# Students' usage behavior toward digital exam pads in Indian university settings

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**ABSTRACT**

This study investigates the factors influencing undergraduate students' acceptance and usage of digital exam pads in the context of Indian higher education by utilizing the variables of the unified theory of acceptance and use of technology (UTAUT) and its extended version, UTAUT2. The shift towards paperless examinations is vital for sustainability and efficiency in education, yet understanding the determinants of student adoption remains a challenge. To address this, the study collected data from 480 undergraduate students from Jharkhand and Karnataka, India, and the proposed model was tested using partial least squares structural equation modeling (PLS-SEM). The results revealed that performance expectancy (PE), effort expectancy (EE), social influence (SI), facilitating conditions (FC), and hedonic motivations (HM) significantly influence students' behavioral intentions to use digital exam pads, which in turn positively affect actual usage behavior (UB). Additionally, gender was found to moderate the relationship between HM and BI. The study concludes that the UTAUT model effectively explains digital exam pad adoption, offering practical insights for universities aiming to implement such technologies. The findings underscore the need for targeted strategies to enhance student engagement with digital tools, particularly considering gender differences.



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## 1. INTRODUCTION

The transition towards paperless exams in higher education has gained attention, especially after the COVID-19 pandemic. A decade ago, many existing options primarily catered to multiple-choice questions (MCQ). Later, the demand for innovative systems capable of handling subjective exams increased. One such solution is the structured query language (SQL)-based paperless examination system, which automates processes and ensures security. Web-based examination systems help evaluate and generate reports in Excel sheets. Recent technological advancements have encouraged paperless examinations in higher education. Online examination has enhanced the effectiveness of teaching and learning processes, reducing time and budget requirements. Introducing automated descriptive answer evaluation systems has led to fairer assessment practices [1]. Paperless examination systems enhance the quality of school assessments and alleviate teachers' preparation tasks. They aim to expedite answer-checking processes with accuracy through automated methods [2]. Mobile applications enable contactless submission with cheating detection features and offer a cost-effective solution for secure exams [3]. These advancements address the limitations of traditional paper-based tests. Information technology helps in enhancing students' learning performances [4].

Students' learning motivation, engagement, and accomplishment improved in elementary and secondary schools through the use of innovative learning methods [5]. Innovative methods are continually being introduced to optimize the examination process. Online examination systems have become vital tools for educational and recruitment institutions [6].

Electronic examinations offer an alternative to traditional pen-and-paper exams. A study employing the technology acceptance model (TAM) revealed positive perceptions among students toward e-exam platforms like ExamSoft due to their ease of use and usefulness [7]. Students generally find e-exams easier to navigate, but they may not be suitable for all courses [8]. Factors of the unified theory of acceptance and use of technology (UTAUT), such as performance expectancy (PE) and facilitating conditions (FC), influence online learners' acceptance of e-exam systems [9]. During the COVID-19 pandemic, female students and those in disciplines like pharmacy and health sciences exhibited higher acceptance levels of e-exams [10]. Addressing student characteristics and enhancing assessment competencies are essential to ensure fair online exams [11]. Mutawa and Sruthi [12] found students' preference for live-human and blended proctoring methods, AI proctoring methods also play a significant role. The transition to paperless exams in language testing underscores the role of modern technology in reshaping assessment methodologies [13]. However, challenges such as negative psychological impact highlight the importance of addressing student well-being in implementing electronic examination systems [14].

Digital exam pads (DEPs) are not well-known in higher education institutes in India. Students can write with a stylus on a digital screen using DEPs as a substitute for pen and paper exams. It is believed to be a promising alternative because it provides a similar experience to traditional exams. Despite this potential, there is a scarcity of primary research investigating the acceptance of DEPs among Indian students, except for a book chapter by Senthilkumaran and Raghavendra [15], which used the TAM.

This study endeavors to bridge the gap by assessing the intention and behavior of undergraduate (UG) students in Indian higher education towards using DEPs. The study attempts to offer insights into the acceptance of DEPs in the Indian educational context by examining all the variables of the UTAUT, i.e. PE, effort expectancy (EE), social influence (SI), FC, and hedonic motivation (HM) from UTAUT2.

The study was conducted to explore the determinants influencing students' acceptance and behavior towards DEPs in an Indian university setting. As universities increasingly adopt digital tools to modernize and streamline academic processes, understanding these factors becomes crucial for the successful implementation of paperless examination systems [16]. This research aims to provide insights into how students perceive and engage with digital exam technology, which is vital for promoting wider acceptance and usage. This study is relevant because it addresses the growing need for sustainable and efficient examination methods in higher education. The adoption of DEPs could significantly reduce paper usage and streamline the examination process, which aligns with global trends towards sustainability and digitalization in education [17]–[19]. Additionally, understanding student behavior and the factors that influence their acceptance of digital tools is essential for higher education institutions aiming to implement these technologies successfully [20], [21].

The UTAUT provides a framework for understanding how people adopt and utilize technology [22]. UTAUT model synthesized prior technology acceptance theories and identified four primary constructs (PE, EE, SI, and FC) responsible for affecting behavioral intentions (BI) and usage behavior (UB). PE reflects the perceived benefits individuals expect from using technology, EE relates to ease of technology use, SI measures the influence of others on an individual's decision to use technology, and FC considers the resources and support available for technology use.

UTAUT2 extends this model by introducing three additional constructs: HM, cost, and habit, moderated by age, gender, and experience [23]. HM implies the joy of using technology. The cost considers the financial implications of technology use. However, since the context of this study involves students who do not directly pay for the technology, the cost aspect is excluded from the proposed model. Habit denotes the extent to which individuals perform behaviors. It is not included in the study due to the novelty of the technology (DEPs) being studied and the lack of customary usage among students in the Indian context. The moderating effect of gender on HM was examined; age and experience were excluded from the study as the respondents were of the same age and experience group, i.e. UG students.

In various studies, the relationships among different constructs within the framework of UTAUT or UTAUT2 have been explored. Chen and Hwang [24] reported that PE and EE directly influence students' BI for online courses. Maita *et al.* [25] emphasized the significance of PE, EE, and SI in manipulating individuals' BI to use technology in academic settings. The study also discovered that these factors significantly influence BI within academic information systems, with FC showing no significant effect. Venugopal *et al.* [26] highlighted the impact of PE, EE, SI, and FC on BI, which subsequently influences electronic health records and telemedicine UB. Andwika and Witjaksono [27] highlighting the key findings pertaining to enterprise resource planning acceptance in the automobile sector. The initial study of Heijden [28] showed the direct influence of HM on technology acceptance and use. Later, Harnadi *et al.* [29]

emphasized the importance of HM in influencing BI, along with other key variables affecting user acceptance of social media technology. Also, HM's significant impact on students' BI to use animation, along with PE is reported by Dajani and Hegleh [30].

Against the backdrop, a framework is developed, as shown in Figure 1, and the following hypotheses are framed: i) PE positively and significantly impacts the BI to use DEPs among UG students in Indian universities (H1a); ii) EE positively and significantly impacts the BI to use DEPs among UG students in Indian universities (H1b); iii) SI positively and significantly impacts the BI to use DEPs among UG students in Indian universities (H1c); iv) FC positively and significantly impacts the BI to use DEPs among UG students in Indian universities (H1d); v) HM positively and significantly impacts the BI to use DEPs among UG students in Indian universities (H1e); vi) BI positively and significantly impacts the UB of DEPs among UG students in Indian universities (H2); and vii) Gender significantly moderates the relationship between HM and BI to use DEPs in Indian universities (H3).

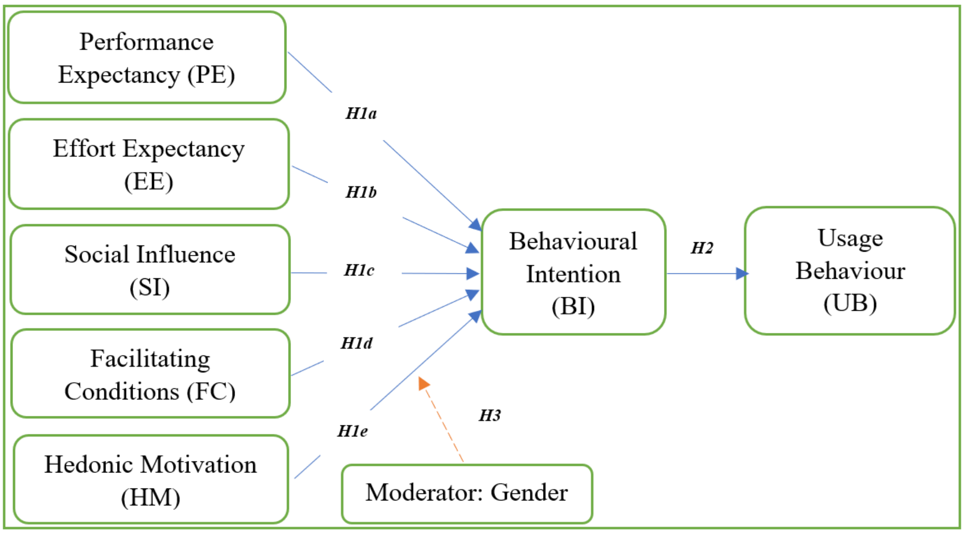


Figure 1. Research framework (adopted from UTAUT and UTAUT2)

## 2. METHOD

Following previous research [31], [32], this study employed a quantitative research approach, utilizing partial least square structural equation modelling (PLS-SEM) to validate the proposed model and test the hypotheses. This approach is widely used in technology acceptance research because it handles complex models and assesses the relationships between multiple constructs. PLS-SEM is a statistical tool that examines the paths of a model and gives accurate results. SmartPLS 4 software was used to assess both the measurement and structural models, ensuring the reliability and validity of the constructs used in the study. The research framework was adopted from UTAUT and its extended version UTAUT2 [22], [23] to examine the factors influencing the behavior of students towards the use of digital exam pads. The research design adopted a cross-sectional approach to collect data from samples.

### 2.1. Sample and data collection

Students of higher education institutions (HEIs) in the states of Karnataka and Jharkhand, India, were included in the data collection process using a convenience sampling method with a structured questionnaire. Since the student population is relatively homogeneous in characteristics (e.g., all are enrolled in similar programs) in the study, hence convenience sampling will provide reasonably representative insights without significant bias [33]. The UG students enrolled in various programs were approached for an online survey in the month of March 2024 at the university premises. The authors received 489 responses, out of which nine were discarded due to more than 50% missing data, resulting in 480 responses in the final data set for analysis. A total of 60% (288) of cases were male and 40% (192) were female. Their age was between 17 years to 25 years.

### 2.2. Measure

The survey instrument was designed to gather the responses from UG students. The first section included demographic profiling, i.e. age and gender, of the respondents, and the second section included multi-item scales to measure independent (PE, EE, SI, FC, HM) and dependent (BI and UB) constructs. The construct EE had a five-item scale; FC, HM and BI had four-item scales, and PE, SI and UB had three-item scales based on prior studies [22], [23], [34], [35]. Out of a total of 26 items, EE2 (.389) and FC4 (.290) were dropped due to low factor loadings and affecting average variance extracted (AVE) and composite reliability (CR) of respective constructs.

## 3. RESULTS AND DISCUSSION

### 3.1. Common method bias

Following the approach adopted by Yıldız [36], variance inflation factor (VIF) values of the inner model were used to examine the common method bias. VIF ranged between 1 to 2.47, which is well below the upper limit of 3.33, denoting the bias-free model, as presented in Table 1.

Table 1. Multicollinearity test–VIF values

| | Independent variable | | | | | |
|---|---|---|---|---|---|---|
| Dependent variable | PE | EE | SI | FC | HM | BI |
| BI | 1.420 | 1.677 | 1.608 | 1.679 | 2.471 | |
| UB | | | | | | 1 |

### 3.2. Measurement model assessment

The constructs' reliability and validity were first examined to evaluate the measurement model. Construct reliability was assessed using Cronbach's alpha and CR, both of which exceeded the acceptable threshold of 0.70, as shown in Table 2. Convergent validity was determined through factor loadings and the AVE. Most factor loadings were above 0.70, except for HM2 (0.662) and HM3 (0.614), but these items were retained in the construct because the overall CR and AVE values surpassed the required benchmarks. AVE values exceeded the threshold criterion of 0.50 [37]. Discriminant validity was assessed using the Fornell and Larcker criterion and the heterotrait-monotrait (HTMT) ratio, as presented in Table 3. The square root of each AVE was higher than the corresponding off-diagonal correlation coefficients, and the HTMT ratios were below 0.90, confirming the discriminant validity according to established guidelines [38].

Table 2. Reliability and validity analysis

| Constructs | Items | Loadings | Alpha | CR | AVE |
|---|---|---|---|---|---|
| PE | PE1 | 0.876 | 0.844 | 0.905 | 0.761 |
| | PE2 | 0.879 | | | |
| | PE3 | 0.862 | | | |
| EE | EE1 | 0.811 | 0.856/ | 0.903 | 0.701 |
| | EE3 | 0.838 | | | |
| | EE4 | 0.756 | | | |
| | EE5 | 0.933 | | | |
| SI | SI1 | 0.853 | 0.735 | 0.837 | 0.632 |
| | SI2 | 0.705 | | | |
| | SI3 | 0.819 | | | |
| FC | FC1 | 0.844 | 0.818 | 0.891 | 0.733 |
| | FC2 | 0.882 | | | |
| | FC3 | 0.841 | | | |
| HM | HM1 | 0.796 | 0.817 | 0.848 | 0.591 |
| | HM2 | 0.662 | | | |
| | HM3 | 0.614 | | | |
| | HM4 | 0.956 | | | |
| BI | BI1 | 0.825 | 0.848 | 0.898 | 0.687 |
| | BI2 | 0.815 | | | |
| | BI3 | 0.857 | | | |
| | BI4 | 0.818 | | | |
| UB | UB1 | 0.775 | 0.775 | 0.869 | 0.690 |
| | UB2 | 0.828 | | | |
| | UB3 | 0.884 | | | |

Table 3. Fornell-Larcker criterion and HTMT

| | BI | EE | FC | HM | PE | SI | UB |
|---|---|---|---|---|---|---|---|
| BI | 0.829* | 0.698 | 0.663 | 0.271 | 0.521 | 0.578 | 0.849 |
| EE | 0.601 | 0.837* | 0.597 | 0.262 | 0.435 | 0.631 | 0.719 |
| FC | 0.553 | 0.501 | 0.856* | 0.178 | 0.572 | 0.597 | 0.685 |
| HM | 0.363 | 0.290 | 0.211 | 0.768* | 0.127 | 0.233 | 0.199 |
| PE | 0.446 | 0.375 | 0.480 | 0.143 | 0.873* | 0.536 | 0.524 |
| SI | 0.505 | 0.510 | 0.482 | 0.254 | 0.441 | 0.795* | 0.572 |
| UB | 0.696 | 0.595 | 0.544 | 0.253 | 0.427 | 0.457 | 0.831* |

Note: *Diagonal values are the square roots of AVE below, and correlations between the construct's values are given. HTMT values are above the diagonal elements.

### 3.3. Structural model assessment

Following the approach adopted by several studies [39], [40], β-values, T statistics, P-value, $R^2$, and $Q^2$ were assessed to support the structural model results. Tables 4 and 5 depict that all proposed hypotheses were supported, and the model has good explanatory power ($R^2$ and $F^2$) and predictive relevance ($Q^2$). All independent variables that are PE (β=0.103, P=0.000), EE (β=0.171, P=0.000), SI (β=0.073, P=0.008), FC (β=0.107, P=0.001) and HM (β=0.456, P=0.000) positively and significantly impacts the BI and explains 74.9% ($R^2$=0.749) of BI to adopt DEPs. Thus, supporting hypotheses H1a, H1b, H1c, H1d, and H1e. HM has the highest T value, followed by EE and PE among these independent constructs, indicating the strength of effect on BI. BI (β=0.696, P=0.000) positively and significantly impacts the UB, explaining 48.4% ($R^2$=0.484) of UB for DEPs. Thus, supporting hypothesis H2.

$F^2$ is examined to support the model's explanatory power in addition to $R^2$. Results indicate that the relationships PE -> BI, EE -> BI, and FC -> BI have a small effect size; HM -> BI has a close to large effect size; and BI -> UB has a substantially large effect size. Gender x HM -> BI and SI -> BI have no effect size. $Q^2$ of endogenous variables have moderate predictive relevance, i.e. BI (0.215) and UB (0.183). The SRMR value of the /model fit of the study is 0.074, which is well within the upper limit of 0.08.

Table 4. Hypothesis testing results

| Hypotheses | β-Values | T Statistics | P-Value | Results |
|---|---|---|---|---|
| H1a: PE -> BI | 0.103 | 3.511 | 0.000* | Supported |
| H1b: EE -> BI | 0.171 | 5.133 | 0.000* | Supported |
| H1c: SI -> BI | 0.073 | 2.431 | 0.008** | Supported |
| H1d: FC -> BI | 0.107 | 3.106 | 0.001** | Supported |
| H1e: HM -> BI | 0.456 | 9.802 | 0.000* | Supported |
| H2: BI -> UB | 0.696 | 21.556 | 0.000* | Supported |
| H3: Gender x HM -> BI | -0.108 | 1.934 | 0.027*** | Supported |

Note: Significant at *p value < 0.001, **p value < 0.01 and ***p value < 0.05

Table 5. Model explanatory power ($R^2$ and $F^2$) and predictive relevance ($Q^2$)

| Construct | $Q^2$ | $R^2$ | $F^2$ | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | PE | EE | SI | FC | HM | BI | Gender x HM |
| BI | 0.215 | 0.749 | 0.03 | 0.07 | 0.013 | 0.027 | 0.336 | | 0.011 |
| UB | 0.183 | 0.484 | | | | | | 0.94 | |

### 3.4. Moderation analysis

Gender significantly moderates the relationship between HM and BI to use digital exam pads (Gender x HM -> BI, β=-0.108, P=0.027, Binary coding: male=1, female=0). Hence, supporting the hypothesis H3. The negative β value indicates that the impact of HM on BI is weaker in males than in females. The slope analysis, as displayed in Figure 2, shows that females have a steeper and more positive slope than males, confirming HM's more substantial impact on BI in adopting DEPs in females.

The study confirmed no common method bias (VIF: 1–2.47) and established reliability and validity of constructs. BI was significantly influenced by HM, EE, PE, SI, and FC, explaining 74.9% of BI and 48.4% of UB. Gender moderated the HM->BI relationship, with a stronger effect in females. The model demonstrated a good fit (SRMR=0.074).

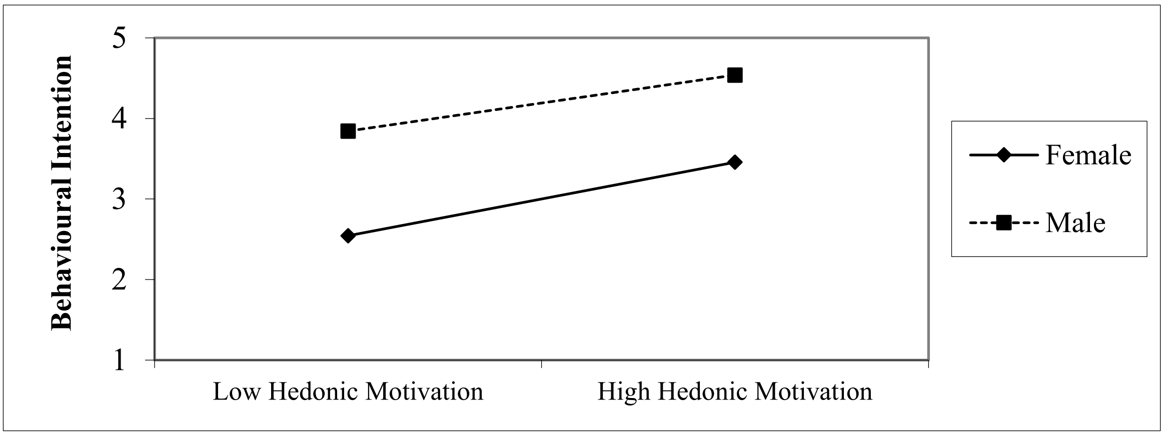


Figure 2. Moderation slope

### 3.5. Discussion

The present study used the UTAUT and UTAUT 2 model, which helps in understanding the various factors influencing the acceptance and use of technology [22], [23]. The findings of the study revealed that all five independent constructs (PE, EE, SI, FC, and HM) have shown a positive and significant relationship with BI for DEPs. It indicates that PE, EE, SI, FC, and HM can help develop a behavioral intention towards using DEPs in examinations by UG students. This is consistent with the recent studies that examined factors influencing students' intentions to use various educational technologies using the UTAUT model and found PE, EE, SI, FC, and HM to have significant impacts on BI in most cases [41]–[43]. Studies on the use of information and communication technology (ICT) and e-learning systems show mixed results regarding SI. While some studies found SI to have no significant impact [44], others reported it as significant [45]. Similarly, HM was found insignificant in one study [44] but influential in another, especially before the COVID-19 pandemic [45].

Additionally, BI was found to have a positive relationship with UB, indicating that the intention to use the digital exam pad leads to actual behavior. It supports the notion that intention is a strong predictor of actual behavior, as Khan *et al.* [46] noted in the case of green consumption behavior, showing that BI predicted actual green consumption among young consumers. Similarly, Alzahrani *et al.* [47] confirmed a strong positive relationship between BI and the actual use of digital library systems. This is encouraging the implementation of the DEP system in UG programs in Indian universities. The findings support the previous research done in the context of mobile health adoption [48], enterprise resource planning acceptance [27], and telemedicine usage [26].

Gender moderated the impact of HM on BI where more fun was associated with female students using DEPs. Female students showed higher motivation than males for the hedonic aspect of the digital exam pad. This implies that BI is high among female students due to the joy they get in using the new exam system. Eltahir's findings [10] of higher acceptance levels of e-exams in Pharmacy and Health Sciences support the results. Moreover, this aligns with existing literature that highlights gender as a moderating factor in the relationship between HM and BI across various contexts. For instance, research in livestream e-commerce shows that females are more inclined towards impulsive buying driven by perceived hedonic value compared to their male counterparts [49]. In tourism, women are more likely than men to adjust their travel intentions based on risk perceptions, while men exhibit a stronger correlation between risk perception and destination image [50]. In online shopping, gratification-seeking emerges as a key driver for female compulsive buyers, whereas males tend to focus more on information-gathering [51]. However, it is essential to note that gender differences are not consistent across all domains. For example, in social media engagement, the relationship between message type and electronic word-of-mouth intentions is not moderated by gender on platforms like Facebook [52]. These variations underscore the importance of considering gender-specific factors when examining the interplay between HM and BI, as our findings suggest that male and female students may indeed differ in their motivations for using digital exam pads.

HM appeared as one of the most powerful predictors of BI to use DEPs among undergraduate university students. It suggests that pleasure derived from using DEPs is a strong determinant of student's intention to use them. This finding is consistent with similar research across various contexts. For example, in m-learning during the COVID-19 pandemic, HM was identified as a key factor driving students' intentions to engage with mobile learning platforms [43]. This was found true by Dajani and Hegleh [30] for students' BI to use animation. Likewise, in the adoption of autonomous vehicles, HM played a significant role in influencing individuals' willingness to embrace this technology [53]. Additionally, in a study of mobile-delivered cognitive behavioral therapy for insomnia, HM strongly predicted users' intentions to continue using the therapy [54]. These findings collectively emphasize the importance of HM as a critical determinant of BI across diverse settings, reinforcing its relevance in the context of digital exam pad adoption among university students. Therefore, the present study's findings claim that UG students have shown a positive intention to use DEPs, which will convert into UB, too.

The results have prepared a ground for HEIs to shift from the traditional pen-paper examination system to paperless examination for both objective and subjective patterns of question paper. The UG students (users) are ready to accept it, and female students are especially the biggest takers as they find more enjoyment in using DEPs to give exams.

#### 3.5.1. Implications

The present study has threefold practical implications. First, the user's readiness to switch from a pen-paper exam to a paperless system is an opportunity for HEIs. Universities may move forward to adopt DEPs to conduct exams. This transformation will help reduce the repetitive tasks of the traditional exam system and expedite the entire process resulting in improved students' academic cycle. DEPs can be integrated with a learning management system (LMS) to help track students' performance and store data safely. Second, the study highlights the future of exams as paperless, opening business opportunities for the industry linked with DEPs and support software requirements, same in the lines of Adiyono *et al.* [55]; the study highlighted the implementation of software development for the automation of educational management. At present, very few HEIs have adopted a paperless exam system in India, and a huge market is available. Third, DEPs in HEIs will be helpful for students with disabilities, as they have various features such as text-to-speech features, font size adjustment, comprehensive drawing options, and colorful highlighting options. It can also help provide real-time feedback on multiple-choice questions, assisting students to learn from mistakes immediately. Therefore, the study highlights the need to make strategic plans on how to adopt DEPs in collaboration with industry, and a major reformation in the examination system of HEIs should be made.

Based on the findings and practical implications, the study has several important ramifications:

i) Educational policy and implementation: universities and educational policymakers need to consider the identified factors (PE, EE, SI, FC, and HM) when designing and implementing DEP systems. Same in the line of previous study [56], institutions may need to invest in user training, reliable infrastructure, and SI campaigns to foster acceptance and usage among students.
ii) Customization and inclusivity: the study highlights the importance of gender as a moderating factor, suggesting that different strategies may be needed to address the specific needs and motivations of male and female students. This could lead to more inclusive technology adoption policies that cater to diverse student demographics.
iii) Sustainability initiatives: the positive relationship between BI and UB underscores the potential for broader adoption of paperless examinations, which aligns with global sustainability goals. Universities adopting DEPs can reduce paper waste and enhance environmental sustainability.
iv) Technology integration in education: similar to Adiyono *et al.* [55], the present study reinforces the role of digital tools in modern education, pushing institutions to further integrate technology into their academic processes. This could accelerate the digital transformation in higher education, paving the way for more advanced e-learning and e-assessment tools.

The study highlights how DEP can revolutionize higher education by improving efficiency, promoting inclusivity, and supporting sustainability. It emphasizes the benefits of adopting paperless exams, making them more accessible for students with disabilities, addressing gender-specific needs, and contributing to environmental goals while advancing the integration of technology in education.

#### 3.5.2. Limitations

The current study, conducted in two states of India using a cross-sectional approach, offers valuable insights into the adoption of DEPs among UG students. However, it has certain limitations that future research should address to ensure a more comprehensive understanding of this phenomenon. Firstly, the study's geographic restriction to just two states may restrict the broader applicability of the findings. Conducting similar studies across other states would help validate the results. This expansion could also uncover regional differences in attitudes towards DEPs, providing a deeper understanding. Second, the study's cross-sectional design limits the ability to draw causal inferences. Future research could benefit from longitudinal studies that track changes in students' behaviors over time as they become more familiar with DEP. Third, the study focused only on the student perspective. The management perspective, particularly in terms of the cost implications of DEP adoption, the training required for staff in examination sections, and the infrastructure needed to support this transition, should be explored. Fourth, investigating additional moderators, such as age, academic discipline, or prior technology experience, could further enrich the understanding of technology adoption in education. Finally, exploring the integration of DEPs with other digital learning tools, such as learning management systems and online assessment platforms, will be crucial for developing cohesive digital education ecosystems.

## 4. CONCLUSION

This research article explored the UG students' intention to use DEPs in India. The results revealed the students' readiness to welcome the technology and be part of the examination system transformation. The constructs of UTAUT (PE, EE, SI, FC, and HM) showed a positive impact on the intention and UB of the students. HM emerged as one of the strongest predictors of using DEPs because of the memorable experience for students. The students are enthusiastic and like the joyful nature of digital exam mode to a great extent. The higher level of impact of HM on BI among females than males is proof that females are more excited about DEPs. Females' colleges may adopt DEPs in the first phase. Using DEPs can help move away from paper-pen formats to a more interactive digital era of examination systems. The endeavor will also support sustainability goals, i.e., zero paper use can decrease the environmental footprint. The study supports the UTAUT model and validates the proposed framework for DEP exam pad adoption by UG students in the Indian context both in terms of intention and usage.


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C : **C**onceptualization
M : **M**ethodology
So : **So**ftware
Va : **Va**lidation
Fo : **Fo**rmal analysis
I : **I**nvestigation
R : **R**esources
D : **D**ata Curation
O : Writing - **O**riginal Draft
E : Writing - Review & **E**diting
Vi : **Vi**sualization
Su : **Su**pervision
P : **P**roject administration
Fu : **Fu**nding acquisition

## CONFLICT OF INTEREST STATEMENT

There is no conflict of interest.

## INFORMED CONSENT

Convenience sampling method was used for the online survey and only interested respondents filled the form, hence no separate consents were obtained from the individuals included in this study.

## DATA AVAILABILITY

The data that support the findings of this study are openly available in Flagshare at https://doi.org/10.6084/m9.figshare.29113871.v1.

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