en [Accessed May 10th, 2022].

Worldbank (2022), "Migration and Remittances Recent developments and outlook." [Online] Available: https://www.worldbank.org/en/topic/labormarkets/brief/migration-and-remittances [Accessed May 10th, 2022].

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