

KADIR HAS UNIVERSITY
GRADUATE SCHOOL OF SOCIAL SCIENCES



PICTURE BOOKS VS. PICTURE BOOK APPS: AN IN-DEPTH
ANALYSIS OF INDUSTRY EXPERTS

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ANALYSIS OF INDUSTRY EXPERTS



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NEFİSE ATÇAKARLAR

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Disclaimer

“I, Nefise Atçakarlar, confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.”



NEFİSE ATÇAKARLAR

ABSTRACT

PICTURE BOOKS VS. PICTURE BOOK APPS: AN IN-DEPTH ANALYSIS OF INDUSTRY EXPERTS

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Master of Social Sciences in New Media

Advisor: Assist. Prof. Dr. Çağrı Yalkın

September, 2016

The aim of this research is to examine the differences between tale picture books and tale picture book apps, prepared for children at the age of 7 to 9; according to their effects on children's reading culture; in terms of authors, critics and editors in Turkey. In this thesis, before analyzing the research, relationship of tales and reading culture of children were reviewed briefly. Statistical data about books, children and children's Internet using behaviors were investigated. Researches defining properties of book apps and comparing the differences of children's books and book apps in terms of their effects on children's reading culture were analyzed.

In order to explore, qualitative research was preferred because the research question could be best answered by in-depth investigation. By using purposeful criterion sampling, e-mail and in-depth interview were done with 22 publishing professionals (editors, critics, authors, managers), who are in touch with children all around Turkey for at least 5 years. 20 open-ended questions were prepared as a part of semi-structured interview. Both in the e-mail and in-depth interviews, questions were re-structured if needed. Questions were investigating the differences between books and apps, in terms of their effects on reading culture, both directly and indirectly. Similar parts of the interviews were gathered and engaged with literature in order to make in-depth analysis.

This research intends to develop foresight for children's literature and reading culture by defining the differences between the picture books of old and new media.

Keywords: children's picture books, tales, children's picture book apps, reading culture, convergence culture, Turkey

ÖZET

RESİMLİ MASAL KİTAPLARI, ELEKTRONİK MASAL UYGULAMALARINA KARŞI: SAHA UZMANLARIYLA DERİNLEMESİNE ANALİZ

Nefise Atcakarlar

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Bu araştırmanın amacı 7-9 yaş arası çocuklar için hazırlanan, resimli masal kitapları ve elektronik, resimli masal uygulamaları arasındaki farklılıkları; çocukların okuma kültürü üzerindeki etkilerine göre; Türkiye'de yazar, eleştirmen ve editörler açısından incelemektir. Bu tezde, araştırmanın analizine geçmeden önce masallar ve çocukların okuma kültürü ilişkisi kısaca incelenmiş; kitaplar, çocuklar ve çocukların Internet kullanım davranışları hakkında istatistik veriler irdelenmiş; elektronik kitap uygulamalarının özelliklerini tanımlayan ve resimli kitaplar ile elektronik kitap uygulamalarını, çocuklar üzerindeki etkileri bakımından karşılaştıran araştırmalar gözden geçirilmiştir.

Araştırma sorusunun derinlemesine bir araştırmaya ihtiyacı olduğu için, nitel araştırma tercih edilmiştir. Yayıncılık alanında emek vermekte ve Türkiye'nin her yerinde çocuklar ile en az 5 yıldır yakından görüşmekte olan editörler, eleştirmenler, yazarlar, yöneticiler arasından ölçüt örnekleme ile 22 uzman belirlenmiş ve bu uzmanlarla, e-posta ile ve derinlemesine mülakat yapılmıştır. 20 açık uçlu soru, yarı yapılandırılmış olarak hazırlanmış; görüşmeler sırasında gerektiğinde sorular yeniden yapılandırılmıştır. Kitaplar ve kitap uygulamaları hakkında hem doğrudan okuma kültürü üzerindeki hem de dolaylı etkileri bakımından irdeleme amaçlı sorular sorulmuştur. Elde edilen veriler, görüşmelerin benzer parçaları bir araya getirilip literatürle bağlantı kurularak derinlemesine analiz yapılmıştır. .

Bu araştırma, eski ve yeni medya ürünleri olan kitaplar arasındaki farkları tanımlayarak çocuk edebiyatı ve okuma kültürü için öngörü geliştirme niyetindedir.

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List of Abbreviations

App: Application

IBM: International Business Machines

NASA: National Aeronautics and Space Administration

US: United States

e-book: Electronic book

e-reading: Electronic reading

e-reader: Electronic reader

UNICEF: United Nations Children's Emergency Fund

BC: Before Birth of Christ

DVD: Digital Versatile Disk or Digital Video Disk

VCD: Video Compact Disk

CD-ROM: Compact Disk-Read Only Memory

TurkStat: Turkish Statistical Institute

iOS: Apple's mobile operating system

EPUB: Electronic publication file

(.mobi): MobiPocket e-book file

GPS: The Global Positioning System

PC: Personal Computer

e.g.: For example

TPA: Turkish Publishers Association

BYB: Press and Publishing Association

YAYFED: Federation of Professional Associations of Publishers

OECD: The Organisation for Economic Co-operation and Development

IPA: International Publishers Association

UK: United Kingdom

1. Introduction

New media affects all kinds of special, public and political life today, as the new media of the past. However, because of the trend and the velocity, it has never caused a huge radical and global difference before. Almost all the studies are touching new media during last years (Alankuş 2015). As Manovich defined “*All new media objects are composed of digital code, they are numerical representations* (eds. Hassan & Thomas 2006: 10)” such as Internet, Web sites, computer multimedia and virtual reality (eds. Hassan & Thomas 2006). Internet has more than 3.6 billion users around the world (Internet World Stats 2016) and has become a source, which may be accessed automatically. Although users do not have enough technical knowledge or experience, they may use the applications and Websites easily (İnceoğlu 2015) and comparing to the traditional media, they may prepare their own content (Yanardağoğlu 2015). Children, born to this communication age; are spending time with computers and Internet and they are defined as digital natives (Bozdağ 2015; Prensky 2012). So, as Durkin and Conti-Ramsden (2014) said “*New media are commonplace in children’s lives.*” Electronic books, which are served with digital tablets, are part of new media, too (eds Hassan & Thomas 2006). The digital versions of traditional books are served with new reading possibilities for children via videos and interactive elements (Tepetaş Cengiz 2015), which lead to a new format, book apps (Kucirkova et al. 2015; O’Mara & Laidlaw 2011).

Book apps are much more innovated than e-books, which are both opponents of paper books and e-books, especially for children. Invention of book apps effected publishers, authors, illustrators, parents, printers, designers, interpreters, bookstores, engineers, librarians and distributors. Change in their lives may be researched. But the most important change is happening in children’s lives, as the main readers/users of the books and book apps. This thesis is important to understand the differences between books and book apps, which affect children’s reading culture.

2. Literature Review

2.1 Tales and Reading Culture of Children

Tales are the first literary genre that children meet (Çakır 2014; Yalçın& Aytaş 2005). They are classified to genres according to their main characters and subjects: Animal tales, extraordinary creature tales, stupid human tales and fairy tales. And also classified according to the author: Anonym folk tales, literary tales (Yalçın& Aytaş 2005). Tales are bridges between the real and dream world. Tales do not need to be surreal every time. Reality in tales is as incredible as the surreal telling. Readers hear their own voices in tales. Tales are part of different disciplines such as literature, psychology, sociology and even architecture because they do have their own places (Yılmaz 2010). Tales were in the verbal language and as soon as they were travelling via word of mouth, they have been developed, changed and took the shape they have today. They were in verbal language in old times but they are in written literature, in books today (İşnas 2011).

Good children's books, direct children to gain reading culture. Reading culture may be defined with the simplest version as, transformation of skills gained by reading, to life style (Sever 2013). This means that good children's books serve possibilities to children to test their ability of reading, esthetic expressions and illustrations; help children gaining conceptual, cultural, lingual, artistic, social and semantic consciousness and awareness; create characters and heroes that children can imitate. These characters help children for developing their personality, dreaming, entertaining and playing (Sever 2013). Children's may learn classifying, analyzing, observing, criticizing, asking, answering, comparing from books. Books also help children for learning new words, practicing native and foreign languages, meet several feelings and ideas, think about nature, learn about animals and plants, understand people and society, examine universe and how to solve problems. Children discover their own abilities in incredible world of books (Sever 2008;

Yıldız 2009). Also illustrations in picture books will help children gaining visual reading and artistic ability (Sever 2008).

Although childhood is a passing period, its traces surround all the lifetime. Therefore, all the literary products served for children, will have sincere effects to their future. Due to the fact that children have dreams and wills; logic is not very important for them, literature products for children have extraordinary richness. Horses can fly or grass may be red. A well-produced children's literature product needs, both literary esthetics and psychological wellness (Özçelik 2007).

Gaining reading culture for a child is a consecutive period. In the first step, child needs to learn listening. In the second step, child learns reading and writing. Third step gain habit of reading, fourth step learn critical reading and fifth step gains universal literacy. Good picture books will help children to love books in listening period. Books, which are prepared according to children, will help in the second period. Because children's books teach thinking, they will help children to learn criticizing and then child will have an ability of universal literacy (Sever 2008).

2.2 Stats of Children, Children's Books and Internet Use

According to TurkStat data published in 22nd April 2016, rate of children population in Turkey in 2015 was 29%. Children's population was 22,870,683 and total population was 78,741,053. (TurkStat defines the 0-17 ages as child, referring to UNICEF.) Population according to ages were as following:

Table 2.1 Child populations in total population (TurkStat 2016a)

Total Population	Child Population	Age group				Child population in total population (%)
		0 - 4	5 - 9	10 - 14	15 - 17	
78 741 053	22 870 683	6 381 516	6 337 719	6 166 985	3 984 463	29,0

Number of book titles published in Turkey is being followed via ISBN. ISBN (International Standard Book Number), is a unique number given in order to identify books and follow up the production of knowledge. It was accepted in 1970. Books in

the electronic media also need to be subject of ISBN. These books may also include music, hypertext and illustrations. Websites, promotions, e-mails, search engines, computer games and personal documents are not subject of ISBN. A publisher needs to take distinct ISBNs for each format of a publication or product (ISBN Turkey Agency n.d.). Münir Üstün manager of The Press and Publishing Association of Turkey, tells that Turkey began ISBN system in 1987. More than 400,000 titles were published after 1987. 170,000 of them are being sold. However we do not have the detailed numbers of books before 1987. Customers can find 15000 books in a giant bookstore with optimum possibility but digital stores do not have a limit (Dijital Hayat 2014).

According to TurkStat data published in 19th April 2016 about ISBN (TurkStat 2016a) sourced from General Directorate of Libraries and Publications, highest increase in 2015 was in web based electronic books with the rate of 21.8%, comparing to 2014. Digital books are classified to 3 according to their media: Web based ones; DVD, VCD and CD; talking books. Detailed data taken from the same web page is as following:

Table 2.2 Number of publications by type and topic of material, 2014-2015 (TurkStat 2016b)

Type of material	Year	Total	Adult fiction	Adult culture	Children and adolescence	Educational	Academic	Religion
Total	2014	50 752	9 542	11 652	6 889	12 380	7 171	3 118
	2015	56 414	11 356	11 092	8 215	15 548	6 808	3 395
Book	2014	44 613	7 726	9 381	6 127	12 081	6 635	2 663
	2015	49 148	8 344	10 038	6 999	14 619	6 180	2 968
Electronic book (DVD, VCD, CD)	2014	483	37	112	41	43	231	19
	2015	539	43	61	240	45	144	6
Electronic book (web based)	2014	5 245	1 683	2 107	647	142	246	420
	2015	6 389	2 930	955	915	744	437	408
Talking book (cassette, CD, DVD)	2014	193	93	26	52	12	1	9
	2015	103	39	4	36	19	2	3
Other	2014	218	3	26	22	102	58	7
	2015	235	-	34	25	121	45	10

As TurkStat explains that “other” category includes “educational documentary, film and video (educational purposes), microform, music on paper, computer programs (educational purposes), braille, education cards, reprint, training kits, thesis, poster and map.” Number of children’s and adolescence books increased from 6889 to 8215.

Increase during years in number of published material type is as following, which is showing the increase in web based electronic books:

Table 2.3 Number of published material type (TurkStat 2016b)

Year	Total	Book	Electronic books (DVD, VCD, CD)	Electronic books (web based)
2008	32 339	31 760	292	107
2009	31 286	30 560	435	146
2010	35 767	34 857	330	305
2011	41 386	39 247	258	1 037
2012	42 626	39 367	311	2 617
2013	47 352	42 655	1 981	2 299
2014	50 752	44 613	483	5 245
2015	56 414	49 148	539	6 389

For detailed information, e-mail is sent to ISBN Agency in Turkey. Mehmet Demir shared the following details: The first e-book tale was registered in 2014 in Turkey. In 2015 number of children’s books were 5406. 27 of them were registered as fairy tales or tales and 2 of these were e-book tales. (It may be more than 27 because some of the publishers may not fill the genre part after filling the general knowledge.)

In 2015 number of published books in total was 384,054,363 according to bandrole¹ data. Bandrole number of children’s and adolescence books was 30,292,818 with 8% of total. Books less than 48 pages are not subject to banderole (YAYFED n.d.).

¹ “Bandrole system has been accepted as one of the most efficient tools for anti-piracy activities in Turkey. Bandrole is defined as a security label in form of holographic specification attached to musical, cinema works and books (MESAM n.d.).”

Number of published books in total is increasing every year according to IPA annual report 2015 (IPA 2015). Turkey is one of the top publishing markets and it is the **11th** country in the world.

Table 2.4 Top publishing markets in the world, 2014 (IPA 2015)

Country	Revenue (m€)	Revenue (mLC)	Market Value (m€)	Market Value (mLC)	Number of titles published
USA	22'918	27'980	29'483		
China	10'578	79'118			448'000
Germany	5'547	5'547	9'322	9'322	87'134
UK	4'587	3'590			220'330
Japan			5'501	754'450	76'465
Korea					
France	2'652	2'652	4'268	4'268	98'306
Spain	2'196	2'196			78'508
Brazil	1'650	5'408			501'371
Italy	1'576	1'576	1'774	1'774	63'922
Turkey	1'268	1'624	1'860	2'381	50'752
Netherlands	1'058	1'058	1'378	1'378	25'793
Norway	297	2'696	477	4'321	6'521
Finland	245	245	327	327	
Belgium	244	244	252	244	4'452

On the other hand, households that can reach Internet in Turkey increased rapidly in last decade: 19.7% in 2007, 30% in 2009, 42.9% in 2011, 49.1% in 2013 and 69.5% in 2015 (TurkStat 2007, TurkStat 2009, TurkStat 2011, TurkStat 2013a, TurkStat 2015). And 96.9% of households have mobile or smart phone (TurkStat 2016b). According to TurkStat data of Internet accessible devices in households in 2015 is as following:

Table 2.5 Percentage of Internet accessible devices in households, 2015 (TurkStat 2015).

	% of all households	% of households with Internet access
Devices connected to the Internet	Total	Total
Desktop computer	16,8	24,0
Portable computer (Laptop, netbook, tablet)	34,0	48,8
Mobile phone (incl. smart phone)	64,7	92,7
Game console	1,7	2,4
Smart TV	9,6	13,8

It is seen that rate of mobile phone users in Turkey is 92.7 (TurkStat 2015). It is almost double of rate of mobile phone users in the world: 51%. While active Internet users are 58% of the population in Turkey; 46% of the population in the world (We Are Social 2016). Turkey is in the **top 20** with this percentage (Internet World Stats 2016).

According to OECD reports, increase in percentage of households that can reach to Internet in OECD countries is as following. It is seen that although percentage of households in Turkey in 2015 is one of the lowest countries, it is increasing rapidly every year.

Table 2.6 Percentage of Internet access in households in OECD countries, 2005-2015 (OECD 2016)

Location	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Australia	60	64	67	72		78,9		83			
Austria	46,7	52,3	59,6	68,9	69,8	72,9	75,4	79,3	80,9	81	82,4
Belgium	50,2	54	60,2	63,6	67,4	72,7	76,5	77,7	80	82,8	81,8
Canada	64,3	68,1	72,7	74,6	77,8				83,9		
Chile		19,7			30			60,5	61,6	66,5	
Czech Republic	19,1	29,3	35,1	45,9	54,2	60,5	66,6	65,4	72,6	78	79
Denmark	74,9	78,7	78,1	81,9	82,5	86,1	90,1	92	92,7	93,1	91,7
Estonia	36,8	45,2	52,2	57,4	61,9	66,9	69,4	73,8	79,3	82,9	87,7
Finland	54,1	64,7	68,8	72,4	77,8	80,5	84,2	86,8	89,2	89,8	89,9
France		40,9	55	62,3	68,9	73,6	75,9	80	81,7	83	82,6
Germany	61,6	67,1	70,7	74,9	79,1	82,5	83,3	85,5	87,7	89,5	90,3
Greece	21,7	23,1	25,4	31	38,1	46,4	50,2	53,6	56,3	65,6	68,1
Hungary	22,1	31,6	37,7	46,6	53,4	58,4	63,2	66,8	69,7	73,1	75,6
Iceland	84,4	83	83,7	87,7	89,6	92	92,6	94,6	96,4	96,5	
Ireland	47,2	50	57,3	63	66,7	71,7	78,1	81,1	82,4	82,2	84,9
Israel	48,9	54,6	59,3	61,8	66,3	68,1	70,3	70,7	70,6		
Italy	38,6	40	43,4	46,9	53,5	59	61,6	62,9	68,9	72,6	75,4
Japan	57	60,5	62,1	63,9	67,1						
Korea	92,7	94	94,1	94,3	95,9	96,8	97,2	97,3	98,1	98,5	
Latvia	30,5	42,2	50,5	52,8	58	59,8	63,6	68,7	71,6	73,4	76
Lithuania	15,8	34,5	44,4	50,9	60	60,6	60,1	60,1	64,7	66	68,3
Luxembourg	64,6	70,2	74,6	80,1	87,2	90,3	90,6	93,1	94,5	95,6	96,8
Mexico	9	10,1	12	13,5	18,4	22,2	23,3	26	30,7	34,4	
Netherlands	78,3	80,3	82,9	86,1	89,7	90,9	93,6	93,5	94,6	95,8	96
New Zealand		65			75			80			
Norway	64	68,8	77,6	84	85,6	89,8	92,2	92,7	94,3	93,1	96,6
Poland	30,4	35,9	41	47,6	58,6	63,4	66,6	70,5	71,9	74,8	75,8
Portugal	31,5	35,2	39,6	46	47,9	53,7	58	61	62,3	64,9	70,2
Slovak Republic	23	26,6	46,1	58,3	62,2	67,5	70,8	75,4	77,9	78,4	79,5
Slovenia	48,2	54,4	57,6	58,9	63,9	68,1	72,6	73,9	75,6	76,8	77,6
Spain	35,5	38	43,5	49,9	52,9	57,8	62,7	66,6	69,7	74,4	78,7
Sweden	72,5	77,4	78,5	84,4	86	88,3	90,6	91,7	92,6	89,6	91
Switzerland										90,6	
Turkey	7,7		19,7	25,4	30	41,6		47,2	49,1	60,2	69,5
United Kingdom	60,2	62,6	66,7	71,1	76,7	79,6	82,7	86,8	88,4	89,9	91,3
United States			61,7		68,7	71,1	71,7		74,4		

And if we investigate Internet using behaviors of children; EU Kids Online made a survey among 25 European countries (Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Lithuania, the Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Spain, Sweden, Turkey and the UK) with 25,142 children aged 9-16 and their parents, including Turkey, in May-June 2010. Researchers interviewed 1018 children and their parents from Turkey. First Internet access of children, before age 7 was 2,6% in Turkey and 13,3% in Europe countries (EU Kids Online 2014; Ogan et al. 2014). Daily Internet use was as following:

Table 2.7 Percentage of time children passed in Internet, 2010 (Ogan et al. 2014)

	Half an hour	1 hour	1 to 2 hours	More Than 2 Hours	None
Turkey	27.3	36.2	22.3	5.9	7.6
Europe	26.7	28.4	25.1	15.5	2.8

In 2014, Net Children Go Mobile updated the data in 7 European countries (Denmark, Italy, Romania, United Kingdom, Belgium, Ireland, and Portugal). According to the results, children are meeting Internet and mobile technologies; becoming an active user at younger ages, comparing to past (EU Kids Online 2014).

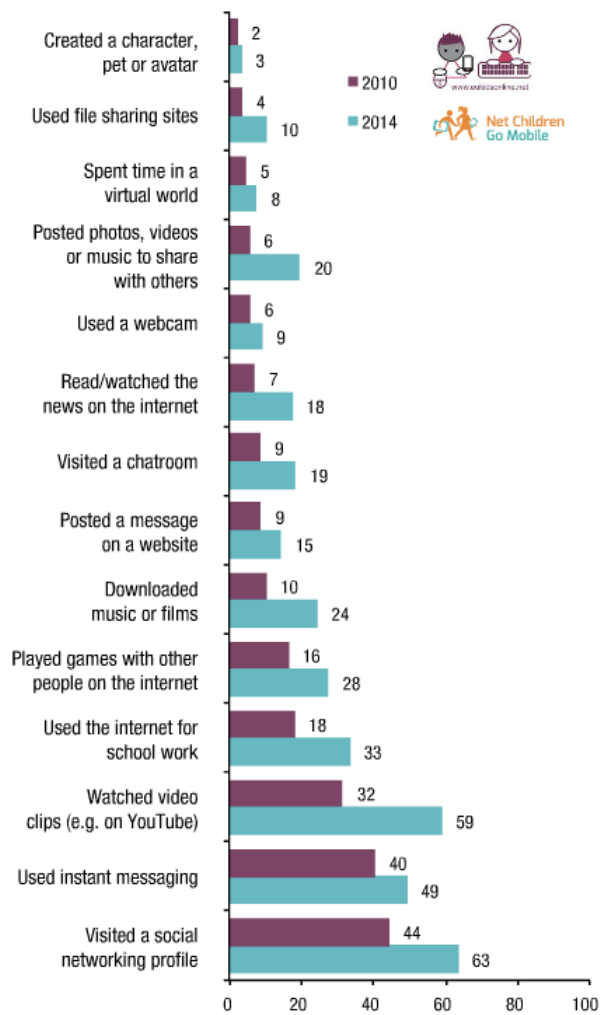


Figure 2.1 Comparing 2010 and 2014 rates of what do children do daily in Internet in 7 European Countries (EU Kids Online 2014; Mascheroni& Cuman 2014)

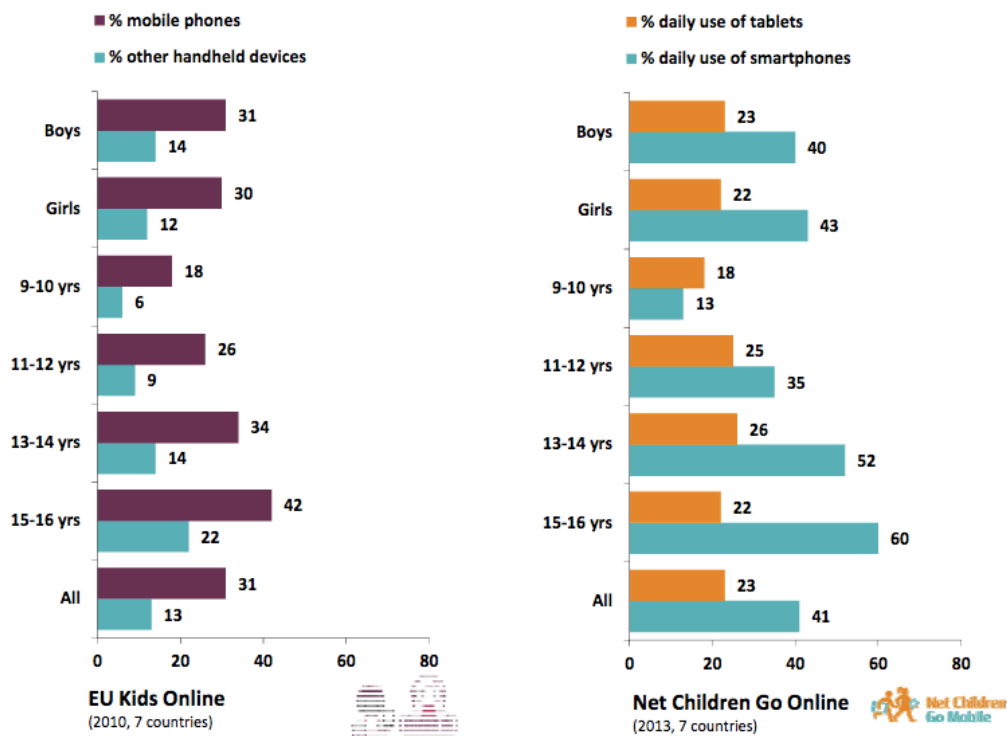


Figure 2.2 Comparing 2010 and 2014 rates of children’s mobile access in 7 European Countries (EU Kids Online 2014)

In America, according to national survey, $\frac{3}{4}$ of children between the ages 0-8, have mobile devices at home in 2013. Comparing the results of 2011 and 2013, use of smartphones increased 41% to 63%. Tablet ownership increased from 8% to 40%, with a five times increasing. Number of kids used mobile devices almost doubled from 38% to 72%. Time in traditional screens decreased 31 minutes and in mobile screens increased 10 minutes. 50% of children used apps via mobile devices (Common Sense Media 2013). In 2015, 53% of 8-12 years, in other words tweens, have their own mobile devices and 24% have their own smartphones (Common Sense Media 2015).

TurkStat analyzed children’s Internet using behaviors in Turkey in 2013. (Data is not updated yet.) Between the ages of 6-10, average of the beginning age for using Internet is 6. Between the ages of 6-15, 24.4% of children has their own computers and 13.1 have their own mobile phones. 60.5% of children used computer, 50.8% used Internet, and 24.3% used mobile phones. And between the ages of 06-10, 48.2%

of children used computer, 36.9% used Internet, 11% used mobile phones in Turkey. Between the ages 06-15 the rate of children who used Internet 2 hours a day is 38.2%, three-ten hours a day is 47.4%, eleven to twenty four hours a day is 11.8%. Between the ages 6-15, 84.8% of children used Internet for learning or preparing homework, 79.5% for playing games, 56.7% for searching subjects and 53.5% for social media (TurkStat 2013b) It is seen that Internet and mobile devices became an important part of childrens' lives while number of printed books are increasing at the same time..

2.3 Transformation of Children's Tales from Printed Books to Book Apps

2.3.1 What is a Picture Book and Picture Book App?

Picture books are books, which have little text and many pictures. Story is told through the pictures (Underdown 2008). They may have different shapes. They may be vertical or horizontal; square, rectangular, triangle or even octagonal (Ural 2015) and they may be printed with the following paper formats:

Board Book: Board books are made of thick paper, with simple, short stories prepared for babies and toddlers (Underdown 2008).

Hardcover: "A book produced with a hard, stiff outer cover, usually covered by a jacket. The covers are usually made of cardboard, over which is stretched cloth, treated paper, vinyl, or some other plastic (Underdown 2008: 296)."

Paperback (Softcover): A book, which has soft cover. After 1960s paperback books became more popular (Underdown 2008).

Novelty: Books, which have extra paper engineering such as pop-ups, lift-the-flaps, die-cuts or sound buttons (Underdown 2008).

Pop-up: Pop-up books have movable parts, flaps to be lifted and many different mechanisms. Paper engineers design the pop-up books, cards or other printed materials (Hiebert 2014).

There are also non-paper books, made of cloth (Carle 2014) or bath books, made of plastic (Moon 2006).

Since early 2000s formats of children's books totally changed and picture book apps became the part of children's lives and literary world (Kucirkova et al. 2015; O'Mara & Laidlaw 2011). App of Alice's Adventures in Wonderland was introduced in April 2010 by Atomic Antelope, which increased the popularity of book apps (Bird 2011). As soon as capabilities of iOS and Android improved, apps become more incredible with new features (Koss 2013). Book apps do not have enough terminology yet (Stichnothe 2014). Before examining book apps, we need to check terminology about book apps.

Hypertext: "Specific type of fiction within the medium that is distinguished by certain technical characteristics (Stichnothe: 2014: 2)."

Hybrid Text: Text between plot and games (Stichnothe 2014).

E-book: E-books are electronic versions of the books with limited interactivity in generally EPUB and Mobipocket (.mobi) formats. They were first seen on the devices like Kindle. It is possible to search and highlight words; check a dictionary definition; change font size (Itzkovitch 2012; Noorhidawati et al. 2015; Greco 2005).

Vanilla e-Book: "The plain text e-book (Phillips 2014: 122)."

Enhanced e-Book: E-books with audio, interactivity and video in ePUB3 for iBooks (Apple) and Kindle Format 8 (KF8) for Kindle Fire (Amazon) (Itzkovitch 2012; Noorhidawati et al. 2015; Phillips 2014).

Interactive E-book: Is an e-book, which includes interactive photos, videos and

sounds; provides an enhanced reading experience beyond the printed book (Itzkovitch 2012).

Multimodal E-Book: Morgan gives a different name to enhanced e-books: “Multimodal e-books are interactive electronic resources that combine text with sound, animation and images and often include text that is read aloud and highlighted (Morgan 2013: 477).”

Talking Picture Book: A picture book accessed in digital media; serving sounds, voices and music; available both for reading and listening (Yazıcı Demirci 34).

Augmented Reality Function: It is a function that combines the user’s location, physical environment to the detailed mobile information (Ciaramitaro 2012).

App: Short form of application software. It is a special software program; accessed on mobile devices and serves different digital opportunities for users (Horne 2012; Gardner & Davis 2013). Apps are served with iOS and Android software (Itzkovitch 2012; Noorhidawati et al. 2015; Phillips 2014). While e-books need extra software, book apps don’t need, they work themselves (Stichnothe 2014).

The term “book app” comes from Apple’s App store as an abbreviation. (Sargeant 2015). As soon as smart phones and tablet pcs were invented and sold, children’s book apps became a new format of books. Book apps are a newly emergent form of literature. Book apps are programmed to serve multimodal plots with verbal, visual and sonic signs; not only for listening and reading, but also for interactivity. Book apps may help children to participate to the creative process (Stichnothe 2014).

Some of the book apps are educational; some of them have similarities with games. Most apps are transformed from the printed books, so size of illustrations and design may not fit to smartphones and tablet PCs’ screens. Books app creators try to provide an analog reading style by designing the app similar to paper book. Audio, video, animation and sounds are integrated to the text in book apps. Book apps help children reading through participation and repetition. Participation may be rewarded within apps. Book apps are serving a different kind of user experience comparing to

the printed ones in terms of techniques. And user experience will develop to multi-user experience via upcoming book apps (Stichnothe 2014).

Book apps have interactive elements. Stichnothe defines these properties as following:

*Interactive elements can
create tension between (verbal) text and image, text and sound, image
and sound,
propel the story forward,
add humor,
provide extra information,
suggest user activities within the app or in the real world,
offer the opportunity to record one's own voice, reading the story or
creating a new one,
allow the user to interact with others through social network
integration,
offer the possibility to choose between different narrative elements
(protagonists, points of view, alternative storylines) (Stichnothe 2014: 3).*

Reviewing the literature, we can define the picture book apps for children as, apps which have several properties integrated to the text; such as movable illustrations, audio, animation, sound effects, painting, creating, video, taking photos and videos, recording voices, multilingual choices, read to me mode, puzzles, games, activities, drawing, coloring, writing, augmented reality function; linking to websites, social media, gaming apps and other apps; used by basic gestures like swiping and tapping the screen. Book apps do not need to include and may exclude all of these properties. Also these properties are being innovated as this thesis is being written.

2.3.2 What are the Differences Between Picture Books and Picture Book Apps?

In new media, convergence is occurring in number of fronts. The use of mobile devices is growing and consumption of media is gathered on to one device (Phillips 2014). Jenkins defines convergence with following words:

The flow of content across multiple media platforms, the cooperation between multiple media industries and the migratory behavior of media audiences who will go almost anywhere in search of the kinds of entertainment experiences they want. Convergence is a word that manages to

describe technological, industrial, cultural and social changes depending on who is speaking and what they think they are talking about (Jenkins 2008:2).

Grant & Meadows (2004) classify convergence in terms of trends as technological convergence; organizational convergence, convergent journalism and media use convergence (Grant & Meadows 2004). In this thesis we are interested in technological convergence which he defines as “caused primarily by the transition of virtually all communication technologies from analog to digital signals that can be manipulated, stored and duplicated using computer technology (Grant & Meadows 2004: 349).” Convergence is taking place in tastes, brands and also books. While reading a book in a mobile device the reader may be oriented to other media (Phillips 2014).

Publishers get used to package stories and texts in one shape: Book (Horne 2012). Then innovation of digital books began and Yokota & Teale (2014) define these innovations in picture books with four steps. 1. Scanning the books for electronic outlets. 2. Transforming the book to film-like media. 3. Transforming book special for digital world. 4. Adding interactive features, games, puzzles, colouring, drawing opportunities to the story (Yokota & Teale 2014). Horne (2012) defines these innovations with 3 steps. Simple book app, gamified book app and book-shop-app. At the first step, the first generation book apps were simulations of printed books. Shapes of their contents were similar. Second generation book apps did have multiple additions such as sound, interactive illustrations and films. They were looking like computer games. Third versions were book-shop-apps, which include several stories (Horne 2012). Some of the apps like British Council’s, LearnEnglish Kids: Playtime (British Council 2016) app, collects all these properties and has rich content. It includes several tales, songs, games, videos, listen and record activities and even theatres. It has in-app-purchase property, which provides users to buy extra tales or content (Ercan Bilgiç 2016). There are also book-making apps such as (StoryMaker 2016) designed for sharing user-created narratives (Kucirkova et al. 2015). Search engines may analyze the behavior of their users and offer new book apps for them (Phillips 2014).

Book apps have several properties different from physical books. There is a **voice-**

over narration so that child can read the book even when he or she is alone and illiterate. **Animations and background music** is also added. Children may disable these properties whenever they want. Book apps may **link** the users to other websites, apps and social media pages. And even integrate the app with real objects, which is **augmented reality**. Another difference between book apps from printed ones is **transitional features**. In some cases, turning the pages imitate physical books' style and in other cases child just swipe and pin. Transitions may have sound effects. In the physical books sound is natural. **Interactive elements** are a very important difference: While reading, users may tap, swipe and pinch to device in order to interact with the text via video, sounds, dictionaries and movable illustrations. Interactivity properties change from app to app. In some cases these properties enhance the book, in some cases distract the users. Also the quality of interactions may vary (Serafini et al. 2016). Interactive properties provide children easiness for travelling in the text, coming back to beginning, going forward (Kamysz & Wichrowski 2014). As Villamor et al. (2010) define in their chart, children use apps by basic gestures like "tapping, double tapping, dragging, flicking, pinching, spreading, pressing, pressing and tapping or rotating (Villamor et al. 2010)." New developments add new basic gestures for using apps (Kamysz & Wichrowski 2014). On the other hand, apps have some threats on personal security, which are not realized by users. For example, users do not care, which kind of personal data, apps may reach (İnceoğlu 2015).

Javorsky & Trainin selected 20 childrens' books apps from 200 free apps randomly and analyzed them. According to their research differences between books and mobile books were as following (They used the terms paper-based stories and mobile stories): For the book, reader will open the book in order to start the story. In order to re-read, will close and re-open it. For turning the pages, reader will hold the paper from the corner and turn it. Receiving sensory inputs were visuals. Illustrations were static. Someone may read aloud to child, while sitting with him or her. Child may ask questions to this person. In order to match the illustrations to the text, child or the other person may point the illustrations. For the book app, in order to begin, child will activate the device and application and control the voice. For re-reading, may use an icon, navigate settings menu or reopen the app. For turning the pages, will need to realize the virtual page. Receiving sensory inputs are both visual and

auditory. Illustrations are movable; size of text may be changed and text may be highlighted or underlined. To point the text, text maybe automaticly highlighted (Javorsky & Trainin 2014).

There have been debates about the effects of the book apps on children's reading culture. Some of the perspectivees and findings are negative. Chiong, Takeuchi & Erickson (2012) made a study in terms of parent-child co-reading behaviors comparing printed books, e-books and enhanced e-books. They found that enhanced e-books were less useful than the e-books and printed books because of their non-content interactions. Children who read the printed book remembered more details about narrative than the children who read enhanced ones. While reading enhanced books, children and parents focused on the interactive elements more than the story. (Chiong et al. 2012). Findings of Takacs et al. (2015) are reflecting the similar negative results.

Some of the negative perspectives, advice to restrict children use of digital media. Stichnothe defines the consumers of book apps not as "readers" but "users." She talks about the peditricians, advice parents to limit technology especially in their early years (Stichnothe 2014). Bilton (2014) shows Steve Jobs as an example of restricting and says, "I had imagined the Jobs's household was like a nerd's paradise: that the walls were giant touch screens, the dining table was made from tiles of iPads and that iPods were handed out to guests like chocolates on a pillow." Steve Jobs, who was running Apple and developing apps, had limits for his children to use iPad (Bilton 2014).

A children's book, *It is a Book* (Smith 2010) tells a negative perspective with an animal tale and in an ironic way. It compares the printed book and the digital ones. There are two characters donkey and monkey and talking about what they are reading. Monkey is the reader of printed book and donkey is the one who is looking at the screen; asking questions about the printed book and trying to understand if is it possible to click on the book, make a blog with it, does it need a password and username. Monkey answers all the questions "No, it is a book." At last donkey takes the book and begins to read it. Because donkey doesn't give it back, monkey goes to library. While monkey is going, donkey says that he will recharge the book when he

finishes the book. Monkey tells him there is no need and says again “It is a book.” Although it is an irony, Smith tells about reality. Children may perceive the real world as virtual world (Wolf 2014).

Gardner & Davis (2013) tell both the negative and positive possibilities. They argue that new generation is conceptualizing the world as an ensemble of apps. When apps allow readers to find new possibilities it is app-enabling. If apps keep users’ choices and goals under control, users become app-dependent and it is up to the user (Gardner & Davis 2013). Javorsky & Trainin (2014) also talk about negative and possible possibilities. Interactive elements may help or restrict children’s reading abilities in terms of their properties (Javorsky & Trainin 2014).

There are also positive perspectives. Koss, claims that book apps will not take place of reading printed book experiences but they may serve a different kind of reading experience (Koss 2013). Bircher (2012) defines the difference between conventional picture book and picture book app as “integration of interactive elements.” Bircher claims that picture book apps fulfill the requirements of traditional picture books and serve extra features. And a well-designed, successful book app is the one that keep the story at the center or front (Bircher 2012). Wolf also has a positive view. He finds book apps made with new technologies, eye-popping with their incredible esthetic properties. According to him multimodalities provide a wide range of possibilities: Alice in the Wonderland and many children’s books moved to AppLand with their new aspects (Wolf 2014). Cengiz (2015), do also have a positive view. She finds the interactive elements such as animations, music, sound effects, audio recording, puzzles and games of words of book apps, enjoyable for children. She indicates that book apps are coming with professional pronunciations, which will be beneficial for children’s speaking. She points out that the, content of the book apps should be prepared suitable for children (Tepetaş Cengiz 2015).

Yokota & Teale (2014), have also positive perspective. They used the term “digital picture book apps” to define book apps with illustrations and think that the digital picture book apps are most exciting innovation in children’s literature in a long time. They are exciting because apps provide several opportunities for publishers to prepare extraordinary work and for children to have new literary experiences. Apps

have a great potential to help children in the early literary acquisition process and to build skills such as print awareness, vocabulary development and word recognition. Well-designed digital picture book apps serve children a multimedia text experience. Because it is easy to change the language of digital picture books, children will be able to experience words of foreign languages. Digital picture books may serve “read to me” mode and this feature may be personalized by recording voice or video of a family member; so that child listen to the text from his family several times (Yokota & Teale 2014). Findings of Al Aamri & Greuter (2015) are reflecting the similar positive results.

In conclusion there are possitive and negative perspectives examining book apps, but they need to be investigated more. Diffirences between books and book apps of children requires to be examined deeply. In Turkey even studies in children’s literature, tales and picture books are insufficient and there are several questions about book apps. What’s happening in children’s new media in terms of children’s reading culture? Are the book apps beneficial for children’s literary pleasure? Do the traditional picture books and picture book apps help their imagination?

3. Method

12 years of experience of the researcher in publishing industry, motivated the research idea and shaped research question: “What are the differences between books and book apps in terms of their effects on children in terms of publishing professionals?” After specifying the question, method was chosen. In order to have deep knowledge about the subject, qualitative research and interviewing with publishing professionals were needed.

Because books and book apps have various formats, restrictions were made for the research. By checking the websites of children’s publishers, it is seen that there are several kinds of printed children's books. They differ according to ages (e.g. 2-3, 4-5, 6-7, 8-9), printing formats (e.g. board book, hardcover, paperback, bath book, pop-up) and content (e.g. tales, novels, stories, rhymes, non-fiction). Because they are the oldest genre, tales were preferred. Because Yükselen (2015) defines the ages 7 to 9 as the most important period for gaining reading culture (İpek Yükselen 2015), the books and book apps prepared for 7 to 9 ages became the focus of research. Also illiterate children were not the part of research in order to compare children’s reading behaviors. Research is not interested in plane texts or e-books. Because two formats are being compared, printed book-book app integrations; such as augmented reality and multi-platform books, which are orienting children from printed books to book apps or from book apps to books; was not part of research. As a result, focus of the research was comparing printed picture books and picture book apps, which include tales for literate children at age of 7 to 9 and their effects on children’s reading culture.

Qualitative research was preferred because the research question could be best answered by in-depth insight. Aim of the research was to gain deep knowledge not to generalize. Because children’s literature and invention of book apps are part of creative and interpretive work, exploring profound knowledge and investigating

different point of views with a flexible style, hear the experiences and observations of experts of this area would help. Stories of children's books experts –editors, critics, authors and publishers- were important (Creswell 2007). Due to the fact that book experts are working and writing for children, discussing about children's literature with international professionals at international fairs such as in Frankfurt, Bologna, New York, London, Chicago and Sharjah, learning children's reviews about books via observing children's behaviors at national book fairs such as İstanbul, Ankara, Adana, Samsun and Bursa (TPA 2016); social activities in several cities, e-mails and social media; they are in touch with several children from all around Turkey and their experiences would be a good summarize about this multi-disciplinary area. It is multi-disciplinary because book apps are not only part of literature and reading culture, they are also part of psychology, sociology and even architecture. Because book apps and their effects on children are part of a creative study and statistical analyses wouldn't be enough to understand, quantitative research was not preferred (Creswell 2007).

Properties of the publishing professionals were important. Especially publishing professionals who are in touch with children in a wide perspective, required. So purposeful criterion sampling was preferred (Creswell 2007). There are two big organizations of publishers in Turkey: The Press and Publishing Association of Turkey (BYB n.d.) with 145 members and Turkish Publishers Association with 318 members of publishers (TPA n.d.). For detailed information, e-mail is sent to TPA. Kübra Özyürek shared that 64 members of TPA are in touch with children's and teen's books. (No specification in BYB for children's publishers is found, so list is examined one by one and by using experience.) Examining the knowledge about publishers from these websites and paying attention to missions and visions of the publishers they represent and aimed, publishers with different visions were selected. Also both independent publishers and holding-dependent publishers would be represented. As soon as publishers are chosen, editors or authors from those publishers were selected; seeking at least 5 years experience. While deciding, although it is not directly part of publishing, the backgrounds of participants were considered and different kinds of political views; democrat, leftist, nationalist, conservative, apolitical or liberal should be represented in sampling group. Also it is researched from their websites, blogs and social media pages that if these editors or

authors were taking part in activities with children and travelling to different cities of Turkey. As a result, e-mails were sent to 42 publishing professionals. Requests weren't sent at the same time aiming to reach 5 to 25 interviewees (Polkinghorn, cited in Creswell 2007). 6 of them didn't answer. 14 of them answered the email but couldn't attend the interview due to the reasons like they do not have enough time or enough knowledge about the subject. 22 of them accepted to answer questions. 12 of participants were female and 10 of them were male. 3 of interviewees are academicians at the same time, one from Marmara University; one from İstanbul University and one from Eskişehir Osmangazi University. Because there is not a department for children's publishing, there aren't many academicians studying children's books area. These academicians are coming from different disciplines. One of the authors is manager of Children's Foundation at the same time. The cities where the interviewees live aren't taken into account. The publishing experts, who are in touch with readers from all around Turkey by travelling to various cities for fairs and activities and via social media and e-mails, were preferred as indicated above. Detailed knowledge about interviewees is as following:

Table 3.1 Detailed knowledge about interviewees

Name	Profession	Gender
Ali Gültekin, Prof. Dr.	Author, Academician, Critic	Male
Aytül Akal	Author	Female
Behiç Ak	Author, Illustrator, Architect	Male
Birsen Ekim Özen	Author, Teacher	Female
Can Öz	Publisher, Manager	Male
Fatih Erdoğan, Phd	Author, Publisher	Male
Filiz Tosyalı	Author, Life Design Specialist	Female
Gökçen Yüksel Karaca	Editor	Female
Hatice Kübra Tongar	Author, Publishing Coordinator, TV/Radio Presenter, Consultant	Female
Mehmet Zeki Aydın, Prof. Dr.	Author, Academician, Consultant	Male
Melike Günyüz, Phd	Author, Publisher, Coordinator	Female
Metin Özdamarlar	Author, Teacher	Male
Mustafa Orakçı	Author, Teacher	Male
Mustafa Ruhi Şirin	Author, Foundation Manager, Critic	Male
Necdet Neydim, Assoc. Prof. Dr.	Author, Academician, Critic, Translator/Interpreter	Male
Nejla Sakarya	Author, Editor, Teacher	Female
Nevin Avan	Author, Editor, Interpreter	Female

Nuran Turan	Author, Manager	Female
Selcen Arvas	Author, Translator/Interpreter	Female
Şebnem Kanoğlu	Project Editor	Female
Yusuf Dursun	Author, Editor, Teacher	Male
Zeynep Ulviye Özkan	Editor, TV Presenter	Female

Before beginning, initial interviews were done (Creswell 2007) with four people. While making my interviews, questions have been developed. Focus of the research was on comparing children's books and book apps in terms of children's literature. But also psychological, rhythmic, visual, cognitive effects were questioned, due to the fact that all these perspectives affect reading culture.

Because authors and editors like writing and may express better while writing, interviewees were asked if they want to answer the questions face-to-face or via e-mail. 5 of the interviewees preferred face-to-face and semi-structured, in-depth interview done with them in order to find out various reading culture behaviors of children via books and book apps (Yalkın et al. 2014; Creswell 2007). They were visited at their own places. 4 of them were living in Istanbul and one of them was in Eskişehir. Their answers were recorded with their permission and notes were taken at the same time. Others preferred to reply the questions via email. Open-ended questions were sent to them (Creswell 2007) and indicated that they may skip the questions if they do not know anything about subject. As soon as they sent answers, if needed, new questions were asked via e-mail again. Recorded interviews were transformed to written texts. The texts of interviews were read. After interpreting the data, the related individual parts were gathered and engaged with literature in order to make in-depth analysis. Outcomes were reviewed for writing the ultimate text.

4. Findings

During the research, while comparing picture books and picture book apps all the interviewees, except Nevin Avan and Fatih Erdoğan, underlined; both books and book apps have beneficial properties but time children spend with picture book apps will be restricted by adults because of problems as virtual addiction and harm for health. Nevin Avan was totally against to book apps until the age of 10 and on the contrary Fatih Erdoğan said children would lose nothing by reading book apps in place of books.

Mobile technologies brought advantages. For example, almost all the experts indicate that book apps are good while travelling. A child may carry 2-3 printed books, but with tablets and mobile phones hundreds of apps may be carried. It is possible to reach several book apps from all around the world. Readers do not wait for their order and do not need to go to a bookshop to buy the book. Sharing knowledge with children from all around the world by online chatting or platforms will help children to have a wider perspective, via book apps. Because digital platforms help, it is very easy to compare the detailed knowledge about book apps such as author, publisher or technical details. Because several tales are collected in tablets, books do not take too much place in the houses, schools or libraries.

Nuran Turan who is an author travelling all around the world, says, “As soon as I visit foreign countries I see that bookshops are being closed. But bookshops selling picture books are still alive.” It is understood that although it is very easy to reach to book apps, printed picture books are still preferred. So what are their differences? In this chapter, by analyzing the interviews, the enabling or disabling properties of books and book apps for children’s reading culture will be summarized and criticized in the first section. General problems that enslave children while they are reaching and using books apps will be examined in the second section.

4.1 Enabling or Disabling Children's Literary Skills

Acquisition of knowledge, skills and competencies is necessary for children's literary culture. Interviewees compared the differences between picture books and picture book apps in terms of enabling or disabling children's literary skills:

4.1.1 Acquisition of Literary Taste Through Focus

Participants emphasize that smell, tissue and three-dimensional format of picture books provide children a good environment for literary taste. Conversely interactive elements of book apps block the literary taste. Reading needs focusing intensely. For the book apps it is generally not possible to focus, interactive elements will take the reader outside the text. If the interactive elements are decreased in the app, because their expectations are different from the apps, children are getting bored. Birsen Ekim Özen, author of loved children's books and a teacher says,

*Book apps may be useful for providing several tales via all kind of media. Also there are families trying to qualify the time their children pass via tablets, computers and mobile phones because children watch films, listen to music and play games with those devices. However as soon as children reading the text; due to the **interactive elements** directing children outside the story, fluency of reading is getting lost. Multiplicity of details in book apps is distracting attention and obstructing the steps for being a good reader.*

Prof. Dr. Ali Gültekin, an author, critic and academician in Osmangazi University, Eskişehir and organizes several conferences about children's literature, talks about interruption due to the interactive elements and the **charge problems**:

If societies do not have children readers, they will not have adult readers too. Children's book apps do not have permanent effects for reading culture. They may not be at the center of children's literature, they only may benefit from it. They are subject of being forgotten. If the charge of the of tablet finishes, reading in a book app will be interrupted. Reader cannot find the same taste and feeling when he or she begins one hour later.

Nevin Avan Özdemir, an author, interpreter and editor, also criticize the interruption caused by interactive elements and indicates, "It is very difficult to focus a single

subject in virtual environments. It is very easy to lose book apps when children break their device. When charge finishes you have to stop reading. And a virus may clean all the history of children in the device.”

Filiz Tosyalı, an author and life coach, living in America, İstanbul and Bodrum, also thinks that book apps are blocking the literary taste due to the interactive features.

Literary pleasure is only possible with printed picture books. Writing notes, going to the previous page and reading again, focusing on the text is easier with conventional books. Text is more important than the voice or videos, to form a literary taste. It is not the same thing to read a single book and reading it between several digital products.

Metin Özdamarlar, a teacher and author who have several social media groups with teachers for talking about books, says,

*For the printed books, I see that children generally do not know quantitative reading. They do not know to use pencil, post-it, notepapers; underlying or in-depth reading while reading printed picture books. Children generally read the books, which teachers and parents advice. On the other hand for the book apps **quota of wireless or mobile Internet** limits children. Because I am an author and teacher, I am talking to several children and although they don't know quantitative reading enough, I hear that they do not feel a good taste in book apps as they feel in books. No matter how much technology will develop; printed books will keep their value.*

Prof. Dr. Mehmet Zeki Aydın, an academician at Marmara University, Istanbul says that book apps with interactive elements it is not a book, we must give a different name to it. Arvas also says that with interactive elements, book apps are not “books”, they are a different kind of product.

Quantitative reading brings permanence. Experts find printed books more permanent. They talk about **memories** about them. They explain that children may keep an archive, may take signs of the authors; so child will have more memories with printed picture books. Selcen Yüksel Arvas, a famous author and interpreter claims that even the fruit juice that is poured on printed books has a sweet memory. Yusuf Dursun an experienced teacher and famous children's author says, “*Core element of reading is “book.” As soon as I meet children, see that they prefer reading printed books. They like touching it, having signs from authors on it and holding the pages.*”

Şebnem Kanoğlu, a professional project editor of children's books, describes picture books as **friends** of children; with their special papers and formats, books have their own personalities. She claims that children may not be friend with book apps and book apps cause a kind of laziness. She likens the books to a beautiful flower and book apps to a beautiful flower behind the screen with no smell and no real feeling of touch. She also defines the advantages of book apps such as possibility to take digital notes with pen or finger, changing the size of illustrations, zooming the objects and pages; using textual, visual, aural reading abilities together. Birsen Ekim Özen describes picture books as a part of children identity. She says,

Children carry the printed picture books, sleep with them and they keep the books in their toy baskets. On the contrary scenes of book apps are flowing like films. They cannot take place of the books. In order to keep children away from tablets, families should try to find incredible books.

Zeynep Ulviye Özkan also defines the printed books as **friends** of children. She says,

“Books are part of a culture, including bookshelves, bookcases, libraries and bookshops. It is anticipated that for children who finds to read ‘boring activity’, book apps may help to love reading. But they see the book apps as a gaming object and if they do not find enough interactive elements, they do not use the book apps just for reading. They are spending time with the activities related with tale, more then the text.

Mustafa Ruhi Şirin is an author, critic and head of Children's Foundation and at the same time the supervisor of Children and Media Congress 2013 in Turkey (Şirin & Yavuzer 2013). He indicates that to be able to read a text in book apps is not enough to be a good reader. Also children need different types of literacy:

*50 years before, the most preferred genre was tales for children. Today, it is the same; tales are still the most popular genre. The important thing is raising children in a reading culture and with **well-prepared books**. In modern World children learn to read illustrations before reading text. Paper and pencil help children for biological and intellectual development. Good prepared printed books, by taking the needs and likes of the child, will help children gaining reading culture, increase feelings and the ability of thinking and dreaming. On the other hand in book apps visual and aural properties are dominant. Also book apps do not need literacy. Adults now need to teach children, visual literacy, basic literacy, technological literacy, digital literacy*

and media literacy. As soon as children can gain these abilities they may use the book apps functionally. Although book apps are very easy to reach, printed books are still special unique medium of children.

As Şirin did; critic, interpreter and author Assoc. Prof. Necdet Neydim, critic, author, interpreter, founder of children's literature foundations and an academician in İstanbul University also points the importance of **content**, both in books and book apps. He says,

Tale is a genre, which is appropriate for children with age of 6 and up. Societies share their concerns, fears, wars, almost everything with tales. Because printed books joined to our lives after 18th century, children will not lose anything with book apps. However, I am not sure about the producers of book apps that they are competent enough. Children need identification while reading book. Of course this is also important for printed books. Parents, teachers and school managers want children to read several books and they give presents if they do. This is wrong. A child may not be born in just one month. Child needs time to internalize the text.

Almost all the book apps serve **songs and sound effects**. It is possible to read a tale while listening to music with just one click. Tongar and Orakçı find this property of book apps helpful for children. On the contrary, Arvas claims that music may be calming but it doesn't help children while focusing on the text. Karaca indicates that reading needs a calm mind and quiet environment to focus the text; affects of music and the text on child will not help each other. Avan tells, if needed it is possible to serve music with printed books too. She reminds printed picture books, which have incredible properties. Children even may play them like a piano.

Book apps have several properties one of which is possibility of **listening to the text**. A child can record his or her parents' voice and listen to the record several times. Also book app may come with a record with "read to me" choice. Orakçı and Aydın remark that while reading book apps, children not only use the senses seeing and touching but also use sense of hearing. Gültekin tells that it may be helpful to listen the tale from an app but recorded voice must read the text in a professional way by taking care the needs and likes of children. According to Tosyalı, listening the tale from a tablet, child will be restricted and squeezed between the walls of digital. She says that child may focus and not think as much as reading the text from a printed book. Experts generally find listening a passive period comparing to reading. Karaca

reminds the advantage of listening while travelling but she indicates that it may not fulfill the advantages of reading. Tongar, a well-known TV and radio programmer, author of children's books, family counselor and publishing explains this with following words: *"Listening is an inactive period. The effect of reading and listening are not same. While reading, child travels in his or her inner world. While listening, feelings of the outside reader are dominant."*

Learning new words is also needed for a functional reading. Experts generally find book apps more useful than books while learning new words. It is understood from their explanations that while using the book, children need a pencil to underline the words. Reader may learn the meaning of the word from an adult, computer or dictionary. Picture book apps make, to find the meanings of the unknown words easier, either with hypertext, interactive functions or searching in the Internet. Especially, if the recorded voices in mobile apps have professional pronunciation, so they will pronounce the words well and right. If the meanings of words are explained with illustrations, it will be elegant. Also child may record his or her voice and take feedbacks, if their pronunciations are true. Findings of Yokota & Teale (2014) is similar with the interviewees claims. Tepetaş Cengiz (2015) and Yokota & Teale (2014) indicate that professional pronunciation provided via book apps will help children's language development.

On the contrary, Avan states, *"Children will spend much time with words in printed books, so words will be permanent for children. They will remember the words better."*

It is seen that book apps are more helpful for children while learning new words according to 21 of 22 experts. The important thing is motivating the children to focus on words. This may be possible both in books and book apps by asking questions, repeating the new words in the text several times. Further in the book apps, it is possible to share the true pronunciation of the word, videos and movable illustrations about the word. These are incredible features that will be rewarding for children.

For more focused reading, experts call attention to parent-child interaction. Neydim tells:

Children may like to spend time alone with book apps, on the other hand need to share book with parents. Child want to listen the text from the parents and use the book or book app as a tool in order to feel warmness of parents, rest on shoulders of the parents and hear the voice of parent's heart.

Can Öz, owner and manager of a 35 years old publishing house in Turkey, also defines the printed books as,

very important factors for children to communicate and contact with mother and father, and on this occasion to gain socio-cultural development. A digitized and asocial reading will affect the human relations negatively and people will diverge from each other and will not communicate or start a family.

Phd. Fatih Erdoğan, one of the most famous writers of children's books in Turkey says that nothing will change for children between book and book app:

Writing was in first on wall of the cave, then it was in clay tablet, than papyrus and parchment, then paper and now again tablet. The important thing is need of humans to share their feelings and ideas. Cave people were jealous and alone too. They were getting angry or sad. It doesn't matter how technology changes. Need of people for sharing, will continue! It doesn't matter, if a father reads the tale from a book or a tablet. It is important to go on sharing. The problem is, putting the technology in place of people. The problem is about adults they spend time with devices rather than with their children.

The companion "*A Companion to the History of the Book*" is like a very detailed version of Erdoğan's saying. In the companion, researchers summarize the history of formats of the book, tell the several versions during the history, from tablet to paper and as a result, digital formats of it (Eliot & Rose 2007). As in all the products, technology changes formats. However, the important thing is not the format, how it is used and what's its content.

In brief, experts except Erdoğan, indicate that interactive elements, ads, social media, charge problems and other Internet products dissolve the children's attention, so child cannot keep the focus on the plot via book apps. They find printed books more helpful for children in terms of acquiring literary taste and focusing on the text. Besides, Şirin and Neydim told that the problems of interactive elements might be solved with well-prepared apps and by educating teachers, parents and children.

Problems like charge, virus, quota problems or easily broken devices may be solved with the upcoming innovations, but interactive elements are the main parts of book apps and they should be investigated deeply. Claims of experts, except Neydim, Erdoğan and Şirin are similar to the following researches: Chiong et al. (2012) found that interactive elements interrupt the children's focus on reading in enhanced books. However their research is for co-reading experiences and limited with 32 pairs of parents and 3-6 years old children in New York and also they don't define what kind of interactive elements distract children. Quill also claims that while children are reading on the screen they don't focus as they do on the printed book, they just scan (Quill 2011). A meta analysis made by Takacs et al. among 2147 preschool and elementary school children in 43 studies, summarizes that interactive elements like questions, dictionaries and games are interrupting children. Takacs et al. defined music, sound effects and visual properties as multimedia element and found beneficial for children; especially for the children lack of family who like reading book (Takacs et al. 2015). Yokota & Teale (2014) also found the background voices as an advantage for children. Koss told that book apps do not take the place of printed books, but provide extra features (2013).

On the contrary, by examining book-based apps, Bircher claims that successfully prepared book apps, provides the properties of traditional picture books and interactive opportunities for extra reading taste (2012). Expressions of Bircher (2012) are engaging to experiences of Şirin and Neydim. If the book app keep the story as the core element, it may be helpful and successful for children's reading culture. Javorsky & Trainin's findings also support Şirin and Neydim. They expressed that interactive elements are not stable, they may differ from app to app and they will be improved day by day. Interactive elements may both motivate or distract according to their properties. In order to help kids, teachers should guide children for mental flexibility (Javorsky & Trainin 2014). Also research made with 18 Omani primary school children, points that interactive elements motivate children for reading (Al Aamri & Greuter 2015). Further, Gardner & Davis claim that the app may become app-enabling or app-dependent for the user, according to the context they are used (2013).

Overall, positive findings and solutions regarding the drawbacks of book apps are

encouraging. It is seen that, although book apps have properties that may interrupt reading, these problems may be solved. Although books are more helpful for children's reading, book apps might be produced and used as helpful as them. Because interactive elements have a huge number of different possibilities with the developing technology, they may be planned and designed with motivating opportunities for reading. For example, an app may guide the child to stop and think on the plot, on a single sentence and on a single illustration; orient the child to stop and feel the sense of the plot. An app may do this by rewarding children or with enjoyable functions. With this way book apps can even be more functional than the book, because no one tells children to stop and think on the text, while they are reading. Digital memories may be provided by the publishers. Publishers may remind children what they did with book apps by enjoyable videos with titles such as "You read these books." "You took these notes." and "You liked these sentences." Book apps may also help children to re-read and criticize the text by asking questions as "Which character is your favourite?" "What are your 3 favourite sentences?" "What did you feel while reading this tale?" and "What would you do if you were in place of the character?" In brief, interactive elements can be used to motivate children for focusing on the text and literary pleasure. Ads and external links should be limited in book apps. Both books and book apps should be prepared with a content, respectful for children's ages, rights and psychological needs. As in all new technologies and new media products; the way, how the books or book apps are produced and used is more important than in which format they are.

4.1.2 Fostering vs. Hindering Imagination

Most of the publishing experts agree that picture books help dreaming, questioning and thinking abilities of children; whereas book apps are decreasing these abilities even they provide reading environment. Nevin Avan Özdemir, explains:

At past there were adults who were proud of their children coloring in computers so they do not need coloring pencils and books and may keep the house clean. It is seen that their children didn't have imaginative abilities. Prisoning the children in a virtual world, leads to raising children who perceive everything as virtual and do not know anything about three-dimensional world. The aim of the book is motivating children thinking, creating and dreaming not to convert children to an encyclopedia. Book apps

will only help memorizing and may be useful for children after the age of 10. 50 years later, societies with individuals who have thinking abilities will be more developed and others will be second-class, living with what thinking people serve for them.

Gültekin says,

We need thinking, dreaming and criticizing children. Children gain these abilities with books. People, who invented plane or television, were the people who have great imagining ability. Children lose their ability of fantasy via mobile book apps. A mobile book app also has benefits, however comparing to book apps, books are more beneficial with at least 90% percent.

Aydın explains the book apps as part of fame,

Book apps are part of fame, they will become ordinary; people will be bored of digital books and will come back to traditional books in the future. However until that time, children who spend too much time with virtual platforms may lose their imagining abilities.

Karaca also criticize book apps, “*Videos or movable illustrations will not help children, improving their imagination abilities. On the contrary, in printed book app, children may examine the stable illustration and dream with it.*”

Visual properties are also part of imagination in picture books. While comparing book apps and conventional books in terms of visual attentiveness, interviewees explained that, book apps generally do not help imagining, but may help learning. Şebnem Kanoğlu tells the advantage of book apps in terms of learning, “*Book apps may provide various and numerous visual properties. For example, while a tale about a folk play is told in the text of picture book app, video of the folk play may be shared with children.*”

Behiç Ak, a well-known illustrator, author and architect, whose books are translated to several languages, including Japanese, talks about the importance of consciousness of “how to read”. He explains how looking at a single illustration for a long time will help children to improve their imagination. He says,

In my activities with children, I want them to look at an illustration, a photograph and say their comments about it. As soon as they focus and think,

they find new details. Children and also adults need visual reading by focusing on an illustration for a long time. Tablets also have benefits however they do not help as much as books.”

On the contrary Neydim mentions that picture books may also affect children’s imagination adversely if they are not prepared in accordance with children. And he explains why can books or book apps limit children’s imagination:

Books or book apps must be prepared with a consciousness of seeing the child as a subject, identity, and personality, not an object. If book apps are prepared such as a trodden snack, someone dreamed and assigned everything; it will not help children’s imagining. Also videos and films are not books. They are the imagining of production director. This is also same for the illustrations of picture books. If the illustration shows a single moment, it doesn’t help dreaming. A good illustration must help imagining what happened before the moment and what will happen after the moment. So child can think and ask, “What happened here?”

Nevin Avan’s concern about children’s perception of mixing real and digital worlds links to Smith’s children’s tale (Smith 2010) and Wolf’s expressions (Wolf 2014). Children may not understand the difference of real and virtual world, as soon as they spend too much time in Internet.

It is understood from the interpretations of experts that although book apps serve incredible visual solutions, they do not help the imagination for children. They only help multiplying knowledge. On the other hand, as indicated above Neydim offers solutions. Albayrak also offers solutions. Although new media has imagination breaking effects; beneficial products that will improve children’s imagination, may be produced with respecting to children’s physical, psychological, moral, mental development (Albayrak 2013).

As Sever tells, children first learn visual reading (2013). They dream with illustrations and dream a fiction by reading illustrations. As soon as they learn reading the text, they still go on dreaming. Imagination is an unlimited process. While reading the text, child may dream the characters, events and places. Text and illustrations of the book will help children’s imagination if they are well prepared. However in the book apps, everything is dreamed and designed by the producers. Child sees all the details of the characters, places and events in the illustrations or

videos. So, child has nothing to dream. Nonetheless, if the producers and publishers of the books apps are well educated about children's literature and psychology, they may provide children, dream-able apps. For example the text may be shared with a half illustrated illustration or text may not be finished. App should guide children finish the half illustration or the tale and motivate dreaming. In short, despite the fact that printed books are more beneficial for children's imagination; by working on the psychological needs of children, several solutions can be used in book apps to help children's imagination skills. Children, reading several books cannot be a bookworm, whereas children who read numerous books and interpret them are defined as bookworms. This is also possible with well prepared book apps. It seems that it is difficult to prepare a valuable book app for children's imagination, but is not impossible.

4.2 Consumption of Book Apps as Enslavement

21 of 22 experts tell, although book apps have beneficial properties for children; they have enslaving factors due to the digital environment they are in. It is difficult to reach book apps in the crowd of Internet. Phd. Melike Günyüz, prestigious, experienced publisher, manager and author says, if children find the book app in a game categorization, they are asking, "What kind of a game is this?" Also, the digital environment of book apps threatens on **physical, mental and psychological development, security and cleanliness of environment**. And also they may be a part of **consumer culture**. Of course this not the area of reading culture directly; but because good readers need good health and publishers are the manufacturers of book apps with engineers; publishing professionals are taking into account the health of next generation. They agree that printed books are natural and healthier. However they have questions about book apps. Gültekin likens the book apps to food and talks about the **physical health**,

Food is beneficial but if we eat a lot, it becomes harmful. Book apps may have benefits but if used too much, they are also harmful, too. But printed books do not have physical harms.. As soon as children look at the screens they have dry eye syndrome, you see them their eyes are aching.

Mustafa Orakçı and Şebnem Kanoğlu tells that books may be harmful for children's

health only when they carry several books. Because book apps are collected in a single device, they may be good for children in terms of easiness of carrying. Carrying numerous printed books may cause waist and back problems.

Publishing professionals have also worries about **psychological development and addiction**. They talk about the findings of psychologists such as from American Psychological Association. As soon as children get used to touch and watch screens, they will be addicted. Time spending with screens must be restricted for children.

Nuran Turan also tells that teachers and parents should be educated in order to keep children from disadvantages of the digital vehicles: *“We are living in an age, people earning money from digital environments. However **addiction** is big problem and as psychologists say if a child has an addiction problem he or she may not be treated before becoming an adult.”* Aydın points out the addiction to digital devices, too. *“Addiction of books is seen really random. However addiction to digital devices became common. This is a great problem. Children do not have friends. Lack of friends is one of the causes of addiction. Their parents also do not have friends.”*

In order to get rid of this enslavement, Behiç Ak advises adults, teachers and governmental authorities to prepare alternatives for children such as playing in the green places, climbing trees, drama, theatre, sports, activities, touching soil and examining seeds.

Families do not give permission to their children to play outside. Lack of these activities causes digital devices finding a place for themselves. Tablets should be only a small part of our lives. As soon as children and also adults spending their time with two dimensioned virtual world, they will become unhappy. There is a misunderstanding that improvement of technology is improvement of humanity. None of the technologies mean improvement of human. People, who are leaving away from the soil, cannot find rhythm of the life. Cannot be healthy. Can the toy duck take the place of duck? Virtual environment may not take place of nature. There should be a balance between representative, virtual life and the real, natural one.

According to Gültekin empowerment of children via both books and book apps will be possible with education:;

It is difficult to reach tablets in small villages and rural places in Turkey. However in urban places, families give tablets and mobile phones to their children in order to divert children. Parents, teachers, teacher candidates and publishers should be educated first about children's literature and books. How can children gain reading culture? Who are the authors of children's literature? Which kinds of books are in accordance with children? In Turkey there are not any faculties for children's literature. And faculties of education, which have courses for children's literature, do not have enough infrastructures.

Another point that experts complain is that, book apps may **decrease the mental development** of children. Günyüz says,

Neurobiologists made researches about reading by comparing reading groups and non-reading groups and they found that reading supports mental development (Yilmaz 2012). Because of this I advice children to meet tablets late.

Behiç Ak also talks about the effects of reading on mental development and say,

“Our hands are really complicated. Because of this it is very difficult to make a robot of the hand. With books child use their hands completely and coordination with hand and brain is better than book apps. Children need three-dimensional reading. Tablets and mobile phones serve only two dimensions and this restrict the abilities of children.

Experts also have worries about personal **security**. Yüksel says, “Apps may capture the personal information of children. And children may be directed to platforms, which are not suitable for their ages.” Experts also worry about the effects of digital devices on **environment**. For the printed books, it is possible to plant young trees in place of older ones. So printed books have no harm. On the other hand, as technology is developing, technological devices and their batteries, adaptors are generating a technological graveyard in our world. Will it be possible to recycle or get rid of all of this dirtiness? Nevin Avan is worried about these devices and says: “Giving tablets and mobile phones to little children and leaving them with those vehicles is like watching the trials of atom bomb in 1950s.”

Can Öz summarizes these problems with following words and offers a recommendation:

Digital devices will slowdown children's mental and psychological

development, due to the fact that they may cause problems like insomnia. Also they may cause other several problems, but, because it is almost impossible to be opposite of technologic development, it will be wisely to look for the solutions to be affected with minimum possibility.

Although research questions were about comparing books and book apps, experts also remind the other screens. Aytül Akal who has children's books more than 150 and translated to several languages, explains that book apps may be tolerated more comparing to the other kinds of "games" or "screens" such as television screen. Günyüz, Karaca and Tosyalı find the book apps more beneficial comparing to gaming apps.

Akal's claims about television screen reflects Ercan Bilgiç's views on the issue: Bilgiç, who is the supervisor of "Digital Media and Child" website, established by İstanbul Bilgi University/Faculty of Communication/Department of Media, illustrates the problems of media; especially cartoons, films and TV programs for children. Owners of the media have a symbolic power and they manipulate the content. They don't provide the reality, but their own perspectives. Their aim is not to help children's psychological development; but increasing their incomes with ads. So adults should check the owners of the media which their children are following. Cartoons, films and TV programs are not only manipulating but also causing children to be less passive (Ercan Bilgiç 2014). Pembecioğlu (2013) says that our brain needs activeness, not passiveness. And as Karaca complained about the games, game addiction is problem as understood from the EU Kids Online reports (2011). In short, book apps may help children, by causing children to be more active and may have advantages comparing to TV and computer games or gaming apps, as experts tell.

However even if the book app is respectful for the child's psychological and literary needs; virtual environment of the app on the Internet maybe problematic and risky for children. Arvas and Özdamarlar explain that, although it looks easier to reach a book app, it is difficult to find a well-designed book app in a crowd of attractive elements. While looking for book apps, children are facing several amateur writings, elements other than book such as games and it is difficult to find qualified text in the wealth of book apps world.

As we link back to researches, Bilton (2014) reports that even Steve Jobs, inventor of one of the most popular tablets and mobile phones; limited children for using mobile technologies at his home; due to their harms. The problems of mobile technologies about mental health, addiction and security that interviewees talk about are proved by the reports. According to the research, which is managed by Sonia Livingstone by interviewing at least 1000 children from each country in Europe, with random sampling, Internet addiction is %24.9 in Turkey, while it is 32.1 in Europe. %13 of children in Turkey and %25.7 in Europe encountered sexual images while using Internet. These photos bothered 48.2% of children in Turkey, while this rate was 27.1% in Europe. 3.2% of Turkish, 5.6% of European children were exposed to cyber bullying (Livingstone et al. 2011; EU Kids Online 2014; Ogan et al. 2014). The National Center for Missing & Exploited Children in USA reported that child sexual exploitation exploded due to mobile technologies (Ernie 2011). Although there are several problems, as Timisi illustrates, instead of rejecting the use of Internet and mobile technologies for children totally, adults should guide children for a functional and helpful using. They should teach children how to use the digital media and how to differentiate harmful and helpful products. As parents don't leave children alone outside, they shouldn't leave them alone with screens (Köprü Yılmayan 2016). Also Oktik advises parents to be more informed about Internet and mobile technologies than their children (2013). Çelen (2013)'s advice is similar with Behiç Ak. She advises families to find alternatives of digital games for their children. However consciousness of parents is not enough yet in Turkey. 60% of parents, %61 of teachers advised children about Internet safety in Turkey. In Europe 63% of parents, 58 of teachers advised. The rate of adult checking is highest in UK with %85 (Livingstone et al. 2011) On the other hand result in research of Kaspersky Lab and B2B International is less: 30% of parents advice children about the risks of Internet (Kaspersky Lab 2016).

All the digital products for children should be prepared by taking care the children's rights. The United Nations Convention on The Rights of Child (UNCRC) defined the rights of children and worldwide governments promised in 1989 (UNICEF n.d.). These rights aim the highest benefit of child. As the technology developed, UNESCO prepared declarations in order to keep children from harmful media and

advised to educate children for the use of new media technologies (UNESCO 1998).

As Mark Prensky defined (Prensky 2012) digital natives are more talented to use Internet technologies comparing to their parents (Prensky 2012; Çakmak 2013; Dingli & Seychell 2015). So in place of prohibiting, adults should help children for a beneficial use of book apps. Technology is not a problem itself, the problem is about how it is used. Engineers, psychologists, publishers, teachers, writers should work for finding helpful solutions for children in order to keep them from threats. Endless solutions may be found in the digital arena, which will both enjoy children and help improving their reading culture. Serving handy and quick knowledge to children will make children passive. As soon as children wasting time with screens, they are moving away from books and finding books stable. Parents should share time with their children very often. Also they will make imagine-developing activities together, either via books or book apps. They will not advice children to read books, should share books. Keeping curiosity with good books and presenting picture books to children is also important. Parents or teachers shouldn't motivate children to read more quickly. And in place of advising children to read, they will read and become a good role for children. The time children spend with them must be restricted, not by forbidding, by serving enjoyable alternatives.

For more security, tablets, which will be just for children and providing book apps may be invented; as Amazon did with Kindle for adults. These tablets may be more sensitive for the eye health of children. Children shouldn't sit for several ours with tablets. In order to keep children from illnesses, they would be encouraged for sports and physical exercises.

Governments and engineers should work for security of children in Internet. Also they may look for solutions for destroying the waste tablets in order to keep the environment.

Interviewees also worry about book apps that they may be a part of **consumer culture**. Zeynep Ulviye Özkan, who worked as an editor in three different publishing houses, describes the book apps as, "*Objects of consuming culture, which do not*

have deep meanings for users and may be cleaned with just one click, not stable comparing to printed picture books.”

Gökçen Karaca, a professional editor in children’s books area and graduate of communication department is also defining the book apps as part of consuming culture and says that:

*In picture books core element is the tale. But picture book apps are helping for ‘spending or killing time’ and they decrease the reading, criticizing and expressing abilities of children. Although picture book apps may converge unlimited properties, they are part of **consuming culture**, not the reading culture.*

Behiç Ak also points to loneliness industry which links to consumer culture,

With the books children need adults. This relation is very important. Technology is causing loneliness industry. With book apps, loneliness of children is increasing. They do not need anyone. And as soon as humans are isolated, companies may sell their products more and more. And loneliness is causing unhappiness, depressiveness.²

Neydim indicateds that *“Both books and book apps need esthetic properties and they mustn’t be a part of consuming culture.”*

Stichnothe’s findings are similar with interviewees’ “consuming culture” expressions. She analyses the iOS book apps for primary school children and points out that book apps may have in-app purchases or links to online shops, which will cause children to consume rapidly although parents avoid from this. By defining the readers of book apps as “users” she consolidates her expression about consuming culture (Stichnothe 2014). Schor also claims that social connections and creative abilities of consumerist children are less than the others (Schor 2005).

Ak, Neydim, Karaca and Özkan told their worries that book apps might be a part of consumer culture. Children’s consumer identity is now formed at very early ages (Yalkin & Rosenbaum-Elliott 2014). Schor illustrates, in her book “Born to Buy”,

² Tablets are not only single part of loneliness industry. Behiç Ak defines the other causes in his interview with Simla Sunay Özdemir. (Sunay Özdemir & Ak 2007).

that media treat children as consumers nearly from the time they are born; design even the essential stuff as a toy and define this treatment as “empowering” children (Schor 2005; Newkirk 2007). As İzberk Bilgin summarizes, there are both positive and negative discourses about consuming culture. Discourse of Marx, Horkheimer and Adorno, Even, and Boudrillard defines the consumer culture as “enslavement” and on the other side; approach of Douglas and Isherwood, Bourdieu and de Certeau has a positive perspective to consumer culture (Izberk-Bilgin 2010). It is seen that these positive and negative perspectives are also valid for books and book apps too. Although it is possible for printed books to be a part of consuming culture, it is not a general problem. However, for the book apps interviewees and researchers have concerns about book apps that they provide for consuming culture not the reading culture and such as Avan, reject them totally. On the contrary Erdoğan welcomes the book apps with a totally positive perspective. Remaining 20 interviewees, in other words, most of them, talks about the problems of book apps and offer solutions for those problems. The aim of reading mustn’t be consuming the book or book app, it must be to feel, live, understand, imagine and internalize the literary work and this is up to the producers, publishers, writers, designers and users which will help children, not the medium itself.

Publishers may solve the consuming problem by limiting in app-purchases in a specific time. For example child will not able to buy a new app or story before finishing the stories and tasks in the existing app. Publishers may also block links to online shops; in order to provide a higher literary taste. And they should make an effecton categorisation for the book app in the digital market. They shouldn’t share ads in children’s book apps. It is a fact that consuming culture may also be possible with printed books. Children may buy printed picture books, collect the books in their library, share their photos in social media, list them to show to their teachers and do not read them. Teachers or adults may cause consuming of printed books by giving more importance to “how many books did they read” rather than “did they read in a quantitative way.” A social reading with parents, teachers or friends is more effective. In the book apps, child may find whatever he or she need and so don’t need any adults. Apps should orient children for co-reading with adults; shouldn’t motivate for loneliness. In short, if it will be possible to minimalize the harm of mobile technologies, book apps will be eye-popping for children’s reading culture.

5. Conclusions

By checking the stats of EU Kids Online (2014), OECD stats (2016), Common Sense Media (2015), TurkStat (2016), it is seen that use of Internet and mobile technologies of children is increasing rapidly, not only in Turkey, but also in the world. It is impossible to ignore the tendency of children to mobile technologies. In the last two decades improvements in technology, especially book apps, provided different opportunities for children, which are very different from the printed books.

There are several researches about media and children both in Turkey and in other countries. However there are not enough researches about new media and children (Hasdemir 2013), especially about relation between book apps and children. As Eliot and Rose (2007) say, “Books make history (eds Eliot & Rose 2007: 1).” and “Books are made by history (eds Eliot & Rose 2007: 2).” In 21st century, it may be claimed that book apps are making history of children and history of children is making the book apps.

In order to have a deep understanding about, what is changing in children’s reading culture, in this research, books and book apps were compared with the help of observations and experiences of editors, critics, publishers and authors. 22 experts attended to the research and answered the open-ended questions of the researcher. Questions were investigating the differences between books and book apps, in terms of their effects on reading culture, both directly and indirectly. Similar parts of the interviews were gathered and engaged with literature in order to make in-depth analysis.

Differences between the picture books and picture book apps may be summarized with the following table:

Table 5.1 Differences between picture books and picture book apps

Books	Book Apps
size of letters are stable	easy to change size of letters
are friends of children	may not be friend
taking notes with paper and pencil	taking digital with mobile technologies
for sharing, extra energy is needed	easy to share the parts with others
difficult to reach the books from all around the world	easy to reach the book apps from all around the world
have a real sense of touch	virtual sense of touch
have smell	doesn't have smell
three dimensional	two dimensional
stable illustrations	changing size of illustrations
stable illustrations	movable illustrations
healthy unless readers carry numerous books	suspicious about health effects in terms of radiation and light
may give literary taste	reading is interrupted by interactive elements, so it is very difficult to serve literary taste
not harmful for environment	harmful for environment
have warm memories	difficult to have memories
reader need to listen music with extra elements, except specially prepared musical equipment integrated books	may serve music and pronunciation of the text easily
textual literacy, visual literacy	textual literacy, visual literacy, aural literacy, technological literacy, digital literacy , media literacy
users spending time with the text	users spending time with activities, games and other interactive elements
seeing, touching, smelling	seeing, touching, hearing
difficult to gather games, puzzles, drawing, coloring activities and tales in a single product	easy to gather games, puzzles, drawing, coloring activities and tales in a single product
no links	have links to other digital media
text via illustrations	text via video, sounds, dictionaries, activities and movable illustrations.
no charge problem	charge problems
if there is not a disaster easy to keep	virus may clean all the history of several book apps
children perceive them as a book	children may perceive them as a game
needs a big place for archiving numerous tales	easy to archive numerous number of tales
reading culture	convergence culture
part of sharing	may be a part of loneliness, lose of real communications and consuming culture
no threatening	threatening personal security

As a result of the research, it is understood that picture books are more beneficial for children's literary taste, mental and psychological development, imagination, creativity and health. Picture book apps are more beneficial for entertainment, accessibility, transformation, pronunciation and learning new words. Picture book apps may create convergence in terms of media, culture and virtual relations but divergence in real life relations. Overall, books or book apps can be empowering for children only if their consumption in terms of time and content, moderated. Here, the quality of the content becomes the key.

If books or books apps do not have content, prepared with consciousness and in accordance with children, they will not have any benefits, maybe harms. Interviewees advice publishers to take into account, needs, ages and psychology of children while preparing books or book apps for them. Also they advice teachers, parents and governmental authorities, to prepare alternative enjoyable and three-dimensional places; in order to restrict the time spend and minimize the disadvantages of digital devices, on children. It is also examined that picture book apps are not only part of reading culture of children's literature. They are only using children's literature and developing a different kind of medium, about which, the term "picture book app" is not enough. They are product of "convergence culture", readers of book apps need textual, aural, visual and new media literacy together. Researcher offers a term, as technical definition for the picture book apps: "**Converged books**" with an abbreviation of **c-books** is offered, for distinguishing them from other apps, book apps, enhanced books and e-books.

By interpreting the results, this thesis claims that although picture books evolved through picture book apps and format totally changed, content is the king, still the most important thing. If the content of book apps are prepared with consciousness, taking the needs and ages of children into account, knowing their psychological limits, respecting children, helpful for child's personality, positive, secure; they may be as helpful as printed books for children's reading culture. And for the digital environments in which, book apps are found; a moderate approach is needed. Adults should neither see children as victims of mobile technologies for the purpose of keeping them from consumer identity nor motivate them to be an Internet-based

consumer. In order to provide children a safety, functional, enjoyable, imaginative and tasty reading with book apps; this thesis suggests the following:

- Writers and editors should prepare the books and book apps with respect to child's needs. Text must be intriguing, not didactic.
- Illustrators and designers should make a design, which will help to improve imagining ability. They shouldn't show everything in the scenes, leave some scenes to the child's imagine and motivate children to imagine, examine and question.
- Publishers may serve multi-platform reading opportunities for children by directing children from book to book app, from book app to book in order to engage them with advantages of both versions.
- Adults should educate themselves for a good digital parenting. They should look for and find good contents in book apps and share time with children by reading them tales and stories, either via books or book apps. The important thing for the child is sharing the tale or story with the parent; which will be a very important step for love of reading and charming memory in the future.
- Adults should know the mobile technologies better than their children and check what kind of content are their children engaging via Internet.
- Engineers may find technologies for charge problems, for not interrupting the reading. And also they may restrict the child in the book app, blocking them to click for going out of the book app in order to focus the tale.
- Engineers may develop apps, which may change according to the needs and understanding levels of the users.
- Engineers may invent or publishers may provide tablets just for book apps, as Amazon did with Kindle, for adults. These tablets may be "a special, digital, book app library" for children in all ages.
- Publishers shouldn't share ads within the book apps or ads should be shared only at the end of the story and just will link to other stories.
- Researchers, publishers, engineers, editors, writers, illustrators should explore helpful solutions for the problems of mobile and Internet technologies and provide a safe digital environment for children. They should be following new researches.

- Adults, teachers and government should teach critical thinking and in order to motivate them for choosing beneficial book apps.
- Adults, teachers, governments, researchers, publishers, academicians should prepare natural, enjoying alternatives for children in order to prevent children from Internet dependency.
- Faculties of Children's Literature should be opened in order to make focused researches and raise professionals.
- Adults, teachers, governments, researchers, publishers, academicians should cooperate for providing a new media which is respecting to children's rights and needs.

5.1 Limitations

As in all the researches, this research had also limits. Research was made in Turkey with publishing experts who are citizens of Turkey. It may be done with other professionals in other countries and comparing will be progressing. Research was made for only one genre, tales. Books and book apps of stories, novels and poems for children may also be compared. Qualitative research was made with publishing professionals; it may be made with teachers and adults. In this research only the effects of books and book apps on reading culture were investigated. Also effects of book apps on adult-child interaction, children's health, children's psychology in Turkey need to be investigated more. Especially books and book apps may be compared with an empirical way, directly with children by sharing books and book apps with children, observing them and asking deep questions about their feelings and experiences.

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Appendix A Interview Questions

This research is only concerned with the effects of the children's tale books on children at the age of 7 to 9. Educational books, stories, non-fiction books and novels are excluded.

In the following questions, "book app" means a medium which includes a single text and audio, video, activities, interactive illustrations integrated with text and presents the choices for changing the language of text, voice or video; recording voice of the reader; in a digital platform such as Apple and Google Play stores. Conventional picture book means a children's book, which is made of paper or cardboard.

What are your observations about following issues?

1. If the world were a place in which there are no paper books, what would children lose?
2. What are the contributions of picture book apps for children?
3. What are the advantages of the picture book apps comparing with conventional picture books?
4. What are the advantages of conventional picture books comparing with picture book apps?
5. What are the differences between picture book app and picture book in terms of hand-eye coordination of children?

6. What are the differences between picture book app and picture book in terms of physical health of children?
7. What are the differences between picture book app and picture book in terms of mental development of children?
8. What are the differences between picture book app and picture book in terms of visual attentiveness development of children? Supported by videos and interactive illustrations, do the book apps contribute to children?
9. What are the differences between picture book app and conventional picture book in terms of development of literary pleasure for children?
10. What are the differences between picture book app and conventional picture book in terms of learning new words?
11. What are the differences between picture book app and picture book in terms of development of using native and foreign languages for children?
12. What are the differences between picture book app and picture book in terms of improving sense of rhythm for children? What are the benefits of listening to music while reading a tale via book app?
13. Does “to be able to listen to the text via picture book apps” make children passive?
14. What are the differences between picture book app and picture book in terms of focusing on a single subject?
15. What are the differences between book app and picture book in terms of accessibility?
16. Do conventional books have damages to nature or mankind?

17. Do books apps have damages to nature or mankind?

18. How can children be directed from book apps to conventional books? Is there a need to direct?

19. Will the multi-platform books which are directing children from book to book app, redirecting from book app to book be useful, helpful and valuable for children?

20. Do you give permission to me for sharing your answers with your name, profession and company?

