



## The Impact of Incentives and Awards in Digital Libraries on Primary School Students' Reading Motivation in EFL Classrooms - (A Case of Erbil, Iraq)

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### Abstract

The present study aims at investigating whether the incentives and awards in digital libraries have an impact on private primary school students' reading motivation in foreign language classrooms. A quantitative research methodology was chosen in order to collect numerical data to reveal the extent of incentives and awards features such as star system, gamified rewards, certificates and badges in digital library on students' reading attitudes. A questionnaire was designed by the researcher for the purpose. Later, the attitudes of the students towards incentives and rewards and the number of the books that students have read were correlated to investigate whether there is a relationship between them. The sample of the study comprised of 41 grade 5 students from two private primary schools in Erbil (Iraq, KRG). The obtained data analysis was performed through SPSS 25 statistical software. The findings reveal that the incentives and rewards in digital library system positively influence the students' attitudes towards reading. Furthermore, the number of the books that the students read in 2019-2020 academic year, and the effect of the incentives and rewards on students' reading motivation are correlated significantly. This research might be beneficial for language teachers to see how students can be motivated to read and enhance their reading skills utilizing technological tools, also for curriculum designers to consider the effectiveness of digital library on students' reading skill development.

**Key words:** awards, digital library, foreign language classrooms, incentives, reading attitudes, reading motivation

### 1. Introduction

Extensive reading is an ascending trend among teachers in language education. While applying extensive reading, students are expected to read large amounts of reading materials at comprehensible for them level and trace and manage students' development (Koby, 2017). Since the learners are continuously exposed to foreign language while reading for pleasure, extensive reading offers the input necessary for further language development of students (Goctu, 2016) From this perspective, digital library platforms might be an appropriate alternative for curriculum designers and language teachers to enhance learners' reading skills and habits.

Digital libraries can be defined as software which provides services for students to read, write and create connection with others through electronic texts. Furthermore, this software offers services for schools, parents and students by delivering a broad content via licensed mobile interface at any place with internet connection without a time constraint (Brueck, Lenhart & Roskos, 2019).

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In general, digital library platforms use well-known oral or paper stories and some supporting features are inserted such as sound, animation and video to provide more interactive environment for the learners. This new delivery style offers learners an innovative format which goes beyond oral speech and monotonous written form (Chen, Ferdig & Wood, 2003).

Digital reading management systems utilize reward tools ranging from certificates, passing scores, and items from school store to motivate students (Palani, 2012) to earning stars and badges (Meyers, Nathan & Stepaniuk, 2017) to enhance reading skills and reading habit of the students. These tools might provide extrinsic motivation to students by earning a certificate, badge, or some other motivational items. On the other hand, Eggen and Kauchak (2016) state that the student “sometimes reads more than the exam content for pleasure and curiosity” (p.445), which means the learners might be motivated intrinsically as well.

### **Research Problem, Objectives and Questions**

Many studies have been conducted about children’s’ reading interest and reading ability (Kirby et al, 2011), but most of these studies have investigated the printed book setting. Though the digital library platforms offer various incentive tools, the impact of them in terms of motivation needs to be investigated. Based on private primary school teachers’ observation in Erbil, generally, people use technological devices for social interactions, fun, communication but not for education. Some private schools have been recently using digital library programs embedded into their curriculum in this region, but this addresses a very limited number of students and the effectiveness still needs scrutiny. Some private schools have been recently using digital library programs embedded into their curriculum in this region, but this addresses a very limited number of students and the effectiveness still needs scrutiny. Hence, the researcher aimed to find out whether the incentive and rewarding tools in digital library provide a positive attitude towards reading and enhance reading habit of private primary school students. This research aims at helping curriculum designers and school administrators make appropriate decisions on utilizing digital libraries in language teaching program. In the light of the problem, two objectives were set for this research:

1. To find out the impact of incentive and award features in digital library on students’ reading attitudes
2. To investigate the correlation between students’ reading motivation and the number of the books that they read in 2019-2020 academic year.

Based on the objectives, two research questions were formulated:

1. To what extent do incentives and awards affect students’ attitudes towards reading?
2. What is the correlation between the attitudes of the students towards incentives and rewards and the number of the book that students read?

## **2. Literature Review**

Readers are not an entirely new thing. Decoratively engineered readers for children which may be accepted as first “dynamic” scripts go back to the 19<sup>th</sup> century in the format of “pop-up” books. Starting from the early 20<sup>th</sup> century, especially in the US, experts launched a wide range of books to provide unique reading experiences to students by adding some features such as sound and even animation. Digital libraries have been developed by adding many new extra features since then, such as Phonograph Records, Listen Reader which provides ambient sound effect as children shift their hands over the book, Children Read Along, and Reading Eye Dog which is a form of social reading. These examples clearly demonstrate that digital library

designers have inserted new interactions to the physical artifact. Moving away from the physical book and into digital environments brought radical changes (Kaplan et al, 2004).

Druin (2005) states in her article that experts occasionally studied children to understand their desires or wishes for children's services. Prior to the 1980s, only unofficial assessments were done partly because of the concern for privacy of a child's use of information. However, this trend has changed recently and many young readers want to express their perspective by participating in the surveys, so that libraries needed to be adapted focusing on children needs and expectations. This notion of working with young people is gaining increasing attention both in the United States and Europe.

Loertscher (2007) claims that accessing digital materials online might have various drawbacks, for instance, devastatingly large amount of texts is encountered which are mostly irrelevant and untrustworthy for the children's age group. They might include advertisement to attract the children and or their parents to become a customer for some other products, so the system might be less and less free to access or the content might be outdated by not receiving the necessary updates in free mode. On the other hand, many children, school teachers and administrations sees the digital library as "hub of the school" which is precious for them because they see the place to start a secure and nurturing information environment that would nurture every child truly by providing firewall protection in a closed system. The digital library system would also be a safe environment from several elements like misleading advertising, pornography, hackers', and malicious people's or groups' attempts to reach children for a variety of nefarious reasons.

Most of the digital reading platforms offer a wide range of instructional content in e-catalog format which includes a long list of titles with narrative and informational texts like any other well-designed classroom library. The majority of digital libraries have a searching feature in their catalog based on the title, writer, genre, subject and reading skills level. Additionally, many programs utilize assessment tools like quizzes and diagnostic tests to find out students' reading skills level and recommend an appropriate selection for the progress of the readers (Brueck et al., 2019).

Comprehension in digital books is supported not only by well-drawn illustrations with vivid reflections of the target language concepts, but also by pictographic text illustrations to facilitate understanding (Liu, 2015). Moreover, sound effects along with the storyline are provided to help learners have more pleasure while reading (Winans, 2016).

Ciampa carried out a qualitative research and found out e-books have positive effects on students' engagement and motivation to read. The study results showed that first-grade students were intensely concentrated on reading and showed passion and interest throughout digital reading sessions. They described the reasons of pleasure as autonomy, choice and stimulation in their reflections (Ciampa, 2012 as cited in Winans, 2016).

According to research findings of Kucirkova and Littleton (2016), 60% of the parents in their study expressed the opinion that their child used digital media devices to be entertained, and 42% of them believed that children used digital devices to learn something new. The parents also stated that 30% of the children read interactive e-books for enjoyment and 34% for education. Additionally, 48% of the parents whose children preferred reading e-books claimed this was because their child enjoyed using digital devices. Following this, 35% of them asserted that their child loved the extra – compared to on-paper books - tools existing in e-books.

The digital libraries are changing their form and improving new features over time to offer learners more effective options to develop reading habits. However, there is another very important factor that decides the success of these libraries, which is motivation. According to Covington as cited in Jalongo (2007), motivation to learn is an existing or recurrent wish to acquire information, improve skills, and reach mastery.

When the learning activity is not seen as a reward itself, external learning incentives can be applied. In extrinsic motivation, students involve in the targeted learning in response to the potential reward or the threat of punishment (Artelt, 2005). For example, a child might read more books to earn more stars from the digital library system to be top student in the list or to please his teacher or to evade disapproval of his teacher. On the other hand; intrinsic motivation exists in the students and the learning activity itself is gratifying and provides satisfaction because it is interesting, fulfilling, exciting or inspiring and so on.

Schaffner, Schiefele and Ulferts (2013) mention that intrinsic reading motivation positively forecasts the increase in reading volume and reading comprehension, while extrinsic motivation increased only the volume of reading, but was not found to be a predictor of increased reading comprehension. However, as, while reading more, children may get a gusto of reading and eventually develop intrinsic motivation as well, rewards for the volume of the read materials are also useful.

Edmunds and Tancock (2003) state that numerous educational practices are utilized by the teachers to augment children's reading motivation in order to encourage them to read more. The incentives and rewards can be tangible, such as certificates, sweets, and books or non-tangible, such as verbal praise. Many researches show that motivation is not affected negatively or decline when extrinsic awards are given. Even in recent meta-analysis studies, it was concluded that different types of concrete rewards undermined intrinsic motivation.

According to Deci, Ryan, Vallerand & Pelletier (1991), intrinsically motivated people devote themselves fully in the actions they desire to take place regardless of any materialistic award or punishment. For intrinsically motivated people activity itself is an award, so they do not expect to have any form of extrinsic motivation reward (Deci & Ryan 1980). According to research results of Ronimus, Kujala, Tolvanen & Lyytinen (2014), incentives inspire the learners to use the system longer at the beginning of adaptation process, but this effect disappears after a certain period.

A number of digital library platforms offer incentives and rewards to motivate children. Murillo (2020) in her research found that some students were spending a remarkable amount of their time in the "Incentive Zone" of Raz-Kids digital library program. Some students only spent a few minutes a day, but some other students, especially the ones with difficulty in reading, spent up to 45 minutes just to customize their robots in this zone which motivated them to read, although customizing took more than the actual reading time.

### **3. Research Method**

#### **3.1. Research Methodology**

Muijs (2010) states that quantitative research in education can be utilized to collect data dealing not only with testing, but to measure attitudes and beliefs via assessing statements through Likert scale. Therefore, this research was planned based on quantitative methodology applying a questionnaire to disclose the features of impacts of incentives and awards in digital library on students' reading attitudes. In addition to this, correlational research was used to explore the correlation between student reading motivation and the number of the books that they read in 2019-2020 academic year.

#### **3.2. Instrumentation**

Taking into consideration the research methodology, the researcher designed a questionnaire consisting of 23 items. The first 4 questions dealt with demographic information about the respondents and 19 questions were designed according to a 5-point

Likert scale (1-strongly disagree, 2-disagree, 3-neutral, 4-agree, 5-strongly agree) to ask the respondents about their attitudes towards Raz-Kids digital library incentive features.

The questions were designed by the researcher based on the literature research on the topic. Then they were sent to three different experts to be checked for content validity. Additionally, the questionnaire was piloted with five primary school students before conducting, and necessary changes were applied correspondingly. The researcher used in the questionnaire as simple language as possible considering the language level of the students. Besides, the questionnaire items were translated into Kurdish by a native Kurdish expert to help the respondents understand them well and answer correctly.

SPSS 25 statistics data program was used to analyse the reliability of the questions and it was found equal to 0.815. According to Vaske, Beamen & Sponarski (2017), the acceptable results of Cronbach alpha with general agreement is .65-.80 range as 'adequate' for a research in the field of humanities.

Beside this, the researcher used the reporting tool of Raz-Kids digital library program as a device to collect data. In this module, teachers can see how many books students read in the selected period of time, how much time they spend reading, listening and recording their voice, how much time they use incentive tools such as robot builder, avatar, etc. So, the researcher used this reporting instrument to find out the number of the books that each student read from September 2019 to June 2020. The number of books was correlated with the results of the questionnaire to reveal the effect of rewarding and incentive tools on students' reading habit development. The correlation was calculated through SPSS 25 statistic data program. Additionally, the average number of the books were calculated through Microsoft excel program.

### 3.3. Setting

The research was carried out in private primary schools in Erbil (Iraq, KRG). The students of these schools study English as a foreign language starting from kindergarten. They have 5 hours of English lessons per week and they use English language teaching (ELT) materials from well-known publishers as course books. The core subjects at these schools are also taught in English. In addition to this, Raz-Kids Digital Library is applied as an extensive reading platform in the ELT curriculum of the schools. This platform includes more than 1600 books in different levels and genres with some supporting features like audio, illustrations, highlighting, etc. Furthermore, this program includes some incentive and reward features such as:

1. **Star system:** Students earn stars when they read books. They can also receive more stars when they practice recording, listen to an audiobook, or pass a quiz for each book.
2. **Avatar Builder:** The system provides students with some avatars and figures which students can customize their avatar with to personalize their character. They can 'buy' different parts and accessories from the store to change their avatar appearance by spending the stars that they win by reading and practicing from the star system.
3. **Badges:** Students might win badges for attaining milestones. They can see each badge on their screen, and when they reach a certain level, the gray badges change their color. Teachers can also print out and give it to the students to encourage them.
4. **Raz Rockets:** The system provides a space rocket and enables students to design the rocket room with different equipment such as aliens, furniture, flowers, etc. They might decorate a new atmosphere with space-theme by spending their stars.
5. **Awards and Certificates:** Teachers can download and celebrate their student's success by delivering different types of certificates, namely, reading star, teachergram, bookworm, moving up, etc.

(Learning A-Z, 2020)

### 3.4. Participants

The population of the study comprises of 96 private primary school students from grade 5 in Erbil. 41 of them participated consisting of the research sample. The convenient sample selection method was employed by the researcher because there is a limited number of schools that use a digital library system in the city, so the researcher used personal contacts to conduct the questionnaire. Four teachers from two different private schools were asked to apply the questionnaire. Later, the questionnaire link was shared with 96 students in 4 different classes. 41 of the students voluntarily responded to the questionnaire. In the evaluation part, one of the respondent's answers were excluded since all his/her answers were shown as 'strongly agree' which can hardly be true.

**Table 1.** Gender of the participants

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	16	39.0	39.0	39.0
	2	25	61.0	61.0	100.0
Total		41	100.0	100.0	

Table 1 illustrates that 61% of the participants were females (n=25), and 39% - males (n=16).

**Table 2.** School distribution of the participants

		School Name			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	18	43.9	43.9	43.9
	2	23	56.1	56.1	100.0
Total		41	100.0	100.0	

The research sample comprises of 41 grade 5 students from two different private primary schools, as shown in table 2. The percentage of participants from school 1 is 43.9 % (18 students), and the percentage of participants from school 2 is 56.1% (23 students).

### 3.5. Procedure

After contacting the English teachers, the researcher asked for a permission from the schools to carry out this research. The school administrations gave permission orally due to the lock down of Corona virus process. The questionnaire, which was created in Google forms, was delivered to the students through Viber groups of the teachers.

After conducting the questionnaire, the researcher contacted the teachers to indicate the number of the books that respondents read from September 2019 to June 2020 by using their accounts' reporting tools from Raz-Kids for teachers.

### 3.6. Research Ethics

One of the ethical issues teachers felt uncomfortable with was applying the questionnaire to their students and sharing their book reading performance. They thought comparisons of the schools and students' results might lead to conflicts between parents, students and school administrators. Therefore, they were assured that anonymity and confidentiality of information would be provided by blinding the name of the schools and students and using codes instead of names. It was also guaranteed that the collected information would only be used within the scope of this study and would not be publicized to any other party. This was

also mentioned to the respondents in the explanatory part of the questionnaire to provide confidence while answering the questions.

### 3.7. Data Analysis

Initially, the questionnaire results were taken from Google forms in Excel format and the data were imported to SPSS 25. The respondents' answers were analysed through SPSS 25 statistics software program. For each item in the questionnaire, means and standard deviations were calculated. Descriptive statistics interpretations of each item were provided respectively.

Secondly, the correlation between the students' attitude towards incentive and reward features and the number of books that these students read was analysed and the results were interpreted correspondingly.

## 4. Findings and Results

**Table 3.** Gender-based results of incentives and rewards survey

Gender	Male			Female			Total		
	Mean	N	Std. Dev.	Mean	N	Std. Dev.	Mean	N	Std. Dev.
	3.78	16	1.060	3.73	25	1.031	3.75	41	1.056

Table 3 shows that the average mean of the items is 3.75 which reflects the incentives and rewards have motivational effect on students to cultivate more positive attitudes towards reading in digital library. There is no significant difference between male and female students' attitudes towards incentives and rewards in Raz-Kids library. Their means are 3.78 and 3.73, respectively. The standard deviation in both genders is above 1 which shows that students' responses show heterogeneous characters which reveals that there is a variety in students' answers and they have different from each other views.

**Table 4.** School-based results of incentives and rewards survey

School Name	1			2			Total		
	Mean	N	Std. Dev.	Mean	N	Std. Dev.	Mean	N	Std. Dev.
	3.83	18	0.903	3.68	23	1.132	3.75	41	1.056

According to the results in table 4, the impact of the incentive and rewards is higher on the students of school 1 than that of school 2. The means are 3.83 and 3.68 respectively. Additionally, standard deviation of the respondents' answers in school 1 is below 1, which indicates more homogeneous group reflection compared to school 2 with 1.132 standard deviation, which means that students have more diverse ideas.

**Table 5.** Descriptive statistics of incentive and rewards survey's answers

		Descriptive Statistics				
		N	Minimum	Maximum	Mean	Std. Dev.
1	I like reading book at home in Raz-Kid	41	1	5	3.68	1.192
2	I like choosing the books that I love.	41	3	5	<b>4.37</b>	0.662

3	I like reading different kinds of books	41	3	5	<b>4.37</b>	0.733
4	I like reading on Raz-Kids more than playing videogames.	41	1	5	3.34	1.196
5	I like reading on Raz-Kids more than watching TV.	41	1	5	3.59	1.117
6	I like earning stars in Raz-Kids.	41	1	5	4.27	0.975
7	I like spending my stars in Raz-Kids.	41	1	5	3.07	1.555
8	I answer the quiz questions at the end of each book because I want to earn more stars.	41	1	5	4.02	1.129
9	I like building and designing my own Avatar in Raz- Kids.	41	1	5	4.00	1.049
10	I like designing my Raz Rocket room.	41	1	5	3.80	1.229
11	I read books in Raz-Kids because my teacher asks me to do so.	41	1	5	4.05	1.048
12	I like earning stars more than reading books.	41	1	5	3.10	1.261
13	I like designing my Avatar more than reading books.	41	1	5	2.51	1.247
14	I like reading books because I learn new things from them.	41	3	5	<b>4.39</b>	0.666
15	I like earning badges in Raz-Kids.	41	3	5	4.29	0.814
16	Earning a star is more important than learning new things for me.	41	1	5	2.20	1.269
17	I like talking to my friends about the books that I read.	41	1	5	3.56	1.097
18	I feel happy when my teacher gives me a Raz-Kids certificate.	41	1	5	<b>4.39</b>	0.919
19	I read books to be the Reading Star of the month.	41	2	5	4.22	0.909
Valid N (listwise)		41				

The data collected from the students reflect consistent results indicating that incentives and rewards have a determinant effect on students' attitudes towards reading books on a digital library platform.

Table 5 illustrates that students gave the highest mean to the following items: they like learning new things (m=4.39), choosing the books they like (m=4.37), reading different kinds and genres of books (m=4.37), which means they are intrinsically motivated to read books for expanding their knowledge and they are satisfied with being autonomous when they decide to select what they read. Besides, they feel happy when their teacher gives them a certificate (m=4.39) and they like earning badges (m=4.29) and stars (m=4.27), which reveals that rewards and incentives also provide a high level of motivation for them to read more books. On the other hand, the lowest mean item with (m=2.20) is 'earning star is more important than learning new things' and 'I like designing my avatar more than reading books' (m=2.51). This reveals that, although extrinsic motivation (earning stars, badges and avatars) is important for the students, the pleasure of reading books is more important. They see reading itself as a reward.

Furthermore, the items 'I like reading books because I learn new things from them' (m=4.39), 'I feel happy when my teacher gives me Raz-Kids certificate' (m=4.39), 'I like choosing the books that I love' (m= 4.37), 'I like reading different kinds of books' (m=4.37), which have the highest mean in the questionnaire have a low standard deviation (below 1), which reveals that most of the students think in the same way. Whereas such items as 'earning a star is more important than learning new things for me' (m=2.20), 'I like designing my Avatar more than reading books' (m=2.51), 'I like spending my stars in Raz-Kids' (m=3.07), 'I like earning stars more than reading books' (m=3.10), which have the lowest mean, have the highest standard deviation (above 1), which reflects more differences among their opinions.

**Table 6.** Correlation between students' attitudes towards incentives and rewards and the number of the books that they read

Correlations			
Mean	Pearson Correlation	1	0.324*
	Sig. (2-tailed)		0.041
	N	40	40
Book No	Pearson Correlation	0.324*	1
	Sig. (2-tailed)	0.041	
	N	40	40

\*. Correlation is significant at the p<0.05 level (2-tailed).

Table 6 illustrates the correlation between students' attitudes towards incentives and reward and the number of the books that they read. According to the result, there is a statistically significant moderate correlation (0.324) between these two variables at p<0.05 level. This indicates that the students who possess more positive attitudes towards incentive and reward within the Raz-Kids digital library system read more books and the ones who has respectively fewer positive attitudes read less.

**Table 7.** Correlations between the items showing students' intrinsic motivation and the number of the books that they read.

Correlations					
		No of books	17- I like talking about the books that I read to my friends.	2- I like choosing books that I love.	14- I like reading books because I learn new things.
No of books	Pearson Correlation	1	.318*	0.182	0.147
	Sig. (2-tailed)		0.042	0.254	0.360
	N	41	41	41	41
17- I like talking about the books that I read to my friends.	Pearson Correlation	.318*	1	.434**	.377*
	Sig. (2-tailed)	0.042		0.005	0.015
	N	41	41	41	41
2- I like choosing books that I love.	Pearson Correlation	0.182	.434**	1	.349*
	Sig. (2-tailed)	0.254	0.005		0.026
	N	41	41	41	41
14- I like reading books because I learn new things.	Pearson Correlation	0.147	.377*	.349*	1
	Sig. (2-tailed)	0.360	0.015	0.026	
	N	41	41	41	41

\*. Correlation is significant at the 0.05 level (2-tailed).

\*\*.. Correlation is significant at the 0.01 level (2-tailed).

According to Table 7, there is a significant moderate correlation (0.318) between the number of the books students read and item 17 "I like talking about the books that I read to my friends." at p<0.05 level. Furthermore, there is also a significant moderate correlation (0.434) between item 2 "I like choosing books that I love." and item 17 "I like talking about the books that I read to my friends." at p<0.01 level. There is also a significant moderate correlation (0.377) between item 14 "I like reading books because I

learn new things." and item 17 "I like talking about the books that I read to my friends." at  $p < 0.05$  level. These results indicate consistency of the students' answers and their intrinsic motivation toward reading

**Table 8.** The top 10 students with the highest mean and last 10 students with the lowest mean.

Rank	Mean	Book number	Average	Rank	Mean	Book number	Average
1	4.53	14	90	31	3.42	7	12.5
2	4.42	133		32	3.42	10	
3	4.37	19		33	3.32	15	
4	4.32	286		34	3.26	5	
5	4.32	16		35	3.26	44	
6	4.32	48		36	2.95	16	
7	4.21	85		37	2.95	0	
8	4.21	133		38	2.89	1	
9	4.16	36		39	2.74	5	
10	4.16	133		40	2.37	22	

Table 7 shows that the top 10 students with a highest mean (read 90 books on average within the period of research), have a mean average 4.30. On the other hand, the last 10 students read 12.5 books on average, and their mean average is 3.17, which shows a clear relationship between the impact of incentives and rewards and students' book reading habit. Meanwhile the other 20 students in between the highest and lowest group read 48 books on average during the research period.

## 5. Discussion

Fawson and Moore (1999) assert that the major difference between learners' intrinsic and extrinsic reading motivation is not based on the external appearance of the behaviours, but it is further based on the cause of the behavior and on the enduring interest of the students towards reading. The motives of the extrinsically motivated students to start a task differ from the intrinsically motivated ones. They mostly accept the task as a tool to reach the anticipated entity as a reward. This reward or incentive may be in different forms to attract the beneficiary such as money, appreciation or prizes. In the present study, the incentives and rewards utilized within the Raz-Kids digital library system also had an impact on the motivation of the students to read more books and to develop more positive attitudes towards reading. The majority of the students expressed the opinion that they like reading books within the system and some of them like reading more than watching TV and playing video games.

As Day et al. (1998) advocate, when the students are free to choose what they want to read from a wide range of topics, it enhances the motivation. This supports the finding of this research that the students like choosing the book that they love and prefer different kinds of books. Moreover, students' responses revealed that they really like the incentive features like collecting badges and stars, receiving certificate, designing their own avatar. The mean of the answers for these questions were above average; however, some items results investigating the intrinsic motivation of the students such as 'I like learning new things' ( $m=4.39$ ) were higher than those. Some other cross-check questions result also justified this result in items such as 'earning star is more important than learning new things' ( $m=2.20$ ), and 'I like designing my avatar more than reading books' ( $m=2.51$ ). Thus, it could be stated that, although incentives and rewards have a significant impact on the motivation of the students, intrinsic motivation factors also form the general perception of the students. Many of the students in the research read books not only for incentives or rewards, but also for the sake of learning.

Finally, most of the students who were motivated positively with the help of incentives and reward tools within the system showed an increased performance and read more books. According to UNESCO reports based on the findings of Arab Thought Foundation's for Cultural Development (Arab reading challenge, 2016), an average child in the Middle East reads only six minutes a year. So, the average number of the books that students read in this system is 61 which shows far ahead results which may be explained by the motivational tools within the system.

## **6. Limitations of the Study**

The data were obtained from only two private schools and the number of the participants was 41, so the results of the study cannot be generalized to all other types and levels of schools and students. Another limitation of the study was the instrumentation. Only a structured questionnaire was utilized due to the corona virus pandemic, since it was not possible to meet the students in school environment, so interviews with students, teachers and parents could not be handled to obtain more detailed data.

## **7. Conclusion**

Based on the findings of this research, it can be concluded that incentive and reward tools within the digital library system provide additional motivation to students. Learners are eager to spend more time within the system with the help of the extrinsic motivation tools provided by the extra features of digital library in addition to children's already existing intrinsic motivation.

Moreover, the number of the books that students read during the academic year reveals that this technological way of extensive reading pushed students to be good readers unlike the other member of their coevals in general. This clearly demonstrates the success of the digital library system and value-added incentive and rewarding tools within the system.

## **8. Recommendations**

As the requirement of the technology-oriented education setting, teachers should train themselves to use various educational tools effectively and encourage their students to utilize the advantages of digital material to ensure the maximum benefit. While obtaining the data of the number of the books that the students read, the researcher realized that some of the teachers kept the records of their students very attentively and provided feedback to the students digitally and their class reading average was significantly higher than in the other classes. This could be a good research topic - to investigate the teacher role in digital library application by his/her students.

Furthermore, in Iraq there is still massive gap in the impact of digital library system on the reading comprehension and reading habits of students. Therefore, other researchers in the field should conduct further studies on this topic.

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**Appendix**Questionnaire <https://docs.google.com/forms/d/e/1FAIpQLSeWejaXlyoJEskNg9302F69IZni1kla7sm3eDoltDeg2eel8A/viewf>

<b>RAZ KIDS INCENTIVES AND AWARDS SURVEY</b>						
Dear Students, this questionnaire is designed to research the effects of incentive and award tools in Raz Kids Digital Library on students' reading motivation. The results will be only used for academic purposes and will not be shared with any other third party and your names will be kept confidential. Your answers will help teachers, school administrators and curriculum designers to develop better program content for your learning. Thank you in advance for your cooperation and time.						
1	<b>Name Surname:</b>					
2	<b>School:</b>					
3	<b>Grade:</b>					
4	<b>Gender:</b>					
		<b>1 Strongly Disagree</b>	<b>2 Disagree</b>	<b>3 Neutral</b>	<b>4 Agree</b>	<b>5 Strongly Agree</b>
1	I like reading book at home in Raz-Kids.					
2	I like choosing books that I love.					
3	I like reading different kinds of books.					
4	I like reading on Raz-Kids more than playing videogames.					
5	I like reading on Raz-Kids more than watching TV.					
6	I like earning stars in Raz-Kids.					
7	I like spending my stars in Raz Kids.					
8	I answer the quiz questions at the end of each book because I want to earn more stars.					
9	I like building and designing my own Avatar in Raz Kids.					
10	I like designing my Raz Rocket room.					
11	I read books in Raz Kids because my teacher asks me to do.					
12	I like earning stars more than reading books.					
13	I like designing my Avatar more than reading books.					
14	I like reading books because I learn new things.					
15	I like earning Badges in Raz Kids.					
16	Earning star is more important than learning new things for me.					
17	I like talking about the books that I read to my friends.					
18	I feel happy when my teacher gives me Raz Kids certificate.					
19	I read books to be "Reading Star" of the month					