

## **Social Inclusion Challenges for Different Society Groups in Latvia**

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**Abstract.** Latvia has been receiving critical remarks from international institutions in regard to high level of social inequality of various groups in the society. Statistical data indicate that the society of Latvia has to address serious challenges in social inclusion, including several aspects in health care. The aim of the paper is to propose possible solutions for social inclusion of different society groups, especially in relation to health care aspects and including application of life-long-learning for health care for several society groups. Research approach to the problem: analysis of data obtained in representative survey 9280 respondents: health condition self-evaluation analysis by regions, by gender, by administrative territory, by age groups, by economic activity and by education level, as well as survey of social service representatives in municipalities in Latvia. For a more thorough data analysis (used evaluation scale 1-5) indicators of descriptive statistics are applied; cross – tabulations; testing of statistical hypotheses with t-test and analysis of variance – ANOVA; correlation analysis. Research results indicate that the use of more diverse approaches of social marketing and life-long-education programs to inform and educate various groups of society on health care aspects might produce beneficial effects to decrease social inequality of different society groups.

**Keywords:** Social inclusion, health condition, self-evaluation, material deprivation.

## **1. Introduction**

Latvia has to address serious challenges in social inclusion, including several aspects in health care. Gini index and other similar statistical data show high level of social inequality of various groups in the society and inequality between regions of Latvia. The aim of the paper is to propose possible solutions for social inclusion of different society groups, especially in relation to health care aspects and including application of life-long-learning (LLL) for health care for several society groups. Especially urgent are problems of mental health. High level of depression and its rapid increase is partly due to Covid19 pandemic, but not only. Our assumption is that all social changes and changes of the life conditions including fast digitalization create reasons for health problems and first of all mental health problems. The solution should be not only medical but would need to include all relations in the society, in all social structure. The available statistical data confirm significant mental health problems and show links with changes of the social structure and social relations of society. Special attention should be paid to rural areas. Ageing and depopulation creates the most harmful effects for the rural communities. The crisis situation puts additional stress on the communities, and the complex aspects ask for an urgent solution for the growing health problems, especially the problems of mental health that are increasing fast. These problems should be solved together with the problems of inclusion of different society groups and reduction of income differences and the negative consequences of inequality. Motivation of people becomes increasingly important. The state, nongovernmental organizations (NGO) and all civil society must be involved to solve the urgent tasks to establish and develop an ideology to address these issues. Use of art and philosophy should not be disregarded either as relevant measures and approaches to overcome the problems and to solve the tasks of inclusion.

## **2. Theoretical Findings**

**Researchers world** – wide are analysing social inclusion aspects in several dimensions and offer findings related to involvement in employment (Raudeliūnienė, et al, 2021, Raudeliūnienė & Szarucki, 2019; Davidaviciene, et al, 2019; Tang. & Cheung, 2010; Tang, et al, 2017), training on required skills as well as diverse social support. Different new technologies appear permanently and employees must acquire new knowledge and skills to cope with these technologies. Regular, lifelong learning is necessary to continue simultaneously with the work. This is true in significant extent also for the health care system. Artificial intelligence and physics are going to be included in more and more medical systems. Deep changes of skills and acquisition of new fundamental knowledge need strong motivation and proper attitudes. Innovative approaches to professional learning should be developed (Spatharou, et, al, 2020)

**Problems of rural areas.** Green Paper of Ageing (GPA), Fostering solidarity and

responsibility between generations GPA pays attention to the problems of all local communities becoming more and more harmful for Latvia as a whole, but remote rural areas are particularly affected. For the adequate satisfaction of the basic human needs such as safety, belonging, recognition and transcendence social contacts are necessary. Older people in rural areas need special attention. They must receive help to establish contacts and to solve their life problems. Internet of things and artificial intelligence can provide with more safe and convenient means of transport without driver, but for the use of this kind of transport the necessary new skills must be acquired. Public organizations and society must organize help and supply the necessary learning possibilities for all people, first of all the older.

**Mental health problems.** Mental health disorders are a serious and undervalued problem with a high degree of social causes. The Riga Stradins University study (Multiinclude, 2021) showed that mental health applied also for students due to the limited presence (on-site activity) (which has caused several unexpected and unsolved problems also in the past) has deteriorated significantly as a result of the Covid19 crisis. Since 2011, when the prevalence of depression and distress symptoms was 6.7%, it has doubled. 6% have experienced clinical depression, but 8% of Latvia's population have been affected by distress. The experience of the 2008 crisis has been investigated in the work of the University of Latvia researchers and the recommendations for crisis management are currently emerging as very useful (Kirwan, et al, 2010).

The fundamentals of human behaviour, the structure of the psyche and the need for social contact have been evolutionary developed throughout the formation of humanity. The virtual environment and particularly in the context of a pandemic, forces a significant change in the psychosocial mechanisms built in traditions and intergenerational experiences, which create tension, especially for young people whose parents can no longer help with the experience of the past. Indications are that 70% of young people have problems. According to the World Health Organization, around 20% of young people face mental health problems, 50% of which start aged 12-14 (World Health Organisation, 2021).

Isolation creates mental disorders and also different other health problems. Socialization, group therapy and different forms of social work and psychotherapy should help. Elder people are a vulnerable category, therefore diversified medical approach should be used, including gerontology. Complex social, cultural, economical and medical measures must be developed to help all interacting groups to solve the common problems in the changing society. Inclusiveness is important for retaining mental health and achieving higher living standards.. Interaction of inhabitants should be organised in the local environment, communities etc.

Different approach to different people and groups of people should be used. Complex interaction and integration in united system, including different roles for different ages, genders, education levels are relevant. Different people cannot perform

the same job equally. The differences must exist, but they must be harmonised in a self consistent system. Use of technology is the direction described in GPA (European Commission, 2021).

As mentioned previously, the approaches for solving the arising problems of human interaction is covered by researchers in many countries (Ebbinghaus, 2021) but is still insufficiently covered in the European Union (EU) policy documents. Creation of appropriate motivation to use technologies is a cultural and ideological task. Investigation of ideological problems linked with the technologies is a topical problem for all countries, including Latvia and EU. Appropriate ideology must be developed by the support of public and private organizations and different associations of citizens. The studies of liberal arts must be increasingly and consistently supported by state education system as important development and prevention measure in the context of the discussed topic as well.

### **3. Ideological Conditions for Quality of Life and Well Being**

Ideologically diverse approaches of social marketing and life-long-education programs to inform and educate various groups of society on health care aspects might produce beneficial effects to decrease social inequality of different society groups, several countries have good results in relation to that (Onwujekwe, et al., 2021). Serious social challenges have been set for the in all states in Europe in the recent document about problems of ageing society (European Commission, 2021). There are proposals in the GPA for the improvement of the social structure of the EU, but still a set of complex problems has not been included directly in the GPA - how to create ideology, compatible with the proposals of GPA and supporting all the concrete activities mentioned in the GPA (European Commission, 2021).

According to the proposals included in the GPA healthy lifestyle and personalised medicine are very useful solutions. The aim described in GPA is healthy and active ageing. It could be achieved by promoting healthy style of life during all time of the human life. Appropriate participation in social contacts and in different types of permanent activity should be supported by adequate medical help for each person. All people including older should be involved in several overlapping networks of human contacts. Very important are contacts between different generations. Both physical, face to face and virtual, digital contacts should be used. GPA contains important proposal to think and reflect on creation of different contacts between young and old people. Teaching and learning activities could be very useful tool for interaction and cooperation, where both parts, young and old people participate playing different roles of mentors and learners, changing their roles during the whole process of interaction in the common framework of life-long learning and supporting each other.

Human needs and lifestyle is closely linked with the world outlook and ideology. In order to eliminate poverty, it is necessary to tackle the challenge of creating

solidarity and morality by providing motivation to work and fostering the development of creativity. It is the task of shaping the world view and perception on the basis of a collaborative ideology. It is necessary to ensure that all human needs (“pyramid” of A.Maslow) are met, with the greatest focus on the highest (ideological) levels (belonging, recognition, self-fulfilment and transcendence), since ensuring the lowest (materialistic) levels (physiological needs and security) is relatively easy to meet. The philosophy (and its component ethics) and the arts must provide an understanding of the conditions for a dignified life on which the rules for the allocation of material resources are based, explain world beliefs, the meaning of life and support their understanding (firstly, in the education system). Humanities should provide methodologies and mechanisms to ensure morality and to exclude deviant behaviour.

One possible path to tackling poverty is the localisation of economic and cultural activity, moving decision-making to the lowest possible levels and granting autonomy to municipalities and other local self-organising options – researchers are analysing several aspects (Fay, et al, 2021). Bringing people together in relatively small (50-500 people) communities (cooperatives, NGO, artels etc.), (e.g. Israel's kibucks as a form of self-organising system), is one of the prospects for organising society in an improved way under the present and future fast changing conditions.

**Challenges for art and philosophy.** Cognitive neurobiology (Graziano, 2019) as the basis and traditions, history, art and value education (Maimone & Sinclair, 2014; Mūrnieks, 2014) in many cases is creating the stability of the society. Many researchers have studied this aspect and has found it useful for social inclusion (Klein, et. al, 2021). History shows the necessary balance between chaos and order which must be created by ideology, starting from different myths and ending with scientific ethics (Maimone & Sinclair, 2014; Veinbergs, 1988). Atomization of society is destructive and must be stopped by appropriate ideology, created by philosophy and supported by art. Atomization of people has been the initial idea of Nietshe and his followers, including NSDAP (Tumans, 2014).

**Protestantic ethics.** Poverty is a necessary consequence of traditional capitalism and free market. The full eradication of poverty may therefore require significantly limit the free market and create cooperation and solidarity instead of competition, support altruism and collectivism. Some countries, for example Switzerland, Norway and Sweden, have significant state regulations of economy and restrictions of free market, but this is not socialism or communism, because socialism is not only an economic system but also an ideology. Neither Sweden nor Switzerland has a sustainable, unifying ideology created or applied. The protestantic ethics that prevail in Switzerland and Nordic countries support capitalism. First of all bank capital and banking domination must be restricted or, better forbidden, as it is required in the Old Testament, for example. Instead of protestantic ethics or similar ideology supporting banking it is necessary to build a scientific worldview without which sustainable,

socially driven development is not possible (neither in Switzerland nor in Nordic countries or elsewhere).

At the same time economic policy should be changed to decrease poverty and dehumanization. Baltic countries and other countries with poverty problems must use customs and fiscal policy to safeguard the domestic market. It would be highly important to address the issue of government control over banks and the financial system through state-owned banks, to promote the establishment of savings societies and implement other measures to reduce the influence of the world financial system to local economics. Without a political desire to build state-backed local production, however, substantial improvements cannot be expected in a foreseeable future.

Important field for local activities is health care. Increasing part of patients could be removed from hospitals to local communities and families. Appropriate use of internet, digital technologies together with improved medical technologies allows to solve the health problems at home, using support of friends and relatives. Permanently acting networks and social contacts should be used to prevent and to solve main tasks of mental and physiological health. The shift of the health care from hospitals to local communities, households and self care are promising developments and should be increasingly supported (Spatharou, et al, 2020, p.78).

The increasing use of information technologies (IT), internet of things (IoT) and artificial intelligence (AI) in health care, transport, education, industry and many other directions of human activities ask to pay increasing attention to ethical and legal problems of AI. All social rules and morality are changing. The education system, using art and philosophy must support the implementation of the new morality, linked with AI. More support for all groups of people is necessary, but first of all for older people (European Commission, 2020).

Fast increase of digitalisation creates digital gap, which is most visible for the elder generation and for people with special needs. Statistical data about digital skills of different groups show high and increasing inequality.

#### **4. Interaction of society members in local communities as the foundation for social inclusion and localised economics**

**"Silver economy"** - Digitalisation and development of local economics and health care brings new possibilities for the "silver economy" suggested in GPA (European Commission, 2021) The use of AI, IoT and IT allows significantly wider participation of all people, including older generation, so called "silver"age, in different economical, cultural, social activities. Part time job and virtual contacts increase diversity of possible participation and allows people with special needs to take part in activities with less intensity, adequate their abilities to work, to establish and to maintain contacts.

**Intergenerational learning** - All generations must interact to create fair, harmonised society.

Non governmental organizations (NGO) in different fields of culture, art, crafts by the necessary support from local communities and state, should participate in the organization of the formal and informal social contacts between people coming from young and old generations.

The ideology, supporting informal interaction could be based on christian values, not always together with christianity. Local history and traditions could be enough, but education system must work for that. This is the answer to the questions formulated in GPA about the support for older generation (European Commission, 2021).

Local communities together with NGO and using state support can combine digital skills and mobility of younger generation and wisdom and experience and knowledge of old generation. Contacts between relatives and in families should be strengthen by the appropriate help from local communities, NGO and the civic society. Involvement of all generations in solving health and care problems is important task (European Commission, 2021).

**Rural and other less developed regions.** GPA shows some ways, but for creation of motivation other efforts should be added. Political decisions of state and local authorities should support the possibilities for different generations to live together. The availability of internet and transport, as well as other services must be provided in all regions. Promotion of modernisation of all services and creation of social networks social protection must be included as important part of a social policy. Intergenerational solidarity and responsibility should be supported by education and cultural activities.. Development of rural regions should be supported using cohesion policy and opportunities emerging in the silver economy. (European Commission, 2021).

The quality of life in certain aspects is better in rural areas than in cities, but there are many organizational, mobility, health care and social problems to be solved to use the positive possibilities of rural areas.

The household size in Europe decreases in most part of countries. The biggest decrease of the household size from 2.6 to 2.2 in Latvia and from 2.9 to 2.5 in Malta from 2010 till 2019. , If the decreases of the household size, will be stopped and intergenerational cooperation will be organized, older people will contribute significantly to the sustainable development and silver economy (European Commission, 2021). Many NGO are working with the state support, but the overlapping networks of interaction still are not enough. More activities should be developed with the aim to face the challenges of ageing populations through organization of new possibilities for local industry and crafts and create opportunities for senior citizens. The focus should be health and welfare technologies, senior employment and empowerment services, information and communication technologies. Local communities and state should pay attention to the infrastructure, transportation services, environment, housing, refurbishment and other living space

development solutions (Smart Silver Lab, 2021). A good example is the Interreg programme co-funded project Osiris, involving partners from Denmark, Estonia, Finland, Latvia, Lithuania and Russia. In the framework of this programme Smart Silver Lab Innovation Program and Accelerator Program as parts of the Interreg programme are designed to support business and social innovation ideas within the sectors of silver economy in the countries around the Baltic sea (Osiris, 2021).

**Integral, complex care** - The main problem is to join different public and private initiatives in the complex network of interaction for all people including rural and less developed areas and all households, including first of all those living alone, and researchers are advising to check all aspects including housing (Arundel & Ronald 2021). Researchers in many countries have found and analysed research results in good practice on that (Martin, et al, 2021; Pernegger, 2021). The significance of cooperation and solidarity between people and generations becomes more clear during crises. Social contacts using physical and virtual networks help to overcome health problems. Cooperation and social contacts are very important for solving the increasing mental health problems (European Commission, 2021).

Combination of virtual and physical contacts must be used and different social, cultural, education, economic and other networks must overlap, creating integrated community with common values and ethics. Inclusion of social and cultural activities, together with economic tasks and health problem solution in the interaction of people is very important (Rupeika – Apoga, et al, 2019). New form of village could be created with all generations included in the interaction.

## **5. Empirical results and discussion**

**Data analysis** - Research approach to the problem: analysis of data obtained in representative survey (EU-SILC): health condition self-evaluation analysis by regions, by gender, by administrative territory, by age groups, by economic activity and by education level, as well as survey of social service representatives in municipalities in Latvia. Research results indicate that the use of more diverse approaches of social marketing and life-long-education programs to inform and educate various groups of society on health care aspects might produce beneficial effects to decrease social inequality of different society groups. For a more thorough data analysis investigation of the results are applied means, dispersions and other results of statistical calculations valid for the decision making about the different types of dependencies and for other hypotheses.

**Ageing and depopulation** - Latvia has to address serious challenges in social inclusion, including several aspects in health care. Gini index and other similar statistical data show high level of social inequality of various groups in the society and inequality between regions of Latvia. The purpose of the investigation is to propose possible solutions for social inclusion of different society groups, especially in relation to health care aspects and including application of life-long-learning (LLL)



for health care for several society groups.

Technological developments lead to rapid changes in the social structure of society and in the processes of the functioning of society. Digitalisation is particularly problematic. The European Commission (EC) documents describe some of the legal and organisational challenges in which the EC calls for the involvement of all EU Member States. The crisis situation caused by the Covid19 pandemic and by the ageing population is leading to a strong acceleration in the search for solutions. The search for solutions requires a complex approach, since changes and challenges affect all spheres of life, all aspects of human contact.

Latvia together with Bulgaria, Lithuania, Ukraine is among the European countries with the biggest decrease of inhabitants between 2019 and 2050, with losses of around 20 per cent or more (UN, 2019). Latvia and other countries with increasing share of old people need to prepare for the changes in the age structure of inhabitants (UN, 2019). According to analysis made in (UN, 2019) amount of persons living in Europe and Northern America with age 80 and more will change from 143 million to 426 million between 2019 and 2050. Health care, pensions and different benefits must be paid working people. The share of people between 25-64 will be twice less than people aged more than 65, in Europe and other 48 industrialised countries in the year 2020.

Health and care problems become very important in ageing society. The long term care will be necessary for 19.5 million, 23.6 million and 30.5 million people in the years 2016, 2030 and 2050 accordingly in the European Union (European Commission, 2021). The main trends of the composition of households has been made by Eurostat (Eurostat, 2020). The Fig. 1 shows the changes during the last decade i.e. 2010-2019. The largest relative decreases of the size of households from 2.6 to 2.2 is in Latvia from 2010.

The composition of households is changing. The Fig. 2 and Fig. 3 show the changes of the types of households during the last decade i.e. 2010-2019. The fastest increase of the number of households is for households with one adult.

The EU establishes social rights, among whom the most important for sustainable future development is education, training and life-long learning (European Pillar of Social Rights, 2021). The households with single adult and children could meet more problems with education, therefore special additional attention should be paid to the decrease of the size of households. Europe refers here to the entire continent. Main data on households on type are included in Fig. 2.

Information included in Fig. 2 indicate that share of single adults is increasing and the number of other types of the households remain approximately the same. Information on households with children is reflected in Fig. 3.

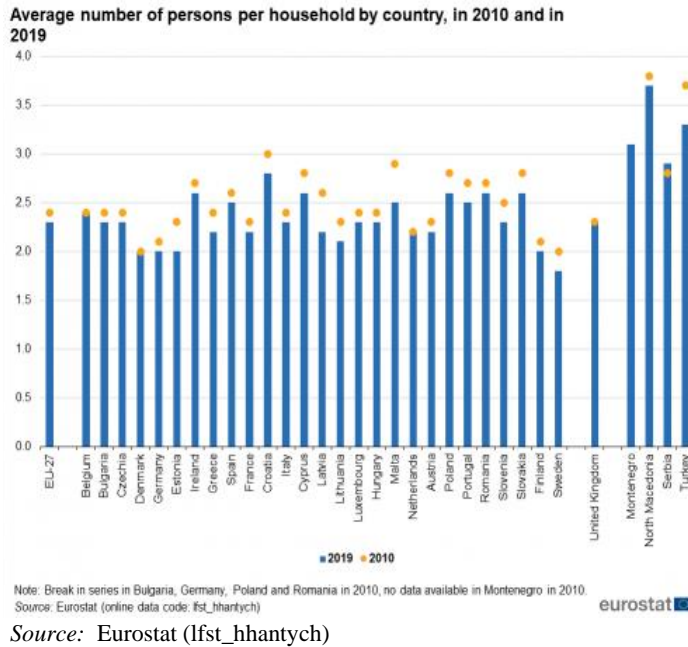
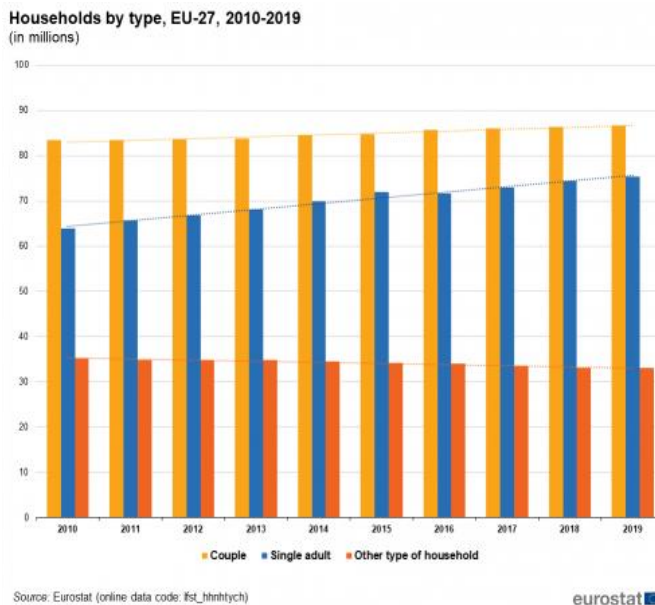
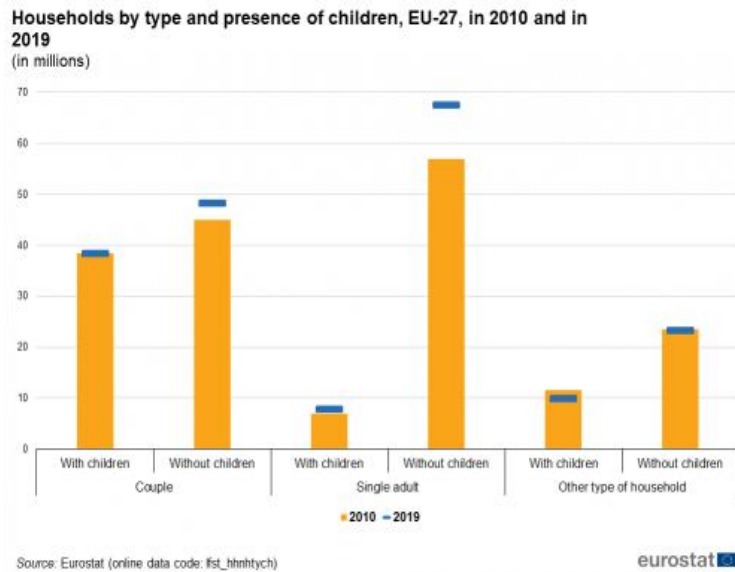


Fig. 1: Average numbers of persons per household, in 2010 and in 2019



Source: Eurostat (fst\_hhntych); the 2019 Revision of UN World Population Prospects (Eurostat online data table demo\_pjanind indicates 43.7 years as the 2019 median age for EU-27.)  
[https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/european-pillar-social-rights/european-pillar-social-rights-20-principles\\_en](https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/european-pillar-social-rights/european-pillar-social-rights-20-principles_en) ]

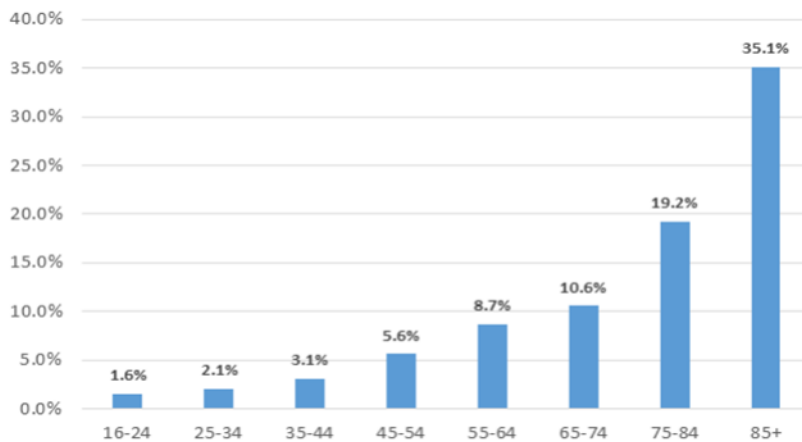
Fig. 2: Households by type, in 2010 and in 2019 (in millions)



Source: Eurostat (*lfst\_hhnhtych*)

Fig. 3: Number of private households by household composition, number of children and age of youngest child (1000) 2010-2019

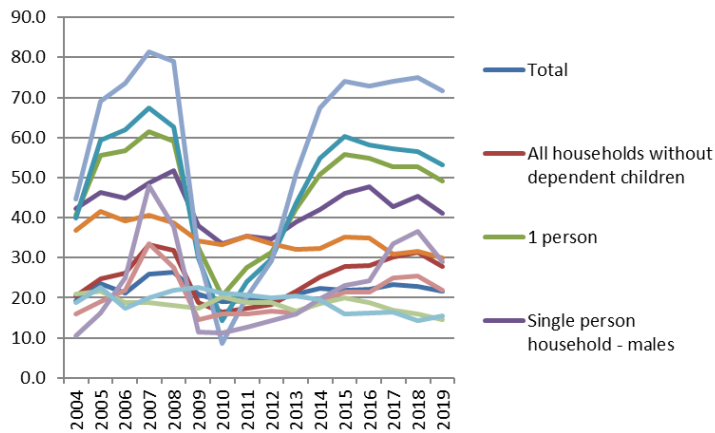
The discussion about changes of the age structure of the society and about the problems linked with these changes has been launched by the GPA (European Commission, 2021). The older people have higher need for the long term care. The dependency rates are shown in Fig. 4 (European Commission, 2021).



Source: Calculation of the Commission's Directorate-General for Economic and Financial Affairs based on Eurostat online data table *hlth\_silc\_06*

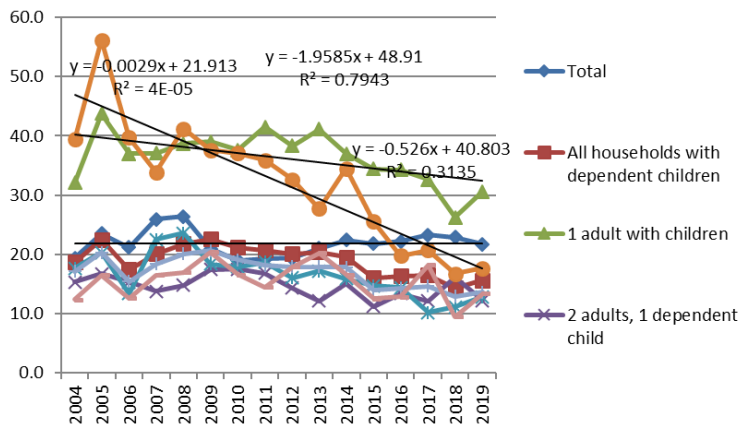
Fig. 4: EU dependency rates increase with age, 2015-2019

Data of persons at-risk-of poverty rate in Republic of Latvia 2004-2019 are included in Fig. 5.



Source: Author's construction based on Data of Open Data Porta, Republic of Latvia

Fig. 5: At-risk-of-poverty rate by household type (%) by Household's type in Latvia in 2004-2019

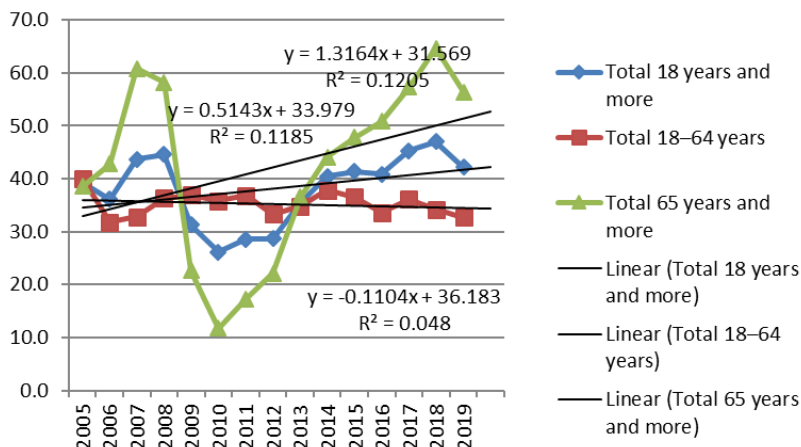


Source: Author's construction and calculations based on Data of Open Data Porta, Republic of Latvia

Fig. 6: At-risk-of-poverty rate by household type (%) by Household's type with children in Latvia in 2004-2019

Data of at-risk-of-powerty by households with children decrease in prevoius decade, data indicate than share of one adult with children decrease in average by 0,53 percentage points annually, with trhee children decrease by 0,0029 percentage points.

Main statistical indicators on overall health situation evaluation in Latvia in 2019 are included in Table 1.



Source: Author's construction and calculations based on Data of Open Data Porta, Republic of Latvia

Fig. 7: At-risk-of-poverty rate by age group with primary education or without formal education in Latvia in 2004-2019

Table 1: Main statistical indicators on overall health situation evaluation in Latvia in 2019

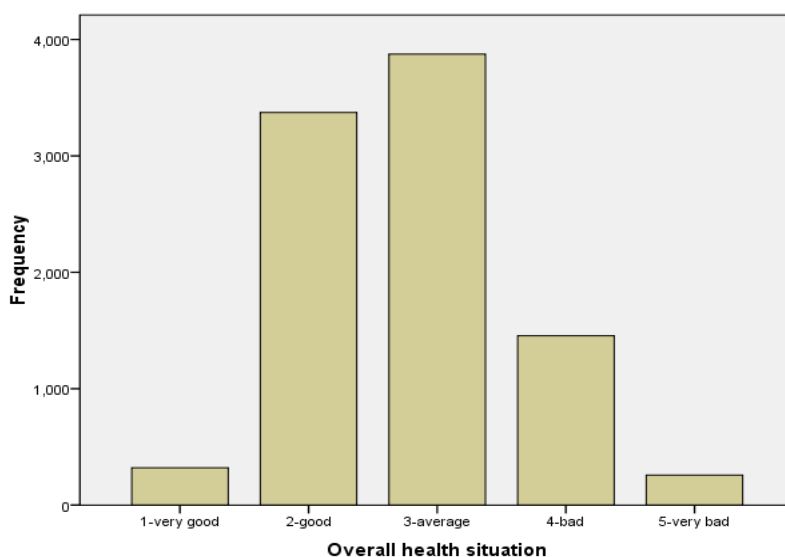
N	Valid	9280
	Missing	0
Mean		2.78
Standard Error of Mean		0.009
Median		3
Mode		3
Standard Deviation		0.849
Range		4
Minimum		1
Maximum		5

Source: author's calculation based on EU-SILC data, Evaluation scale 1-5, where 1- very good; 5 – very bad, n=9280

Main statistical indicators on the overall health situation evaluation in Latvia in 2019 indicate that arithmetic mean of the evaluations was 2.78, most often given evaluation (mode) overall health evaluation was 3 – average, half of inhabitants evaluate on 3 or less and half of inhabitants evaluate on 3 or more (characterised by median). All evaluation scale was used for evaluations.

Distribution of responses is presented in Fig. 6.

Distribution of evaluation of overall health situation in Latvia in 2019 indicate that most of people evaluate their health condition as average and the share of inhabitants evaluating their overall health situation as very good is approximately the same as those who evaluate the overall health situation on very bad.



Source: author's construction based on EU-SILC data, Evaluation scale 1-5, where 1- very good; 5 – very bad, n=9280

Fig. 8: Distribution of evaluation of overall health situation in Latvia in 2019

Distribution of evaluation of overall health situation by regions in Latvia in 2019 is included in Table 2.

Table 2: Distribution of evaluation of overall health situation by regions in Latvia in 2019

Evaluations	Regions						Total
	Riga	Pieriga	Vidzeme	Kurzeme	Zemgale	Latgale	
1-very good	79	61	36	45	60	39	320
2-good	979	586	347	514	623	324	3373
3-average	994	564	386	686	591	653	3874
4-bad	321	216	184	218	243	273	1455
5-very bad	52	36	40	36	40	54	258
Total	2425	1463	993	1499	1557	1343	9280

Source: author's calculations based on EU-SILC data, Evaluation scale 1-5, where 1- very good; 5 – very bad, n=9280

Main statistical indicators on health evaluations by regions by chi-square tests in Latvia are included in Table 3.

**Table 3: Main statistical indicators by Chi-Square tests on overall health situation evaluation by regions in Latvia in 2019**

	<b>Value</b>	<b>df</b>	<b>Asymp. Sig. (2-sided)</b>
Pearson Chi-Square	170.105 <sup>a</sup>	20	0.000
Likelihood Ratio	173.665	20	0.000
Linear-by-Linear Association	59.249	1	0.000
N of Valid Cases	9280		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 27.61.

Source: author’s calculations based on EU-SILC data, Evaluation scale 1-5, where 1- very good; 5 – very bad, n=9280

Data of analysis of chi-square tests on health evaluations in regions in Latvia indicate that the evaluations by regions do not differ statistically significant.

Main statistical indicators on health evaluations by regions by symmetric Latvia are included in Table 4.

**Table 4: Main statistical indicators by symmetric measures on overall health situation evaluation by regions in Latvia in 2019**

	<b>Correlations</b>	<b>Value</b>	<b>Asymp. Std. Error<sup>a</sup></b>	<b>Approx. T<sup>b</sup></b>	<b>Approx. Sig.</b>
Interval by Interval	Pearson's R	0.080	0.010	7.722	0.000 <sup>c</sup>
Ordinal by Ordinal	Spearman Correlation	0.084	0.010	8.078	0.000 <sup>c</sup>
N of Valid Cases		9280			
<i>a. Not assuming the null hypothesis.</i>					
<i>b. Using the asymptotic standard error assuming the null hypothesis.</i>					
<i>c. Based on normal approximation.</i>					

Source: author’s calculations based on EU-SILC data, Evaluation scale 1-5, where 1- very good; 5 – very bad, n=9280

Data of analysis of symmetric measures on health evaluations in regions in Latvia do not differ statistically significant.

Main statistical indicators on health evaluations in cities and rural areas in Latvia are included in Table 5.

**Table 5: Main statistical indicators on overall health situation evaluation by territories in Latvia in 2019**

<b>Territory</b>	<b>N</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Standard Error of Mean</b>
city	5753	2.75	0.843	0.011
rural	3527	2.83	0.857	0.014

Source: author’s calculations based on EU-SILC data, Evaluation scale 1-5, where 1- very good; 5 – very bad, n=9280

Main indicators of data of analysis of t – test for comparing the statistical difference on health evaluations in cities and rural areas in Latvia are included in Table 6.

Table 6: Main statistical indicators on testing hypothesis on differences in evaluations of overall health situation by territories in Latvia in 2019

Indicators	Levene's Test for Equality of Variances		t-test for Equality of Means				
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Equal variances assumed	1.161	0.281	-4.364	9278	0.000	-0.079	0.018
Equal variances not assumed			-4.346	7357.687	0.000	-0.079	0.018

Source: author's calculations based on EU-SILC data, Evaluation scale 1-5, where 1- very good; 5 – very bad, n=9280

Data of analysis of t – test for comparing the statistical difference on health evaluations in cities and rural areas in Latvia do not differ statistically significant.

Main statistical indicators of on comparing the evaluations of overall health situation by regions of inhabitants by analysis of variance (ANOVA) in Latvia in 2019 are included in Table 7.

Table 7: Main statistical indicators on comparing the evaluations of overall health situation by regions by analysis of variance (ANOVA) in Latvia in 2019

Indicators	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	83.887	5	16.777	23.551	0.000
Within Groups	6606.785	9274	0.712		
Total	6690.672	9279			

Source: author's calculations based on EU-SILC data, Evaluation scale 1-5, where 1- very good; 5 – very bad, n=9280

Data of analysis of variance – ANOVA where it was compared the evaluations of overall health situation by regions in Latvia do not differ statistically significant.

Main statistical indicators of on comparing the evaluations of overall health situation by age groups of inhabitants by analysis of variance (ANOVA) in Latvia in 2019 are included in Table 8.

Data of analysis of variance – ANOVA where it was compared the evaluations of overall health situation by age groups do not differ statistically significant.

Main statistical indicators of correlation analysis on the evaluations of overall health situation and age groups, regions and territories in Latvia in 2019 are included in Table 9.



Table 8: Main statistical indicators on comparing the evaluations of overall health situation by age groups by analysis of variance (ANOVA) in Latvia in 2019

	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Between Groups	2110.331	6	351.722	712.069	0.000
Within Groups	4580.341	9273	0.494		
Total	6690.672	9279			

Source: author's calculations based on EU-SILC data, Evaluation scale 1-5, where 1- very good; 5 – very bad, n=9280

Table 9: Main statistical indicators of correlation analysis on the evaluations of overall health situation and age groups, regions and territories in Latvia in 2019

		<b>Overall health situation</b>	<b>Regions</b>	<b>Territory</b>	<b>Age group</b>
Overall health situation	Pearson Correlation	1	0.080**	0.045**	0.558**
	Sig. (2-tailed)		0.000	0.000	0.000
	N	9280	9280	9280	9280
Regions	Pearson Correlation	0.080**	1	0.321**	0.038**
	Sig. (2-tailed)	0.000		0.000	0.000
	N	9280	9280	9280	9280
Territory	Pearson Correlation	0.045**	0.321**	1	0.013
	Sig. (2-tailed)	0.000	0.000		0.197
	N	9280	9280	9280	9280
Age group	Pearson Correlation	0.558**	0.038**	0.013	1
	Sig. (2-tailed)	0.000	0.000	0.197	
	N	9280	9280	9280	9280

\*\**. Correlation is significant at the 0.01 level (2-tailed).*

Source: author's calculations based on EU-SILC data, Evaluation scale 1-5, where 1- very good; 5 – very bad, n=9280

Data analysis indicate that correlation is statistically significant with level of significance 0,01 and it means that the evaluations on overall health situation is evaluated lower by increasing the age group, the evaluations on overall health situation is evaluated lower by inhabitants living in less developed regions and the evaluations on overall health situation is evaluated lower by rural inhabitants.

## 6. Conclusions, proposals, recommendations

1) Intergenerational learning, including mentoring or experience sharing for social inclusion of different society and age groups are the most preferable activities for the

increase of social inclusion.

2) The use of more diverse approaches of social marketing and life-long-education programs to inform and educate various groups of society on health care aspects, including mental health might produce beneficial effects to decrease social inequality of different society groups.

3) New, much more extensive role of art and philosophy could be introduced in relation to improved social inclusion.

4) The role of local communities and national states should be increased according to the subsidiarity. Combination of virtual and physical contacts and overlapping networks could be used.

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