A TPB-TAM Approach to Identifying Adoption Factors of Hyflex Among Educators

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Abstract: Hybrid flexible learning facilitates simultaneous instruction for in-person and remote students through technology. Students benefit from enhanced flexibility in class delivery beyond the limits of the physical classroom. However, post-pandemic, the adoption of Hyflex learning decreased due to cost, complexity, and training requirements. This research integrates the Theory of Planned Behavior and the Technology Acceptance Model, alongside monetary incentives, to examine factors influencing Hyflex adoption among 161 Philippine teachers. Our analysis indicates that social influence significantly impacts the intention to utilize Hyflex flexible learning. In contrast, attitude, usability, and perceived usefulness do not significantly affect adoption intention. Additionally, the construct of monetary incentives was found to have no impact on the acceptance of the Hyflex model within the context of this study.

Keywords: Hybrid Flexible, Hyflex, TPB, TAM, Monetary Incentives

1. Background

An emerging educational trend involves integrating online and in-person learning, enhancing student flexibility. The HyFlex model promotes an adaptable learning environment, particularly highlighted during the COVID-19 pandemic (Detyna et al., 2023). Students have the autonomy to choose their mode of participation in classes. Santandreu et al. (2023) indicate that the HyFlex model evolved from blended learning, which merges asynchronous and synchronous formats. While HyFlex learning benefits students, educators encounter challenges in preparation and management. This recognition is prevalent among global institutions implementing this pedagogical approach, particularly during the pandemic. Successful implementation of the HyFlex model necessitates comprehensive planning, ensuring teachers receive adequate support for teaching and technology to navigate the complexities of varied instructional methods (Romero & Ripine, 2021). Adopting new methodologies and technologies may need more support from community members. The influence of financial incentives in educational settings is a noteworthy area for exploration. Roumani et al. (2015) found that rewards positively influence individuals' willingness to learn and adapt to new technological skills, especially pertinent for educators in developing economies. Sgarbossa et al. (2022) observed that additional financial incentives significantly motivate employees to elevate their performance. Given the difficulties teachers face with the HyFlex model and the transition back to in-person classes, this study seeks to determine if financial incentives can encourage consistent use of the HyFlex model in the post-pandemic landscape. The study investigates teachers' perceptions and utilization of the HyFlex model in a post-pandemic context, employing the Theory of Planned Behavior (TPB) and Technology Acceptance Model (TAM), incorporating financial incentives as a variable. The research evaluates the acceptance and willingness to adopt the HyFlex model post-pandemic.

Additionally, focusing on the Philippine context provides a distinct perspective that will yield valuable insights into the challenges and opportunities associated with HyFlex learning from educators' standpoints in a developing economy. The research examines how different factors affect teachers' willingness to use the Hyflex method for teaching. These factors are Perceived Usefulness (PU), Perceived Ease of Use (PE), Attitude (A), Subjective Norms (SN), Behavioral Intention (BI), Actual Use (AU), and Incentives (MI). Together, these factors create a model that shows how beliefs about the Hyflex method, personal views, social factors, and outside incentives influence teachers' intentions and real usage patterns (Goehrig, 2023; Al-Belushi & Khan, 2017).

2. Methodology

This study aimed to evaluate the effectiveness and ease of implementing the Hyflex learning approach among educators in the Philippines, focusing on their views, particularly regarding financial incentives. It utilized the frameworks of TAM and TPB and the incentives construct to analyze educators' acceptance and willingness to adopt HyFlex learning. The participants included at least 150 educators familiar with the HyFlex approach, either from adjustments during the COVID pandemic or plans to use it. Data had been collected through a survey using Google Forms over two months, with reminders sent every two weeks to encourage participation. The survey gathered demographic information such as school name, age, gender, educational background, job title, teaching experience, and salary. Quantitative data had been collected through closed-ended questions using a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree) to gauge participants' sentiments. A pilot test with 20 educators ensured the questionnaire's validity and reliability, with feedback used to refine the final survey. The study analyzed how financial incentives and other factors from TAM and TPB had influenced educators' intentions to use the HyFlex model, using partial least squares structural equation modeling (PLS-SEM) to assess relationships and validate the hypotheses.

3. Results and Findings

The results of the structural model test suggest that SN (H6) positively influences the BI of educators in adopting Hyflex learning. The variables of PU (H1), PE (H2), A (H4), and MI (H8) do not significantly influence BI. Moreover, the BI (H7) has a beneficial impact on the AU.

A study of 161 educators revealed that perceived usefulness, ease of use, attitude, and financial incentives do not significantly influence the adoption of Hyflex learning. However, subjective norms positively impact educators' intentions to adopt this modality, highlighting the importance of social influences in educational settings. While Philippine educators appreciate Hyflex learning, financial incentives do not drive its adoption. The study emphasizes the need for professional development and peer support to foster positive attitudes toward innovative teaching methods. Despite work-life balance and childcare challenges, Villamin et al. (2022) stated that educators are encouraged to enhance learning experiences by prioritizing convenience and flexibility. Interestingly, while monetary incentives typically promote technology adoption, they did not strongly influence the adoption of Hyflex learning in the Philippines, possibly due to financial constraints related to necessary remote learning tools (Dorner & Lancsar, 2023). Non-monetary incentives may also play a role in modifying Hyflex learning adoption.

4. Conclusion

Hyflex learning offers numerous benefits but presents challenges for educators and students (Abdelmalak & Parra, 2016). A successful transition requires support, resources, and

infrastructure (Khaki et al., 2022). Financial incentives alone may not convince educators to adopt Hyflex learning; internal motivators such as freedom, competence, and significance play a crucial role. Adopting is more likely when teaching methods align with professional values and enhance student learning. A supportive institutional culture encouraging innovation and collaboration fosters receptiveness to hybrid learning (Nechita et al., 2023). Joining in training and participation in decision-making can boost educators' confidence in Hyflex teaching. Acknowledging the needs of educators and students is vital for the success of Hyflex learning. Research indicates that enhancing intrinsic motivators is more effective than relying solely on monetary incentives for technology acceptance in education (Ali & Georgiou, 2024), particularly in developing nations like the Philippines. Future studies should explore the sustainability and environmental impact of digital learning methods like Hyflex, ensuring long-term accessibility and effectiveness in education.

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