International Conference on Education and Educational Psychology (ICEEPSY 2012)

Gender differences in reading habits among boys and girls of basic school in Estonia*

Anne Uusen*, Mare Müürsepp

Tallinn University, Narva str 25, Tallinn 10120, Estonia

Abstract

Problem Statement: Reading habits and reading interest of teenagers is probably the most discussed issue among teachers and in media as well in Estonia during last five years. The year 2010 had been announced as reading year in Estonia. Therefore it is not hard to understand the actuality of named issue, especially in the light of 5 Education Benchmarks for Europe defined by the European Commission in the framework of the Lisbon-Strategy. It is hard to find a better timing for the dealing with reading issues, taking into consideration that starting from September 2010 the new National Curriculum came into force in Estonia, where literature is named as separate subject from grade 5 upwards. This leads to a stereotypical conception about reading, which expresses the opinion that: 1) reading (also the skill of reading) mostly refers to reading fiction; 2) our teenagers are bad readers (they don’t read enough literature); 3) especially boys tend to read less and less.

Purpose of Study: The above discussed standpoints and participation in the ADORE-project provided the need to organize the research, the goals of which was to find out 1) what kind of texts are authentic for the students, what they read voluntarily, how long time teenagers spend with reading etc. and 2) are there differences between boys and girls in reading habits.

Research Methods: The quantitative research method in the form of questionnaire was used, which included 15 open-ended and multiple-choice questions. 140 students participated in the survey.

Findings: The results of the research showed that there are differences between boys and girls in many aspects of reading habits and preferences. Boys named themselves mostly as average or poor readers, they read less classical literature voluntarily, they spend less time with reading, they don’t like to read long books and books with small letters etc. In the same time, boys and girls seemed to be rather similar readers by computer.

Conclusions: The results of the conducted questionnaire provided the food for thought about broadening the assortment of reading materials for students and for making Estonian language lessons more suitable for every student.

© 2012 The Authors. Published by Elsevier Ltd. Open access under CC BY-NC-ND license.
Selection and peer-review under responsibility of Dr. Zafer Bekirogullari of Cognitive – Counselling, Research & Conference Services C-crcs.

Keywords: broader concept of reading, reading habits, literature, authentic text

* This article is supported by grant ETF 8605
* Corresponding author. Tel.: +372-6199-717; fax: +6199-704.
E-mail address: anne.uusen@tlu.ee.
1. Research question

The results of the PISA (Programme for International Student Assessment) study provided evidence that relatively big number of adolescents in many European and non-European countries lack sufficient reading competence. Not only has the European Commission failed in decreasing the numbers in this risk-group of low achievers in reading, (a goal aimed at in the Education Benchmarks), but the rate of low achievers has even increased since 2000. This has been recognized as an urgent socio-political problem, since reading and understanding texts of all kinds are seen as the fundamental skills for acquiring knowledge, for participating in social and cultural life, for being successful on a job and for life-long learning at all stages of life (Garbe et al, 2010, 3). For this reason, the improvement of reading literacy counts among the 5 Education Benchmarks for Europe defined by the European Commission in the framework of the Lisbon-Strategy (European Commission 2008: 92).

According to the PISA survey data, some individual and family-specific risk factors increase the probability of belonging to the group of low achievers in reading literacy. Even though the influence of these factors varies in the different countries, they seem to play a role in almost all OECD countries. Three of the most important risk factors are 1) male gender (individual characteristic), 2) a low social status of the student’s family and 3) an immigration status (both family characteristics). Therefore, rather common viewpoint in Estonia that the majority of struggling young readers are male students seems to be justified.

Reading skill, reading interest, understanding of text and other aspects connected with reading have been researched quite a lot during the last decades in Estonia. During the last decade the Institute of Educational Sciences in the Tallinn University has conducted about twenty studies aimed directly at reading activeness, reading interest, understanding of text, etc. and a number of these have allowed to draw the conclusion that basic school students are rather good readers, although some of them prefer watching TV or using the computer over reading (Jukk, 2009; Lutsepp, 2004; Niit, 2002; Perovskaja, 2003; Piir, 2003; Põldsalu, 2002). A larger proportion of these studies have focused on one or two aspects of reading (Harmipaik, 2000; Ratasep, 2006; Sikk, 2005) or on the issues of understanding the text (Metsla, 2001; Kulderknup, 1999; Lillepea, 2001).

In the PISA (Program for International Student Assessment) survey in 2006, which primarily measured the skill of functional reading, Estonian students were very highly ranked. When we consider the number of students, whose results were on Level 3, 4, or 5, then among the OECD (Organization for Economic Co-operation and Development) countries Estonia held the 13th position. But when we look at the number of students, whose knowledge corresponded to or exceeded Level 2, then Estonia held the 8th position (Henno et al, 2007, 124–125). Thus, Estonia belongs among the countries, whose results are statistically significantly higher than the average of all the countries.

Since 1998 nation-wide placement tests in Estonia have been carried out among the students in Grades 3 and 6 to determine their level of reading skill; the main stress of the tests is on applying the skills of understanding a text. Additionally, the placement tests also measure the constituent skills of the Estonian language (reading, writing, listening). Some exercises concerning the language are also included. The focus is on reading and understanding different types of texts. The results of the placement tests have showed that students have average skills in reading (Pandis, 2006).

Thus, complaining about students' poor skills in reading seems to be unfitting (Vislapuu, 2010). Nevertheless, in Estonian press and among teachers the concern about students', especially male students', insufficient interest in reading, which compared to the past has considerably decreased, is very frequent, because the overall opinion is that students, especially boys, tend to read less and less (Hein et al, 2007; Hint, 2008; Vaher, 2008). Also PISA survey results confirm that in Estonia girls outperform their male peers by 45 points. This difference in performance between boys and girls is alarming because 40 points on the PISA reading literacy scale can be recorded as equivalent to one year of instruction at school (European Commission, 2008).

2. Short theoretical background

2.1. Interpreting the notions of reading and reading skill: functional reading or reading literacy

The problem, at least partly, lies in the fact that reading and reading skill are often interpreted in different ways. The researchers from Norway and Finland (the countries had very good results in PISA-surveys) stress the critical
importance of understanding the text in explaining the notion of reading, and that the meaning and importance of reading have changed during the last decade. Victor van Daal (2007) first points out the importance of reading in acquiring education and in coping well in everyday life. In Daal’s opinion reading books for one’s own interest is a sphere, where understanding the text is a „bonus“ for the reader.

There is a quite unanimous opinion about the fact that understanding the text that is being read is to great extent dependent on certain automatic processes (Kintsch & Rawson, 2005). As automatic processes the authors see such processes, the performing of which do not require intentional effort, such as the listening skill (in case of material presented in the native language). Another automatic process needed for understanding the text that is being read is undoubtedly recognizing words (i.e. mechanical reading skill), which provides the first means to understand what a text is about (Van der Leij & Van Daal, 1999). Thus, listening skill and the skill of reading words are unquestionably highly important at the initial stages of learning to read.

Perfetti, Landi and Oakhill (2005) reached the conclusion that essential constituent skills that children should acquire are 1) apprehending and understanding the meaning and the form of sentences in a text; 2) composing situation models; and most importantly 3) drawing conclusions, i.e. making a text coherent/understandable, because there is not a single text that is completely explicit. The skills that support the before-mentioned understanding processes include 1) general knowledge – knowledge about the world and how things function in the world, etc.; 2) linguistic knowledge – being aware of phonology, syntax, morphology, and pragmatics; 3) vocabulary – the vocabulary, which consists in words the meaning, but also the phonological, orthographic and syntactic features of which are known (Mikk, 1980; Perfetti, 1985).

The Estonian specialists of reading Mare Müürsepp (1995) and Meeli Pandis (2001) have explained in brief the skill of reading as comprehending the written language and responding to it, interpreting symbols, and the communication between the writer and the reader. Stereotypically, reading is regarded as the mechanical reading skill (Jürimäe, 2001). Another stereotypical conception about reading expresses the opinion that reading (also the skill of reading) means reading fiction. Despite of the demand of the new curriculum (2002) to look at the concept of reading and writing from a much broader viewpoint, there are still many teachers who define reading mostly as reading of classical literature. Hence the claim that teenagers read less generally means that in the speaker’s opinion they no longer read (enough) fiction. This was one argument that the native language teachers used to justify their wish to see literature as a separate subject in the curriculum from Grade 5 onwards. Wanting to talk about reading in a broader sense people tend to use the expression functional literacy.

Living in the 21st century demands much more from teenagers as readers than it did in the past century (Dillon, O’Brien & Heilman, 2000; Hoffmann & Pearson, 2000; Labbo, 1996). Lauren Resnick (1987) has noted that the skills and abilities that employers demand today are at least those demanded for college entrance just a few years ago, and she has argued also that in the near future the entry level jobs will require reading skills equivalent to those of today’s college sophomores.

In Finland and other countries the former notion of functional literacy has been replaced with the notion of reading literacy. Reading literacy is a person’s skill of using various kinds of written texts (also tables, diagrams, posters, etc.) to achieve one’s aims: a person masters reading and writing on the level, which enables him/her to live a full life in a social environment (Must et al 2001). A noted Finnish researcher of reading Pirjo Linnakylä (2000) adds the cultural environment to the social environment and recognizes that recently the constructivist approach has been expanded so that the process of understanding reading is approached from the socioconstructivist or the sociocultural point of view.

The socioconstructivist point of view stresses that the reader’s interpretation is not influenced simply by his/her personal expectations, knowledge and intentions, but also by these that originate and arise in socializing with other readers. However, the sociocultural point of view rather stresses the culturally authentic (true, original) real-life texts and the processes of understanding, where the surrounding community and the cultural context have an important role in developing a meaning (Linnakylä, 2000; Langer, 1995).

The aforementioned proves that talking about reading, reading activeness or interest of students in the 21st century should largely be based on the socioconstructivist or sociocultural standpoint. In other words, taking into account the types of texts students regard authentic at a certain age or what they daily read in case of need or wish, reading should not be limited simply to reading fiction (Ehala, 2009).
2.2. The gender differences in reading literacy

PISA identifies reading literacy as the skill with the largest gender gap. Though there are differences between countries, on average girls outperform boys. In turn, male students are more likely to be the lowest performing readers. According to PISA 2006, 17% of the 15-year-old girls and 30%, almost twice the number, of boys in the same age group belong to the group of struggling readers (European Commission, 2008).

As to take as an example Finland, where overall performance was very high, gender is identified as the indicator with the most visible negative impact on performance in reading literacy: Finnish girls outperform their male peers by 51 points, according to the PISA survey of 2006, the gender gap in Finland is the second largest after Greece among OESD countries (Linnakylä, Välijärvi and Arffman, 2007).

Therefore, similar results from different surveys support the assumption that the effect of gender on reading literacy is a serious challenge for education systems in all European countries, included Estonia.

In some countries, gender awareness in reading research has led to more specific insights into the gender gap in reading literacy and to conclusions concerning the opportunities for gender-specific reading promotion. The study of separate skills in reading in Estonia accentuated for example that each of boys, who named themselves as non-readers, had certain skills concerning the reading activities higher than medium level of the sample (Trofimov, 2004).

According to Garbe, it’s possible to find stable gender differences in the following five reading-specific domains in all reading-and media-usage:

- Reading quantity and frequency: girls read more frequently and longer than boys.
- Reading material and preferences: girls read other books, magazines and electronic texts than boys.
- Ways and modalities of reading: girls read differently from boys.
- Reading enjoyment and affection: girls like reading more and receive more satisfaction than boys.
- Reading achievement: girls perform better in reading than boys, especially when working on demanding tasks (Garbe, Holle and Weinhold, 2010, 16–17).

3. Methodology of research

The above discussed theoretical standpoints, PISA survey results about gender differences and participation in the ADORE project in 2006–2008 provided the opportunity and the need to thoroughly research the reading problems of adolescent readers and delve more deeply into the gender differences in reading activeness in Estonia, which excited interest in and prompted to launch a broader survey on reading activeness and interest in reading of the 6th grade students in basic school.

The quantitative research method in the form of questionnaire was used, which included open-ended (9) and multiple-choice (4) questions. The researcher conducted the survey personally and schools in the survey were selected randomly by the principle that most of the regions of Harjumaa (region near the capital of Estonia) and both types of schools (basic schools and gymnasiums) would be represented. All the schools that participated in the survey are ordinary public schools.

140 respondents from 7 randomly selected schools from Harjumaa participated in the survey. 72 of them were boys and 68 were girls.

The questionnaire included 13 questions that covered the following topics: a) general information about the student; b) student's attitude towards reading and his/her reading skill; c) frequency of and preferences in reading fiction, media texts, study materials, and computer texts; d) general reading activeness. Drawing up the questions was based on the key elements of good working practices promoting the skill of reading, which turned out during the ADORE project, and the interviews of sociological surveys conducted in Estonia and Finland (ADORE-Project: Executive Summary, 2009; Hansson, 2009; Linnakylä et al, 2000). In this paper the focus is only on general aspects of reading and literature reading. Data processing and analysis (percentages, frequencies of answers) were conducted by using MS Excel.

To find out, whether or not the gender gap in reading quantity, frequency, preferences etc. is the same as in other European countries, the questions about the preferences and frequency of reading treated in the article include:

- How do you evaluate yourself as reader?
- When did you last read a book by your own choice and will?
• When did you last read a book of fiction voluntarily?
• How long time do you spend with reading every day (approximately)?
  In case of reading texts on the computer the following questions are discussed:
• What source do you prefer to read: computer, book or both?
• What do you mostly do on the computer?

4. Results of the research

As one of the aims of the survey described in this article was to map general tendencies and to give preliminary overview about reading habits of male and female teenage students for preparing a larger future research, it is practical to confine in the article only to above mentioned questions and to percentages and frequencies of answers.

![Figure 1. How do students evaluate themselves as readers?](image)

As shown in Figure 1, boys evaluate themselves as readers generally much lower than girls. Therefore it can be said that they think they perform worse in reading than girls. When altogether 58% of girls named themselves as good readers, then only 33% of boys are holding the same opinion about themselves. Almost half of the boys (46%) named themselves as average readers (32% of girls) and even 16% of male students (9% of female students) announced that they don’t like reading at all.

![Figure 2. When did students read a book not connected with school task?](image)
About frequency of reading whatever book not connected with school task turned out (Figure 2) that 80% of girls and only 57%, almost one third less, of boys read a book during last month. But there was also almost quarter (24%) from male students who admitted that they read any kind of book even more than a year ago. From female students only 6% read a book the same long time ago.

The gender gap was even more drastic connected with frequency of reading fiction voluntarily.

Figure 3 shows that when almost half of the girls (48%) read fiction within last month, then only 32% from boys had read fiction during the same time period. The biggest difference between genders was expressly in frequency of reading fiction or belles letters. According to the results of the research, 16% of girls and 42%, even more than twice a number, of boys read fiction book more than a year ago.

There was also question about how much time do students spend every day with reading different texts not connected with school tasks in the questionnaire. Girls average time spent with reading every day is 114 minutes (1 hour 54 minutes) and boys read every day approximately 74 minutes (1 hour 14 minutes) on the average. Therefore it is obvious that girls read more frequently and longer than boys.

It is rather common viewpoint in Estonia that teenagers prefer to read any kind of texts, included fiction and classical literature, by computer, if it could be possible. And there is even more strong opinion that adolescent students tend to spend almost all free time communicating and playing games on computer in Estonia.
The results of the study did not actually support very strongly above-mentioned attitude. Both, boys (45) and girls (48) rather equally prefer to read a paper book (see Figure 4). Comparing male and female students who like to read by computer, there was a slight difference between genders: 25 boys and only 15 girls said they prefer to read a book by computer. The reasons, why it is better to read paper book, where following: computer can be harmful for your health; you can close a book and open it next time from the same place; it’s possible to take a book with you; reading a book is more comfortable and you can trust what is written on the book etc.

Boys and girls seemed to be generally rather similar practitioners on computer (see Figure 5). On the computer both boys (26%) and girls (27%) mostly look for interesting materials or surf in Internet. Also communicating with friends is very popular, as well as playing computer games. Anyway, there was slight gender gap among last-
mentioned activities. 21% of boys believe they use computer for communicating with friends and 28% of boys play mostly computer games. In the same time almost third part from girls (31%) believe they communicate with friends on computer and only 10% of girls use computer for playing games. So, female students seem to be a little more pragmatic computer users as boys.

5. Discussion and conclusion

The Estonian society and therefore also Estonian teachers expect high-level performance from every student in almost every field of studying, including reading. At the same time there is rather traditional and stereotypical attitude towards gender models and roles in the Estonian society, as well as towards gender gap in reading skills and preferences. As most of the teachers in Estonia are female, largely common viewpoint among the teachers expresses opinion that male teenage students are worse readers than female; they read less frequently, they don’t read enough, they prefer to read or to do something else by computer etc.

The results of the preliminary research on the reading frequency and preferences of adolescent readers in Estonia unfortunately supported above-mentioned attitude. The survey introduced in the article showed that, as in many other European countries, also in Estonia boys self-concept as a reader is lower than girls self-concept: they believe they are average readers and they don’t read very much. Rather big amount of teenage boys don’t like to read at all.

Almost half of the boys who participated in the study admitted that they read a book of fiction more than a year ago. This is even twice bigger number comparing with girls. Analyzing time students believe to spend with reading every day, the tendency seems to be the same. Boys read nearly twice shorter as girls.

Comparing the issue of reading fiction with the results of the corresponding survey conducted in Finland we can state that based on the given results Estonian students read more fiction than their peers in the neighboring country. Linnakylä (2000) study showed that 53% (41% of girls and 12% of boys) of 15-years-old students claimed that they read fiction several times a month (Estonian results 66%). However, on their own initiative Finnish students read considerably less fiction compared to other texts (e.g. newspapers and magazines).

Connected with other stereotypical opinion in Estonia about boys` preferences of using computers more than girls the results of the study shows that there is not significant gender gap in named issue. Male and female students are rather similar computer users in Estonia.

Gender differences in many aspects of reading among boys and girls of basic school in Estonia gave the bases to agree with the sequitur of PISA survey that special efforts are required by all countries, included Estonia, to minimize the shortcoming of boys, because reading literacy is regarded as a basic skill that is needed for learning process in all other subject domain (Garbe, Holle and Weinhold, 2010, 17).

Gender awareness regarding reading promotion has to take many aspects into account: under the terms of today’s media supply and male peer groups, it has become a difficult task to develop a stable self-concept as reader. A key ingredient in enhancing boys’ positive learning experiences in reading literacy instruction is a wider view of reading and texts. The results of the project “Schools Where Literacy Thrives” convinced clearly that the schools, which reported about boys success in reading, imply the methods like guiding to the widest choice of reading material, reading integrated to different subjects, to the contest, to the drama based on pupils' own initiative, to the activities in open air etc (Müürsepp, 2010). The essence of the matter is acknowledging that boys are competent readers in context and purposes relevant to them (Sulkunen, 2007a, 189). Thus, general conception that boys do not read deserves critical reconsideration.

School programs and communal, regional and national activities should keep gender in mind. Pertaining reading research at the national level is required, as well as a national curriculum that takes into account gender differences regarding the supply of reading materials (Garbe, Holle and Weinhold, 2010, 18).

The results of the study described in current article support once again the opinion that the didactic specialists of the Estonian language hold: it is time to start broadening and modernizing the selection of reading materials and to make teaching Estonian more pragmatic. Since individual students’ interests may vary considerably, it is wise to let students choose their own reading materials whenever possible and provide them with a wide selection of texts.
References


Jürimäe, M. (2001). The role of phoneme awareness in the process of learning to read. [Diploma paper in the Faculty of Educational Sciences in the TU.]


Lillepea, K. (2001). Tekstiteadmised ja tekstist õppimise strateegiad 3. ja 4. klassis [Understanding the text and strategies of learning from the text in grades 3 and 4]. [Master's thesis in the Faculty of Educational Sciences in the TU.]

Perovskaja, T. (2003). *Laste lugemishuvi teises kooliastmes* [Reading interest of children in second stage of basic school]. [Diploma paper in the Faculty of Educational Sciences in the TU.]

Piir, K. (2003). *Eesti ja vene õppekeelelega koolide 11. klasside õpilaste lugemiseelistused ja – harjumused* [Reading preferences and habits of 11th grade students’ in Russian speaking and Estonian speaking schools]. [Bachelor's thesis in the Faculty of Educational Sciences in the TU.]

Põldsalu, C. (2002). *Eesti uuema lastekirjanduse vastavus algklassilaste lugemishuville* [Suitability of Estonian new children’s literature to reading interest of primary school students]. [Diploma paper in the Faculty of Educational Sciences in the TU.]

Rataspep, A. (2006). *Projekti “Lugeda on mõnus” võimalused aktiivse lugeja kujunemisel info-kommunikatsioonitehnoloogia vahendite toel* [Project “Reading is fun” as possibility to form active reader with the help of ICT]. [Master's thesis in the Faculty of Educational Sciences in the TU.]


Sikk, Ü. (2005). *Lapse eneserefleksioon lugejana ja “hea lugeja” mõiste* [Child’s self-reflection as reader and concept of “good reader”]. [Master's thesis in the Faculty of Educational Sciences in the TU.]


Van Daal, V. (2007). *Socrates ADORE Teaching Adolescent Struggling Readers.* [Norwegian description of the current state of the ADORE project.]


Vislapuu, P. (2010). *Põhikooli II astme õpilaste lugemissagedus ja lugemishuvi* [Reading frequency and interest of basic school students]. [Master's thesis in the Faculty of Educational Sciences in the TU.]