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**HEALTH LITERACY CRISIS: OPPORTUNITIES FOR
WELLNESS AND FITNESS CENTERS**

Master Thesis

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Pärnu 2015

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This Master thesis has been compiled independently. All works by other authors used while compiling the thesis as well as principles and data from literary and other sources have been referred to.

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INTRODUCTION

People seek for different ways of health improvement during all the time of human existence. Literacy has always been an important parameter of this process. In ancient times, when people lived very short lives and feared so many things, they used to believe in immortality which could be achieved eventually. In medieval times, when people mixed heathenism and belief in God, they looked for magic artifacts to be found or invented (like sorcerer's stone). The value of a single person's life was still low, but some individuals (the richest and the most literate) got the wish for longer and better life, or even immortality.

Nowadays, when the level of general literacy in EU is almost 100%, nobody believes in immortality. Despite the growing life expectancy and the decrease of communicable diseases, new issues are becoming urgent.

The issue of health is now more than just a private matter, it becomes public goods and assets for human development (WHO, 2013). Maintenance and improvement of health conditions is a life-long, continuous and complicated process. Therefore, health literacy is a core parameter for it. Attention to the topic is growing day by day. WHO makes it one of the main priorities in the "Health 2020: a European policy framework" (WHO, 2012).

A health literacy process is complex and could be compared to the general literacy process. The author of this paper assumes that nowadays the humanity is in the very specific stage of it, when the information is excessive but we are still lacking systematic

and strategic approaches. That's why the chosen topic of this paper is urgent, important and worth researching.

A significant research was conducted in 2012 by EU Health Literacy Consortium with the sample of almost 8000 respondents through 8 EU countries. The aim of research was to find out the situation in the society regarding the health literacy topic, as “health literacy” is determined as a key dimension of Health 2020, European health policy framework. It was stated that around half of population has inadequate or problematic health literacy skills (HLS-EU CONSORTIUM, 2012).

Based on this survey, WHO came to the conclusion that there was a severe health literacy crisis in the EU. It was stated that people faced with a health decision-making paradox. That basically means that nowadays education systems fail to provide proper health knowledge and skills, health care system is illness-oriented and difficult to navigate, and marketing is oriented on unhealthy lifestyles (WHO, 2013).

The health literacy process is still not really clear and consistent unlike the general literacy process. It is a vast area for researches and development. One of the particularly important points is to consider the participants of the process. Even though the policies and framework of Health 2020 are general, the place was given to private health sector and wellness economy is really uncertain, even though it's obvious that wellness economy should be taken into the consideration, The topic of this paper “Health literacy crisis: opportunities for the wellness and fitness centers” derived from author's professional experience, educational background, present location and intention to contribute to the society. This research is aimed to direct findings of scientists to the practical field, to the wellness and fitness industry professionals.

Surprisingly, by definition “wellness” and “literacy” have very similar meanings. According to UNESCO, “Literacy is a process, not an end-point. It is rather the entry point to basic education and the passport to lifelong learning” and “Literacy is part of achieving full individual potential, learning for growth and change, communication within and across cultures, and participation is social and economic opportunities.” (UNESCO, 2008, pp.21, 81).

According to the National Wellness Institute, “Wellness is a process of becoming aware of making choices toward a more successful existence” (Arloski, 2009, p.13). Another definition “Wellness is a choice, a way of life, a process, an efficient channeling of energy, an integration of mind, body, spirit and a loving acceptance of self ” (Travis & Ryan, 2004; Arloski, 2009, p.13) shows us that these processes are very similar in meaning, but at the same time they have very different image in society. While literacy is clear, serious, scientific and socially important, wellness is usually unclear, sophisticated and too commercialized. That is not a final conclusion; it is just the result of observation.

For the proper investigation the main research question was formulated: **What kind of services could wellness enterprises develop and provide to participate in the process of solution for health literacy crisis?**

Bearing in mind the latest researches and publications, the author offers the following hypothesis: **wellness and fitness centers need to develop and provide services to participate and benefit from the process of solution for health crisis.**

The hypothesis is formed in line with the aim of the paper. In order to test the hypothesis two samples of individuals were taken. Firstly, the professionals who work in the industry were interviewed to collect qualitative data with the aim of researching the approach and opinion regarding the topic. Secondly, the individuals of the distinct groups in Facebook were questioned to collect quantitative data with the aim of investigating specially the view of customers who potentially will use the services whether their experience and demand support the proposed hypothesis.

The aim of this dissertation is **to determine the attitude to health literacy process from wellness and fitness center perspective in relation to needs of community.**

In order to elaborate the research the author decided to set such particular tasks:

- to specify relationship between health literacy and wellness economy through research of existing literature;

- to develop research tools for the investigation;
- to choose and justify research methodology and methods;
- to collect the results and process the data;
- to make recommendations based on the thesis findings for the institutions, wellness economy enterprises and individuals.

The dissertation is divided into three main parts which are:

- modern research overview with the framework from the existing publications and research papers about health literacy, wellness economy, its major aspects and trends;
- research part with process description, findings and analysis;
- recommendations, proposals and conclusions part where the main outcomes of the paper will be showed.

The results of the study could be suitable for the wellness economy enterprises to develop innovative services for wider range of customer to satisfy current demands of the market and the society requirements. For the future researches this dissertation could clarify the ways for the practical as well as theoretical developments, especially in the sphere of finding touch-points between such important topics as wellness and health literacy.

HEALTH LITERACY CRISIS FROM WELLNESS ECONOMY PERSPECTIVE

1.1 Health literacy: definition and theoretical overview

The term “health literacy” appeared in the scientific papers less than 50 years ago. Despite the importance of health and literacy separately, only few researchers correlated them together until the beginning of the 90s (Speros, 2005), when first serious findings in the USA linked low literacy level and different health related issues (Sorensen, 2012).

Another part of the process was the way of definition for “health literacy” term. The discussion could be long and intensive, but since the author is planning to research another dimension of the topic, the definition from the systematic review of 17 sources was chosen to be appropriate to the particular paper and the author will refer and imply exactly to it further. So, by the team of European Health Literacy Consortium, in future the name of organization will be used in shortened form HLS-EU Consortium, '**health literacy** is linked to literacy and entails people’s knowledge, motivation and competences to access, understand, appraise, and apply health information in order to make judgments and take decisions in everyday life concerning health care, disease prevention and health promotion to maintain or improve quality of life during the life course' (Sorensen et al., 2012, p.3).

Unlike general literacy, which is defined as a set of speech, reading, writing, comprehension and some other skills needed to succeed in society, health literacy 'requires more additional skills, including those necessary for finding, evaluating and integrating health information from a variety of contexts; as well as knowledge of

health-related vocabulary and culture of the health system' (Mitic & Rootman, 2012, p.17).

Health literacy is looked at in various ways. It can be seen as an emerging concept, a process, an outcome, and a public health goal.

However, even though it is not a one-way process, every individual should take responsibility in the meaning of his or her health-literacy assessment, acceptance and improvement, yet health literacy is not the only responsibility of individuals in the general population or of just one sector; rather, it crosses multiple boundaries, professions and jurisdictions (See Figure 1) (Mitic & Rootman, 2012, p.17).

It is important to understand how people obtain and use health information in order to understand potential impact of health literacy. The information about health comes from many sources, including the government and the food and drug industries, and is distributed by the popular media. Commercial and social marketing of health information, products and services is a multi-billion dollar industry. People are frequently and repeatedly exposed to quick, often contradictory bits of information. Socioeconomic status, education level, and primary language all affect whether consumers will seek out health information, where they will look, what type of information they prefer, and how they will interpret that information. (IOM, 2004)

It's very hard to be a consumer, a patient these days. Misunderstanding, misinformation, mistakes are common and costly (Parker & Ratzan, 2010).

Health literacy issues affect huge numbers of people through the following:

- poor health outcomes (low health literacy is a strong indicator of mortality risk);
- increasing rates of chronic disease (health literacy plays a crucial role in chronic disease self-management, individuals must be able to understand and assess or evaluate health information (including a complex medical regimen), plan and make lifestyle adjustments, make informed decisions, and know how to access health care when necessary);

- increasing additional health care costs (additional expenses from 3 to 5 % in Canada, and 7-17% in USA by many researches);
- health information demands (more than 800 studies found that a mismatch exists between the reading levels of health-related materials (informed consent forms, medication packages, etc.) and the reading skills of the intended audience.

Equity means fairness. In health it connotes that the needs of people guide the availability of opportunities for well-being. In actuality, however, culture, social class, race and ethnicity, language proficiency, area of residence and health literacy level are common and widespread barriers to health equity. (Mitic & Rootman, 2012, p.13)

This certain number of facts make the author wish to raise the interest about the values of literacy in the meaning of adaptation scientific findings into the practical sphere of use.

1.2 Health literacy crisis

Problems with health literacy are real, growing and here to stay (Parker & Ratzan, 2010). Even though it was stated that every person has an equal and inherent right to accurate, understandable, and culturally appropriate health information and services (Mitic & Rootman, 2012, p.5), it is not surprising that many people do not have enough skills to be health literate in all situations, impeded by an almost endless list of barriers, circumstances and information-processing demands. (Mitic & Rootman, 2012, p.9).

Everyday people confront situations that involve life-changing decisions about their health. These decisions are made in such places as grocery and drug stores, workplaces, playgrounds, doctors' offices, clinics and hospitals, around the kitchen table, and, speaking about the topic of the paper, before, during or after physical activities. Only some of the decisions are made when individual is in a face-to-face consultation with the professional, many more are made when people are on their own and dealing with often unfamiliar and complex information. For instance, speaking about the following

question, they must figure out what wellness or fitness center to choose and why, what type of training to take and how often to attend; how to evaluate results, etc. People need information they can understand and use to make informed decisions and take actions that protect and promote their health. Yet many researches indicate that today's health information is presented in a way that is not usable by the average individual. Nearly 90% of adults have difficulty using the everyday health information that is routinely available in their environment: wellness and health facilities, media and communities (U.S. DHHS, 2010, p.3).

The huge National Assessment of Adult Literacy Survey (in future the name of tool will be used in shortened form, NAAL) was performed in 2003 with an aim to identify how many individuals had lower than basic literacy skills and needed additional adult education, where certain health literacy assessment items were included at the request of U.S. Department of Health and Human Services (DHHS) and Institute of Medicine (IOM) (Berkman, 2010). With the sample of 19000 individuals results showed that 14% respondents had below basic, 22% – basic, 53% – intermediate and 12% – proficient health literacy level. After the first national survey many scientific researches and investigations around the topic of health literacy appeared as this theme was considered valuable and important to the society as well as to every individual.

European institutions and researchers started to investigate the topic of health literacy later than American ones. The first vast project was conducted in 2011 across eight countries with the sample of almost 8000 respondents. The European Health Literacy Project Consortium (the HLS-EU Consortium) of European universities and institutes developed instrument named EU Health Literacy Questionnaire (HLS-EU-Q) to measure health literacy and results showed that 12.4% respondents had inadequate, 35,2% – problematic, 36% – sufficient and 16,5% – excellent health literacy level (HLS-EU Consortium, 2012).

These results didn't make sense to average people, and had to be explained because of the narrowly used scientific terms and very specific formulations. Taking results into consideration, the report “Health literacy: solid facts” was written by WHO specialists.

The main statement of the written report was that society is facing health literacy crisis (WHO, 2013).

Almost half of the population in researched European countries (47%) has inadequate or problematic health literacy level. It was called 'health decision-making paradox' and means that 'people are increasingly challenged to make healthy lifestyle choices and manage their personal and family journeys through complex environments and health care systems but are not being prepared or supported well in addressing these tasks' (WHO, 2013, p.1).

A growing number of studies are focused on efforts to improve health literacy, i.e. with the aim to find a way to solve of the crisis (Murray et al, 2007, p.10). Both public and private health care providers from the governmental institutions to the SMEs are seeking for the answer, supporting and participating in researches.

The author of this particular research paper is taking into consideration reports and reviews based on health literacy assessments throughout the world, concentrating mostly on European data, and covering first of all the comprehensive image of the current situation with an intention to find the complex solution to the problem, which is lack of communication and collaboration between public and private health and well-

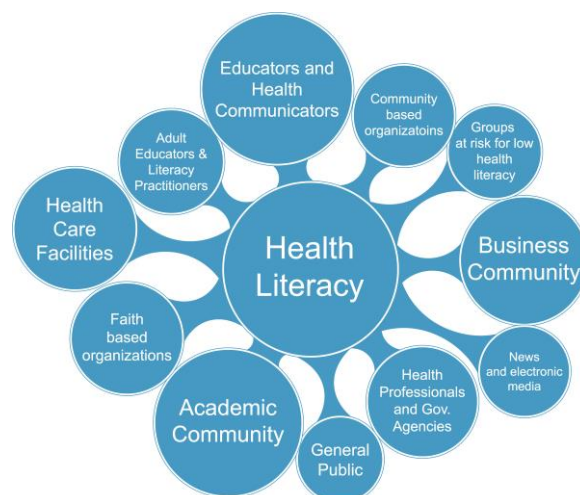


Figure 1. Major stakeholders involved in health literacy. Source: adopted from Mitic & Rootman, 2012, p.18.

being institutions regarding health literacy issues.

Although there are many stakeholders involved in health literacy (see Figure 1), and all of them are important in the way of positive results achievement, to make the research specific and valuable, the author will investigate the topic from wellness economy point of view. Unfortunately, wellness economy enterprises are not included in the wide list of stakeholders. The author believes that it should be done. Wellness economy is growing rapidly and taking part in global processes, and features of wellness allow distinguishing it from the health care organizations, separate health professionals or business community. And the collaboration could be beneficial to all of the participants, from the governmental institutions and health care facilities to the every single wellness professional, and, finally, to the aware and conscious customers. (SRI, 2014)

Before research will start, two conceptual models of health literacy will be described for better understanding of process, and some of assessment tools will be mentioned to start the solution process description.

1.3 Health literacy conceptual models

Many conceptual models of health literacy have been presented in the recent studies, nevertheless none of them were comprehensive enough to line up with the evolving definitions of the topic and with competencies they imply, before this model (see Figure 2) was developed. This particular model 'combines the qualities of a conceptual model outlining the main dimensions of health literacy (represented in the concentric oval shape in the middle of Figure 2), and of a logical model showing the proximal and distal factors that have an impact on health literacy, as well as the pathways linking health literacy to health outcomes' (Sorensen et al., 2012, p.8).

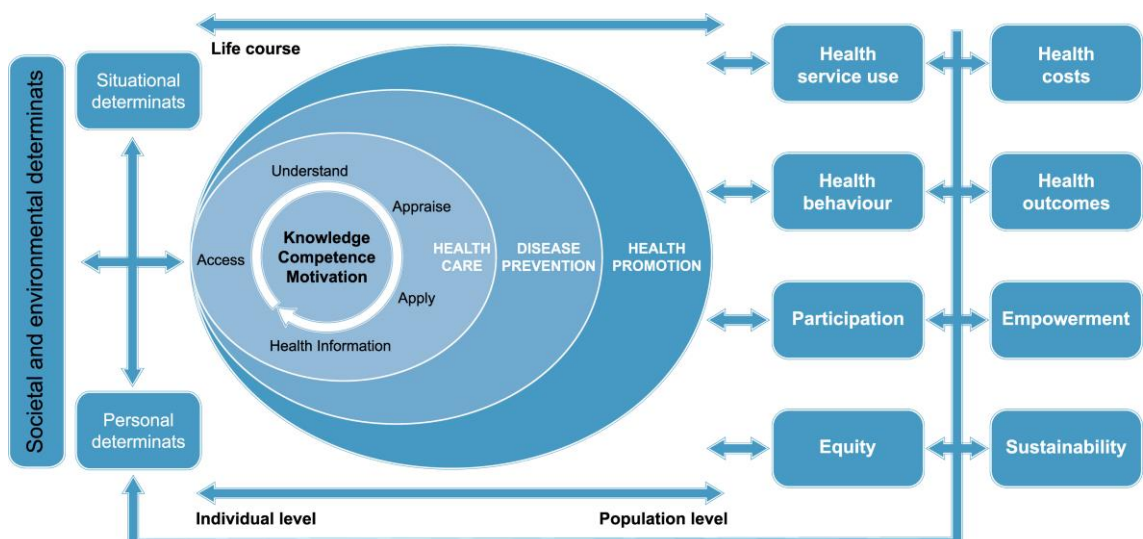


Figure 2. The HLS-EU conceptual model of health literacy (Sorensen et al., 2012, p.9)

This scientific conceptual model combines “medical” dimension of health literacy with broader “public health” conceptualization.

It combines four main health information processing dimensions, which are:

- **access:** the ability to seek, find and obtain health information;
- **understanding:** the ability to perceive the accessed data;
- **appraisal:** the ability to interpret, filter, judge and evaluate received details;
- **application:** the ability to make decisions for health maintaining and

improvement;

with the three health domains: health care, disease prevention and health promotion, and forms 12 sub-dimensions of health literacy (Table 1).

The complexity of the model shows us that solutions of the issue cannot be trivial, and the process should cover all dimensions to be successful and effective. However, for this research paper, attention will be given mostly to disease prevention and health promotion domains with the perspective from wellness economy enterprises.

Table 1. The matrix with four dimensions of health literacy applied to three health domains.

Sources: Sorensen et al, 2012, p.10; HLS-EU Consortium, 2012.

Health literacy	<i>Access/obtain information relevant to health</i>	<i>Understand information relevant to health</i>	<i>Process/appraise information relevant to health</i>	<i>Apply/use information relevant to health</i>
<i>Health care</i>	Ability to access information on medical or clinical issues	Ability to understand medical information and derive meaning	Ability to interpret and evaluate medical information	Ability to make informed decisions on medical issues
<i>Disease prevention</i>	Ability to access information on risk factors for health	Ability to understand information on risk factors and derive meaning	Ability to interpret and evaluate information on risk factors for health	Ability to make informed decisions on risk factors for health
<i>Health promotion</i>	Ability to update oneself on determinants of health in the social and physical environment	Ability to understand information on determinants of health in the social and physical environment and derive meaning	Ability to interpret and evaluate information on health determinants in the social and physical environment	Ability to make informed decisions on health determinants in the social and physical environment

In addition to the main components of domains, HLS-EU model also shows the main antecedents and consequences of health literacy. Distinction is made between more distal factors, including societal and environmental determinants (e.g., demographic situation, culture, language, political forces, and societal systems) and proximal factors: personal (age, gender, race, socioeconomic status, education, occupation, employment, income, literacy) and situational determinants (social support, family and peer influences, media use and physical environment). (HLS-EU Consortium, 2012)

Another conceptual model was developed by Baker (2006) earlier; however, it conceives health literacy in the real world as a product of individuals' capabilities and the demands of health information messages delivered by the health care system (Figure 3) (IOM, 2009, p.8).

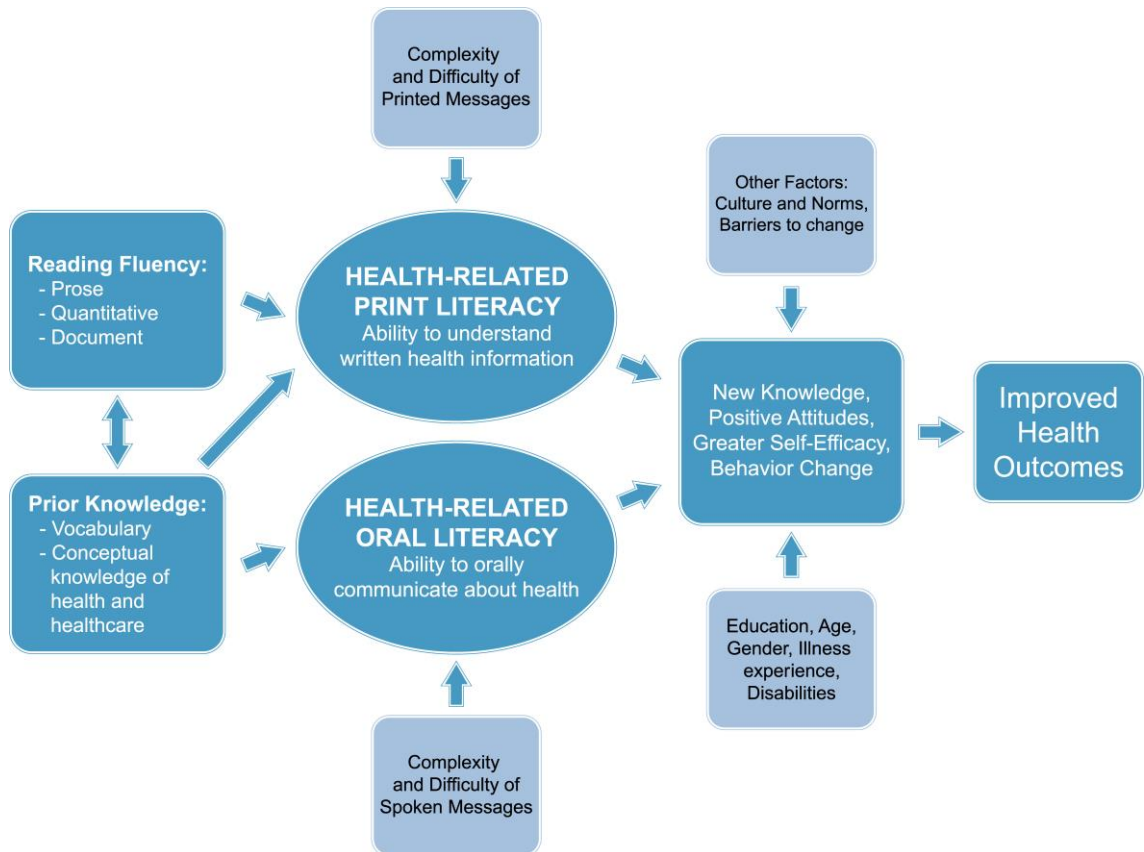


Figure 3. Conceptual model of the relationship among individual capacities, health-related print and oral literacy, and health outcomes. Adopted from sources: Baker, 2006; IOM, 2009, p.8.

The author of this dissertation considered this model as appropriate in relation to the educational system as well as to wellness economy. How can individuals use health information effectively? This model was created taking into consideration the health care system, although there are many debates that it can't manage the issue with low health literacy because of its “sick care” orientation. The author's intention is to formulate and answer the question: “How could health and wellness industries' enterprises use this model, take responsibilities to communicate and identify the correct strategies for caring for customers and benefit from it?” The responsibilities are:

- to teach adults (and children also) the health-specific knowledge they need to take care of themselves and to make decisions about their health care;
- to simplify written and spoken health communications;
- to develop systematic approach for the customer easy to navigate and to educate how to avoid health risks and live a healthy lifestyle. (IOM, 2009, p.8-9)

Basically, these responsibilities are the key answers for the innovative services. Socially responsible enterprises could also benefit from the situation. And first touch-point is an individual assessment of the health literacy.

1.4 Health literacy assessment tools

The first measurement tools - Rapid Assessment of Literacy in Medicine (in future the abbreviation REALM will be used) and Test of Functional Health literacy in Adults ((in future the abbreviation TOFHLA will be used), - which were developed in North America, assess mostly reading skills regarding health, without comprehensive approach to indicate understanding, abilities or motivation (D'Eath M. et al, 2012).

Researches have used measures TOFHLA and REALM to conduct studies that have shaped the field of health literacy. For instance, it was found that people with lower health literacy have poorer health care and outcomes (Berkman et al, 2006). Baker and colleagues (2007) used the TOFHLA to determine that inadequate health literacy independently predicts all-cause mortality and cardiovascular death among elderly persons and that health literacy is a more powerful variable than education (IOM, 2009, p.7).

Although the tools being described are named measurement tools, most of them are actually screening tools. There is a fundamental difference between screening and measurement. The goal of screening is to divide people into healthy and sick categories. Screening does not tell what is actually wrong with an individual, because it is primarily required to be short, quick and easy to use. Measuring, on the other hand, is an attempt

to explore in depth the structure and function of objects of interest. In fact, a true measuring should establish the basis for a reliable screening tool. According to IOM the purposes of measurement (2009, p.18) are:

- to advance knowledge – i.e. to test hypotheses;
- to explore and explain structure and function;
- to monitor effectiveness and equity of interventions;
- to indicate major problems that the society faces;
- to contribute to setting policy goals.

Therefore the process of development of different health literacy measurement tools is continuing, with different scientists as well as commercial institutions throughout the world being engaged in the field.

Another measurement tool was developed by the group of authors in Research Triangle Park (USA). The Health Literacy Skills Instrument (HLSI) was designed to measure print literacy (the ability to read and understand any text and locate and interpret information in documents), numeracy (the ability to use quantitative information), oral literacy (ability to listen effectively) and navigation (the ability to seek information through Internet). HLSI has 25 items, and HLSI-SF (short form) has 10 items. This measure is publicly available; it can be used in surveillance activities, to evaluate interventions and in researches examining the relation between health literacy and health outcomes. (Bann C. et al, 2012)

For the vast research of HLS-EU consortium the measurement tool named HLS-EU-Q was developed. Based on the HLS-EU conceptual model, the 12 health literacy sub-dimensions (to the three levels of domains of health care, disease prevention and health promotion four main competencies/dimensions which are access, understanding, processing/appraisal and application/use information relevant to health) are represented by 3-5 items. Items were selected from existing instruments, newly formulated and

developed by the consortium, and phrased as direct questions: 'On a scale from very easy to very difficult, how easy would you say it is to...' perform a given health related task. Likert scale with 4 points (very easy; easy; difficult; very difficult) was given to respondents to rate their skills, abilities and experience. Besides measurement of individual skills, the particular instrument gives possibility to rate the relation/fit between personal competences and situational demands/complexity (HLS-consortium, 2012, p.9).

Being developed by the team of the scientists and with the support of European Commission, this particular tool is considered by the author of this research as the most comprehensive and useful for the present moment.

According to WHO recommendations (2013), this unique instrument should be applied in more countries and regularly, with repeated measurements which should demonstrate the results of future interventions.

Assessment is the first step only. Accepting and analyzing results of researches should lead to the implementation of adopted decisions. As it was stated that society is facing health literacy crisis, activities should be focused on the process of solution of the situation.

The author is supporting the comprehensive approach, however, being a professional and an adept of wellness culture, aims to involve the wellness economy enterprises, particularly wellness and fitness centers, into the process with win-win results to all of the participants.

1.5 Wellness and fitness centers as a part of wellness economy

Wellness becomes a popular topic in the end of XX century. With the complexity of the definition the term becomes more blurred and uncertain, conceptual and wide. That's why many authors and even the whole institutions, starting with the father of modern

wellness concept Dr. Dunn to The National Wellness Institute (and Global Wellness Institute, as well) were exploring the topic to find the most comprehensive description of this notion to use both for the scientific and business purposes. The author is considering wellness as one of the most important global concept and phenomenon in the modern world.

Since the meaning of wellness in Europe is very different from the original the author prefers to distinguish personal wellness concept (mostly used in the US, Canada and Australia, being, however, poorly accepted in the EU) and wellness economy (used worldwide). Many EU professionals consider 'wellness' as a marketing term for relaxation and luxury (Miller, 2005). Such perceptions do make some sense. Since the first research by the Global Wellness Institute (in future abbreviation GWI will be used) together with Stanford Research Institute (in future abbreviation SRI will be used) was conducted in 2007, global wellness economy is growing rapidly. All industries which are included in wellness economy generated \$3,4 trillion in 2013 (SRI, 2014). Here is the list of these areas (sorted by the share in the whole industry, starting with the biggest):

- beauty & anti-aging;
- healthy eating, nutrition & weight loss;
- wellness tourism;
- fitness and mind-body;
- preventive and personalized medicine;
- complementary and alternative medicine;
- wellness lifestyle real estate;
- spa industry;
- thermal/mineral springs;

- workplace wellness.

Basically, wellness economy could be perceived as an umbrella for many independent industries that somehow influence personal wellness. For this particular study attention will be given only to fitness industry regarding to the aim, research question and tasks.

Nevertheless, all the industries under wellness industry are interconnected by consumers, who prefer to be conscious and proactive and choose to prevent diseases and enhance quality of life (SRI, 2014).

In this point the topic becomes more related to the personal wellness concept. Unlike the wellness economy, it's totally inner process, with specific definition and priorities.

The opinions of many wellness professionals were researched by Judd Allen, Ph.D., in 2004 in order to find out the proper definition and he concluded that the term 'Wellness' should be defined as 'a conscious, self-directed and evolving process of achieving full potential. Wellness is multi-dimensional and holistic (encompassing such factors as lifestyle, mental and spiritual well-being and the environment). Wellness is positive and affirming'. And as a generalization The National Wellness Institute stated the following definition: 'Wellness is a process of becoming aware of and making choices toward a more successful existence'. (Arloski, 2009, p.12-13).

All theorists show that wellness is multi-dimensional. During the 80s and the 90s many conceptual models were developed towards a comprehensive understanding of this notion. Despite the variety of models that the authors described, there are similar dimensions of which wellness is composed:

- **Physical** (regular safe, developing and enjoyable physical activities; balanced nutrition; adequate rest and sleep; proper approach to the body: breathing, hygiene, self-care and safety).
- **Emotional** (realistic self-concept, awareness and acceptance, understanding and appropriate expression of emotions; control over emotions and stress management).

- **Spiritual** (search of purpose and meaning of life; practicing meditation, prayer or introspection; understanding of self, a higher power or the universe).
- **Social** (meaningful relationships; giving and receiving care; contributions to the community; tolerance of and respect for differences; and the realization of interdependence with others).
- **Intellectual** (curiosity, continuous education; critical thinking, ability to innovation and creativity, application of knowledge and skills).
- **Environmental** (protection of the nature, awareness about benefits and harm to the environment).
- **Occupational** (suitability of work to the person's skills, values and interests; financial satisfaction, hobbies and community involvement). (Van Linden, 2011)

For this particular paper attention will be given to the physical wellness, especially to regular safe, developing and enjoyable physical activities (Hoeger, 2012), with the perspective from health literacy crisis and its influence on the efficiency of process.

Gradually, from the general topic of wellness economy and personal wellness concept, concentrating on the physical wellness, what means involvement of fitness industry in the process, the author gradually is moving to the core of the topic. To avoid misunderstanding, some definitions should be clarified at this point. (Travis & Ryan, 2009)

First of all, the distinction between *physical activity* and *exercise* should be established.

Physical activity is a movement of the body produced by skeletal muscles. It requires certain amount of energy to use and produces progressive health benefits. **Exercise** is structured, repetitive and planned bodily movement. This type of physical activity usually is done to improve or maintain certain components of personal physical wellness (Hoeger, 2012).

The main service providers for this type of activities are wellness, health and fitness

centers.

For this particular paper a **fitness center** is the core facility with the variety of possibilities in the meaning of equipment for the physical exercises together with services, from different group (stretching, strength and etc.) to personal training sessions. A wellness center focuses on multiple aspects of health, in addition to fitness center services. Nowadays many fitness-centers also provide additional services, yet as they don't provide comprehensive approach, rather just a diversity one, they can't be named "wellness centers" (Hoeger, 2012).

Anyway, it's not a core of the discussion in this paper, thus after the defining the providers, actual services and their importance to the people will be described.

The popularity of wellness and fitness centers is growing constantly. Since the crisis of health care system is staying unsolved, people are seeking answers and support with the maintaining of the good fit, as the most common reason for engaging in sport or physical activity is to improve health (62% of respondents through EU). (SEB, 2014, p.5).

Even though many researches, particularly, Teixeira et al. (2012, p.1-2), stated that regular physical activities and exercise are highly beneficial for health, physical and psychological well-being, there is a problem, which is related to the main topic, health literacy crisis, that many people don't feel competent at physical activities, or are not physically fit and skilled enough to exercise, or have limitations to participate (in what?).

There is another link between education and the frequency of exercise or sport that people do. Only 27% of all the people who left the educational system at the age of 20 or over say they never exercise or play sport. Besides, they are the most common clients of wellness and fitness centers (15%), falling to 4% of those who ended education by the age of 15 (SEB, 2014).

The topic of physical literacy is appearing quite often along with the one of physical

activities in different scientific papers. Surprisingly, there were not any references to the physical literacy in the researches of health literacy topic. How could this paradox be explained? Physical literacy, by definition of Lundvall (2015, p.2), is 'a concept which describes embodied experiences that are aimed to enhance or improve physical performance aspects of movements that enable a particular goal to be achieved, or elements of movements that need attention. It could be also defined as the motivation, confidence, physical competence, knowledge and understanding to maintain physical activity throughout the life course.'

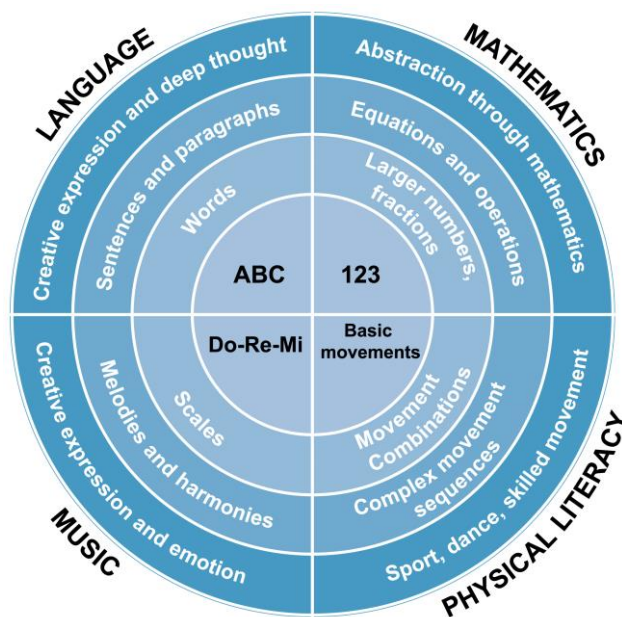


Figure 4. Physical literacy, changing paradigm for better educational process. Source: Corlett & Mandigo (2013).

Corlett & Mandigo (2013, p. 20) offered innovative approach to the structure of physical literacy, similarly to existing structures of language(s), Mathematics and Music (Figure 4), which could be used to health literacy as well to clarify the process of crisis solution.

1.6 Process of solution of health literacy crisis

Health literacy process is complex and crisis is severe, with huge influence on all spheres of every individual' life. Thus process of solution of the crisis is also complex, multi-dimensional and many of stakeholders involved in it.

The conceptual approach to the solution was offered by Mitic and Rootman (2012). They proposed to consider three fundamental components of the framework for action:

- develop knowledge;
- raise awareness and build capacity;
- build infrastructure and partnerships.

These components could be applied to all major stakeholders of the health literacy process.

Considering these components, the phenomenon of Big Data should be analyzed.

The influence of the Big Data Issue is global. After internet was invented, and the whole world was expanded by it, the amount of global data is growing dramatically. And there are things which are important for the health literacy and wellness economy topic:

- **Access to information.** The process of searching necessary information has been simplified tremendously, by clicking one button everybody can get any type of information that he/she is interested in: prevention, health issues, symptoms, drugs or medical herbs, Ayurveda, Chinese medicine or Slavic curative methods, doctor's suggestions and, most of all, different advertising materials and so on. (SRI, 2014)
- **Contradictory data.** Commercial offers usually consist of positive facts, attractive information to promote services or sell the products. This can be dangerous, because it hides scientific data, researches, or governmental/institutional materials which usually look boring, unattractive and

too difficult for average people.

- **Personal data.** Social media help to share enormous volume of personal information, blogs give almost everyone possibility to become a writer and share opinion, data from devices give possibility to analyze the life of every individual with different parameters. This information could be very significant for research. However, it is still a chaotic mass of unstructured pieces. (Neff, 2013)

Nevertheless, some of institutions (health care providers, professional sport teams) are using their specifically collected data and already benefit from the quick and simple process of analysis.

People imagine data and value it in very different ways. Professionals sometimes say that they have enough data, and need more resources, especially doctors, who consider data innovation means more work for them.

On the other hand, business and technology sectors see data as valuable. Yet, the following question should be answered: "How will such data be integrated into providers' work practices?"

There are two types of data which attract interest in the health-care field:

- Big data, or analytics of multiple types of data across the population, potentially from different sources, structured or unstructured, and with complicated set of elements. The contradiction of big data is that it could be really valuable for society, but at the same time it may not be cost-effective to analyze and manage it.
- Small data or output of tracking processes about any individual user of technological devices, especially those who are involved in "quantified self" movement. It becomes popular with the possibilities of different devices, such as smartphones, gears, bracelets, etc.

In general information is not neutral, ways how someone collects, interprets and forms

arguments, are really meaningful. Anyway, "big data" as well as "small data" could be beneficial to the process of solution of health literacy crisis. With proper design and after exploration data might be able to bridge different worlds of clinical decisions and personal life improvements and participate in development of new relationship models between professionals and their customers/patients with allowance to share important information without barriers and shame (Neff, 2013).

Two more concepts will be described further for the wider picture of the present development.

Firstly, eHealth literacy is a relatively new approach, which refers to skills of seeking, finding, using and understanding information about health from electronic sources and applying the gained knowledge to solve a health issue (Norman & Skinner, 2006).

The eHealth literacy presented here is the first step to understanding what these skills are and how they relate to the use of information technology as a tool for health. The next step is to apply this model to everyday conditions of eHealth use—patient care, preventive medicine and health promotion, population-level health communication campaigns, and aiding health professionals in their work—and evaluate its applicability to consumer health informatics in general. Using this model, evaluation tools can be created and systems designed to ensure that there is a fit between eHealth technologies and the skills of intended users. By considering these fundamental skills, we open opportunities to create more relevant, user-friendly, and effective health resources to promote eHealth for everybody.

Norman (2011) continued to work and develop the concept (how exactly?), this idea is mentioned aiming to show the variety of concepts which could be developed and involve topics around health and literacy. However, this approach doesn't differ from health literacy. Possibly only some innovative elements (which elements exactly?) could be considered and included to the conceptual HLS-EU model to keep it updated.

2 Research of the wellness economy enterprises opportunities

2.1 Research methodology

The author used explanatory research strategy to complete this study. This approach is about why things are as they are, and how they might be, it also seeks to explain relationships between phenomena.

Triangulation research method was chosen for the investigation process. In case of particular research this multiple method is appropriate when two methods (qualitative and quantitative) are used to focus on the same phenomenon providing confirmation or differing insights. (Veal, 2011)

Through the process of thesis writing the author decided to use qualitative research method as a main method to analyze information gathered from two main sources - the professionals and the customers or physically active people. For the professionals the author created semi-structured interviews which could clarify the strategy of the further additional step which was quantitative research for the customers.

The method of qualitative research through interview is unique as the researcher becomes the instrument for data collection. It relies on direct and immediate interaction between researcher and respondent which helps to draw on the best of human features while conducting an interview: trust, empathy and reflective listening. In this particular study the author had to decide who will be participants, why and how they will be chosen. Fitness professionals regardless their position and occupation were chosen for this research due to needed opinion about the general view from the service providers

about health literacy. (Biggam, 2008)

It is important to mention that interviewer is responsible for ethical inquiry relevant to the research purpose and questions. Research participants need to know what is expected of them, why and when. All parties should be sure about the purpose of the research, the use of the data and the parameters of the data collection.

Purposeful sampling was used in this particular study. The gained results are anonymous and all answers and descriptions were used in the analysis. Finding potentially could be used for developing new services, as the free play of attitudes and opinions can be a rich source for the researcher. (Veal, 2011)

For the analysis manual methods were used. Basic activity was reading of notes and transcripts and listening audio materials with the flagging issues and ideas for the further process of research.

Quantitative research method of e-survey with prepared questionnaire was used as an additional method for this study. During the design of the questionnaire simplification of the questions was applied, and pre-coded questions were offered for answering, with single attitude question. The survey results were analyzed with the default on-line tool provided by Google Docs. The results are shown on the figures by the author of the author of this thesis. It was decided that percentage rate is the most appropriate measure to see the thresholds of the answers.

2.2 Research participants and process

Pärnu is a town in Estonia, with the population of about 40.000 people, a popular summer resort for the local and foreign customers with a variety of sport and wellness facilities. Citizens have the possibility to use separate fitness-centers as well as hotel SPA and sport-centers.

The choice was given to the certain wellness and fitness facilities, such as:

- **Sport hall** (Pärnu Spordihall, Riia mnt.129) offers numerous indoor sport and fitness facilities (gym Kimberi Clubi, group work-outs - FitLife, basketball, volleyball, archery, etc).
- **MyFitness** (MyFitness Pärnu, Aida 5) is a fitness-center offering a gym, group trainings, spinning, TRX, etc.
- **Tervis Medical Spa** (Seedri 6) has variety of medical and spa-treatments, swimming pool, sauna complex and gym;
- **Tervise Paradiis Spa Hotel & Water park** (Side 14) has 25-meter swimming pool, water park, gym and group training facilities, spa and physiotherapy services.
- **Klubi26 fitness** (Klubi 26, Hommiku 3) provides group trainings.
- **Shaping** (Body Shape Club, Supeluse 2) offers group trainings.
- **Kahe silla clubi** (a voluntary union of amateur sportsmen) provides running and spinning facilities etc.

Only the last organization has no facilities, it is an union of the individuals who use different opportunities for physical activities, and accepted as an appropriate participant of the research.

Number of facilities and organizations were excluded from the study, as they offer playing sports (football, volley-ball, etc.), but the main reason was the difficulty to access them without the personal relations with the trainers or responsible persons.

There are also other facilities, smaller or bigger, which were excluded due to their orientation on the tourists only. Almost every hotel has something to offer. The problem is that employees can't get enough work in one place so there are many people who are working for two or three enterprises, taking different time to offer specific training sessions to the customers. The competition is high, that is why enterprises should follow

the fashion and offer something new all the time. And the market is constantly growing; fitness is becoming more and more popular because of the marketing efforts, and also the effectiveness of even very simple physical activities for personal health improvement.

Every facility is represented in the Internet. Simple or complex web-pages, social media groups and accounts give customers possibility to keep updated about the activities within the enterprises. While web-pages mostly provide information about the enterprise, prices and schedules, social media pages is the space for interaction between the members.

As it was stated, research was conducted by two main stages. The first stage was based on the semi-structured interviews with the fitness professionals, and a short description of the process will be provided below.

Table 2. Interviewees and information about them (created by the author).

Number	Sex	Experience, years	Expertise	Technique for interview	Date of interview
TR1	Male	12	Personal and group training; body-building, functional; nutrition	Dictaphone	26.02.15
TR2	Male	15	Personal and group training; body-building, functional; nutrition	Dictaphone	28.02.15
TR3	Female	3	Group training: hi-intense	Dictaphone	03.03.15
TR4	Male	5	Group training: hi-intense	Dictaphone	04.03.15
TR5	Male	10	Running: group training; personal training; nutrition	Dictaphone	04.03.15
TR6	Female	9	Group and personal training: Body&Mind, functional, synergy, TRX	Dictaphone	04.03.15

The codes like TR1 will be used in the analysis part. It was chosen to keep interviewees anonymous, to make reading easier to follow. Questions are coded starting from the first “Q1” to “Q15” as they were used in questionnaire (see Appendix 1).

During the process of interviews certain limitations were discovered.

First of all, the issue of language is often an obstacle. 5 from 6 trainers are Estonians, and even though their level of English is higher than Intermediate, there were periodical misunderstandings. One of the interviews was conducted in Russian, with further adaptation and translation during transcription.

Secondly, despite the general good education and knowledge of their profession, two of the interviewees do not have sufficient academic education in the fitness sphere. However, their personal experience, intention to learn more and help people sometimes matters more than proper academic training. Moreover, it is actually very easy to become a trainer in Estonia, you could do it without any papers, and usually employers require just basic course, which takes only 3-4 day to complete.

Finally, 5 from 6 trainers are personal acquaintances of the author. It was really hard to meet trainers without any previous communication. Many of them would find excuses to postpone and skip the interviews. Nevertheless, with personal communication answers were more honest and the discussion was lively and productive.

The second step of the research was aimed to collect information from the trainees and customers who are involved in the different physical activities regardless the enterprise.

Although the first limitation caused the little turnover from the questionnaire, as by the preliminary agreements with the professionals, it should be shared within the social media groups to get sufficient amount of responses. Unfortunately, only one group accepted and offered the questionnaire to its members, and only segregate responses from other people have been received.

2.3 Interviews with fitness professionals: findings

In the present research part the fitness and sport trainers were interviewed. Among them there were both personal and group trainers. Three trainers occupy the leading roles in the business, as fitness managers of facilities (without specification). Two of them are

women, and four are men. All of the interviewees participated as individual professionals regardless to their place of work. The preliminary list of question was prepared (Appendix 1), though many additional questions were asked during the interviews. The discussion was started from the general questions about the position, experience and communication with the customers and led to the wellness and health literacy topic.

Taking into consideration the fact that the fitness industry is broad and has many different directions, the first questions defined specialization of every respondent, and concerned how they described an average customer of the his/her services and their relationships with the clients. Two of the respondents (TR3 and TR4) provide only group training classes; both of them also have the smallest work experience among all of the interviewees in the industry.

An interesting remark was made by TR2 and TR5. They said that they preferred to call the people with whom they worked, 'trainees' rather than 'clients' or 'customers'. All of the professionals said that they had various channels of communication with their customers, from personal meetings to on-line discussions. It was mentioned that usually the feedback from clients was honest. There was no point in hiding anything, because then result would be lower” (TR1).

The next question where the topic of health literacy was brought on wasn't answered clearly. With the specifying questions the responses differed from: “They come with no knowledge at all” (TR2) to “They have a good level of literacy, but don't use their knowledge” (TR6).

The discussion continued with the joint statement that there was a lot of education in the training process, and when the customer came with low health literacy, his/her health condition was also low, and particular attention with personalized approach had to be utilized to move forward to results. The common method for trainers (TR1, TR2, TR4, and TR6) is observation to start productive collaboration.

Speaking about the results of workouts, “life change” was mentioned by three trainers,

“self-esteem” - by two. Attention was given also to the clearly stated short-term and long-term aims to follow, and adequate evaluation of the resources and possibilities. For instance, “biological individuality” is a core parameter for TR2 and “...the best you could be” is the core definition of the strategic aim for the every trainee (TR2), and “inner motivation” is an important factor (TR5) to achieve goals. “Safety” is also one of the main parameters; it was mentioned by four trainers.

Turning to the topic of interviewees' professional knowledge, they all have continuous educational programs with regular seminars and workshops, everyone mentioned on-line sources used as a source of new information, though also all of them mentioned practical verification for anything new.

Evidently, the fitness industry is practical, and new inventions are coming every day, and trainers are responsible to find out what type of new services they could adopt to meet the needs of their customers or trainees.

It was also mentioned that information is business, and nowadays there is an excess of “poor data” (TR2), “crap information” (TR5), “fitness chicks” (TR2), and it's confusing to the people with low critical thinking level. The trainers trust scientists and researches which get practical approval and evidence-based results.

The next question was about the relation between wellness economy and fitness industry. All the trainers agreed that fitness is a part of physical wellness, although it was mentioned that speaking about business, disguising of important facts could be used, especially in innovative things, and it could be harmful to the customers (TR1). All of them except TR6 were familiar with the personal wellness concept and the importance of it in the modern society.

When modern technologies were mentioned during the interview, professionals became almost unanimous. People like devices in Estonia, specified TR4, and responses are usually positive, as trainees have possibility to get immediate feedback from gears; it gives external motivation to move forward and share achievements. The bad things are: information should be processed correctly and assessed by professional, and it rarely

happens; devices take away attention and concentration from practicing and environment (in case of outdoor activities, TR3 indicated that).

A vigorous dispute was caused by the core question. Speaking about the educational aspect of their job, everyone agreed that fitness has a lot of education in it, as primary customers usually came with low level of knowledge and health conditions. Unfortunately, the regulations allow to work as a fitness trainer without any certification, or it could be even two-three days course to get the certification (TR1, TR2), and it leads to inability of the industry to provide education across-the-board. It was also mentioned that public health care and educational systems should work to educate people, especially to eat healthier.

Based on the responses of the interviewees, the survey of questionnaire was created and conducted with the findings which will be presented below.

2.4 Findings from the questionnaire

The following findings are representing the analysis of data which were collected during the preparation of the paper. The information was gathered with the on-line survey among 45 Pärnu citizens who are involved in the Facebook group of local sport, wellness and fitness-centers and health clubs after the first part (interviews) was conducted. As only one of the groups (“Kahe silla klubi jooksusõbrad”) accepted the questionnaire, and the others gave only segregate responses, the sample could be considered as representative to limited community.

Some findings will be compared with the fitness professionals responses, and also with findings from the Special Euro Barometer (SEB) “Sport and physical activity”, which was conducted in November-December 2013 among all the EU countries.

The recent studies showed that the percentage of people who have membership in wellness or fitness centers in EU (11%) is growing (in comparison with 9% in 2009) (SEB, 2014). The author could not have access to the local wellness and fitness centers statistics, so this data could not be compared, but SEB (2014) results also showed that

the level of involvement in Estonia was higher (12%) than in EU.

There were 32 female and 13 male respondents, mostly of the age 27-37 (62%), and this information matches to the answers of the fitness professional in the qualitative part of research.

The study is inductive so there were not any expectations about the responses, although based on the interviewees' opinions and interviews' findings the questions were specified to find out the possibilities for the fitness-centers to offer innovative services.

The survey included three groups of questions: general (age, gender and location), those concerning physical activities and the questions about education (together with the health literacy perception); and there were a total of 13 questions.

The questionnaire was in English, and this fact could be considered as a limitation. Some of the respondents could have misunderstood certain questions, even though they were formulated to be simple and understandable, and some could have just ignored the research because they considered their English level as low (while in fact it was not).

Most respondents were local, as it was planned, though 8 people, who filled in the form, were from other places. 78% had high education (bachelor degree or higher), and this information correlates with the statement, that educated people in general care about health more.

For the sixth question, with the scale of the most popular physical activities (10 available variants), which allowed the respondents to specify how often they practiced them during the last year.

The highest rates within this table were shown by the negative responses:

75% didn't attend personal training sessions;

46% didn't attend individual gym sessions;

44% didn't attend low-intensive (stretching, yoga, pilates) group training sessions.

The highest rates within this table were shown by the positive responses (1-2 times per week):

33% practiced running sessions 1-2 times per week;

31% practiced walking/jogging 1-2 times per week;

22% practiced hi-intensive group training sessions 1-2 times per week;

22% practiced individual gym sessions 1-2 times per week.

Please, evaluate you level of knowledge about health.

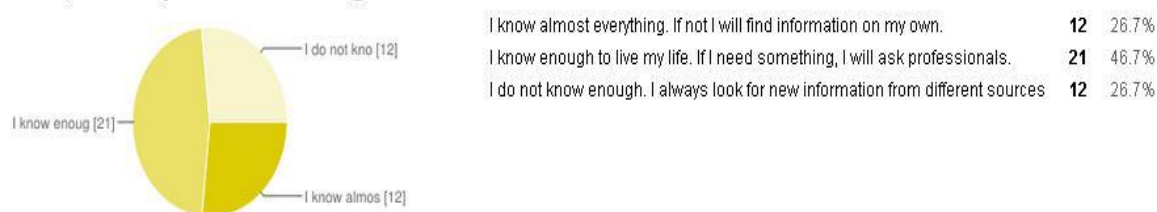


Figure 5. Percentage point of health knowledge self-assessment.

For the seventh question, people mostly responded (Figure 5) that they 'knew enough about health, if not they would ask professionals' (21 respondents, 46,7%). Two other answers ('I know almost everything...' and 'I do not know enough') collected the same amount of answers (12 respondents, 26,7%).

Do you consider health literacy as an important process?

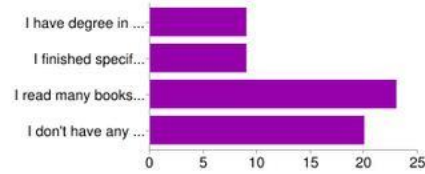


Figure 6. Importance of the health literacy process.

For the next question, the respondents showed remarkable consensus (Figure 6).

Almost 89% of the respondents considered health literacy as an important process.

What is your level of health education?



I have degree in Medicine, Sport Science or similar.	9	20%
I finished specific courses about health (fitness, massage, self-care, self-development)	9	20%
I read many books about health, explore this topic on my own or practice a lot	23	51.1%
I don't have any proper education about health.	20	44.4%

Figure 7. The bar chart about the health education level.

When it came to the ninth element of the questionnaire, where they had possibility to choose multiple answers, and the question was about the health education, many of people stated that they don't have any proper education about health (Figure 7).

It correlates with the following responses, where also more than one response was allowed.

Please, choose individual (s) whom you (will) trust when it comes to the health topic.

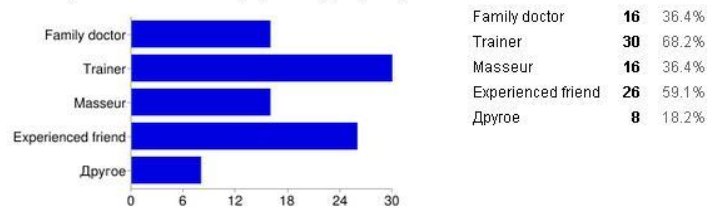


Figure 8. Credibility to professionals.

When it comes to the question of trust, family doctors have the same credibility as masseurs (16, 36,4%). For this audience trainers are the most trustworthy individuals whom people believe, when it comes to the health topic (Figure 8).

Would you like to have more clear image about your health conditions?

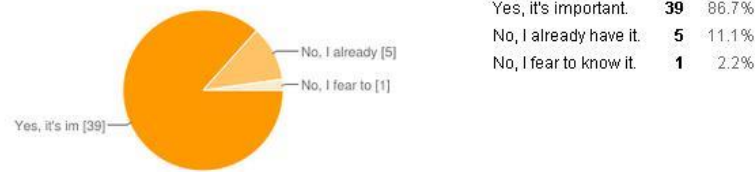


Figure 9. Interest in the possible assessments.

The two next questions, the eleventh and the twelfth, are interrelated and showed that this audience was interested in the possible evaluation, planning and education.

With the high rate of positive 'Yes, it's important', (39 respondents, 86,7%) the issue 'Would you like to have a clear image about your health conditions?' was answered (Figure 9).

Almost the same level of concern was shown to the question about 'strategy for future personal health development'. Only 2 of the participants already have it, and 6 do not take any interest in it.

In your opinion, who should organize health educational process (multiple is available)?

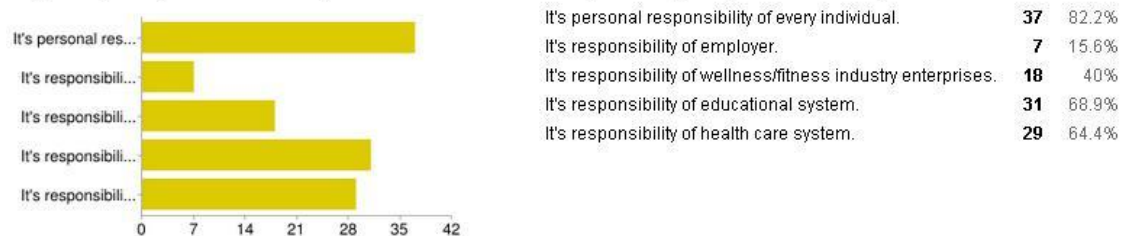


Figure 10. Responsibility for the educational process.

The last question response should be taken into consideration and researched more for the clarification (Figure 10). The respondents considered themselves as the responsible people for the organization of health educational process. As it was possible to give multiple answers, almost the same level of credibility was given to educational and health care systems.

3 Discussion and proposals

3.1 Theory discussion

In this particular paper the author employed the knowledge that was obtained during the study process during the two-year Master program in Wellness and SPA Service Design and Management. Apprehension of the processes within the Wellness economy was gained through numerous courses such as “Wellness History and Philosophy”, “Wellness and Health tourism”, “Principles of Sustainable Development” and others. Understanding of what market and society needs are was provided by participating in the courses like “Strategic and Financial Management”, “Service Management”, “Wellness and SPA Service Design and Marketing” and others. This valuable education together with author's professional experience created core expertise and competencies for the successful completing of the final stage of this dissertation.

Nowadays the connection between the theoretical findings and practical implementation is one of the most challenging tasks. This process is supported by governmental institutions which are trying to find the right motivators for SMEs to participate in it (in what?). Although methods should be clearer and more widely used, as many enterprises prefer to continue operations as they got used to.

From the theoretical overview the following main statements were concluded:

- Despite the numerous researches, investigations, efforts, and, certainly, investments, there are only a few touch-points between the health literacy concept and current situation. For instance, the physical literacy, in the author's opinion, the core practical component of health literacy, is missing in the main conceptual models and lists. Meanwhile, physical inactivity is now identified as

the fourth leading risk factor for global mortality (6%), after high blood pressure (13%), tobacco use (9%) and high blood glucose (6%). Overweight and obesity has 5% of global mortality, which is obviously connected with the inactivity (WHO, 2010).

- Wellness economy is growing rapidly and interconnecting many industries with the purpose of life-long comprehensive improvement. And there are no researches about how people are using information to learn about wellness issues (WHO, 2010), and no one of the researchers considered wellness economy among the major stakeholders of the Health literacy.
- Surprisingly, there are many action plans for health literacy crisis solution in Europe, the United States and Canada from the official, global point of view, but individuals do not have any guidelines, structured processes of health literacy improvement.

Furthermore, the wellness economy should be considered one of the main stakeholders of the health literacy process.

3.2 Research discussion

The research was conducted in two steps, but as it was done on purpose, the discussion came along with both parts as interviews' findings as well as questionnaire's analysis.

There exists a chasm of knowledge between what professionals know and what consumers can understand (U.S. DHHS, 2010).

- The individualistic approach is prevailing among the trainers and their trainees. Fitness professionals consider themselves as “life-changers” and “unique skills carriers”, and customers think that they have competencies to maintain high level of health.
- Both trainers and trainees are open for new things: skills, knowledge and offers. Trainees consider education as an important part, and are ready to take on

responsibilities (even though many of them want to share them with institutions), and trainers are some of the most open-minded professionals, as all of them follow modern wellness and fitness trends.

Everyday people face with situations that involve life-changing decisions about their health. These decisions are made in such places as grocery and drug stores, workplaces, playgrounds, doctors' offices, clinics and hospitals, around the kitchen table, and, speaking about the topic of the paper, before, during or after physical activities. Only some of the decisions are made when an individual is in a face-to-face consultation with the professional, many more are made when people are on their own and dealing with often unfamiliar and complex information. For instance, speaking about the following topic, they must figure out what wellness or fitness center to choose and why, what type of training to take up and how regularly to attend; how to evaluate results, etc. People need information they can understand and use to make informed decisions and take actions that protect and promote their health. (U.S. DHHS, 2010) Yet many researches indicate that today's health information is presented in a way that is not usable by an average individual. Nearly 90% of adults have difficulty using everyday health information that is routinely available in their environment: wellness and health facilities, media and communities.

3.3 Proposals

Giving recommendations to the different participants of the process the author believes that findings of the dissertation will give a direction to and impact on all of them.

To the governmental institutions (such as health care and educational developers as well as international researches, like HLS-EU consortium) the author suggests:

- improving the conceptual models of health literacy, including the physical literacy in it;
- developing an action plan for the individuals who want to participate in health literacy process;

- elaborating educational programs for the wellness and fitness professionals. They could collaborate directly with the target audience and their contribution could be priceless;
- including wellness economy as an one of the major stakeholders of health literacy, and regarding the process;
- developing specific policies for the wellness economy enterprises (particularly – to wellness and fitness centers) with explanation how they could contribute to the solution of health literacy crisis and become more socially responsible, separately provide validation for the process to be beneficial for them in the middle- and long-term perspective.

Here is certain recommendations **to the wellness and fitness centers** accordingly to their possibilities and operations and what they as socially responsible companies can do regarding to the solution of the problem. Fashion is one of the main moving forces for the market. Many enterprises are following fashion trends, and there are only few that can create trends. The author believes that very soon first, the very leaders will catch the importance of health literacy topic, because it gives wide possibilities to collaborate with the customers and benefit from this relation more, with the development of more comprehensive services, which will attach clients and make them regulars in fitness facilities.

Develop knowledge: evaluate the level of health literacy of the customers along with the level of their health condition with the consideration for ethical practice; evaluate and develop health literacy knowledge and skills of employees; provide structured and filtered information with clear explanation: why, what behind what and how; participate and conduct researches to create background for the future practical innovations.

Raise awareness and build capacity: develop and lead campaigns that bring awareness to health literacy issues in community with verification that information meets the needs and capacities of the targeted audience; use appropriate methods of communication during the client visit (teach-back methods) with the check they

understand the risk and benefits of the services and treatments; develop programs for children to build a better understanding of their health and health care; use technology, including online possibilities (web-pages, social media) to expand clients' access to the team and health information; for employees: encourage staff to be trained; provide ongoing training in health literacy, plain language and culturally and linguistically appropriate services;

Build infrastructure and partnership: collaborate with local community organizations, educational institutions and social service agencies to develop a valuable relationship and deliver health information to different points in the community; create customer-friendly environments that are conducive to communication with well-designed and easy-to-navigate information and feedback system (Mitic & Rootman, 2012).

These technologies could be easily and implemented without huge investments in every wellness and fitness-center to improve collaboration with the clients.

As for the **recommendations for every individual** that have been one of the primary tasks of this research the author can advise:

- To consider the fact that health is 100% personal responsibility. And every person has an equal and inherent right to accurate, understandable, and culturally appropriate health information and services. (Mitic & Rootman, 2012)
- To measure personal health literacy and health conditions repeatedly. Experts consider health literacy to be dynamic. Individuals' health literacy can change as they gain experience with the various health circumstances and choices that they face and therefore their health literacy level would need to be measured and reevaluated repeatedly. (Berkman, Davis & McCormack, 2010)
- To develop a personal strategy and follow it, considering external services and offers as tools and evaluate them properly before paying for a service or buying a product.

CONCLUSION

WHO made the conclusion that there is a severe health literacy crisis in the EU. It was stated that people confronted a health decision-making paradox. That basically means that nowadays education systems fail to provide proper health knowledge and skills, health care system is illness-oriented and difficult to navigate, and marketing is oriented on unhealthy lifestyles (WHO, 2013).

Many researches were conducted to find solution of the crisis. Many action-plans, policies and statements were made on the highest national and international levels; however, there is still need in the developments as problem is staying unsolved.

The main finding from the literature review is that wellness economy should be considered one of the main stakeholders of health literacy process since more and more people trust in personal wellness concept. Most of the professionals connect wellness and health, and also consider fitness industry as a part of wellness economy. People often are doing exercises for health purposes (SEB, 2014). It can be said that they are interested to increase the efficiency of physical activity and consider education as a possible way for this improvement. There is intention to take the process as a personal responsibility though with sharing and guiding. But this requires subsequent researches.

As the number of challenges which people face is growing, and data is still contradictory, there is need for further investigations in the areas of the topic of wellness and fitness, and many factors should be considered.

The aim of the particular dissertation which was stated as 'to determine the attitude to

health literacy process from wellness and fitness center perspective in relation to needs of community' is achieved through the research carried out. The triangulation research method was used and both professionals and the physically active people mentioned importance of the education.

The research question for this study was: “What kind of services could wellness and fitness centers develop and provide to participate in the process of solution for health literacy crisis?” And the answer is **“Wellness and fitness centers could develop and provide both individual and group innovative educational services to participate in the process of solution for health literacy crisis”**. This answer was formulated from the findings and analysis of the research. However, due to relatively small sample and numerous limitations current research should be considered as a pilot study, and there is wide area for further investigations. The author recommends developing topic of the health literacy from the wellness economy perspective due the possibilities of practical implementation for the theoretical findings. For the scientific research a lot of opportunities exist. It could be another important study about the level of health literacy in Estonia as it was recommended by WHO in their report to spread the study throughout the European Union and to do in regularly.

As a final conclusion it could be stated, regardless some weak moments of the research part, that the question was answered.

Wellness and fitness centers usually are SMEs which perform practical tasks. And they fulfill many services which with proper preparation could occupy the right place in the field of prevention. Health literacy and, by the extension, prevention is the missing gap in the design of the current health care system. Prevention, health literacy and reducing health care costs are integrally related. Collaboration and coordination between clinical medicine and prevention approach is necessary, but appropriate balance is lacking globally. Poor health literacy can be taken as one of many indicators of that imbalance (IOM, 2014, p.119).

Possibly many of scientists believe that 'improving health literacy is a responsibility to be shared among multiple sectors' (Mitic & Rootman, 2012, p.5). At the same time

wellness economy is out of the major stakeholders of the health literacy.

Working on this particular paper, a certain set of tasks was completed.

First of all, comprehensive analysis of the modern research papers, reports and national action-plans was completed. The first chapter of this particular paper was written according to the findings of the analysis and specification of the relation between the health literacy process and wellness was given.

Secondly, primary data was collected through the completed research of combination qualitative and quantitative methods, findings were described and analyzed by chosen methods of analysis.

Finally, recommendations for the governmental, public and private institutions were given. Main aim was achieved through the determination of the attitude, that community is lacking innovative approach to the solution of health literacy crisis, and wellness and fitness centers could develop and provide services to solve the problem.

To finish this writing, the dissertation clarifies that education is a core of the solution for health literacy crisis, and both service providers and users just should be aware about what they want to achieve.

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APPENDICES

Appendix 1

In-depth interview questions with fitness professionals

Health literacy crisis: opportunities for wellness and fitness-centers

1. What is your specialization in fitness/sports (group training, personal training, etc)?
2. How often do you see your customers (in average – according to individual)?
3. How can you describe your average customer/client?
4. How can you describe your relations with the clients?
5. How do you usually get feedback from them?
6. What is their average health literacy level?
7. How do you work when his/her health literacy level is really low?
8. How do you evaluate an efficiency of your services in short-term perspectives?
9. How do you evaluate an efficiency of your services in long-term perspectives?
10. What is the best result of your work?
11. How do you improve your professional knowledge?
12. How could you define relations fitness industry with wellness (two concepts – wellness economy and personal wellness concept)?
13. Which sources about health information do you trust?
14. What do you think about modern technologies for health and fitness (wearables, online sources and tools)?
15. What do you think about educational aspect of your job?

Appendix 2

Physical activities and health literacy process

Hello. My name is Andriy Mozhyn. I'm writing my Master thesis and I need to collect information from the physically active people in Pärnu area. This survey is anonymous and confidential. It'll take less than 10 minutes and I hope, make contribution for future developments.

1. Gender:
 - Male;
 - Female.
2. Choose your age category:
 - 16 – 26;
 - 27 – 37;
 - 38 – 48;
 - 49 – 59;
 - 60 and above.
3. Specify your education (the highest level):
 - Secondary school;
 - Vocational school, Hi school;
 - Bachelor Degree;
 - Master Degree;
 - PhD.
4. Specify your location (Where do you live last 6 months):
 - Parnu;
 - Estonia;
 - Other location.

5. What is your level of physical activity?

- Very low (no walking or outside activities, no exercising);
- Low (only walking, rare outside activities or exercising few times per month);
- Intermediate (walking, outside activities and exercising at least 1-2 times per week);
- High (active lifestyle and regular exercises at least 3 times per week);
- Very high (active lifestyle and regular exercises almost every day).

6. Specify your physical activities and exercises during last year:

	never	once a month or less	once a week or less	1-2 times per week	3-4 times per week	Almost every day
Morning exercises						
Walking, jogging (at least 15 minutes)						
Bicycling (at least 20 minutes)						
Running (at least 15 minutes)						
Group training (middle or hi-intensive)						
Group training (stretching, yoga, pilates)						
Personal training sessions						
Individual gym sessions						
Individual training sessions at home or outside						
Other						

7. Please, evaluate you level of knowledge about health:
- I know almost everything. If not I will find information on my own.
 - I know enough to live my life. If I need something, I will ask professionals.
 - I do not know enough. I always look for new information from different sources.
8. Do you consider health literacy as an important process?
- Yes;
 - No;
 - Other (Specify) _____.
9. What is your level of health education?
- I have degree in Medicine, Sport Science or similar;
 - I finished specific courses about health (fitness, massage, self-care, self-development);
 - I read many books about health, explore this topic on my own or practice a lot;
 - I don't have any proper education about health.
10. Please, choose individual (s) whom you (will) trust when it comes to the health topic:
- Family doctor;
 - Trainer;
 - Masseur;
 - Experienced friend
 - Other:_____.
11. Would you like to have more clear image about your health conditions?

- Yes, it's important.
- No, I already have it.
- No, I fear to know it.

12. Would you like to have strategy for your future personal health development?

- Yes.
- No, I already have it written and specified.
- No, I'm not interested.

13. In your opinion, who should organize health educational process (multiple is available)?

- It's personal responsibility of every individual.
- It's responsibility of employer.
- It's responsibility of wellness/fitness industry enterprises.
- It's responsibility of educational system.
- It's responsibility of health care system.

Thank you very much for your participation.
Please, give your feedback about topic below.

РЕЗЮМЕ

Кризис грамотного отношения к здоровью: возможности для веллнесс- и фитнес-центров

Андрей Можин

Тема здоровья является одной из приоритетных для большинства людей. Личное восприятие и ответственность за собственное здоровье существенно отличается у разных людей, и на данный момент многие исследования показали, что образованность и здоровье связаны. И если проблему с базовой грамотностью (умение читать и писать) практически удалось решить, человечество столкнулось с сложностями, которые связаны с специфической грамотностью, в том числе, и с безграмотностью в отношении здоровья.

Практически 50% населения имеет неудовлетворительный или низкий уровень грамотности в вопросах здоровья. Таков результат масштабного исследования от объединенной команды 8 европейских университетов. Опросив около 8000 человек, ученые обнаружили, что лишь чуть больше 15% жителей Европы адекватно воспринимают информацию о здоровье, умеют анализировать и принимать решения относительно лечения, профилактики и оздоровления.

После анализа результатов этого исследования Европейский офис Всемирной Организации Здоровья (далее будет использоваться сокращение ВОЗ) предложил рассматривать ситуацию как критическую, поскольку существующие системы, в первую очередь образовательная и здравоохранительная, перестали справляться с вызовами современного мира.

С точки зрения государственных и коммерческих организаций, здоровье это актив. Процесс повышения грамотности в вопросах здоровья и разрешения кризиса имеет множество заинтересованных сторон. Автор данной работы предложил рассмотреть эту тему с точки зрения веллнесс-индустрии, поскольку до настоящего времени этот аспект остается малоизученным. Многие

заинтересованные стороны, и пока полное отсутствие системного подхода, поскольку образовательная и здравоохранительная (чаще называемая в различной литературе 'системой лечения болезней') системы плохо справляются, оставаясь закрытыми, консервативными и малоэффективными, требуют иного подхода.

Многие люди оценили преимущества профилактики, клиент-ориентированности и развития осознанности, которые предлагает веллнесс-индустрия. За счет этого она стремительно развивается, привлекая все больше внимания и финансовых ресурсов (в 2013 году сгенерировав более 3,4 триллионов долларов прибыли). Да, это один из основных недостатков индустрии: бизнес-ориентированность часто приводит к тому, что некоторые компании предлагают сомнительные (или даже опасные) продукты или услуги, поскольку они являются маркетингово привлекательными. Для таких компаний низкий уровень грамотности клиентов — это возможность манипуляций с целью легкого заработка.

С другой стороны, многие компании, в частности, основная масса веллнесс- и фитнес-центров, настроены быть социально ответственными. Автор считает, что такие компании в процессе решения кризиса грамотного отношения к здоровью могут также получать прибыль, и поэтому поиск возможностей участия компаний веллнесс-индустрии в процессе разрешения кризиса стал одним из основных направлений данной работы.

В результате проведенного исследования автор обнаружил, что профессионалы считают одной из своих задач обучение и изменение их жизни к лучшему, а клиенты считают важным повышать уровень знаний о здоровье, что является оптимистичным фактором. Сложность состоит в том, что образовательные сервисы пока являются редкостью, а также отсутствует системный стратегический подход к данной проблеме, а осознанность того, что разработка и внедрение образовательных инновационных сервисов может быть прибыльными и в то же время повышать социальную значимость веллнесс-индустрии, пока еще низкая.

Данное исследование является всего лишь первым шагом, пилотным проектом в данном направлении, и открывает возможности для дальнейшего изучения вопроса с тем, чтоб использовать теоретические разработки и открытия ученых для развития и практического внедрения.

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