Translating Scientific Texts from Croatian into English

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TRANSLATING SCIENTIFIC TEXTS FROM CROATIAN INTO ENGLISH

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ABSTRACT

For this thesis, I have chosen three scientific texts which I will translate from Croatian into English. The main part of the thesis are the three source texts and their translations. The first text concerns the quality and the content of information about stress on the Internet during Croatian language search, the second talks about the information needs and the behavior of high school students when searching for health information and the third text explores the digital competencies of older adults in Osijek. Each text is accompanied by genre analysis, where I analyze various components relevant to the text in order to determine the best way to translate them. Every translation is followed by the workflow, in which I outline the process of translation and explain my decision-making during the process as well as the problems presented during translation. At the end, I have provided a brief conclusion and listed the references used in the paper.

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1.Introduction

In this thesis, I will translate excerpts from three scientific texts from Croatian into English. The first text is from the field of psychology. It is an excerpt from an article titled *Kvaliteta i sadržaj informacija o stresu na internetskim stranicama prilikom pretraživanja na hrvatskom jeziku*. The second text is from the field of information technology, an excerpt from an article titled *Informacijske potrebe i informacijsko ponašanje učenika i učenica 1. gimnazije u Osijeku pri pretraživanju zdravstvenih informacija*. The third text is an excerpt from an article titled *Digitalne kompetencije i treća životna dob: analiza programa informatičkog i informacijskog opismenjavanja korisnika treće životne dobi Gradske i sveučilišne knjižnice Osijek,* also from the field of information technology.

Each of these three Croatian-to-English translations consists of four parts: the Source Text, the Translation of the Source Text, the Commentary and Analysis section (where I analyze features of the text such as genre, source, audience, purpose of writing, authenticity, style, level of formality, layout, content sentence patterns and subject terminology), and the Workflow section, where I briefly describe the process of translating a text and outline certain translation decisions and my reasons for choosing these solutions.

During the process of translation, a translator converts the source text into a target text, while striving to keep the meaning as similar as possible. This is a complicated process, as the translator must constantly brainstorm to find the best solutions for certain problems found during the translation. These problems can be grammatic, semantic, syntactic, etc. The translator's decisions on what solutions to use are influenced by a multitude of factors, hence it is important to be very familiar with both the source language and the target language, in order to preserve

semantic nuances found in the source text. The type of text also influences what kind of translation must be used; sometimes more literal translations are necessary, while other times, it is necessary to retain the effect the original text had on the reader, something that is not always possible to obtain with literal translations (e.g. when translating poems). During the process of translation, the target text is constantly modified until a version is created that is deemed the most suitable.

Since all languages are different, translators are faced with many problems during translation. These include grammatical, semantic and syntactic, rhetorical, and pragmatic problems, as well as cultural issues. As I will be translating scientific texts in this thesis, I will outline some problems and solutions specific to this type of texts.

2. Source Text I

Kvaliteta i sadržaj informacija o stresu na internetskim stranicama prilikom pretraživanja na hrvatskom jeziku

UVOD

Stres, koji možemo definirati kao stanje napetosti i pritiska koje nastaje kada je osoba suočena s događajima koje smatra prijetećima za svoju dobrobit ili koje procjenjuje prezahtjevnima za svoje resurse (Lazarus i Folkman, 1984), sveprisutan je u današnjem društvu. Svjetska zdravstvena organizacija procijenila je da će psihičke bolesti, uključujući i one povezane sa stresom, postati drugi vodeći uzrok onesposobljenosti do 2020. godine (Murray i Lopez, 1996). Dosadašnja istraživanja pokazuju kako je izloženost stresu povezana sa smanjenom kvalitetom življenja (Kahana, Kelley-Moore i Kahana, 2012) te da ima dugoročne posljedice po psihičko i tjelesno zdravlje (Charles, Piazza, Mogle, Sliwinski i Almeida, 2013; Schneiderman, Ironson i Siegel, 2005).

Budući da se sve više govori o negativnim posljedicama stresa na naše zdravlje, ali i o tome da stres predstavlja neugodno subjektivno iskustvo, mnogi ljudi traže načine kako se bolje nositi sa stresom. Jedan od važnih izvora informiranja o zdravlju danas je u sve većoj mjeri internet. Čak 80 % osoba koje koriste internet, koriste ga kako bi pronašle informacije o zdravlju (Fox, 2011). Najveći broj njih, 66 %, tražilo je informacije o specifičnoj bolesti ili zdravstvenom problemu, dok ih je 28 % tražilo informacije o depresiji, anksioznosti, stresu i psihičkom zdravlju (Fox i Jones,

2009). Nadalje, čak 60 % osoba izjavljuje da su informacije koje su pronašli na internetu utjecale na njihovu odluku o tretmanu, a 49 % da su promijenile način na koji razmišljaju o dijeti, vježbanju ili nošenju sa stresom (Fox i Jones, 2009).

Brojne su prednosti korištenja interneta u svrhu informiranja o zdravlju, poput široke i brze dostupnosti, malih troškova, ali i anonimnosti koju internet pruža, a koja je osobito važna kada govorimo o psihičkim smetnjama uslijed potencijalne stigmatizacije. S druge strane, istraživanja pokazuju kako je kvaliteta informacija o psihičkim bolestima na internetu uglavnom niska, s tim da postoje poboljšanja u kvaliteti internetskih stranica o poremećajima raspoloženja (Reavley i Jorm, 2011). Neka istraživanja sugeriraju kako određene stranice, poput Wikipedije, imaju visoku kvalitetu sadržaja o psihičkim bolestima, ali nisku čitljivost (Reavley i sur., 2012). Nedovoljna čitljivost zdravstvenih informacija na internetu sve se više pokazuje problematičnom (McInnes i Haglund, 2011), a neke studije sugeriraju kako su sadržaji o psihičkim bolestima na internetu teže čitljivi od sadržaja o tjelesnim bolestima (Hutchinson, Baird i Garg, 2016).

U istraživanju kvalitete sadržaja internetskih stranica o psihičkom zdravlju na hrvatskom jeziku, specifično o anksioznosti i depresiji (Jokić-Begić, Bagarić i Jurman, 2015), pokazalo se da u velikom broju slučajeva nije napisano tko je autor članka ili autor nije stručnjak iz područja mentalnog zdravlja. Mnoge od informacija o depresiji i anksioznosti netočne su ili nepouzdane, a neki od tekstova pisani su na takav način da bi mogli stvoriti još veći osjećaj beznađa kod osoba s depresijom. Isto tako, utvrđeno je da su informacije o psihoterapiji kao obliku traženja pomoći nedostatne.

Međutim, čini se da se kvaliteta informacija o mentalnom zdravlju na internetu razlikuje za različite vrste smetnji pa se tako pokazuje da je kvaliteta informacija o shizofreniji, bipolarnom poremećaju i distimiji bolja od kvalitete informacija o fobiji, anksioznosti i paničnom poremećaju

(Grohol, Slimowicz i Granda. 2014). No, nismo pronašli niti jedno istraživanje koje je ispitivalo kvalitetu informacija o stresu na internetskim stranicama. Netočne ili iskrivljene informacije mogle bi biti osobito problematične kada govorimo o stresu jer nova istraživanja pokazuju da negativna vjerovanja o stresu mogu imati razne štetne posljedice.

U istraživanju povezanosti između količine stresa, percepcije da stres utječe na zdravlje te zdravstvenih ishoda i mortaliteta, na uzorku od skoro 30 000 osoba, trećina je smatrala da stres mnogo ili donekle utječe na njihovo zdravlje (Keller i sur., 2012). Pokazalo se da su izloženost većem stresu i vjerovanje da stres utječe na zdravlje neovisno jedno o drugome povezani s lošijim tjelesnim i psihičkim zdravljem. Također, osobe koje su bile izložene većem stresu i koje su istovremeno smatrale da stres utječe na njihovo zdravlje imale su veću vjerojatnost za preranu smrt. Iako je riječ o korelacijskoj studiji, nalazi ovog istraživanja idu u prilog hipotezi o ključnoj ulozi procjene kod stresa.

Percepcija da stres negativno utječe na zdravlje povezana je i s povećanim rizikom za koronarnu bolest srca (Naibi i sur., 2013). Ova povezanost ostala je statistički značajna, čak i kada se kontroliralo biološke, bihevioralne i psihološke rizične čimbenike, uključujući i percipirane razine stresa i socijalnu podršku. Dakle, negativna vjerovanja o stresu imaju vlastiti doprinos zdravstvenim problemima čak i kada uzmemo u obzir nečiju percepciju o tome kolikom stresu je izložen.

Negativna vjerovanja studenata o stresu izmjerena za vrijeme manje stresnog razdoblja, na početku semestra, predviđaju broj i intenzitet tjelesnih simptoma tijekom stresnog razdoblja, na kraju semestra (Fischer, Nater i Laferton, 2016). Dakle, vjerovanje da je stres štetan za zdravlje može dovesti do većeg broja simptoma kada je razina stresa veća mehanizmom sličnim samoispunjavajućem proročanstvu. Drugim riječima, studenti koji vjeruju da je stres štetan, kada

ga dožive, uznemireni su ne samo zbog ispitnih rokova, već i zbog samog stresa. Veća pobuđenost dovodi do većeg broja tjelesnih simptoma potvrđujući njihovu početnu pretpostavku o štetnosti stresa.

Teorija stresa i suočavanja Lazarusa i Folkmanova (1984) ističe važnost kognitivnih čimbenika u nastanku stresa: primarne i sekundarne procjene. U primarnoj procjeni osoba evaluira je li specifični događaj u okolini relevantan za njezinu dobrobit; je li štetan, koristan ili nevažan. U sekundarnoj procjeni osoba evaluira može li se nešto i što točno poduzeti kako bi se smanjila potencijalna šteta ili povećala dobrobit. Na temelju ovih dviju procjena donosi se zaključak o tome predstavlja li situacija opasnost jer je potencijalno štetna ili izazov jer nudi mogućnost razvoja vještina. Međutim, i sama stresna reakcija predstavlja događaj koji osoba može procijeniti opasnim za svoje zdravlje, korisnim jer mu omogućuje bržu reakciju ili priliku da razvija strategije suočavanja ili možda kao uobičajeno i bezopasno iskustvo.

Prema kognitivno-bihevioralnom modelu (npr. Beck, 1979), jedan od čimbenika koji utječu na procjenu nekog kritičnog događaja jesu vjerovanja koja se razvijaju na temelju životnih iskustava kroz implicitna i eksplicitna učenja. Ova vjerovanja potaknut će automatske misli o situaciji i sposobnostima nošenja s njom, koje će za posljedicu imati emocionalnu i ponašajnu reakciju. Kada osobe koje vjeruju da je stres štetan po zdravlje dožive visoke razine stresa, one će uobičajene simptome tjelesne pobuđenosti (npr. lupanje srca, pritisak u prsima, teškoće u koncentraciji) interpretirati kao prijetnju (npr. Od stresa ću dobiti napad gastritisa, Ako nastavim ovako, razvit ću neku bolest) ili na uznemirujući način (npr. Dobit ću srčani udar od stresa, Poludjet ću od stresa). Takve uznemirujuće interpretacije tjelesnih simptoma pobuđenosti mogu zauzvrat pojačati emocionalnu pobuđenost i tjelesne simptome, čime je zatvoren taj začarani krug (npr. Clark, 1986).

Na sličan način, osobe koje nakon doživljenih stresnih iskustava zaključe da se s njima mogu nositi i da je stres kontrolabilan, zbog tih vjerovanja kasnije u životu mogu biti otpornije na nove stresore. Tako je otkriveno da umjerena razina stresa može imati pozitivan učinak na otpornost (Seerya, Holmana i Silvera, 2010). U ovom longitudinalnom istraživanju osobe koje su doživjele nekoliko životnih nedaća izvijestile su o boljim ishodima po psihičko zdravlje i dobrobit od onih koje su doživjele mnogo, ali i od onih koje uopće nisu imale životnih nedaća. Negativni životni događaji imali su najmanje utjecaja na skupinu sudionika koji su doživjeli umjerenu razinu stresa. Uspješno nošenje s umjerenim brojem teškoća pomaže u razvoju učinkovitih vještina suočavanja, stvara doživljaj postignuća te razvija vjerovanja da će se osoba i u budućnosti uspješno nositi s nedaćama. Možemo pretpostaviti da je kod ovih osoba došlo do promjena u vjerovanjima o štetnosti stresa, kao i u vjerovanjima o vlastitim sposobnostima da se nose sa stresom. S obzirom na to da internet ima važnu ulogu u informiranju o stresu pa tako i razvoju vjerovanja o tome je li stres štetan ili koristan, i u kojoj mjeri, željeli smo ispitati kakve informacije korisnici tamo mogu pronaći.

CILJ

Cilj ovog istraživanja bio je: 1) ispitati kvalitetu informacija o stresu na internetskim stranicama razumljivima hrvatskim govornicima, 2) ispitati je li stres u većoj mjeri prikazan kao opasan i štetan ili kao adaptivan i koristan te 3) razmotriti potencijalno djelovanje takvih sadržaja na njihove konzumente.

Pod pojmom kvalitete podrazumijeva se autorizacija teksta, i to od strane stručnjaka, slaganje definicije stresa s općeprihvaćenom definicijom u literaturi (Lazarus i Folkman, 1984), navođenje izvora informacija (npr. referenci, poveznica), uravnoteženo prikazivanje informacija (pozitivne i negativne strane stresa) te točnost informacija.

2.1. Translation of Source Text I

Quality and Content of Information about Stress on the Internet during Croatian Language Search

INTRODUCTION

Stress is ubiquitous in modern society. It can be defined as a state of tension and pressure which occurs when a person is faced with events that are deemed threatening for their well-being or too demanding for their resources. The World Health Organization has estimated that by 2020, mental illnesses, including ones related to stress, will have become the second leading cause of disability. Previous research has shown that exposure to stress is correlated with a reduced quality of life and has long-lasting consequences on mental and physical well-being.

Stress negatively impacts our health and represents a subjectively unpleasant experience, a fact that is becoming more well-known. Due to this, many people are finding ways to better cope with it. Nowadays, an increasingly important source of information on health is the Internet. 80% of Internet users use it to find health information (Fox, 2011). Most of them, 66%, searched for information on a specific illness or health problem, while 28% searched for information on depression, anxiety, stress, and mental health. (Fox and Jones, 2009). Further, 60% of people stated that the information found online influenced their decision on treatment, while 49% stated it changed the way they thought about diet, exercise and coping with stress.

The advantages of using the Internet for information are numerous, such as widespread and quick availability of information, small expenses, as well as the anonymity provided by it, which is especially important when considering the potential stigmatization of individuals with mental disturbances. On the other hand, research shows that the quality of information on mental illnesses on the Internet is generally low, with a slight improvement in quality when looking at websites that provide information on mood disorders. Some research suggests that certain sites, such as Wikipedia, have a high quality of content on mental illnesses, but low readability. (Reavley and assoc., 2012). Low readability of health information on the Internet is becoming increasingly more problematic. (McInnes and Haglund, 2011), and some studies suggest that content on mental illnesses online is more difficult to read than the content on physical illnesses (Hutchinson, Baird and Garg, 2016).

The research on the quality of content of Internet Pages on mental health in Croatian, specifically anxiety and depression (Jokić-Begić, Bagarić and Jurman, 2015), showed that in a large number of cases, names of the authors of articles were not cited, or the authors were not specialists from the field of mental health. Many of the information on depression and anxiety is incorrect or untrustworthy, while some of the texts were written in a way that could create an even stronger feeling of hopelessness in individuals suffering from depression. Lastly, it was determined that information on psychotherapy as a way of getting help is inadequate.

However, it seems that the quality of online information on mental health is different depending on the kind of disorder, and as such, it has been shown that information relating to schizophrenia, bipolar disorder and dysthymia was of significantly higher quality than that on phobia, anxiety and panic disorder (Grohol, Slimowicz and Granda, 2014). However, there was not a single research examining the quality of information on stress found online. Inaccurate or distorted information

can be especially problematic when talking about stress, as recent research has shown that negative beliefs about stress can have various harmful effects.

In the research on the connection between the amount of stress, the perception that stress affects health and health outcomes and mortality, carried out on a sample size of almost 30,000 people, one third of those examined considered stress to be a significant or somewhat significant factor affecting their health. (Keller and assoc., 2012). It was shown that exposure to larger amounts of stress and the belief that stress affects health are, independently of each other, connected with worse physical and mental health. Also, those individuals exposed to larger amounts of stress who considered it to have an effect on their health had a higher probability of an early death. Although the study was correlative, the results of the research support the hypothesis on the key role of appraisal when dealing with stress.

The perception that stress negatively impacts health was also connected with a higher risk of coronary artery disease (Naiby and assoc., 2013). This connection remained statistically significant even after taking into account biological, behavioral and psychological risk factors, including perceived levels of stress and social support. In other words, negative beliefs about stress themselves contribute to health problems even when taking into account someone's perception on the amount of stress they were exposed to.

Negative beliefs of students about stress measured during less stressful times, at the beginning of semesters, can be used to predict the number and intensity of bodily symptoms during stressful times, at the end of semesters (Fischer, Nater and Laferton, 2016). Therefore, the belief that stress is harmful to health can lead to a larger number of symptoms when the stress level is higher, with a mechanism similar to a self-fulfilling prophecy. In other words, students that believe stress is

harmful are upset when they experience it, not only because of exams, but also because of stress itself. Bigger arousal leads to a bigger number of bodily symptoms, which confirms their initial assumption on the harmfulness of stress.

The theory of stress and coping by Lazarus and Folkman (*Here I again used the term cope, I had to look up the official translation. I also had to look up to see how the term procjena is called in English, it is appraisal. Originally, I had used assessment)* notes the importance of cognitive factors in the occurrence of stress: primary and secondary appraisal. During primary appraisal, a person evaluates whether a certain event in their surroundings is relevant to them: is it harmful, beneficial or unimportant. *Surroundings or environment.* During secondary appraisal, they evaluate whether what exactly, if anything, can be done to reduce the potential or increase the benefit. Based on these two appraisals a conclusion is made on whether the situation signifies danger because it is potentially harmful or a challenge because it offers the possibility of skill development. However, the stressful reaction itself represents an event that can be deemed dangerous to a person's health, useful since it allows them a faster reaction or a chance to develop coping strategies and lastly, it might simply be deemed a regular and harmless experience.

According to the cognitive-behavioral model (e.g. Beck, 1979), one of the factors affecting the appraisal of a critical event are the beliefs which are developed based on life experiences through implicit or explicit learning. These beliefs will encourage automatic thoughts on the situation and the ability of coping with it, which will create an emotional and behavioral reaction as a result. When persons who believe stress is harmful for health are exposed to high levels of stress, regular symptoms of bodily arousal (e.g. heart beating, chest pressure, difficulty concentrating) will be interpreted as a threat (e.g. The stress will give me a gastritis attack, If I go on like this, I'll get some kind of illness) or in a disturbing way (e.g. The stress will give me a heart attack, The stress

will make me go insane). Such disturbing interpretations of bodily symptoms of arousal can in turn enhance emotional arousal and bodily symptoms, which closes the vicious circle.

Similarly, people who have concluded that they can handle stressful situations after experiencing them, as well as believing that stress can be controlled, could possibly be more resistant to new stressors later in life. It was discovered that a moderate amount of stress can have a positive effect on resistance (Seerya, Holmana and Silvera, 2010). In this longitudinal research, persons who had experienced a few life misfortunes reported better outcomes for mental health and benefits than the persons who had experienced a lot of them, but also better than the ones that faced no misfortunes at all. Negative life events had the weakest effect on the group that experienced a moderate amount of stress. Successful coping with a moderate amount of difficulties helps to develop effective coping skills. It creates a feeling of accomplishment and develops the belief that coping with difficulties will be successful in the future as well. We can assume that in these people, there was a change in the belief on the harmfulness of stress, as well as the beliefs on their own abilities to handle it. Since the Internet has an important role in informing about stress and therefore the development of the belief on whether stress is harmful or not, we wanted to examine what kind of information users can find there.

OBJECTIVE

The objective of this study was: 1) To examine the quality of information on stress on Internet sites understandable to speakers of Croatian, 2) examine whether stress is presented as dangerous and harmful or as adaptive and useful, and 3) look at the potential activity of such contents on their consumers.

The term *quality* implies authorization of text by experts, a definition of stress that matches the generally accepted definition in literature (Lazarus and Folkman, 1984), citation of information sources (e.g. references, links), balanced presentation of information (positive and negative effects of stress) and accuracy of information.

2.2. Commentary and Analysis

TEXT I: Quality and Content of Information about Stress on Internet Pages when Searching in Croatian Language

1. Genre: Excerpt from a scientific article in the field of psychology.

2. Source: The article was written by Branka Bagarić, Dragana Markanović and Nataša Jokić-Begić. It was published in *Media Research: Croatian Journal for Journalism and the Media* in 2018.

3. Audience: The text is intended to be read by other specialists in the field of psychology.

4. Purpose of writing: The purpose of the text is to inform its readers on the quality of information on mental health that can be found online and to check whether stress is represented as harmful or useful to individuals experiencing it.

5. Authenticity: The text is an original scientific article, published in a scientific journal.

6. Style: The style of the text is formal and informative.

7. Level of formality: Formal

8. Layout: The translated excerpt was taken from the beginning of the paper after the Summary. The sections *Introduction* and *Goal* were translated. The first section consists of 12 paragraphs and the second section consists of 2 paragraphs. The beginning lines in the paragraphs are not indented and vary in length. Headings are written in bold.

9. Content: The text starts by giving a general description of stress and reveals that an increasing number of people are interested in finding information about it. It then informs

readers on the quality of information on stress and mental illnesses in general that can be found online. In the second part of the introduction, the authors cite examples of how different beliefs on stress can affect people. In the last part of the introduction, the authors cite various scientific theories on stress. In the last section, *The Objective*, the authors explain the purpose of the text.

10. Sentence Patterns: Most sentences in this text are of medium length, although there are a number of longer sentences.

11. Terminology of the subject: The text uses some specialist terminology, mainly from the field of psychology, but also from the field of medicine.

2.3. Workflow

The Croatian title of the article is *Kvaliteta i sadržaj informacija o stresu na internetskim stranicama prilikom pretraživanja na hrvatskom jeziku.* The English title, which was contained in the abstract, is *Quality and Content of Information about Stress on Internet Pages when Searching in Croatian Language*. The term *stress* can be ambiguous in English. The meanings also change depending on whether the word is a verb or a noun. In the title sentence, it can be used to refer to *pressure exerted* on something, or it can refer to a mental state of an individual. This makes the English title problematic and ambiguous. Some phrases can be condensed, and that is what I applied in the title. I therefore modified the title quite a bit, changing it into *Quality and Content of Information about Stress on the Internet during Croatian Language Search.*

In the original, the first sentence contained the word *sveprisutan*, which can be translated as both ubiquitous or omnipresent, with only slightly different meanings. I used the former as the latter was more used in connection with divine topics. In this first sentence, as in many later ones, I changed the word order and divided the sentence into two. This is a common occurrence with Croatian to English translations, as certain grammatical constructions in Croatian sound unnatural in English.

Various sentences, which were originally one sentence in Croatian, had to be divided into two in English. An example of this is the first sentence which, in Croatian, reads: *Stres, koji možemo definirati kao stanje napetosti i pritiska koje nastaje kada je osoba suočena s događajima koje smatra prijetećima za svoju dobrobit ili koje procjenjuje prezahtjevnima za svoje resurse (Lazarus i Folkman, 1984), sveprisutan je u današnjem društvu.* The translated version reads: *Stress is ubiquitous in modern society. It can be defined as a state of tension and pressure which*

occurs when a person is faced with events that are deemed threatening for their well-being or too demanding for their resources. As can be seen here, not only did I divide the sentence into two, but I also used inversion, putting the last part of the sentence in Croatian as the first sentence in English, as such a structure is more appropriate in English.

Another noticeable change I performed in this sentence is changing active to passive (*može se definirati/can be defined*). In the original Croatian version, sentences containing passive are frequently followed by sentences written in the active voice. When translating, I tried to make it more consistent, changing the voice from either active to passive or vice versa, depending on the context. Passive voice is more common in English, while it is usually not used in Croatian when we know who performs the action

The term *stress* recurs throughout the article. I translated *nošenje sa stresom* as *coping with stress*, as *cope* is usually used in collocation with *stress*, as opposed to the more common *handle*. There is also a slight difference in meaning, as *handling something* means to *take care* of it, while *coping* is more ambiguous, implying that the problem is so big it is difficult to handle. Another option was *deal*, but this word is similar to handle, and again, it is better to use *cope.*

Čitljivost can mean both readability and legibility, but the former refers to how easily a whole text can be read, while the latter refers to how easily each letter can be recognized. For this reason, I used the former term.

The term *kvaliteta informacija na internetu* is repeated throughout the text. To achieve better readability, I modified the term in various ways, such as rearranging the word order or using different words with similar meanings. I translated *posljedice* as *effects*, although I was

considering translating it as *consequences* at first, eventually deciding the former was more suited due to context.

The text contains numerous specialist terms from the field of psychology, but also medicine. Because of this, it is important to look up the accepted translations of these terms, in order to avoid translating it incorrectly. For example, the text mentions *koronarna bolest srca*, which would literally be translated as *coronary heart disease*. However, no such term exists in English, and the term used is either *coronary artery disease* or *ischemic heart disease*.

3. Source Text II

Informacijske potrebe i informacijsko ponašanje učenika i učenica 1. gimnazije u Osijeku pri pretraživanju zdravstvenih informacija

1. Uvod

U osnovi informacijskih procesa kao što su stvaranje, dijeljenje, širenje, rasprostiranje, spajanje i uporaba informacija jesu informacijske potrebe. Informacijske potrebe već su dugo u središtu interesa istraživača kako na teorijskoj tako i na empirijskoj razini. Smatra se da prva istraživanja informacijskih potreba sežu u 1948. godinu, kad je na Royal Society Scientific Information Conference prikazan niz studija na temu informacijskog ponašanja, ali i teorijskih pokušaja razumijevanja koncepta informacijske potrebe. Ono što je za informacijsku potrebu karakteristično, bez obzira na njezinu vrstu ili tip, jest činjenica da ona potiče, motivira i pokreće informacijsko ponašanje.

Do današnjeg vremena u okviru informacijskih znanosti nije postignut dogovor ili opredjeljenje za jednu i jedinstvenu, općeprihvaćenu, sveobuhvatnu definiciju koncepta informacijske potrebe. Naprotiv, postoji izrazito mnogo općenitih i specifičnih definicija, tipova i podjela informacijskih potreba u okviru različitih konteksta te jednako mnogo teorija i modela kojima ih se nastoji protumačiti.

2. Informacijske potrebe i ponašanje mladih

Raspravljajući o informacijskim potrebama i teorijskim postavkama raznih autora, Case i Given 2016. g. navode da je razlog otežane konceptualizacije informacijske potrebe taj što je informacijsku potrebu teško promatrati, budući da je vidljiva tek kad uslijedi zahtjev ili određeno informacijsko ponašanje. Najšire gledajući, potreba za informacijom unutarnje je stanje pojedinca u trenucima spoznaje da je njegovo postojeće znanje o određenoj temi, predmetu ili određenoj situaciji nedostatno te želi, treba ili očekuje dodatne informacije kako bi donio odluku o nečemu ili pak djelovao.

Jedna od ponuđenih podjela informacijskih potreba jest podjela na informacije opće prirode, tj. one koje se odnose na samog pojedinca, okolinu, ljude te na informacije vezane uz životne potrebe – zdravlje, prehranu, sigurnost, emocionalnu stabilnost te intelektualni napredak. Prema tome, zdravstvena informacija samo je jedna vrsta informacija u nizu informacija potrebnih za život, ali vrlo značajna. Upravo zdravstvena informacija (engl. health information) omogućuje pojedincu da razumije vlastito zdravstveno stanje te donosi odluke vezane uz vlastito zdravlje ili zdravlje svoje obitelji. Postoje i osobne zdravstvene informacije (engl. personal health information), tj. podaci koji se odnose na medicinsku povijest osobe, uključujući simptome, dijagnoze, postupke kroz koje je prošla i ishode. Zapisi o zdravstvenim informacijama uključuju povijest bolesti, nalaze laboratorijskih pretraga, rendgenske snimke, kliničke podatke i bilješke.

Informacijske potrebe neraskidivo su vezane uz informacijsko ponašanje te utječu jedno na drugo. Informacijsko ponašanje, u najširem smislu, interakcija je određenog izvora informacija i čovjeka sa svrhom zadovoljenja informacijske potrebe. Informacijsko ponašanje ovisi o vrsti informacija koju pojedinac treba u nekom trenutku te o vanjskim (socijalni, organizacijski, vremenski i sl.) i unutrašnjim čimbenicima (vještine, znanja, pismenost pojedinca itd.), spolu te ostalim čimbenicima koji utječu na informacijsko ponašanje. Važno je napomenuti kako se

informacijsko ponašanje ne odnosi na jedan proces, već podrazumijeva skup procesa i radnji koje se odvijaju kada pojedinac nastoji zadovoljiti svoju informacijsku potrebu. Prva istraživanja informacijskog ponašanja, koja, kao i informacijske potrebe, datiraju iz 1948.g., svoju su pozornost usmjeravala na informacijske izvore i sustave. Istraživanja toga područja preokret su doživjela 1980-ih godina, kada se njihovo težište s informacijskih izvora prebacuje na samog korisnika i proces dolaženja do informacija.

Kada je riječ o odraslim ljudima, može se pretpostaviti kako se oni pri suočavanju s određenim poteškoćama i u namjeri njihova rješavanja u velikoj mjeri oslanjaju na svoje prethodno stečeno iskustvo i prikupljeno znanje. S druge strane, mladi, s obzirom na siromašnije životno iskustvo, moraju konzultirati neki informacijski izvor kako bi im donošenje odluka u svakodnevnom životu bilo jednostavnije i uspješnije. Mladim ljudima (engl. young adults, youth, young people) smatraju se osobe od 12 do 18 godina starosti, tj. osobe koje pohađaju više razrede osnovne i srednju školu. Ponekad pojam mladi uključuje osobe do 24. godine, tj. studente. U Republici Hrvatskoj svaka osoba mlađa od 18 godina zakonski se smatra djetetom. S druge strane, UNESCO pod pojmom „mladi“ podrazumijeva osobe od 15. do 24. godine. Treba svakako uzeti u obzir kako se dobna granica mladih neprestano mijenja, ovisno o demografskim, ekonomskim i sociokulturnim kontekstima i čimbenicima.

Mladi su po svojoj prirodi znatiželjni i zanima ih velik broj tema. Oni informacije vezane uz svakodnevni život pronalaze koristeći veliki broj informacijskih izvora za koje smatraju da će zadovoljiti njihove potrebe. Odrastanjem i sazrijevanjem pojedinca mijenjaju se njegove informacijske potrebe.

Zdravstvene informacije ključne su pri suočavanju pojedinca s nekom zdravstvenom poteškoćom i za uspješan proces prilagodbe na nju. Također, dostupnost zdravstvenih informacija

jedna je od strategija koje pomažu promoviranju zdravlja i zdravog načina života. Zdravstvene su informacije temelj za donošenje odluka vezanih uz zdravlje svakog pojedinca. S druge strane, nedostatak zdravstvenih informacija ili netočne zdravstvene informacije mogu imati negativan utjecaj na zdravlje. Iako su informacije o gotovo svim zdravstvenim temama lako dostupne, ponekad je potrebno konzultiranje izvora koji, kada je riječ o nekim manje važnim temama, nisu prvi izbor pojedinca. Naprimjer informiranje o zdravstvenom stanju i zdravlju općenito zahtijeva stručnije objašnjenje, a ponekad i veći broj izvora kako bi se dobio uvid u konkretnu tematiku. Izvori zdravstvenih informacija za mlade mogu biti roditelji, pružatelji zdravstvenih usluga, prijatelji, internet ili baze medicinskih podataka. Škola u tom radu nije navedena kao izvor na kojem bi mladi mogli dobiti zdravstvene informacije. Razlog je tomu prvenstveno taj što se u spomenutom članku govori o specifičnim zdravstvenim informacijama, ali mogao bi biti i taj što se u Republici Hrvatskoj na školski sustav ne gleda kao na sustav koji bi djecu i mlade opskrbljivao zdravstvenim informacijama. U kontekstu Hrvatske tako ne postoji jedinstveni školski predmet u okviru kojega bi učenice i učenici mogli dobiti informacije o zdravlju. Doduše, neke teme iz tog područja sadržane su u školskim planovima i programima predviđenih predmeta, a neke bi trebale biti pokrivene zdravstvenim odgojem koji pak ne obuhvaća sve učenike.

Odabir izvora zdravstvenih informacija kojima će se mladi obratiti ovisi o nizu čimbenika. Informacijsko se ponašanje dakle, kao i svaka druga vrsta ponašanja mijenja. Ljudi su podložniji utjecajima drugih u tri faze života. Drugim riječima, njihovo informacijsko ponašanje vezano uz zdravlje najlakše će se promijeniti u trenucima kada primjerice postignu višu razinu samostalnosti. Naprimjer mladi su pod većim utjecajem vršnjaka kada se pokušavaju osamostaliti, tj. kada nastoje biti manje ovisni o svojim roditeljima. U razdoblju kada prestaju biti djeca i postaju odrasli ljudi, mladi su spremniji eksperimentirati s drogama, seksualnošću i sl. Sljedeća faza u kojoj su stavovi

najpodložniji utjecajima okoline jest kada mladi počnu živjeti sami te isključivo o njima ovisi ponašanje koje utječe na zdravlje (prehrana, sigurnost itd.). Treća je faza razdoblje kada pojedinci počinju živjeti s partnerima i zasnivati vlastite obitelji. Svaka od tri navedene faze ključna je za poticanje i/ili održavanje zdravih navika pojedinca. U svim tim fazama informacije i izvori u kojima pojedinci pronalaze informacije mogu imati ključnu ulogu u donošenju odluka. Informacijski izvori koje osoba konzultira u fazi donošenja odluka važan su element u procesu donošenja odluke jer odabir izvora može značajno utjecati na ishod odluke.

Primjerena prethodna informacija pomaže pacijentu nositi se s događajima ili medicinskim postupcima koji će uslijediti, svesti stres na najmanju moguću mjeru i učiniti da ishod liječenja bude optimalan, tj. informacije vezane uz zdravlje itekako su važne. Osim što utječu na trenutni ishod liječenja, zdravstvene informacije na temelju kojih mladi donose odluke o zdravlju i zdravstvenim navikama mogu imati dugoročne implikacije, odnosno utjecat će na zdravstveno stanje u zreloj dobi. Očuvanje zdravlja i razvoj pozitivnih zdravstvenih navika sve je više u fokusu javnosti kao jedna od tema o kojoj treba razgovarati i učiti. Sve veći broj istraživanja bavi se tematikom informacijskog ponašanja pri pretraživanju zdravstvenih informacija. U dosadašnja istraživanja bile su uključene brojne skupine koje su se razlikovale po dobi, spolu, zdravstvenom stanju i slično. Neka istraživanja, iako još uvijek ne brojna, bave se informacijskim ponašanjem mladih u situacijama kada im je potrebna zdravstvena informacija.

3.1. Translation of Source Text II

Information Needs and Information Behavior of Students of the First Gymnasium in Osijek when Searching for Health Information

Information needs are at the core of information processes such as creating, sharing, spreading, connecting and using information. Information needs have long been at the center of researchers' interest, both on a theoretical as well as empirical level. It is thought the first research of information needs dates back to 1948, when a series of studies on the topic of information behavior, as well as theoretical attempts of understanding the concept of information needs, was shown at the Royal Society Scientific Information Conference. What is characteristic for information needs, no matter its type, is the fact that it encourages, motivates and launches information behavior.

To this day, an agreement or a commitment to a unique, generally accepted and all-encompassing definition of the concept of information needs has not been reached within information science. On the contrary, there are many general and specific definitions, types and divisions of information needs within different contexts, and just as many theories and models that try to explain them.

2. Information Needs and Behavior of Young Adults

While discussing the information needs and theoretical settings of various authors, Case and Given (2016), cite that the reason for a more difficult conceptualization of information needs is that it is more difficult to look at it, since it is only visible after a request or a certain information behavior is made. Generally looking, the need for information is the internal state of an individual in the moments of realization that their existing knowledge on a certain topic, subject or situation

is inadequate and therefore, they wish, need or expect additional information to make a decision about something or act.

One of the existing divisions of information needs is the division on information of a general nature, ones that refer to the individual itself, the surroundings, people, and information related to life needs – health, diet, safety, emotional stability and intellectual progress. According to that, health information is just one in a series of information needed for living, albeit a very significant one. It is health information that enables an individual to understand their health condition and make decisions connected to their health, or the health of their family. There are also personal health information, data that refer to the medical history of a person, including symptoms, diagnoses, procedures they undertook and their outcomes. Files on health information include history of illness, results of laboratory tests, X-ray scans, clinical data and notes.

Information needs are inseparably connected with information behavior and the two affect each other. Information behavior, generally defined, is the interaction of a certain source of information and a person with the purpose of satisfying an information need. Information behavior is dependent on the type of information that individuals need at a certain moment and on external (social, organizational, time) and internal factors (skills, knowledge, literacy of an individual, etc.), as well as other factors that affect information behavior. It is important to note that information behavior does not refer to just one process, but implies a set of processes and actions that happen when individuals want to satisfy their information need. The earliest research of information behavior, which, like information needs, date back to 1948, focused their attention to information sources and systems. Research in that area experienced a reversal in the 1980s, when the focus was moved from information sources to the user itself, as well as the process of finding information.

When it comes to adults, it can be assumed that when facing certain difficulties, in order to resolve them, they largely rely on their previous experience and accumulated knowledge. On the other hand, young people, considering their lesser life experience, have to consult an information source so that making decisions in their everyday life would be simpler and more successful. The term *young people* (young adults, youth) refers to people from 12 to 18 years of age, i.e. people that are attending higher grades of elementary and high school. The term sometimes includes people up to 24 years of age, i.e. students. In the Republic of Croatia, every person younger than 18 is legally considered a child. On the other hand, under the term *young people*, UNESCO includes people from 15 to 24 years of age. It should certainly be noted that the age limit of young people is constantly shifting, depending on demographic, economic, and sociocultural contexts and factors.

By their nature, young people are curious and interested in a large number of topics. They find information related to life using a large number of information sources that they consider will satisfy their needs. Through growth and maturation, an individual's information needs change.

When an individual is faced with a health difficulty, health information is crucial for a successful process of adjustment to it. Also, availability of health information is one of the strategies that enable health promotion and a healthy lifestyle. Health information are the basis for making decisions related to the health of every individual. On the other hand, lack of health information or inaccurate health information can have a negative impact on health. Although information on almost all health topics is easily available, it is sometimes important to consult sources that are not someone's first choice when concerning some less important topics. E.g. informing about a health condition and health in general requires a more expert explanation, and sometimes a larger number of sources in order to gain insight into a specific theme. For young people, the sources of health

information can be parents, health service providers, friends, Internet or medical databases. In that work, school is not cited as a source that would supply young people with health information. The reason for that is primarily because the aforementioned article talks about specific health information, but the reason could also be because in the Republic of Croatia, the school system is not seen as a system that would supply children and young people with health information. In Croatia's context, there does not exist a unique school subject within which students could get health information. However, some topics are contained in school plans and programs of planned subjects, while some should be covered by health education which, however, does not include all students.

The choice of health information sources which young people will consult depends on a number of factors. Therefore, information behavior, like any other type of behavior, changes. People are more susceptible to influences of others in three phases of their lives. In other words, their information behavior related to health will most easily be changed in the moments when they reach a higher level of independence. For example, young people are under a larger influence of their peers when they are trying to become independent, i.e. trying to be less dependent on their parents. At the time when stop being children and start becoming adults, young people are more willing to experiment with drugs, sexuality, etc. The next phase in which their attitudes are susceptible to outside influences is when young people start living alone and health dependent behavior starts depending entirely on them (diet, safety, etc.). The third phase if the time when individuals start living with partners and establishing their own families. All of the three aforementioned phases is crucial in encouraging and/or maintaining healthy habits of individuals. In all of these phases information and sources in which individuals find information can have a crucial role in decision making. Information sources which a person consults with are an important element in the process

of decision making. Depending on which source is picked, the result of the decision might vary significantly.

An appropriate previous information can help the patient cope with events or medical procedures that follow. It can help minimize stress and optimize the outcome of treatment, as health related information is of great importance. Besides affecting the current outcome of treatment, health information which help young people make decisions can have long term implications, i.e. they could affect a person's health condition in old age. Health preservation and development of positive health habits is a topic worth discussing, one that is gaining more and more traction in the public eye. A growing number of researches is being done on the theme of information behavior while searching health information. So far, studies included many groups divided by age, gender health condition, etc. Some research, although not numerous, have explored the information behavior of young people in situations when they need health information.

3.2. Commentary and Analysis

TEXT II: The Information Needs and Information Behavior of the Students of the First Gymnasium in Osijek when Seeking Health Information

1. Genre: Excerpt from a scientific article.

2. Source: The article was written by Ivana Martinović, Sara Bakota and Boris Badurina. It was published in *Vjesnik bibliotekara Hrvatske* in 2018.

3. Audience: The text is intended to be read by other specialists in the field of information technology and anyone interested in that field.

4. Purpose of writing: The purpose of the article is to determine information needs and the behavior of students while searching for health information.

5. Authenticity: The text is an original scientific article, published in a scientific journal. The authenticity is also shown in the fact that this is the first research within information science in the Republic of Croatia that deals with information needs of young people concerning health.

6. Style: The style of the text is formal and informative.

7. Level of formality: Formal.

8. Layout: The translated excerpt was taken from the beginning of the paper, starting with *Introduction* and also including *Information Needs and Behavior of Young Adults***.** The former section consists of two paragraphs, while the latter section consists of 8 paragraphs, most of which are of longer length. The beginning lines in paragraphs are indented and vary in length. Headings are written in bold.

9. Content: The text starts out explaining the importance and history of information needs. The article clarifies that due to lack of experience, young people have to rely on other sources of information when faced with a problem (the definition of *young people* is given). The text then explains the typical information behavior of young people, including their choice of health information sources, etc. Lastly, the text talks about some specific problems young people face when searching for health information.

10. Sentence Patterns: This text contains sentences of medium to long length. There are quite a few long sentences.

11. Terminology of the subject: Most of the terminology in the text is quite basic, although there is some specialist terminology, from the field of medicine.

3.3. Workflow

In the first sentence of the text, I had to use inversion. If literally translated, the sentence would sound unnatural in English and I therefore put the phrase *informacijske potrebe/information needs* at the beginning. (*U osnovi informacijskih procesa kao što su stvaranje, dijeljenje, širenje, rasprostiranje, spajanje i uporaba informacija jesu informacijske potrebe*/*Information needs are at the core of information processes such as creating, sharing, spreading, connecting and using information*). I also had problems with translating the terms *širenje* and *rasprostiranje*, as both of these words can be translated as *spreading*. As I found the two terms to be of very similar meaning in Croatian, I decided to combine them into the one term. This was not the only time I would combine two or more words into one. I translated *vrsta/tip* into *type*,

The text uses some medical terminology, such as *povijest bolesti/history of illness, nalazi laboratorijskih pretraga/results of laboratory tests, rendgenske snimke/X-ray scans*, etc. Whenever translating specialist terminology, it is important to make sure the translation is accurate, otherwise, the translated text would be confusing to read to an expert of that field reading the translated version.

Surprisingly, I had some trouble translating the term *siromašnije životno iskustvo*. Poorer life experience was an option that was not satisfying and seemed to imply something different in English. *Lesser life experience* was a variant that sounded better, but still left a lot to be desired. I then decided to completely change the structure of the sentence, translating it first as *lack of experience in life,* and finally, *lack of life experience*.

This text contains many very long sentences, which can be a challenge when translating from Croatian into English, as the latter prefers shorter sentences. I had to change a lot of these long

sentences by either restructuring them, shortening them, or dividing them into two or more sentences. An example of this is the following sentence: *Informacijski izvori koje osoba konzultira u fazi donošenja odluka važan su element u procesu donošenja odluke jer odabir izvora može značajno utjecati na ishod odluke*. This sentence, while not appearing to be too long, can be tricky to translate. First of all, its length, while slightly problematic, does not necessarily demand the sentence be divided into two. Arguably the most problematic part is the phrase *donošenje odluka*, which is repeated twice in the sentence. I decided to omit the first written occurrence of the phrase and keep the second. The translated two sentences read: *Information sources which a person consults with are an important element in the process of decision making. Depending on which source is picked, the result of the decision might vary significantly.*

Another problematic sentence was the following*: Primjerena prethodna informacija pomaže pacijentu nositi se s događajima ili medicinskim postupcima koji će uslijediti, svesti stres na najmanju moguću mjeru i učiniti da ishod liječenja bude optimalan, tj. informacije vezane uz zdravlje itekako su važne.* This sentence is long and also quite clunky, difficult to translate into English. In order to translate it, I divided it into two sentences and changed the structure a bit: *An appropriate previous information can help the patient cope with events or medical procedures that follow. It can help minimize stress and optimize the outcome of treatment, as health related information are of great importance.*

4. Source Text III

Digitalne kompetencije i treća životna dob: analiza programa informatičkog i informacijskog opismenjavanja korisnika treće životne dobi Gradske i sveučilišne knjižnice Osijek.

1. Uvod

Pismenost (lat. litteratus) je koncept koji se razvijao s vremenom i imao je različita značenja. Neke od definicija objašnjavaju pismenost kao sposobnost korištenja jezika u pisanom obliku jer pismena osoba zna izražavati misli u pisanoj formi, zna čitati, pisati i razumije svoj materinji jezik. Kasnija razmišljanja uvode pismenost u koncept i shvaćanje funkcionalne pismenosti, ono postaje kompleksnije i definira pismenost kao jednu od vještina potrebnih za uspješno funkcioniranje u društvu. Danas podrazumijeva i sposobnost služenja informacijskom tehnologijom, kao i sposobnost pretraživanja, pronalaženja, vrednovanja i upotrebe informacija. Razvija se i novi pojam informacijske pismenosti, kao sposobnost prepoznavanja potrebe za informacijom i sposobnost lociranja, evaluacije i učinkovitog korištenja potrebnih informacija. Mijenjaju se i ciljevi pismenosti; ona sada ima cilj odgoja i obrazovanja cijele osobe, stvaranja temelja za cjeloživotno učenje i razvoj sposobnosti pojedinca u svim osobnim i profesionalnim zahtjevima. Funkcioniranje u današnjem vremenu podrazumijeva digitalnu inkluziju pojedinca, što u konačnici predstavlja mogućnost spoznavanja važnosti mnoštva podataka i informacija za društveni, gospodarski i osobni razvoj, osposobljavanje za prepoznavanje stare i nove informacijsko-komunikacijske tehnologije (mobilna telefonija, internet, računalo), stjecanje osnovnih znanja o

vrstama računala, osposobljavanje za korištenje osnovnih uslužnih programa, osposobljavanje za korištenje interneta za osobne ili poslovne potrebe i osposobljavanje za kritički stav prema raspoloživim informacijama. Američko udruženje knjižničara (American Library Association ili ALA) govori o informacijskoj pismenosti kao skupini vještina potrebnih u pronalaženju, analiziranju te korištenju informacija. Standardi i uvjeti svakodnevnog življenja uvjetuju posjedovanje upravo tih znanja, posjedovanje sposobnosti učenja te znanje pri korištenju informacija. Informacijska se pismenost s vremenom, razvojem tehnologija i promjenama samih izvora informacija također neprekidno mijenja. Obrazovanje za tu vrstu pismenosti potrebno je neprekidno i pravodobno prilagođavati novim standardima. Knjižnica kao informacijska ustanova u tome ima veliku ulogu. Uglavnom pruža ili bi trebala pružati uvjete za edukaciju osoba o informacijskoj pismenosti bez obzira na njihovu starosnu dob. Kroz razne oblike radionica, tečajeva i seminara knjižnica može pružiti nova znanja i vještine. Kako dostupnost informacija raste, postavlja se pitanje u kojoj su mjeri informacije ravnopravno dostupne svim članovima društva, odnosno posjeduju li svi ista predznanja, u kojoj mjeri i jesu li informacijski pismeni, imaju li financijske mogućnosti kojima bi si osigurali odgovarajuću tehnologiju za pristup informacijama... Sve navedeno posebno se odnosi na treću životnu dob, što zbog slabe platežne moći, odnosno malih mirovina, a što zbog informacijskog i informatičkog doba u kojem živimo, a koje svakodnevno unosi promjene u sve aspekte ljudskog života dovodeći do novih procesa učenja i obrazovanja.

2. Osobe treće životne dobi i informacijska tehnologija

Ljudsko društvo sve više stari i taj je fenomen globalnih razmjera. Svijet je primjerice u 2015. godini zabilježio porast od 48,00 % u kategoriji osoba u dobi od 60 i više godina u odnosu na 2000. godinu, a dvije trećine najstarijih osoba na svijetu žive u razvijenim zemljama i njihov broj raste

puno brže nego u zemljama u razvoju. Razlog za tu situaciju u velikom su broju slučajeva smanjeni fertilitet ljudskog društva i nizak natalitet s jedne strane te bolja razina zdravstvene skrbi s druge. U većini zemalja svijeta starost započinje sa 65 godinom. U Hrvatskoj je to i godina kada većina radno sposobnih građana odlazi u zasluženu mirovinu, tako da je to globalno prihvaćena godina početka starosti i kod nas. Svjetska zdravstvena organizacija starost nadalje dijeli na tri razdoblja: raniju starost (65–74 godine), srednju starost (75–84 godine) te duboku starost (85 i više godina).

Prema podacima Hrvatskog statističkog zavoda Hrvatska je u 2011. imala 17,70 % građana u dobi od 65 i više godina. Te je godine zabilježena prosječna starost građana Republike Hrvatske od 41,70 godina. S druge strane, prema podacima Ujedinjenih naroda omjer građana iz kategorije 65+ u Hrvatskoj u odnosu na 100 radno sposobnih građana (odnosno građana u dobi od 15 do 64) za 2015. godinu iznosio je 28,20 (usporedbe radi, u Europi je najveći omjer za Italiju – 35,00, a najmanji za Makedoniju – 17,70), dok projekcije za 2050. iznose visokih 52,70 (Italija – 66,20; Makedonija – 42,00). Pristup informatičkoj tehnologiji i potreba za njom građanima u trećoj životnoj dobi došli su na red nešto kasnije, zbog čega nisu imali ni načina ni potreba za informatičkim i informacijskim opismenjavanjem formalnim putem tijekom radnog i inog vijeka. No iako su se s informatičkom i informacijskom tehnologijom prvi put susreli tek u kasnijoj životnoj dobi, mnogi građani treće životne dobi u svijetu danas ne bi mogli zamisliti kvalitetan život bez nje i bez učinkovitog korištenja interneta. Unatoč tomu, dostupni podaci govore o tome da osobe treće životne dobi predstavljaju rastući, ali još uvijek slabo zastupljen udio korisnika interneta. U Velikoj je Britaniji primjerice u 2016. godini zabilježeno 4,2 milijuna građana starijih od 65 godina koji nisu nikada koristili internet, dok podaci Eurostata za Hrvatsku svjedoče da postoji trend porasta broja građana iz kategorije 65+ koji nemaju pristup internetu u svome domu (u 2014. ih je bilo 6,40 %, a u 2015. 8,10 %). Istovremeno, taj se postotak smanjuje na razini cijele

Europske unije (2014. – 17,50 %, 2015. – 15,20 %). Podaci koji govore o dostupnosti interneta u kućanstvima osoba treće životne dobi u Hrvatskoj pomalo su zabrinjavajući s obzirom na to da je internet kao medij idealan za starije osobe koje imaju problema s mobilnošću jer im olakšava komuniciranje i rješavanje financijskih pitanja, nudi zabavu, nabavu (kupovinu) potrebnih artikala te mogućnost informiranja. Svakako razloge za takve podatke treba tražiti u nepovoljnoj financijskoj situaciji staračkih domaćinstava u Hrvatskoj te život na granici siromaštva za veći dio starije hrvatske populacije.

Istraživanja svjedoče da osobe treće životne dobi, kada se konačno na to odluče, rado uče i postaju revni korisnici interneta, iako njihovo usvajanje novih znanja i vještina nailazi na niz prepreka uzrokovanih njihovom poodmaklom dobi. No jedna od prvih i najvećih prepreka svakako je njihov prvotni otpor i negativne emocije prema novim, njima nepoznatim tehnologijama. Štoviše, taj otpor raste s dobi – što je osoba starija, to je otpor u pravilu veći. U ostale prepreke ubrajaju se fizička i kognitivna ograničenja te smanjena mogućnost percepcije.

Unatoč svim tim ograničenjima, istraživanja u razvijenim zemljama pokazuju da nešto mlađe osobe (50+ ili tzv. generacija baby boomera) provode više vremena online od svojih mlađih ili starijih sunarodnjaka. Prema istraživanju iz 2016. godine 31,00 % američkih pripadnika generacije 50+ provodi online minimalno 15 sati tjedno, a njihove su najčešće online aktivnosti čitanje novina, sudjelovanje u društvenim medijima, istraživanje različitih proizvoda te online kupovina. U istraživanju koje su proveli Reisenwitz, Kuhlmeier i Eastman na uzorku od 374 američka građanina u dobi od 65 i više godina rezultati pokazuju da su ispitanici u prosjeku koristili internet 5 sati tjedno (15,00 % ispitanika koristilo je internet više od 10 sati tjedno). Najčešći razlozi za korištenje interneta u navedenom istraživanju bili su sljedeći: održavanje kontakta s prijateljima i rodbinom (40,00 %), čitanje vijesti (26,00 %), informacije o zdravlju (24,00 %), kupovina (23,00

%),te zabava (11,00 %). Slično, najpopularnije internetske aktivnosti među američkim starijim osobama prema istraživanju istraživačkog centra Pew jesu korištenje elektroničke pošte, pronalaženje informacija o hobijima, čitanje novina, traženje informacija o zdravlju, zabava i vremenska prognoza. Općenito gledajući, za većinu pripadnika starije generacije koji tek kratko vrijeme koriste računala i internet glavni razlog za ulaganje napora za ovladavanje novim tehnologijama jest upravo njihova smanjena mobilnost i potreba za komunikacijom s obitelji, prvenstveno djecom i unucima. Međutim nisu svi pripadnici starije generacije jednako vješti u korištenju informacijske i komunikacijske tehnologije i za njih je rješenje sudjelovanje u nekom od programa informacijske pismenosti. Programi informacijskog opismenjavanja za osnovne i srednje škole, obitelji, osobe treće životne dobi i druge društvene skupine provode se i u brojnim narodnim knjižnicama. Shodno tomu, brojni su radovi koji svjedoče o tome kako (narodne) knjižnice provode radionice informacijske i informatičke pismenosti za osobe treće životne dobi, najčešće kao jedan od oblika cjeloživotnog učenja. Tako je jedna narodna knjižnica u Australiji provela niz radionica želeći svoje starije korisnike osposobiti za korištenje svih knjižničnih usluga, pa i onih elektroničkih, te im pomoći da svoje tablete koriste ne samo za čitanje nego i za komunikaciju i pronalazak informacija. Sljedeći zanimljiv projekt koji poboljšava svakodnevni život osoba treće životne dobi provođen je pod nazivom Senior CHAT (Consumer Health Awareness Training). Za cilj je kroz informacijsku pouku starijih građana imao poboljšati dostupnost informacija o zdravlju u osiromašenoj župi u Louisiani. Knjižničari na državnom sveučilištu u jugoistočnoj Louisiani surađivali su s centrima za osobe treće životne dobi kako bi promovirali baze podataka Nacionalne knjižnice za medicinu. Postoje projekti koji istražuju povezanost korištenja pametnih telefona i razvoja informacijske pismenosti kod starijih. Rezultati istraživanja u Koreji pokazuju da korištenje pametnih telefona značajno utječe na internetsku

pismenost osoba treće životne dobi. Kako podučavanje učiniti laganim, a pristup informatičkoj pismenosti za odrasle i osobe treće životne dobi učinkovitim, u svom je radu objasnila Kara J. Gust s Michigan State Universitya, East Lansing, Michigan, SAD

4.1. Translation of Source Text III

Digital Competencies and Older Adults: Analysis of the Computer and Information Literacy Program for Older Adults at the City and University Library in Osijek

1. Introduction

Literacy (Lat. Literatus) is a concept that developed over time and held different meanings. Some of the definitions define literacy as the ability to use language in a written form because a literate person knows how to express their thoughts in written form, they know how to read and write and understand their mother tongue. Later definitions introduce literacy into the concept, as well as understanding of functional literacy. With this addition, the definition becomes more complex, defining literacy as one of the skills needed for basic functioning in society. Today it also implies the ability of using information technology, as well as the ability to search, find, value and use information. A new form of information literacy is also being developed, as well as the ability to recognize the need for information and the ability to locate, evaluate and effectively use the necessary information. Objectives of literacy are also being changed; it now has the goal of upbringing and educating a person, to create the foundation for learning throughout one's entire life, and to develop an individual's ability in all personal and professional demands. In modern times, functioning implies the digital inclusion of an individual. This inclusion represents the ability to recognize the importance of a multitude of files and information for social, economic and personal development. It also represents training to help recognize old and new information-communication technologies (mobile phones, Internet, computers), training for usage of basic service programs, training for Internet usage for personal or business needs, as well as training for

a critical attitude towards available information and the acquisition of basic knowledge on the types of computers. The American Library Association (ALA) defines information literacy as a group of skills needed in finding, analyzing and using information. Standards and conditions of everyday life necessitate the possession of this knowledge, the possession of the ability to learn and knowledge while using information. Information literacy is changing with time, the development of technologies and changes in the sources of information itself. It is necessary to constantly adjust this type of literacy to new standards. The library plays a large part in this, as an information institution. It mostly provides or should provide conditions for the education of people in information literacy no matter their age. Through various forms of workshops, classes and seminars, the library can provide new knowledge and skills. As the availability of information grows, a question presents itself on to what extent the information is available to all members of society, i.e. do all of them have the same previous knowledge, to what extent are they informatically literate, do they have the financial possibilities to insure themselves with appropriate technology for access to information, etc. All of the above especially refers to older adults, what with weak pay power (small pensions), what with information and the information age in which we are living, which is constantly bringing changes into all aspects of human life, bringing new processes of learning and education.

2. Older adults and information technology

Human society is getting older, a phenomenon of global proportions. For example, in 2015, the world recorded an increase of 48% in the category of people aged 60 and over compared to year 2000. Two thirds of the oldest living people in the world live in developed countries and their number is growing much more rapidly than that of people in developing countries. The reason for

this situation is in large part due to decreased fertility of society and low birthrate on one hand and better level of healthcare on the other.

In most countries in the world, old age begins at 65. In Croatia, this is the year when most citizens capable of work retire, making 65 the accepted beginning of old age in Croatia. The World Health Organization divides old age in three groups: early old age (65-74 years of age), middle old age (75-84 years of age) and deep old age (85 and over).

According to the data from the Croatian Bureau of Statistics, in 2011, Croatia had 17,70% of citizens aged 65 and over. That year, the recorded average age of the citizens of the Republic of Croatia was 41,70 years. On the other hand, according to the data of the United Nations, the ratio of citizens in the 65+ category in relation to 100 citizens capable of work (citizens aged 15 to 64) in 2015 was 28,20 (for comparison purposes, in Europe, the highest ratio is in Italy – 35,00, and the smallest in North Macedonia – 17,70), while projections for 2050 amount to a high 52,70 (Italy – 66,20; North Macedonia – 42,00). Access to information technology and the need for it came later to citizens in old age, which is why they did not formally have a way or need for IT or information literacy during their working lifetime. However, although they have only met with IT and information technology later in their lifetime, many older citizens today could not imagine a quality life without it and the efficient use of the Internet. Despite that, available data tells us that older adults represent a growing, but still poorly represented share of Internet users. In Great Britain, in 2016, it was recorded that 4,2 million of citizens over the age of 65 had never used the Internet, while Eurostat's data for Croatia tells us that there is a trend in the increase of citizens over 65 who do not have access to the Internet in their homes (in 2014, there was 6,40 of them, in 2015 8,10%). At the same time, that percentage is getting smaller on the level of the EU as a whole (2014 – 17,50%, 2015 – 15,20%). The data on the availability of Internet in homes of older adults

in Croatia is slightly worrying given the fact that the Internet as a medium is ideal for older people who have mobility problems. The Internet makes communication and solving financial problems easier, offers entertainment, purchase (shopping) of needed products and the ability to inform oneself. The reasons for this data should definitely be looked for in the unfavorable financial situation of old households in Croatia and life on the verge of poverty for the bigger part of the older Croatian population.

Research shows that older adults, when they finally decide to, are willing to learn and become zealous Internet users, although they face a series of obstacles in the adoption of new knowledge and skills due to their advanced age. But one of the first and biggest obstacles is definitely their initial resistance and negative emotions toward new, to them unknown technologies. Moreover, the older a person is, the resistance is generally larger. Among other obstacles, there are physical and cognitive limitations and a decreased ability of perception.

Despite all these limitations, research in developed countries shows that slightly younger people (50+ or the so-called, *baby boomer* generation) spend more time online than their younger and older countrymen. According to a research from 2016, 31,00% members of American Generation X spend minimally 15 hours online weekly, and their most frequent online activities include reading newspaper articles, using social media, researching various products and online shopping. In a research carried out by Reisenwitz, Kuhlmeier and Eastman based on the sample size of 374 American citizens aged 65 and over, results show that test subjects, on average, used the Internet 5 hours per week (15,00% of subjects used Internet more than 10 hours per week). The most frequent reasons for Internet usage were the following: maintaining contact with friends and relatives (40,00%), reading news (26,00%), information on health (24,00), shopping (23,00%) and entertainment (11,00%). Similarly, the most popular Internet activities among older American

citizens according to Pew Research Center are E-mail usage, finding information on hobbies, reading newspapers, looking for health information, entertainment and weather prognosis. Generally looking, for most members of the older generation that have only been using computers and the Internet for a short time, the main reason for investing effort into mastering new technologies is their decreased mobility and need for communication with family, primarily children and grandchildren. However, not all members of the older generation are equally skilled in using information and communication technology. For them, the solution is participation in an information literacy program. These programs, ranging from ones for elementary schools, high schools, families, older adults and other social groups, are held in numerous public libraries. Accordingly, there are numerous works that testify how (public) libraries hold workshops on information and IT literacy for older adults, most often as one of the forms of lifelong learning. One public library in Australia held a series of workshops wanting to enable its older users to use all of its library services, including electronic ones, and help them use their tablets not only for reading but also for communication and finding information. The next interesting life-enhancing project was held under the name Senior CHAT (Consumer Health Awareness Training). Its goal was to improve availability of information on health in a poor parish in Louisiana through information lessons. Librarians from the state university in southeastern Louisiana cooperated with centers for older adults to promote the National Library of Medicine's databases. There are projects which explore the connection between using smartphones and the development of information literacy in older people. The results of a study in Korea show that using smartphones significantly affects the Internet literacy of older adults. Kara J. Gust, from Michigan State University, East Lansing, Michigan, USA, in her work explained how to make lessons easier, and access to information literacy for adults and older adults more effective.

4.2. Commentary and Analysis

TEXT III: Digital Competencies and Older Adults: An Analysis of the Computer and Information Literacy Program for Older Adults at the City and University Library in Osijek

1. Genre: Excerpt from a scientific article.

2. Source: The article was written by Srđan Lukačević, Dino Radmilović and Kornelija Petr Balog. It was published in *Vjesnik bibliotekara Hrvatske* in 2018.

3. Audience: The text is intended to be read by other specialists in the field of information technology and anyone interested in that field.

4. Purpose of writing: The purpose of the paper is to clarify the terms *information literacy* and *computer literacy* and point out their importance for everyday activities of older adults in order to reduce their social exclusion.

5. Authenticity: The text is an original scientific article, published in a scientific journal.

6. Style: The style used in the article is informative and formal.

7. Level of formality: Formal.

8. Layout: The translated excerpt was taken from the beginning of the paper, starting with the *Introduction,* and also including the section *Older Adults and Information Technology*. The first section consists of one paragraph, while the second section is composed of five paragraphs. The beginning lines in paragraphs are indented and vary in length. Headings are written in bold.

9. Content: The text starts by giving a definition of literacy, and the history of the term. It explains how in the present, there are various forms of literacy, one of which is information literacy, the definition of which is given. In the second section, the text explains how the average age of the human population is getting higher, providing various definitions of old age. The article then explains the attitude of older adults towards information technology, and gives information on the most frequent activities of older adults who use information technology.

10. Sentence Patterns: This text contains sentences of medium to long length. Some of the sentences are very long.

12. Terminology of the subject: Most of the terminology in the text is quite basic.

4.3. Workflow

In the first sentence, the abbreviation for Latin, *Lat.,* has its first letter capitalized while the original Croatian text does not have it capitalized. The first letter should be capitalized in English.

Although the article I translated was originally written in Croatian, an English title was provided in the abstract. The English title of the article is *DIGITAL COMPETENCIES AND OLDER ADULTS: AN ANALYSIS OF THE COMPUTER AND INFORMATION LITERACY PROGRAMME FOR OLDER ADULTS AT THE CITY AND UNIVERSITY LIBRARY IN OSIJEK*. I wanted to mostly use the official translated title, to keep it as close to the spirit of the Source Text as possible. However, in this case I had to make a small modification; I changed *programme* to *program.* This change illustrates the difference between British English and American English, in which various words are spelled differently; e.g. words such as *programme, colour, analyse* are spelled *program, color, analyze* in American English. Since I used American English in this entire thesis, I also decided to use it here, for the sake of consistency.

One of the main challenges while translating this text was its structure, specifically the length of the sentences. Sentences in this text are usually of above average length, which can be a problem when translating, as English prefers shorter sentences. An example of this is this sentence: *Funkcioniranje u današnjem vremenu podrazumijeva digitalnu inkluziju pojedinca, što u konačnici predstavlja mogućnost spoznavanja važnosti mnoštva podataka i informacija za društveni, gospodarski i osobni razvoj, osposobljavanje za prepoznavanje stare i nove informacijsko-komunikacijske tehnologije (mobilna telefonija, internet, računalo), stjecanje osnovnih znanja o vrstama računala, osposobljavanje za korištenje osnovnih uslužnih programa, osposobljavanje za korištenje interneta za osobne ili poslovne potrebe i osposobljavanje za kritički*

stav prema raspoloživim informacijama. As expected, this sentence was difficult to translate into English and retain the original meaning. The translated version reads: *In modern times, functioning implies the digital inclusion of an individual. This inclusion represents the ability to recognize the importance of a multitude of files and information for social, economic and personal development. It also represents training to help recognize old and new information-communication technologies (mobile phones, Internet, computers), training for usage of basic service programs, training for Internet usage for personal or business needs, as well as training for a critical attitude towards available information and the acquisition of basic knowledge on types of computers.* As can be seen here, I divided the original sentence into three and rearranged the word order to make it easier and more understandable to read in English.

I had to look up the official English names of some institutions, such as *Hrvatski statistički zavod,* which is officially translated in English as the *Croatian Bureau of Statistics*. The information could be found at the official website of the Croatian Bureau of Statistics.

The original English name of *Nacionalna knjižnica za medicine* is *National Library of Medicine,* which also has an official website that served as a reference for the translation.

5. Conclusion

In this thesis, I have laid out some problems that arise when translating scientific texts, as well as my choices for how to deal with these problems. On first glance, scientific texts may seem easy to translate, as they are very straighforward. However, an issue translators face when translating such texts is the large amount of specialist terminology, a problem that was most notable in the first text of this thesis. These specialist terms are difficult to translate as the translator is not given much freedom in the choice of how to translate them. Sometimes, certain terms can be misleading, and are translated differently into the target language than one would expect. Therefore, I had to perform additional reserch, so that I could find the official English names of the terms used. A certain degree of knowledge in the field one is translating may also needed, especially when translating something technical like manuals.

Additionally, as the texts I was translating are formal texts, I was expected to use certain collocations and phrases associated with such texts. But before I could do that, I had to analyze each text in order to determine how to go about my translation. In this regard, genre analysis was a helpful tool.

Finally, I would like to say that there is far more included in the process of translation than just translation itself. Languages are separated by a gap that consists of far more than just linguistic differences, and making a good translation means taking into account all these factors. The translator's responsibility is to provide an accurate translation, one that will cause a similar effect as the original did for its readers. In other words, it is up to the translator to bridge that gap in the best way they can.

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