



Teachers' Behavioral Intention to Use E-books to Promote Reading Skills in Preschoolers: Adoption of the UTAUT2 Model

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The current study aims to investigate teachers' behavioral intention to use e-books to promote reading skills in young children post COVID-19 ERA, applying the UTAUT2 Model. A quantitative, non-experimental survey design was used to study the relationships between the independent variables (UTAUT2 constructs) and dependent one (behavioral intention to use e-books). A total of 480 responses was received. As indicated by findings all the constructs impacted teachers' behavioral intention to use e-books to promote reading literature in young children positively and significantly. this study support evidence on UTAUT's application in using e-books to promote reading literature in young children.

Keywords: teachers' behavioral intention, e-books, reading skills, preschoolers, UTAUT2 model

INTRODUCTION

Developmental psychologists, educators, and anyone interested in education have long recognized that reading to young children can improve their long-term reading competence and enhance their acquisition of various cognitive skills, such as the ability to listen, think creatively, and focus for long periods of time (Güngör et al.,2022; Sahu,2020; Tepetaş & Erol, 2021).

There is no doubt that digital books, such as e-books, story apps, picture book apps, and interactive stories, have great attractions for children, such as cartoon characters that bob their heads, buttons that can make exciting sounds, or characters that can be moved and helped them move. Bypassing certain situations. There is no doubt that these interactive elements are a great source of attraction for children, but at the same time, they can act as distractions and affect the benefits of shared reading (Barakat, 2023; Barakat & Elmaghraby, 2022; Ciampa & Jagielo-Manion, 2021; Düzyol & Yıldırım,

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2022; Güngör et al., 2022; Huang & Lu, 2021, Pamuket al., 2023; Wheeler & Hill, 2021; Yurtbakan & Batmaz, 2023).

Distance education has been around for more than a hundred years, and previous forms of distance education were adopted through correspondence courses, which began in Europe. This remained the primary means of distance education until the middle of this century when radio and television instruction became more common. As technology has changed, the definition of distance education has changed, and video-recorded lectures have been the standard in university courses over the past two decades, and audio tapes and mailed lessons have also been used in correspondence courses to teach subjects such as language (Hidajat, 2023; Yurtbakan & Batmaz, 2023). Distance education is of great importance in the educational process, as it provides tremendous potential to expand access to education and increase students' use of Internet-based technologies. It provides opportunities for learning anywhere and at any time. New technologies have facilitated greater cooperation between teachers and students, so technology was chosen to support the changes. Which occurred in light of the Corona pandemic, which forced schools and educational institutions to switch to the distance education mode, so schools and universities adopted online and distance education curricula (Düzyol & Yıldırım, 2022).

The e-book loaded on the mobile phone, tablet or computer makes things easier for the student. Instead of carrying a bag full of books, the student can download all the books on the mobile phone, which enables the student to follow his lessons and read his notes anywhere and anytime without getting tired (Sari et al., 2022). Hsu et al. (2017) showed that studying e-books increases our understanding of the role played by the adoption of technology in education settings.

A unified theory of acceptance and use of technology (UTAUT 2) is one of the recognized theoretical models that are widely and practically used in different ICT applications (Mekonnen, Addisalem & Agmasie, 2023; Özkan, Çiğdem & Yazar, 2023). By examining behavioral intention to use e-books to promote reading literature in young children, applying the UTAUT2 Model, this study has the potential to contribute to the promotion of reading literature in young children.

Literature Review

This section presents the theoretical background on the behavioral intention of preschool teachers to use e-books to promote reading literature in young children, applying the UTAUT2 Model, introducing in detail the UTAUT2 Model.

Unified Theory of Acceptance and Use of Technology (UTAUT 2)

Within this model, there are constructs that impact users' behavioral intentions. These are performance expectancy, effort expectancy, social influence, and facilitating conditions (Özkan et al., 2023). Perceived enjoyment which affects behavioral intentions to use e-books was added (Özkan et al., 2023). This model is presented in Figure 1. In UTAUT , it is assumed that performance expectancy (how far the individual perceives the usefulness of technology), effort expectancy (how far the individual perceives the easy to use of technology), social influence (how far the

individual appreciates the importance of technology in the social network) and facilitating conditions (how far the individual possesses the resources to use the technology) influence an individual's behavioural intention to use a technology (Venkatesh et al., 2003). UTAUT2 added hedonic motivation, price value and habit (Venkatesh et al., 2012).

Performance Expectancy(PE)

PE is a construct from the UTAUT model. It aims to measure the level of an individual's confidence by employing a certain system that empowers him/her to achieve the performance of his /her job (Verita & Tri, 2020). PE is a variable that can be referred to as the ability to get significant benefits after using a system. According to Abu-Tayeh et al. (2022), PE has the greatest influence on behavioral intention to use mobile banking. Meanwhile, Wijaya and Eva (2020) show that PE has no effect on behavioral intention in the online marketplace Shopping. There seems to be gap in the literature. Therefore, the following hypothesis was developed:

H1. PE has a positive impact on teachers' intention to use e-books to promote reading literature in young children.

Effort Expectancy(EE)

EE is the effort done by the person in carrying out a system that empowers them to carry out the tasks assigned to them. It has been shown that when persons perceive e-books as an easy task to carry, it is highly likely that you will be the focus of their attention (Dahri et al., 2023). While other research show that there is no significant effect between the effort expectancy (EE) variable on the behavioral intention (BI) variable (Fahlevi and Anthony, 2022). Thus, our hypothesis is as follows.

H2. EE has a positive impact on teachers' intention to use e-books to promote reading literature in young children.

Facilitating Conditions(FC)

FC is the level of confidence from someone in the event that the company he works for possesses the basic components that support the use of the system at work. In addition, FC also refers to a person's beliefs regarding the technological capabilities in the organization, which can help him accept and use technology in general. (Castillo-Vergara et al.,2022; Venkatesh et al., 2003). Thus, our hypothesis is as follows.

H3. FC has a positive impact on teachers' intention to use e-books to promote reading literature in young children.

Social influence (SI)

SI refers to the ability of those around the individual to persuade him to use and adopt the system in his work (Sultan,2021). Based on a person's confidence in the people around him who are important to him, he seeks to use the system on the basis that it is a general demand (Castillo-Vergara et al.,2022). Thus, our hypothesis is as follows.

H4. SI has a positive impact on teachers' intention to use e-books to promote reading literature in young children.

Hedonic motivation (HM)

It expresses the pleasure that an individual gets from using a technological application. HM has, as indicated by Ahmed (2016) a positive effect on BI towards e learning. HM correlates positively with teachers' intention to use e-books (Alalwan et al., 2017; Kang et al., 2015; Herrero & San, 2017). Thus, our hypothesis is as follows.

H5. HM has a positive impact on teachers' intention to use e-books to promote reading literature in young children.

Price Value (PV)

PV is the comparison of the benefits that will be obtained from the use of technology (Sung & Sung,2015). It has been shown that there is a positive correlation n between PV and BI (Xu,2014). Users will bear the costs of using a technology system. Thus, our hypothesis is as follows.

H6. PV has a positive impact on teachers' intention to use e-books to promote reading literature in young children.

Habit (HA)

When a person gets used to doing a job or carrying out a task, this work or task is then done automatically. Behavior that is carried out several times and carried out satisfactorily can become a habit (Escobar et al.,2014; Yeh & Tseng ,2017). It has been shown that HA has a positive impact on BI (Yeh & Tseng ,2017). Thus, our hypothesis is as follows.

H7. HA has a positive impact on teachers' intention to use e-books to promote reading literature in young children.

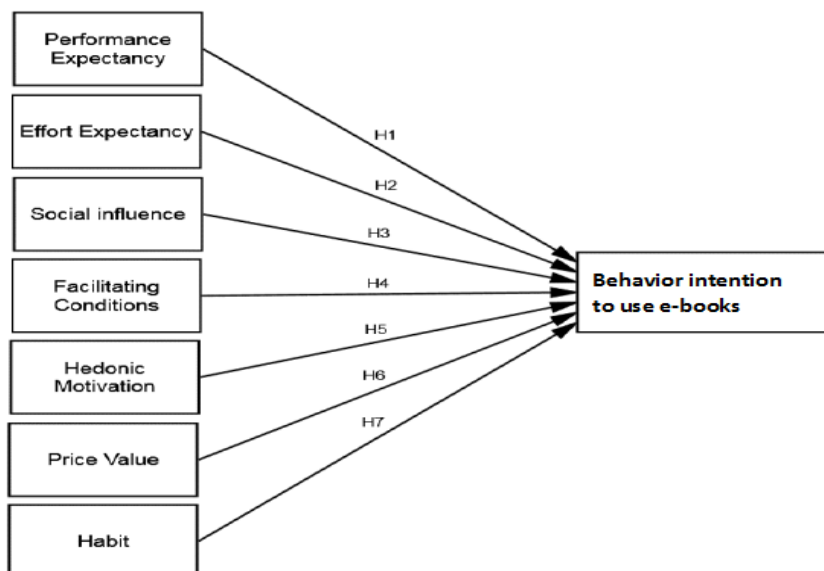


Figure 1

Research model

The present study

Compared to the remote teaching of literacy for older children and adults in primary education to university education, this type of education did not receive enough attention in the pre-school stage (Kaiper-Marquez et al., 2020). There is an urgent to integrate modern technology into preschool. As such, the current study aims to investigate behavioral intention to Use e-books to promote reading literature in young children, applying the UTAUT2 Model. So we ask the following question:

How far do teachers' behavioral intention to use e-books to promote reading literature in young children is affected by the UTAUT2 constructs?

METHOD

Research Design

This study argued that the UTAUT2 model is appropriate for investigating teachers' behavioral intention to use e-books to promote reading skills in preschoolers. The UTAUT2 model has been affirmed by many studies as a theoretical framework for testing factors of technology adoption in classroom teaching.

Sample

A convenience method of sampling was used. Preschool female teachers from general administration of education in the northern border were targeted. E- questionnaire was used to collect data via Facebook and WhatsApp groups. A total of 480 responses was received. All participants are of Saudi nationality and speak Arabic as their mother tongue. They were recruited on a voluntary basis. The respondents' ages are mainly between 22 and 30 years old. The inclusion criteria comprised teachers' willingness to participate.

Instrument

To collect data, a 5-point Likert scale, based on Venkatesh et al. (2012), was developed to be used. The questionnaire has good Cronbach's alpha (α) coefficients of 0.776, 0.812, 0.802, 0.801, 0.810, 0.758, 0.777, and 0.787 for the eight sections of the scale respectively by using Internal Consistency Reliability (ICR) measures.

FINDINGS

Measurement model analysis

Standardised factor loadings, AVE, internal consistency reliability and model fit indices were used. MIN/degrees of freedom (χ^2/df), goodness of fit index (GFI), adjusted goodness of fit index (AGFI), normed fit index (NFI), Tucker–Lewis index (TLI), comparative fit index (CFI) and the root mean square error of approximation (RMSEA) were done (see table 1.). Square roots of AVE as well as the maximum shared value (MSV) metric were used (Table 2). The measurement model fit metrics satisfied the minimum requirements for model fit demonstrating overall model fit and confirming CV.

Table 1
CFA results (λ , CA, CR, AVE, S and K)

| Model | Construct | SFL | CA | CR | AVE | Skewness | Kurtosis |
|------------|-----------|---------------------|-----------------------|------------------|-----------------|-------------|-------------|
| constructs | items | ($\lambda > 0.6$) | ($\alpha \geq 0.7$) | ($Crel > 0.6$) | ($AVE > 0.6$) | $S < j2j $ | $K < j4j $ |
| PE | PE1 | 0.731 | 0.825 | 0.825 | 0.711 | 1.731 | 2.231 |
| | PE2 | 0.677 | | | | 1.243 | 2.423 |
| | PE3 | 0.718 | | | | 1.929 | 1.893 |
| | PE4 | 0.679 | | | | 1.248 | 2.427 |
| | PE5 | 0.730 | | | | 1.989 | 1.894 |
| EE | EE1 | 0.777 | 0.781 | 0.819 | 0.623 | 1.040 | 2.111 |
| | EE2 | 0.820 | | | | 0.832 | 1.928 |
| | EE3 | 0.679 | | | | 1.452 | 1.811 |
| | EE4 | 0.817 | | | | 0.832 | 1.931 |
| | EE5 | 0.682 | | | | 1.466 | 1.825 |
| SI | SI1 | 0.744 | 0.820 | 0.841 | 0.635 | 1.119 | 2.544 |
| | SI2 | 0.840 | | | | 1.311 | 2.013 |
| | SI3 | 0.660 | | | | 0.882 | 2.817 |
| | SI4 | 0.812 | | | | 1.342 | 2.103 |
| | SI5 | 0.671 | | | | 0.890 | 2.797 |
| FC | FC1 | 0.780 | 0.844 | 0.824 | 0.651 | 0.817 | 2.441 |
| | FC2 | 0.817 | | | | 1.448 | 1.951 |
| | FC3 | 0.850 | | | | 1.205 | 2.228 |
| | FC4 | 0.777 | | | | 1.451 | 1.815 |
| | FC5 | 0.676 | | | | 1.213 | 2.230 |
| HM | HM1 | 0.746 | 0.723 | 0.741 | 0.615 | 0.800 | 1.732 |
| | HM2 | 0.711 | | | | 0.723 | 1.716 |
| | HM3 | 0.719 | | | | 0.727 | 1.720 |
| | HM4 | 0.723 | | | | 0.731 | 1.741 |
| | HM5 | 0.741 | | | | 0.752 | 1.764 |
| HT | HA1 | 0.732 | 0.743 | 0.766 | 0.611 | 0.996 | 1.977 |
| | HA2 | 0.744 | | | | 1.119 | 2.544 |
| | HA3 | 0.671 | | | | 1.115 | 2.471 |
| | HA4 | 0.744 | | | | 1.119 | 2.544 |
| | HA5 | 0.632 | | | | 1.101 | 2.102 |
| PV | PV1 | 0.825 | | | | 1.519 | 2.551 |
| | PV2 | 0.822 | | | | 1.201 | 1.856 |
| | PV3 | 0.773 | | | | 1.337 | 2.441 |
| BI | BI1 | 0.705 | 0.823 | 0.831 | 0.644 | 1.217 | 2.736 |
| | BI2 | 0.819 | | | | 1.335 | 1.394 |
| | BI3 | 0.729 | | | | 1.715 | 2.188 |
| | BI4 | 0.849 | | | | 1.317 | 3.035 |
| | BI5 | 0.679 | | | | 1.452 | 1.811 |

Table 2
Sources Measurement model assessment using model fit indices

| Construct | Absolute fit measures | | | Incremental fit measures | | Parsimonious fit measures | |
|-----------|-----------------------|-------|-------|--------------------------|-------|---------------------------|-------|
| | χ^2/df | GFI | AGFI | NFI | TLI | CFI | RMSEA |
| PE | 1.867 | 0.943 | 0.938 | 0.970 | 0.970 | 0.945 | 0.044 |
| EE | 1.788 | 0.951 | 0.946 | 0.971 | 0.979 | 0.956 | 0.045 |
| SI | 1.926 | 0.952 | 0.942 | 0.982 | 0.968 | 0.963 | 0.042 |
| FC | 1.866 | 0.967 | 0.939 | 0.967 | 0.969 | 0.962 | 0.042 |
| HM | 1.789 | 0.973 | 0.940 | 0.973 | 0.975 | 0.948 | 0.043 |
| HT | 1.877 | 0.970 | 0.938 | 0.968 | 0.970 | 0.960 | 0.044 |
| PV | 1.789 | 0.973 | 0.942 | 0.971 | 0.971 | 0.959 | 0.045 |
| BI | 1.888 | 0.974 | 0.949 | 0.964 | 0.965 | 0.959 | 0.045 |

Structural model assessment

The R2 amounted to 69.1%, which indicated that a significant amount of variation in BI could be explained by the seven constructs of UTAUT2 Model (Ozili, 2022). Figure 2 shows the path co-efficient and R2 value. Figure 3 shows the bootstrapping results of this research.

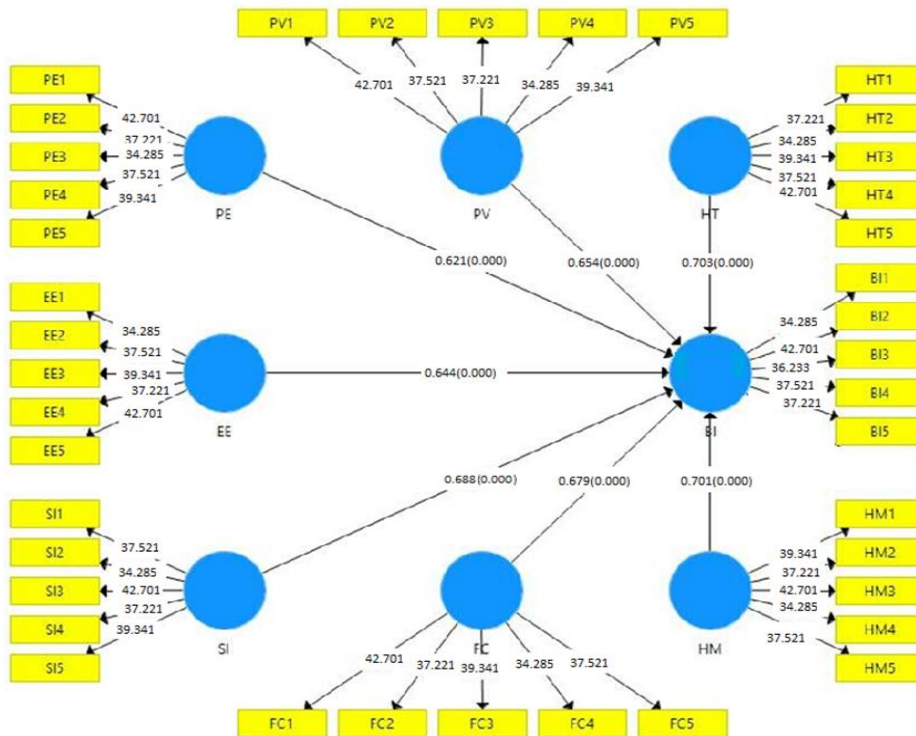


Figure 2
Path coefficients and R² value

Bootstrapping results

The seven constructs of UTAUT2 Model significantly and positively predicted BI. As shown in Table 3, all the constructs had significant impact on teachers' behavioral intention to use e-books to promote reading literature in young children post COVID-19 ERA: PE($\beta = 0.621$, $t = 8.413$), EE($\beta = 0.644$, $t = 8.601$), SI($\beta = 0.688$, $t = 8.935$), FC($\beta = 0.679$, $t = 8.911$), HM($\beta = 0.701$, $t = 9.430$), PV($\beta = 0.654$, $t = 8.686$), HT($\beta = 0.703$, $t = 9.443$). So, all the constructs demonstrated positive and significant effects on the endogenous variable.

Table 3
Hypothesis, path coefficients, t-values and p-values

| | Path coefficients | t | p-values |
|-----------------|-------------------|-------|----------|
| PE \square BI | 0.621 | 8.413 | 0.000 |
| EE \square BI | 0.644 | 8.601 | 0.000 |
| SI \square BI | 0.688 | 8.935 | 0.000 |
| FC \square BI | 0.679 | 8.911 | 0.000 |
| HM \square BI | 0.701 | 9.430 | 0.000 |
| PV \square BI | 0.654 | 8.686 | 0.000 |
| HT \square BI | 0.703 | 9.443 | 0.000 |

DISCUSSION

The current study aims to investigate teachers' behavioral intention to use e-books to promote reading literature in young children, applying the UTAUT2 Model.

The result indicates that PE is important to increase teachers' behavioral intention to use e-books to promote reading literature in young children. According to Chang (2012) PE is seen as the most influential driver of individuals' intention to use technology. Teachers are convinced in saving their time. And this in turn supports E-books (Al-Abdullatif & Alsubaie, 2022). Teachers perceive that the use of e-books help them to improve the quality of learning in their classrooms. In case of teachers perceive the e-books as user-friendly and easy to use, it is highly probable that they incorporate it into their teaching process. PE is seen by teachers as the most prominent reason that encourage them to use e-books in their teaching practices. Previous studies (Dahri et al., 2021; Yee & Abdullah, 2021; Zacharis & Nikolopoulou, 2022) support this result.

The result also indicates that SI is important to increase teachers' behavioral intention to use e-books to promote reading literature in young children. This result goes in the same line with that of Maduku (2015) who identified performance expectancy, social influence and facilitating conditions as salient factors of e-book use intentions among tertiary students, while contradicts with those of other researchers (e.g. Abbad, 2012; Holzmann, Schwarz, & Audretsch, 2020; Piramanayagam & Seal, 2021) who found that has the least significant influence on students' and teachers' intention to use technology.

EE was found to be affecting teachers' behavioral intention to use e-books to promote reading literature in young children (Venkatesh et al. 2003; Yakubu & Dasuki 2019). However, this result is in contrast to previous studies (e.g. Graham, Stols & Kapp, 2020; Zhang et al., 2021). Meanwhile, other research show that there is no significant effect between the EE variable on the BI variable (Fahlevi and Anthony, 2022).

Facilitating conditions (FC) was found to be affecting teachers' behavioral intention to use e-books to promote reading literature in young children post COVID-19 ERA. Preschool teachers tend to use e-books when resources and technical support are available. Facilitating conditions are largely determined by indicators such as perceived behavioral control and compatibility (Zhang et al., 2021). So it can be concluded that there is an influence on the relationship between the facilitating condition (FC) variable and behavioral intention (BI) in the use of e-books (Voravickositt,2017).

HM was found to be affecting teachers' behavioral intention to use e-books to promote reading literature in young children. HM is pivotal in influencing technology adoption among users (Yang, 2013). According to Venkatesh, Walton, and Thong (2012) stated that a person not only cares about performance but also the feelings that will be obtained from using a technology.

PV was found to be affecting teachers' behavioral intention to use e-books to promote reading literature in young children. This finding goes in the same line with that of Sung and Sung (2015), and Xu (2014) who show that PV has a positive impact on BI. Price value will have a positive effect if the use of technology can produce benefits that are greater than the costs that will be incurred by use (Chang, 2015). Previous studies have shown that price value will have an effect on behavioral intention, as the results of Andrianto's research (2020) indicate that price value has the greatest influence on behavioral intention. Andini and Hariyanti (2021) conducted research which resulted in the price value (PV) variable having no effect on behavioral intention (BI) in using the OASIS application.

Habit (HA) was found to be affecting teachers' behavioral intention to use e-books to promote reading literature in young children post (Chang, 2015). However, this results contradicts with that of Onibala, Rindengan, and Lumenta (2021) who find that habit variable (H) has no effect on behavioral intention (BI) to use E-Kinera in North Sulawesi Province. Likewise with research conducted by Andrianto (2020) which produces a relationship that has no effect on the habit variable (H) on behavioral intention (BI) in using digital wallets.

CONCLUSION

The UTAUT2 model was validated in predicting teachers' behavioral intention to use e-books to promote reading literature in young children. The findings of this study support evidence on UTAUT's application in using e-books to promote reading literature in young children. All the constructs had significant impact on teachers' behavioral intention to use e-books to promote reading literature in young children.

This research has several theoretical and practical implications on e-books. Teacher's use of e-books by will give rise to a new experience for children learning reading, e.g., ensuring they do not feel bored. However, there is still limited research on the use of the UTAUT model to analyze teachers' intention, specifically for promoting reading literature in young children. This study is among the first to assess teachers' behavioral intention to use e-books to promote reading literature in young children po, and could serve as a useful guide for the development, expansion and use of e-books in the future.

To increase the level of facilitating conditions that could enhance e-book use for by teachers promote reading literature in young children, the management of kindergarten schools should continue to work assiduously to provide stable e-book supply within the school environment.

This study contributes to the literature regarding teachers' behavioral intention to use e-books to promote reading skills in preschoolers adopting the utaut2 model.

This study is not without limitations, which may lead to future lines of research. First, the sample consists of preschool teachers, and so the results cannot be generalized. Future work could include other types of teachers. Secondly, this study is cross-sectional in nature; future research could consider longitudinal studies that allow for a longer-term view or other techniques. Third, this study was based on the respondents' self-reported intention to use e-book, not their actual usage. Lastly, since the sampling locations were confined to Arar city only, the findings could not be generalised across both public and private kindergartens. Instead of relying on self-reported intention to use, actual usage of e-book is recommended to be tracked and recorded to deliver insightful information on e-book. Further future research is encouraged to broaden the sample size and involve an extensive range of teachers.

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AUTHOR CONTRIBUTIONS

The authors contributed to the paper equally and approved the submitted version.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusion of this article will be made available by the authors, without undue reservation.

CONFLICT OF INTEREST STATEMENT

None

REFERENCES

- Abbad, M. (2021). Using the UTAUT model to understand students' usage of e-learning systems in developing countries. *Educ Inf Technol* 26, 7205–7224. <https://doi.org/10.1007/s10639-021-10573-5>
- Abu-Tayeh, S.; Masa'deh, R.; Alkhaldeh, R.S.; Khwaldeh, S. & Alrowwad, A. (2022). Continued Intention to Use of M-Banking in Jordan by Integrating UTAUT, TPB, TAM and Service Quality with ML. *J. Open Innov. Technol. Mark. Complex.* , 8, 120. <https://doi.org/10.3390/joitmc8030120>
- Alalwan, A. A., Dwivedi, Y. K., & Rana, N. P. (2017). Factors influencing adoption of mobile banking by Jordanian bank customers: Extending UTAUT2 with trust.

International Journal of Information Management, 37(3), 99-110.
<https://doi.org/10.1016/j.ijinfomgt.2017.01.002>

Al-Abdullatif, A.M.& Alsubaie, M.A. (2022). Using Digital Learning Platforms for Teaching Arabic Literacy: A Post-Pandemic Mobile Learning Scenario in Saudi Arabia. *Sustainability*, 14, 11868. <https://doi.org/10.3390/su141911868>

Andrianto, A. (2020). Faktor Yang Mempengaruhi Behavior Intention Untuk Penggunaan Aplikasi Dompot Digital Menggunakan Model UTAUT2. *Jurnal Ilmiah Ekonomi Bisnis* 25(2), 111–22.

Andini, F., and Ifani H.(2021). Penerapan Model UTAUT 2 Untuk Memahami Perilaku Penggunaan OASIS Di Sekolah Tinggi Teknologi Bandung. *Jurnal Ilmiah Nasional Riset Aplikasi dan Teknik Informatika*, 03(02), 1–10.

Barakat, A. (2023). The effects of digital drama-based instruction on developing receptive and expressive language among kindergarten children. *International Journal of Instruction*, 16(1), 103-118. <https://doi.org/10.29333/iji.2023.1616a>

Barakat, A. & Elmaghraby, R. (2022). The Contribution Of Storytelling Strategy As A Literature Tool To The Development Of Language Skills Among Kindergarten Children. *J. Posit. Sch. Psych.*, 6(8), 2324-2337.

Castillo-Vergara, M.; Álvarez-Marín, A.; Villavicencio Pinto, E. & Valdez-Juárez, L.E. (2022). Technological Acceptance of Industry 4.0 by Students from Rural Areas. *Electronics*, 11, 2109. <https://doi.org/10.3390/electronics11142109>

Chang, A. (2021). UTAUT and UTAUT 2: A review and agenda for future research. *Winners*, 13, 10–114

Chang, P. (2015). *Factors Influencing Behavioral Intention to Adopt Mobile E-books among Undergraduates: UTAUT2 Framework*. Bachelor Degree Graduation Research, University Tunku Abdul Rahman.

Ciampa, K.& Jagielo-Manion, R. (2021). Teaching and Assessing Early Literacy during COVID-19 and Beyond, *J. of Lang. and Liter. Educ.*, 17(2), 1-17. <https://files.eric.ed.gov/fulltext/EJ1342487.pdf>

Dahri, N.A.; Vighio, M.S.; Bather, J.D. & Arain, A.A. (2021). Factors influencing the acceptance of mobile collaborative learning for the continuous professional development of teachers. *Sustainability*, 13, 13222.

Dahri, N.A.; Al-Rahmi, W.M.; Almogren, A.S.; Yahaya, N.; Vighio, M.S.; Al-maatuok, Q.; Al-Rahmi, A.M.& Al-Adwan, A.S. (2023). Acceptance of Mobile Learning Technology by Teachers: Influencing Mobile Self-Efficacy and 21st-Century Skills-Based Training. *Sustainability*, 15, 8514. <https://doi.org/10.3390/su15118514>

Düzyol, E., & Yıldırım, G. (2022). Examination of the Opinions of Pre-School Teachers Regarding the COVID-19 Pandemic Period's Reflection of Pre-School Education. *Psycho-Educ. Res.Rev.*, 11(2), 261–280. https://doi.org/10.52963/PERR_Biruni_V11.N2.17

Fahlevi R., and Anthony, S.(2022). Analisis Faktor-Faktor Yang Mempengaruhi Online Purchase Intention Pada Situs Belanja Online. *Jurnal Mirai Manajemen*, 7(1), 74–97.

Graham, M.A.; Stols, G.&Kapp, R. (2020). Teacher Practice and Integration of ICT: Why Are or Aren't South African Teachers Using ICTs in Their Classrooms. *International Journal of Instruction*, 13, 749–766. DOI:10.29333/iji.2020.13251a

Güngör, H., Gülay Ogelman, H., Yapıcı, M., Zeren Nalinci, G., & Erten Sarıkaya, H. (2022). COVID-19 in Pictures of Preschoolers. *Psycho-Educ. Res.Rev.*, 11(2), 321–338. https://doi.org/10.52963/PERR_Biruni_V11.N2.20

Herrero, Á., & San Martín, H. (2017). Explaining the adoption of social networks sites for sharing usergenerated content: A revision of the UTAUT2. *Computers in Human Behaviour*, 71, 209-217. <https://doi.org/10.1016/j.chb.2017.02.007>

Hidajat, F. A. (2023). The development of digital e-books to improve students' creativity skills: A self-regulation strategies approach. *International Journal of Instruction*, 16(4), 367-384. <https://doi.org/10.29333/iji.2023.16422a>

Holzmann, P., Schwarz, E.J. & Audretsch, D.B. (2020). Understanding the determinants of novel technology adoption among teachers: the case of 3D printing. *J Technol Transf*, 45, 259–275. <https://doi.org/10.1007/s10961-018-9693-1>

Hsu, C. L., Lin, Y. H., Chen, M-C., Chang, K. C., & Hsieh, A. Y. (2017). Investigating the determinants of e-book adoption. *Program*, 51(1), 2-16. <https://doi.org/10.1108/PROG-04-2014-0022>

Huang Y & Lu J (2021). Assessment of Language and Literacy Teachers' Distance Teaching in COVID-19 Lockdown Time. *Front. Psychol.* 12:762732. doi: 10.3389/fpsyg.2021.762732

Kaiper-Marquez, A., Wolfe, E., Clymer, C., Lee, J., McLean, E. G., Prins, E., & Stickel, T. (2020). On the fly: Adapting quickly to emergency remote instruction in a family literacy programme. *Int. Rev. of Educ.*, 66(1), 691–713. DOI:10.1007/s11159-020-09861-y

Kang, M., Liew, B. Y. T., Lim, H., Jang, J., & Lee S. (2015). Investigating the determinants of mobile learning acceptance in Korea using UTAUT2. In G. Chen, V. Kumar, Kinshuk, R. Huang, & S. Kong (Eds), *Emerging issues in smart learning. Lecture notes in educational technology* (pp. 209-216). Springer, Berlin, Heidelberg

Maduku, D. K. (2015). Factors of E-book Use Intentions: Perspective of Students in a Developing Country, *Perspectives on Global Development and Technology*, 14(6), 597-618. doi: <https://doi.org/10.1163/15691497-12341364>

Mekonnen K., Addisalem W.&Agmasie ,D. (2023). Behavioral intention to use e-learning and its associated factors among health science students in Mettu university, southwest Ethiopia: Using modified UTAUT model *Infor. in Medic. Unlocked* 36 ,101154

- Ozili, P. (2022). The Acceptable R-Square in Empirical Modelling for Social Science Research. *SSRN Electronic Journal*, 1-10 . DOI:10.2139/ssrn.4128165
- Özkan, U. B., Çiğdem, H. & Yazar, G. (2023). Factors Affecting Vocational College Instructors' Usage of LMS in the Post-Pandemic Normal. *Psycho-Educ. Res.Rev.*, 12(1), 217–236. https://doi.org/10.52963/PERR_Biruni_V12.N1.14
- Pamuk, S., Alici, D., Aktaş, M., Selvi, H., & Uzun, N. B. (2023). An Investigation of Variables Predicting the Reading Literacy in Pisa 2018. *Psycho-Educational Research Reviews*, 12(1), 338–349. https://doi.org/10.52963/PERR_Biruni_V12.N1.21
- Piramanayagam, S.&Seal, P.P. (2021). Hospitality students' adoption of e-Books during the COVID-19 pandemic: A developing country perspective. *Libr. Philos. Pract.*, 1–17.
- Sahu P. (2020). Closure of Universities Due to Coronavirus Disease 2019 (COVID-19): Impact on Education and Mental Health of Students and Academic Staff. *Cureus.*, 12(4), e7541. doi: 10.7759/cureus.7541.
- Sari, S., Rahim, F., Sundari, P & Aulia, F. (2022). The importance of e-books in improving students' skills in physics learning in the 21st century: a literature review. The 4th International Conference on Research and Learning of Physics (ICRLP 2021) 31/08/2021 - 02/09/2021 Padang, Indonesia. DOI 10.1088/1742-6596/2309/1/012061
- Sultan, A. (2021). Determining the Factors that Affect the Use of Virtual Classrooms: A Modification of the UTAUT Model. *Journal of Information Technology Education: Research* , 20 117-135. <https://doi.org/10.28945/4709>
- Sung, H., & Sung, J. (2015). Research on intention to adopt smart wear: Based on extended UTAUT model. *Fashion business*, 19(2), 69-84.
- Tepetaş Cengiz, G. Şule, & Erol, D. (2021). Validity and Reliability Study of the Parent-Child Shared Book Reading Inventory. *Psycho-Educational Research Reviews*, 10(2), 328–350. https://doi.org/10.52963/PERR_Biruni_V10.N2.23
- Venkatesh, V., Morris, M., Davis, G., & Davis, F. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27, 425-478.
- Venkatesh, Viswanath, Sam M Walton, and James Y L Thong. (2012). Quarterly Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *Mis Quarterly*, 36(1), 157–78. <http://about.jstor.org/terms>.
- Verita W., & Tri P. (2020). Evaluasi Penggunaan Pendaftaran Online Dengan Metode Unified Theory of Acceptance and Use of Technology (UTAUT) Di Rumah Sakit Islam Ibnu Sina Pekanbaru.” *Journal of Hospital Management and Health Sciences*, 1(2), 24–30.
- Voravickositt, P. (2017). *Understanding the relationship between users' reading attitudes and behaviors, and e-book collection management in Thai academic libraries*. Doctors' Thesis, University of Sheffield.

Wheeler, D. L., & Hill, J. C. (2021). The impact of COVID-19 on early childhood reading practices. *Journal of Early Childhood Literacy*, 0(0). <https://doi.org/10.1177/14687984211044187>

Wijaya, M and Eva H.(2020). Analisis Faktor Yang Mempengaruhi Behavioral Intention Pada Online Marketplace Menggunakan Model UTAUT.” *Seminar Nasional Teknologi Informasi dan Komunikasi STI&K (SeNTIK)*, 4(1), 1-19.

Xu, X. (2014). Understanding users' continued use of online games: An application of UTAUT2 in social network games. *Sixth International Conference on Advances in Multimedia, Nice*, 58-65

Yakubu, M. N., & Dasuki, S. I. (2019). Factors affecting the adoption of e-learning technologies among higher education students in Nigeria: A structural equation modelling approach. *Information Development*, 35(3), 492–502. <https://doi.org/10.1177/0266666918765907>

Yang, S. (2013). Understanding undergraduate students' adoption of mobile learning model: A perspective of the extended UTAUT2. *Journal of Convergence Information Technology*, 8(10), 969- 979.

Yee, M.& Abdullah, M.(2021).A review of UTAUT and extended model as a conceptual framework in education research. *J. Pendidik. Sains Mat. Malays.*, 11, 1–20.

Yurtbakan, E., & Batmaz, O. (2023). Analysis of Dialogic Reading's Effects on Primary School 4th Graders' Views on Values Education and Attitudes towards Reading. *Psycho-Educational Research Reviews*, 12(1), 171–184. https://doi.org/10.52963/PERR_Biruni_V12.N1.11

Zacharis G, &Nikolopoulou K. (2022). Factors predicting University students' behavioral intention to use eLearning platforms in the post-pandemic normal: an UTAUT2 approach with 'Learning Value'. *Educ Inf Technol (Dordr)*. 27(9), 12065-12082. doi: 10.1007/s10639-022-11116-2.

Zhang, Y.; Zhang, L.; Wu, Y.; Feng, L.; Liu, B.; Han, G.; Du, J.& Yu, T. (2021). *Factors Affecting Students' Flow Experience of E-Learning System in Higher Vocational Education Using UTAUT and Structural Equation Modeling Approaches*; Springer International Publishing: Cham, Switzerland