E-book or print book: Parents' Current View in Hong Kong

Cora Yan Yu Sung, Dickson K.W. Chiu (Corresponding Author)
Faculty of Education, The University of Hong Kong, Pokfulam, Hong Kong
email: u3542315@connect.hku.hk, dicksonchiu@ieee.org

Abstract

Purpose: This study examines the perception and preference of parents for their children using mobile devices to read. The pros and cons of electronic books and print books are examined from the parents' perspective.

Methodology: Semi-structured interviews were conducted with eleven parents in Hong Kong who have children in primary and secondary schools. Their opinions were summarized into common themes to explore their choice of books for children in terms of format and content.

Findings: Our findings indicated that most parents and schools still prefer print books unless required by schools. However, the e-book has played an essential role under the current COVID-19 pandemic and digital literacy development.

Originality/Value: Scant studies focus on parents' views on their choice of book formats for children, especially for East Asian metropolises. The findings are useful for schools, teachers, and publishers to explore publication and collection as well as market development in digital reading resources.

Keywords: Electronic book; print book; reading habits; promotion; digital reading; parent's intervention on reading

INTRODUCTION

While there are rapid increases in mobile device ownership and network coverage, the development of digital services has also become diversified (Ko et al., 2015). For students in higher education, they are adopting mobile devices for not only daily life but also for academic reading (Ko et al., 2015; Wang et al., 2016), no matter it is required by pedagogies or initiated by themselves.

The market for electronic books has been developed for over a decade, and electronic reading materials are not limited to leisure purposes but also helpful for educational purposes (Wang et al., 2016). Schools in Hong Kong are promoting STEM (Science, Technology, Engineering, Mathematcis) programs, or even STEAM (Science, Technology, Engineering, Arts, and Mathematics) and demand for digital literacy (Lefever-Davis & Pearman, 2015), including digital reading and collaborative learning to support teaching and learning activities. Although Hong Kong has rapid growth in consuming online entertainment (Consumer Council, 2016), the market for electronic books is not active compared to other regions (Statista, 2020).

On the other hand, the initiation of using electronic devices in students' life should not only rely on schools but also parents, and children should have education and intervention in using electronic devices from their parents before entering school or becoming independent (Vaala & Bleakley, 2015). Saracho and Spodek (2010) and Tang (2018) proposed that recommendations from teachers are essential to parents, especially because parents in Hong Kong work quite close to school management. Most parent-teacher associations in Hong Kong are actively committed in school activities, and at least one parent member is in the Incorporated Management Committee, who may comment on school policies. Therefore, considering factors from parents' influence is crucial when studying students' reading habits.

Besides, Lam and Loo (2014) found that family factors are influential towards children's independent mobility (CIM), where the household income and working status of mothers would interpret the time and money consumed on children. Students would depend on parents' opinions and financial support as primary resources of choice. As contemporary reading devices are multi-functional as web browsers, social media browsers, and game machines (Ko et al., 2015), parents should control and guide their children with their time management to avoid addiction (Venkatesh et al., 2019).

Recently, the COVID-19 pandemic has caused problems of accessibility to physical bookstores and libraries, and people had spent more time at home. Figures in western countries reveal that newly created e-book readership in both public libraries and paid platforms have been raised significantly in March since the pandemic (Kozlowski, 2020). However, it is unclear whether people's reading incentive or change their reading habits, i.e., from non-readers to readers, or from print format to electronic.

This study addresses the current problems of the slow-developing progress and the low demands of the Hong Kong e-book market from the parent's perspectives. The purpose of this qualitative research was to explore some mutual themes in between participants' perceptions and decisions and how they influence their children's reading behaviors by the following central research questions:

RQ1. How much time and money would parents spend on their children's digital and print reading materials?

RQ2. What are the pros and cons of e-books and print books from the parents' perspective?

RQ3. What are the main concerns that influence their choice of digital or print materials?

RQ4. What are the behaviors of children that change upon reading on electronic devices?

RQ5. How do parent perceptions influence their children's reading behavior?

LITERATURE REVIEW

Differences between e-books and print books

Staiger (2012) investigates the pros and cons of e-books from academic users' perceptions. Reasons for using e-books include convenience, searchability, cost, portability, and eco-friendliness as compared to print books. Users who prefer e-books think it is easier to retrieve specific information while print books are for in-depth reading (Ko et al., 2015). For the younger generation, Rao et al. (2018) conducted a study on the price and desirability of both types of books in university libraries. The price of e-books is generally found higher than print versions and also more preferred by users.

However, previous studies found no absolute criteria for readers to choose either type of books, but demographic characteristics affect e-readers' adaptation. For example, Shrimplin et al. (2011) conducted a factor analysis on four clusters of opinions on the e-book and showed that e-reader characteristics would affect readers' choices between the two formats: book lovers

had an emotional attachment to print books, while technophiles preferred e-books. Zhang (2012) emphasized that the younger generation and males are more likely to adopt e-readers than the older generation and females. Liu (2005) found that many reading behaviors have changed, but readers aged 30 to 45 still prefer print materials to electronic ones, because many functions embedded with reading on screens, such as scanning, browsing, and spotting keywords, may distract users while in-depth reading and highlighting occur only on reading print materials.

Research on higher education students (Foasberg, 2011) found that only a small portion of students would use e-readers and mainly for leisure purposes. Meanwhile, the cost of e-readers and e-books, title availability, and eyestrain are the main concerns while adopting digital reading. Shabani et al. (2011) got similar results from students in that they would often print electronic documents for ease of reading and note-taking. Millar and Shrier (2013) found students in tourism and management classes generally prefer print textbooks to electronic ones as they feel printed textbooks more convenient.

Wang et al. (2016) studied the influences of mobile devices on the reading habits of university students in Hong Kong. They showed that mobile device adoption changed magazine reading habits, including reading patterns within a day, frequency, and types. Still, the total time spent on reading had no significant change with the adoption. Tablets are the most favorite mobile device types, which may be due to device vendors' marketing strategies. Babarinde et al. (2017) found that some secondary school students may use electronic devices to read books, but they also mainly use these devices for leisure purposes. While there are prescribed resources on textbooks and school recommendations, school students tend to reduce time on voluntary reading activities once they can spend time on electronic media.

Learning in the digital environment

A survey by Ko et al. (2015) concluded that Library and Information Science students among Hong Kong, Japan, and Taiwan, students use smartphones for social, casual, and search purposes rather than academics, and they avoid read lengthy materials on smartphones. A further study (Lau et al., 2017) on educational usage of mobile devices in Japan (undergraduate and postgraduate) revealed that the use of mobile devices for education purposes heavily relies on learning patterns, most frequently for searching but least for reading. However, mobile devices are still mainly used for social and entertainment purposes rather than academic

activities. For barriers to using mobile devices to read, the study found that screen sizes and website compatibility are the most concerns from students. In a study (Wai et al., 2018) on students' usage pattern of mobile apps, the findings confirmed the positive attitude towards young people using mobile apps for academic learning. The technology acceptance model (TAM) was used to study students' intention to adopt apps for academic learning, which could be a useful tool applied in this study to outline parents' attitudes towards technologies. Zhang et al. (2020) revealed that most students participating in their research recognize the benefits of using mobile learning skillfully towards their professional study and confidence level. Abubaker & Lu (2017) conducted a survey among students aged 9 to13 for Internet and e-book usage, and over 80% of students said that they had not used e-books before.

Parents' role in children learning and reading

Greenhough and Hughes (1998) study the differences among parents as high conversing and low conversing rather than ages of child. They have different perspectives and approaches to encourage their children to read; for example, parents with great conversing treat reading as an enjoyable activity and would share books with their children. Bergin (2001) finds the quality of parent-child relationship and frequency of parent-child joint reading significantly positively related to children's attitude toward reading and their reading frequency, as beginner readers. Fiala and Sheridan (2003) study the effectiveness of parent involvement in children's reading and discover that significant improvement in reading accuracy occurs after adopting paired reading methods at home. Further studies on families' choices of children's literature books towards reading interest and motivation show that parents can share literacy-oriented experiences with their children during reading time to build positive reading attitudes (Saracho & Spodek 2010; Baker et al., 1997). These studies demonstrated that parents exhibit heavy influence on their children from an early stage, no matter the literature choices, habits, or interest.

METHODOLOGY

Since this research aims to explore the necessary attitude of parents, with scant previous related studies, the choice of research methods was collaborative and exploratory. As general ideas are needed to establish further survey direction, qualitative interviews were used for exploring the underlying reasons for participants' perceptions and behaviors. Semi-structured interviews

ensure participants expressing their thoughts in the scope of research with their expression freely (Leedy & Ormrod, 2013). It also enables interviewers to follow up and respond, while participants can clarify their answers instantly (Bryman, 2001). Moreover, all participants were asked of the same set of questions for data consistency and facilitating analysis to discover the similarities and differences between them.

Jun et al. (2012) indicated that the demographic profiles do affect the awareness, interest, and intention to use an e-book. Purposeful sampling was applied to select parent interviewees by criteria related to their backgrounds: having at least one dependent child, having more or less reading activities, affordable to an e-book device or e-books, and knowledgeable in using electronic devices. Moreover, different age groups of children's parents were covered to explore the possibility of age-related differences in kindergarten, primary, and secondary schools. Thirteen parents were invited, and eleven accepted to participate (one refused the interview to be recorded, and one claimed that he did not know about his son's reading habits). Table 1 lists the demographic background of each participant.

Table 1. Overview of Participants' profiles.

Participant code	Occupation	Children Ages	Ratio of reading in Print book : e-book	Spending on books (of total spending on child)	Reading pattern (Child)	Reading habits (Parent)	Length of interview (transcribed into English words, approx.)
P01	Accountant	3 & 6	10:0	3%	Almost daily	Not read at all	210
P02	Teacher	16	1:1	30%	Daily	Positive	157
P03	Clerk	19	7:3	5%	Occasionally	Positive	281
P04	Teacher	17 & 11	9:1	5%	Occasionally	Positive	1118
P05	Housewife	11	10:0	50%	Almost daily	Occasionally with purposes	825
P06	Teacher	8 & 10	4:1	Irregular	Almost daily	Positive	169
P07	Businessman	11 & 15	1:1	1%	Seldom	Occasionally with purposes	201
P08	Housewife	14	4:1	5%	Occasionally	Not read at all	219
P09	Teacher	10 & 14	1:1	20%	Seldom	Positive	1154
P10	Teacher	4 & 7	6:1	20-30%	Daily	Positive	1331
P11	Housewife	5	10:0	80-90%	Daily	Occasionally with purposes	1459

All interviews were conducted by English or Cantonese. Related responses were transcribed (and translated into English transcript if the interview was conducted to Cantonese) each of which contained 150 to 1500 words. Themes and codes are consolidated based on the research questions and common opinions structured according to the interview questions. Thus, 5 categories of themes (Table 2 to 6) have been extracted from the transcript.

Due to the unique situation of social distancing during the COVID-19 pandemic, all interviews were conducted via social communication tools. Each interview comprised 16 questions and took approximately 30 minutes. The whole data collection process lasted for three weeks. Ethical approval for the research was granted by the researchers' faculty, and permissions were sought for voice recording and transcription.

RESULTS AND DATA ANALYSIS

To facilitate the expression of results, common theme tables are constructed by consolidating the information collected from interviewees. This section presents the themes responding to research questions.

Demographic information

Parents who were raising dependent children were invited to the interview. All of their children were having certain reading habits. Participants were asked for their children's age, reading occasion, expenditure for books, e-book and print book reading ratio, and channel to access reading books. Besides, parents' reading occasions were also asked for knowing the possibility of hereditary factors in responding to RQ1.

Table 2. Code for participants' (Parent) background.

Theme	Coding
Age of raising a child	From 3 to 19 (Pre-school to secondary school)
Reading the occasion of their child	From daily to occasionally
E-book and print book reading ratio	From 0:10 to 1:1
Expenditure spending on books	From HK$50 to HK$800 per month
Channels to access book	Public libraries school libraries, bookstores, online platform, second-hand market, book fair, bookstalls

Table 2 summarizes the participants' demographic information. Five participants have children in kindergarten to primary school, and six participants have children in secondary school. Half of them read daily or almost daily, and another half of them read occasionally or seldomly. Three participants said their children read print books only, while the rest said that they were reading in different ratios of both e-books and print books, but the print book was still the majority. All participants were spending money to buy books for their children every month, from HK$50 to HK$800 (1US$ = 7.8HK$, approximately). They use various available channels to access books, such as libraries, bookstores, and online platforms. For the participants themselves, some read daily, but some of them did not have any reading habits at all.

Perception of e-books and print books

Table 3. Coding for participants' opinions toward both formats of books

Theme	Coding
Print book	Traditional tool Physical attraction (Smell, texture, color) Easy to read and make notes Never tried e-book, will not try in the short term; Just not a real book
E-book	Harmful to eyes, regardless of eye-protecting technology Could link to more additional resources, interactive feature Convenience Saving storage and the environment Only with a user-friendly device
Open	As long as they read Could see the trend of e-learning Better to have a balance of both Will try when the child grew up

Table 3 summarizes the participants' perceived advantages and disadvantages that might affect their reading decisions. These are critical opinions that could gain ideas to answer RQ2 to RQ5. Participants were generally more favorable to print books because they were customized to traditional reading media. They opined that print books provided convenience for reading and making notes and the physical attraction to children, such as the smell, texture, and color of the printing and paper.

For e-books, the opinions were split. Some participants expressed that they did not like e-books because they considered them "just not a book," and they would not even try it on shortly.

Some said that they would try reading e-book only if they got a user-friendly device. Participants were also much concerned about the potential harm of e-books to their eyes upon prolonged reading. However, participants also provided positive opinions, such as convenience to read and link to additional resources, interactive features bringing extra fun, saving storage at home, and environmental friendliness. Besides, some participants noted the need to balance both formats in reading, and the trend of e-learning would eventually be making e-books popular.

Preference on choosing between e-books and print books

Further to participants' general perception of e-books and print books, Table 4 summarized their preferences on choosing between e-books and print books, such as the criteria for choosing reading materials for their children and their preferred form of reading materials. These questions could further explain their choices between the two formats of the book (RQ3).

Table 4. Coding for participants' problems with reading on e-books

Theme	Coding
Health concerns	Harm to eyes; Low level of sense experience
Parenting concerns	Lack of control and self-discipline; Links to other unrelated media
Lack of resources	Less amount of databases available and books on platforms; Low frequency of resources updates
Lack of knowledge	Access to the database; Not familiar with reading devices; Unable to follow technology trends
Popularity	School support; Promotion from various platforms; Technical support

All participants agreed that book formats would not be the critical factor of their choice of reading materials. Some participants expressed that they would not force their children's choice of format for reading as long as they were willing to read. However, problems that appeared when reading e-books became significant barriers to choosing e-book for their children. The main parenting problems included health concerns on children's vision and low level of sense experience, as well as losing control of children's use of mobile devices. They are also concerned about their lack of technological knowledge, such as skills in using electronic devices and e-databases, technological trends, and the popularity of e-book. Moreover, they perceived a lack of resources, such as the availability of e-databases and books on the platforms and low frequency of materials update. They also felt low incentives for e-reading habits because of the lack of promotion and support.

Pros and cons of e-books

Table 5. Pros and Cons of e-books

Theme	Coding
Pros	Links to external resources Comply with school requirement and social needs Store fewer books at home Explore reading titles
Cons	Harm to the health of eyes Addicted to using electronic devices Links to video or games which are not related to the book

Table 5 summarizes participants' perceptions of the pros and cons of e-books (RQ2). Positive factors of using e-book included compliance with school requirements, social needs, and storage-saving at home. Adverse effects included harm to vision, addiction to electronic devices, and distraction from links to external resources that are not related to the e-books. Notably, linkage function to external resources was also considered positive by some participants because it allowed explorations and interactions of related information, media, and books.

Parental factors of choosing books for children

Table 6. Coding for participants' influences towards their children

Theme	Coding
Choice of genres	Story, picture, mystery, fiction, historical, biography, science, animals, textbook, comics, language; no limit but no sex and violence
Choice of types	Picture book, fiction, comics, tool books, knowledge books
Reading habits	Imitate but not a habit, interested, role models, encourage, imitate and turns into a habit
Choice of format	E-book, print book, open, balance both
Purpose of reading	Entertainment – hobbies, interest Education - language skills, positive value, school requirement
Times spending on reading	No difference, need rest every 0.5 hours, will limit reading time if reading e-books

Table 6 summarizes participants' consideration of choosing books for their children (RQ5). Most participants agreed that their reading habit would influence their children. They believed that parents could build a role model, and children would tend to imitate adults' behaviors and habits. All participants would let their children choose reading materials according to their interests, but

setting a few constraints, such as the values and appropriateness of the content. For the types of books and reading purposes, parents would usually take control of the children's needs, for example, sense building, picture book, language learning, fiction, and tool books. For book formats, some would choose only print books, but most of them were open to both formats. The most intervening element would be the time allowed to read if they read on e-readers. Children would be asked to take rest regularly when using electronic devices.

DISCUSSION

Table 7. Factors of participants' choosing a book in terms of format for their children

Extrinsic factors	Intrinsic factors	Professional factors
- Location of bookstores - Opening hours of libraries - Pattern of accessing resources (buy, borrow, exchange, second-hand) - School requirement* - Price - Accessibility - Harm to health* - Content - Format - Remarks / Notes jotting*	- Reading habit - Texture of holding up a real book* - Feeling good in using electronic devices - Environmentally friendly - Values - Parent-child relationship - Concentration* - Hobbies and interests - Level of control	- Award author - Reading level - Recommendation

*High-rated factors which over half of the participants considered important

According to Deci and Ryan (1985), the Self-Determination Theory of Motivation proposed that the choices of human behavior will be led by intrinsic and extrinsic motivation developed by their personality and psychological needs. Various factors affecting the perceptions and behaviors of participants are summarized into three types in Table 7: extrinsic, intrinsic, and professional.

Parents' decision of choosing between e-books and print books
Time and money spent as indicators to format preference
All participants' children had certain reading habits, including leisure and educational purposes. Surprisingly, they did not ~~only~~ rely on library services much but rather purchase books themselves. Lee et al. (2015) suggested that consumers would make product choices by considering costs and time. The book expenditure reported by the respondents revealed the

perceived importance of reading print books over e-books. Meanwhile, the probability of restricting reading time will be less for children reading print books in terms of time. All participants worried since parents believe that reading on electronic devices would lead to addiction and harm to vision. Although one of them mentioned that the Kindle or similar e-readers would facilitate eye protection, it was not persuasive to other participants. Print books were still the most reassuring format for reading.

Print books are "real" books and e-book is the "world"

Both formats of books have their supporters. Parent respondents preferred e-books mainly because of the accessibility and portable features. Although children could explore the world through an electronic device, parents worried that using e-readers might cause more harm to health. According to Robinson et al. (2017), there are correlations between screen exposure and obesity have correlations. Besides, some participants showed their weakness in technological skills and knowledge. They thought that e-readers could not generate bookmarks and note-taking functions, which discouraged their reading of e-books.

On the other hand, although a print book requires storage and is not as portable as an e-book, it has solid features that parents like. Some participants pointed out that the texture and smell of print books are part of the unique reading experience that e-books could not replace. Abubaker and Lu (2011) indicated that the ease of reading print books would be the most favorable, which only required physical abilities, would be the most favorable feature of print books. Since there are too many electronic devices around in our daily life, one participant expressed that reading a print book could allow the feeling of "escaping from the cyberworld." Furthermore, for children's development, some featured books acquired sense experiment function, which could help children build the concept of reading, and is an essential learning process for beginner readers.

Harms created by electronic devices are the most concerned

Participants mentioned several features quite frequently among the interviews: harm to health, school requirements, notes taking, textures of a real book, and concentration. Zambarbieri and Carniglia (2012) researched on eye movements comparing reading on print books with different kinds of e-readers and found no significant difference between all formats. Munzer et al. (2020) found that reading e-books resulted in fewer verbalizations and collaborations between parents and toddlers. The potential harm may also refer to sleep quality and weight gain (Chang et al.,

2015; Robinson et al., 2017). Healthiness is the most critical factor to be considered by the participants when choosing materials for their children. All participants concerned the negative effect on reading e-books and would prefer to print books or set up rules for using e-readers. Some participants expressed that unless their schools required it, print books would remain their priority of choice.

Behaviors differences when reading e-books

Previous research has shown some factors of parents towards the use of technology (Lenhart et al., 2005). Apart from health concerns, parents also expressed the negative impacts of their children using electronic devices. The function of linking the e-reader to the Internet is a double-edged sword. Once the e-reader can link to the Internet, there would be lots more for users to enjoy while reading, such as interactive activities and extra reference information, reading titles recommendation. All these could encourage reading motivations. On the other hand, some parents perceived more drawbacks to use electronic devices for educational purposes, as it is relatively harder to concentrate and requires children's self-discipline.

E-learning would lead the digital adoption

Although some respondents refused to let their children read e-books, they would still comprise school requirements when needed. They showed their understanding of the development of digital adoption. The importance of learning information literacy from parental support and home-school collaboration has also been raised (Kong & Li, 2009). E-learning plays an important role during the pandemic, so are electronic devices and e-textbooks. Woody et al. (2010) report that from students' perspective, e-textbooks are more visually appealing and provide greater flexibility than print books. Herman and Ciampa (2019) found the positive relationship between primary students' comprehension and the use of literacy support tools and they preferred e-books. Another research conducted by Moody and Swafford (2019) also suggested that some features from e-books, such as shared reading, would enhance literacy learning at school. While e-learning facilitates digital literacy, the trend would initiate and lead to behavioral changes. Reading on e-devices is becoming more ubiquitous and essential to adults as well as children.

Parents influence their children's reading behavior
Parents encouragement

Edmunds and Bauserman (2006) indicated that parent participation is a crucial factor in children's growth and their reading. Parents also play the role of making choices for their children and anticipate the consequences of their choices (Johnson, 2014). Through share-reading, storytelling, and reading routines, children could build motivation and encouragement in reading from parents. Also, parenting style is a critical factor to influence children's reading behavior, such as the frequency of reading. While some parents ask their children to read at least one book every day, some others think that "as long as they read, it is fine." Some parents allow reading for leisure (e.g., comic books) while some ~~allow~~ prefer language books and textbooks. It is consistent with previous findings (Rutherford et al., 2015) that parental involvement and rules setting are the key elements in controlling children's behavior.

Parent's limitation

Abubaker and Lu (2011) and Truong (2009) found that some readers may find difficulties to read on screens ~~that would take more time~~, i.e., more procedures and ~~more~~ complicated when compared to paper. Parents' attitude towards technology is heavily intervening and limiting children's choice of book format. For those who are not familiar with technologies, they avoid electronic resources. ~~They may would find reading e-books as a habit, like playing a video games, and it may be yet hard for them to figure out the rules techniques required. Therefore, user-friendly devices and reading platforms are essential to bringing this kind of parents to the e-book world.~~ According to the respondents, if parents ~~are reading e-books~~ read on e-book readers, older children may be more interested and think that it is cool; Younger children may find e-book readers boring because the screen is full of colorless words~~,~~ but they ~~can~~ are able to recognize the machine is for reading, not for playing any games. ~~Thus, they may build up the discipline for reading e-books. The importance of learning information literacy from parental support and home-school collaboration has also been raised (Kong & Li, 2009).~~ Therefore, user-friendly devices and reading platforms are essential to encourage parents to the e-book world before their children.

Potential suggestions and implications

Promotions on e-books need more efforts

Under the situation of stay-home policy and closure of libraries, promotion on the e-book market was expected to be more and more influential to gain the market. However, the disappointing

promotion strategies from Hong Kong Public Libraries (HKPL) could not boost the popularity of e-book platforms and services. At least one-third of the interviewees said they do not hear about the e-book service from HKPL, and at least half of the interviewees said they do not ever use the services. Users will not be aware of e-book availability as long as they access the library website for other purposes (Oriogu et al., 2018). Blummer & Kenton (2012) summarized several research articles among academic libraries in the United Kingdom, discovering that the lack of proactive or formalized promotion strategy from library staff would still fail to build awareness for readers.

Tingle and Teeter (2018) found that promotions of making e-book information, including book covers and Quick Response (QR) codes to be visible between stacks, could increase awareness throughout a user's selection process but not the use of digital collections. Apart from awareness, the quality of services is also critical to readers. Some studies suggested that librarians should enhance the attraction of the library collection by addressing users' barriers and striving for improvement with vendors (Blummer & Kenton, 2012; Sprague & Hunter, 2008; Slater, 2010). Comparing libraries from three cities: Hong Kong (Hong Kong Public Libraries, 2020), Melbourne (City of Melbourne, 2020) and San Francisco (San Francisco Public Library, 2015), though the e-book lending service was launched with different vendors, HKPL had provided the least borrowing days to its readers (6 to 14 days vs. 21 days) among the cities. Another problem with the selection of e-databases is also unsatisfactory (HKET, 2018). The overall e-services of HKPL have to be enhanced.

Buying books for children is a habit, and it is common

All participants would buy books for their children, and some would buy printed books only, which is in line with the previous research by Johnson (2014). Under hygiene concerns (n.a., 2020), a question was set to ask if they would turn to read e-books than print books. However, our findings indicated that they turned to buy books online rather than reading e-books. The Hong Kong Consumer Council (2016) reported that 53% of online shoppers would buy books or toys, but the overall online retail participation was low by international standards. The stay-home policy and closure of libraries during the COVID-19 pandemic did not affect their reading book format, and it only affected their buying channel. Even if parents need to borrow books from libraries, they will clean the books with alcohol-wipe papers or ultraviolet light sanitizers at home.

In response to such needs, online bookstore platforms (e.g., Amazon) and other e-commerce platforms (e.g., e-bay and Taobao) may strengthen their sales efforts and offer discounts to not only selling e-books but also print books. New book promotions should be continued and even strengthened to notify potential buyers accordingly.

Different purposes for different formats

Respondents showed their opinions towards reading e-books and print books are quite different. From the research of Courage (2019) and Etta (2019), print books are found to be a family bonding tool, especially for young children with parents, such as bedtime stories. On the other hand, e-books would function as a babysitting tool for parents. Both stuides revealed that e-books and print books are treated as two discrete reading habits. However, e-books are not so popular as print books, especially for smaller children.

As e-books have distinctive advantages perceived by the participants, reading e-books could be treated as building a new habit, rather than replacing print books. Opportunities could be found in the use of learning materials such as exercise books, textbooks, or exam papers because of the portability and sustainability of reusing and shareable features (Littlejohn & Shum, 2003). Moreover, these traits are also crucial to the e-learning process, such as learning pronunciation, science graphics (Evans, 2019). School libraries may also refer to the findings of this study to promote e-book resources and build their overall collections with a right balance of e-books and print books accordingly.

CONCLUSION

Although most of our parent respondents do not have a reading habit, their parenting styles and attitudes toward the importance of reading would influence the children's reading behavior, such as format, time spent, and frequency. This research showed that buying books is one of the essential expenditures for children in Hong Kong. It is common among parents under the COVID-19 pandemic, but buying or reading e-books is not as favorable as print books due to health concerns. Parents may build reading habits for their children, such as educational, entertainment, or sense training purposes. Both e-books and print books possess significant features to support various reading activities and purposes.

Some of the print book readers would reject reading e-books. Parents who do not read e-books would let their children do so only if the school required them for learning activities. As

parents' top concern is the harm to eyes that reading e-books may bring to their children, they would limit electronic reading time. ~~Nevertheless,~~ E-platform promotion, user-friendly reading devices, and technology trends are enablers for parents to let their children start reading e-books. Parents could utilize both e-books and print books for diverse purposes, not for replacement. Nonetheless, it is believed that the trend of adopting e-learning would develop digital literacy.

For many people, reading is something more than just the process of information acquisition. If people treat reading as a cultural activity, they treasure book design and enjoy the texture and smell of book papers. Under such consideration, a print book could never be replaced by an e-book under various circumstances. Abubaker and Lu (2011) get the same result from their research respondents, and many people would still be pleased to see all these feelings be inherited to the next generations.

Limitation and further studies

~~There were many interesting dialogs with interviewees but cannot be reported as they were related to other themes of education.~~ We are planning for other studies on parenting in Hong Kong, such as music and language education. Moreover, since the participants all own electronic devices, the research results would be different and not representative for those who could not afford any devices (Neuman & Celano, 2001) or those who could not afford to buy books. To avoid such limitations, we are planning research on particular age groups and conducted by school-based so that quantitative research can be conducted to explore a more generalized context. Apart from print books and e-books, we are also interested in studying the use of audiobooks.

Reference

Abubaker, A., and Lu, J. (2011), "Model of E-Reading Process for E-School Book in Libya", *International Journal of Information Retrieval Research*, Vol. 1 No. 3, pp. 35-53.

Abubaker, A., and Lu, J. (2017), "Access and Use of the Internet among Libyan Primary School Students", In: Lu, J., and Xu Q. (Ed) *Examining Information Retrieval and Image Processing Paradigms in Multidisciplinary Contexts,* pp. 173-184.

Babarinde, E.T., Babarinde, O. and Dike, V. (2018), "Reading habit and use of electronic media by junior secondary school students in Nsukka Local Government of Nigeria", *Journal of Children and Media*, Vol. 12 No. 1, pp. 16-32.

Baker, L., Scher, D., Mackler, K. (1997), "Home and family influences on motivations for reading". *Educational Psychologist*, Vol. 32 No. 2, pp. 69-82.

Blummer, B., & Kenton, J. (2012), "Best Practices for Integrating E-books in Academic Libraries: A Literature Review From 2005 to Present", *Collection Management*, Vol. 37 No. 2, pp. 65-97.

Bryman, A. (2001), "Social Research Methods", *Oxford: Oxford University Press*.

Chang, A., Aeschbach, D., Duffy, J., and Czeisler, C. (2015), "Evening use of light-emitting e-readers negatively affects sleep, circadian timing, and next-morning alertness", *Proceedings of the National Academy of Sciences of the United States of America*, Vol. 112 No.4, pp. 1232-1237.

City of Melbourne (2020), "Borrowing", available at: www.melbourne.vic.gov.au/community/libraries/using-the-library/Pages/borrowing.aspx (accessed 4 May 2020).

Consumer Council (2016), "A study on Hong Kong consumer attitudes, business practices & legal protection", available at: www.consumer.org.hk/sites/consumer/files/competition_issues/online-retail/full%20report_e.pdf (accessed 4 May 2020).

Courage, M.L. (2019), "From print to digital: The medium is only part of the message." In: Kim, J. E. and Hassinger-Das, B. (Eds) *Reading in the digital age: Young Children's experiences with e-books,* pp. 23-43.

Edmunds, K.M., and Bauserman, K.L. (2006), "What teachers can learn about reading motivation through conversations with children". *Reading Teacher,* Vol. 59, pp. 414-424.

Etta, R.A. (2019), "Parent preferences: e-books versus print books", In: Kim, J. E. and Hassinger-Das, B. (Eds) *Reading in the digital age: Young children's experiences with e-books,* pp. 89-101.

Evans, M.A. (2019), "E-Book design and young children's behaviour: The case of alphabet books", In: Kim, J. E. and Hassinger-Das, B. (Eds) *Reading in the digital age: Young children's experiences with e-books,* pp. 59-85.

Fiala, C., and Sheridan, S. (2003), "Parent involvement and reading: Using curriculum-based measurement to assess the effects of paired reading." *Psychology in the Schools*, Vol. 40 No. 6, pp. 613- 626.

Foasberg, N.M. (2011), "Adoption of E-Book readers among college students: a survey". *Information Technology and Libraries*, Vol. 30 No. 3.

Greenhough, P. and Hughes, M. (1998), "Parents' and teachers' interventions in children's reading". *British Educational Research Journal*, Vol. 24 No. 4, pp. 383-398.

Herman, H. and Ciampa, K. (2019), "The effects of digital literacy support tools on first grade students' comprehension of informational e-books", In: Kim, J. E. and Hassinger-Das, B. (Eds) *Reading in the digital age: young children's experiences with e-books,* pp. 175-196

HKET (2018, Jun 21), "Trying out HKPL e-books lending services", *Bauhinia Foundation Research Centre,* available at: www.bauhinia.org/index.php/english/analyses/743 (accessed 4 May 2020).

Hong Kong Public Libraries (2020), "Overview of e-book collections", available at www.hkpl.gov.hk/en/e-resources/overview-of-ebook-collections.html (accessed 4 May 2020).

Johnson, K. (2014), "Parental perceptions of the influence of digital media and technology on children's reading habits at home", *All Graduate Theses and Dissertations,* 2186, available at https://digitalcommons.usu.edu/etd/2186 (accessed 2 March 2020).

Jung, J., Chan-Olmsted, S., Park, B., and Kim, Y. (2012), "Factors affecting e-book reader awareness, interest, and intention to use". *New Media & Society*, Vol. 14 No. 2, pp. 204-224.

Ko, E. H. T., Chiu, D. K. W., Lo, P., Ho, K. K. W. (2015), "Comparative study on m-Learning usage among LIS students from Hong Kong, Japan and Taiwan", *The Journal of Academic Librarianship*, Vol. 41, No. 5, pp. 567-577.

Kong, S., and Li, K. (2009), "Collaboration between school and parents to foster information literacy: Learning in the information society", *Computers & Education*, Vol. 52 No. 2, pp. 275-282.

Kozlowski, M. (2020), "Libraries are experiencing a record number of e-book loans", *Good e-Reader,* available at https://goode-reader.com/blog/digital-library-news/libraries-are-experiencing-a-record-number-of-ebook-loans (accessed 25 April 2020).

Lam, W.W.Y., and Loo, B.P.Y. (2014), "Determinants of children's independent mobility in Hong Kong", *Asian Transport Studies*, Vol. 3 No. 2, pp. 250-268.

Lau, K.P., Chiu, D.K.W., Ho, K.K.W., Lo, P. and See-To, E.W.K. (2017), "Educational usage of mobile devices: differences between postgraduate and undergraduate students", *The Journal of Academic Librarianship*, Vol. 43 No. 3, pp. 201-208.

Lee, L., Lee, M. P., Bertini, M., Zauberman, G., and Ariely, D. (2015), "Money, time, and the stability of consumer preferences", *Journal of Marketing Research*, Vol. 52 No. 2, pp. 184–199.

Leedy, P.D. and Ormrod, J.E. (2013), "Practical research: planning and design", 10th ed. Boston, *MA: Pearson*.

Lefever-Davis, S., and Pearman, C.J. (2015), "Reading, writing and relevancy: Integrating 3R's into STEM". *The Open Communication Journal*, Vol. 9 No. 1, pp. 61-64.

Lenhart, A., Madden, M. and Hitlin, P. (2005), "Youth are leading the transition to a fully wired and mobile nation", *Pew Internet and American Life Project, Teens and Technology*, pp.1-48.

Littlejohn, A., and Shum, S.B. (2003), "Reusing online resources: A sustainable approach to eLearning", *Journal of Interactive Media in Education,* Vol. 2003 No. 1.

Liu, Z. (2005), "Reading behavior in the digital environment: Changes in reading behavior over the past ten years", *Journal of Documentation*, Vol. 61 No. 6, pp. 700-712.

Millar, M., and Schrier, T. (2015). "Digital or printed textbooks: which do students prefer and why?" Journal of Teaching in Travel & Tourism, Vol 15, No.2, pp. 166-185.

Moody A.K. and Swafford J., (2019), "Practical strategies for e-book use in early childhood classrooms (K-5)," In: Kim, J. E. and Hassinger-Das, B. (Eds) *Reading in the digital age: Young children's experiences with e-books,* pp. 217-233.

Munzer, T.G., Miller, A.L., Weeks, H.M., Kaciroti, N. and Radesky J. (2020), "Differences in parent-toddler interactions with electronic versus print books", *Pediatrics,* 2019, Vol. 143 No. 4.

Neuman, S.B., and Celano, D. (2001), "Access to print in low-income and middle-income communities: An ecological study of four neighborhoods", *Reading Research Quarterly*, Vol. 36 No. 1, pp. 8-26.

Oriogu, C.D., Oluwatola, K.I., Oriogu-Ogbuiyi, D.C. and Enamudu, A.I. (2018), "Awareness and use of electronic books among undergraduate students: A survey", *Library Philosophy and Practice*, available at www.researchgate.net/publication/332495473_Awareness_and_Use_of_ Electronic_Books_among_Undergraduate_Students_A_Survey (accessed 2 May 2020).

Rao, K., Kumar, S. and Tripathi, M. (2018), "E-book and print book price and desirability for university libraries: A comparative study", *The Electronic Library,* Vol. 36 No. 1, pp. 82-102.

Robinson, T., Banda, J., Hale, L., Lu, A., Fleming-Milici, F., Calvert, S., and Wartella, E. (2017), "Screen media exposure and obesity in children and adolescents", *Pediatrics*, Vol. 140 Suppl 2, pp. S97-S101.

Rutherford, L., Brown, Judith E., Skouteris, H., Fuller-Tyszkiewicz, M., and Bittman, M. (2015), "Screen media, parenting practices, and the family environment in Australia: A longitudinal study of young children's media use, lifestyles, and outcomes for healthy weight", *Journal of Children and Media*, Vol. 9 No. 1, pp. 22-39.

San Francisco Public Library (2015), "Q. How many may I reserve / hold? How many may I borrow? How long may I keep items?", available at https://sfpl.libanswers.com/faq/94381 (accessed 2 May 2020).

Saracho, O.N. and Spodek, B. (2010), "Families' selection of children's literature books", *Early Childhood Education Journal,* Vol. 37 No. 5, pp. 401-409.

Shabani, A., Naderikharaji, F., and Reza Abedi, M. (2011), "Reading behavior in digital environments among higher education students", *Library Review*, Vol. 60 No. 8, pp. 645-657.

Shrimplin, A., Revelle, A., Hurst, S., and Messner, K. (2011), "Contradictions and consensus-clusters of opinions on e-books", *College & Research Libraries*, Vol. 72 No. 2, pp. 181-190.

Slater, R. (2010), "Why aren't e-books gaining more ground in academic libraries? E-book use and perceptions: A review of published literature and research", *Journal of Web Librarianship,* Vol. 4 No. 4, pp. 305–331.

Sprague, N. and Hunter, B. (2008), "Assessing e-books: Taking a closer look at e-book statistics", *Library Collections, Acquisitions, and Technical Services,* Vol. 32 No. 3-4, pp.150-157.

Staiger, J. (2012), "How e-books are used", *Reference & User Services Quarterly*. Vol. 51 No. 4, pp. 355-365.

Statista. (2020), "eBooks", *The Statistics Portal, available at* www.statista.com/outlook/213/118/ebooks/ hong-kong#market-age (accessed 3 March 2020).

Tang, M.M. (2018), "Possible school-parent partnerships: a case study on Hong Kong primary school parents' major digital parenting concerns", (Thesis). *University of Hong Kong*, Pokfulam, Hong Kong SAR.

Tingle, N. and Teeter, K. (2018), "Browsing the intangible: does visibility lead to increased use?", *Technical Services Quarterly*, Vol. 35 No. 2, pp. 164-174.

Truong, Y. (2009), "An evaluation of the theory of planned behaviour in consumer acceptance of online video and television services", *Electronic Journal Information Systems Evaluation*, Vol. 12 No. 2, pp. 177–186.

Vaala, S.E. and Bleakley, A. (2015), "Monitoring, mediating, and modeling: Parental influence on adolescent computer and Internet use in the United States", *Journal of Children and Media*, Vol. 9 No. 1, pp. 40-57.

Venkatesh, V., Sykes, T., Chan, F.K., Thong, J.Y. and Hu, P.J. (2019), "Children's Internet addiction, family-to-work conflict, and job outcomes: A study of parent-child dyads", *MIS Quarterly*, Vol. *43 No.* 3, pp. 903-927.

Wai, I.S.H., Ng, S.S.Y., Chiu, D.K.W., Ho,K.K., and Lo, P. (2018), "Exploring undergraduate students' usage pattern of mobile apps for education", *Journal of Librarianship and Information Science*, Vol. 50 No. 1, pp. 34-47.

Wang, P., Chiu, D. K. W., Ho, K. K.W., and Lo, P. (2016). "Why read it on your mobile device? Change in reading habit of electronic magazines for university students." *The Journal of Academic Librarianship*, Vol. 42, No. 6, pp. 664–669.

Woody, W., Daniel, D. and Baker, C. (2010), "E-books or textbooks: Students prefer textbooks.", *Computers and Education*. Vol. 55, pp.945-948.

Zhang, L. (2012), "Changes in reading behavior among e-reader adopters", *Rochester Institute of Technology*, available at https://scholarworks.rit.edu/cgi/viewcontent.cgi?article=4833&context =theses (accessed 3 March 2020).

Zhang, X., Lo, P., So, S., Chiu, D.K.W., Leung, T.N., Ho, K.K.W. and Stark, A. (2020), "Medical students' attitudes and perceptions towards the effectiveness of mobile learning: A comparative information need perspective", *Journal of Librarianship & Information Science*, June 2020.

Zambarbieri D and Carniglia E. (2012), "Eye movement analysis of reading from computer displays, e-readers and printed books", *Ophthalmic Physiol Opt* 2012, No. 32, pp. 390–396.

Appendix - Interview questions

1. How old is/are your child/ children?
2. Could you explain the reading habit of your child/children for both leisure books and learning-related books? (e.g., what kind of books, when, etc.)
3. Do they usually read e-books or print books? What is the ratio between them?
4. How much expenditure would you spend for their reading materials monthly/ yearly? What is the percentage of the total spending on them?
5. Which vendors/ platforms/ libraries do you and your child/ children get the book from?
6. What are the criteria for choosing reading materials for your child/children? Do you think those criteria will be affected by the format of the books?
7. How often do your children choose their own books? What are their criteria for choosing reading materials? Do you think those criteria will be affected by the format of the books?
8. From the perspective of parents, what is your opinion for letting your child/children read on electronic devices and print books? Would there be any differences between leisure and educational reading?
9. What is your attitude towards mobile technologies and related devices?
10. What is your child/children's attitude towards mobile technologies and related devices?
11. Based on your observation, which form of reading materials is preferred by your child/ children?
12. Do you have a reading habit? What kind of reading materials? Do you prefer electronic or print format?
13. Do you think your habit would bring influence to theirs? If yes, how?
14. Any critical reasons that would drive your choice on choosing a print book or e-book? Do your children read and consider reading more e-books under the current situation of society? Why?
15. Do you agree that e-books could enhance or motivate the reading experience of your children? Why?
16. Would there be any difference between the time you allow your children to spend on print book and e-book? How and Why?