

BAB V

PENUTUP

5.1. Kesimpulan

Penelitian dilakukan terhadap dua Sekolah Menengah Atas yang berada di Kota Denpasar dan Kabupaten Badung mengenai penerimaan dan penggunaan siswa terhadap *e-learning*. Setelah dilakukan pengumpulan, pengolahan, serta analisis data terdapat 510 responden untuk dapat mengidentifikasi faktor yang berpengaruh dalam penggunaan berkelanjutan dari *e-learning*. Penelitian didasarkan oleh model UTAUT yang diperluas sesuai dengan kebutuhan penelitian dengan menambahkan *Self-Efficacy* dan *Information Quality*. *Self-Efficacy* digunakan sebagai tolak ukur kemampuan siswa dalam memahami dan mengikuti proses pembelajaran secara *online*. Sedangkan *Information Quality* sebagai acuan bagaimana sistem pembelajaran yang diterapkan sudah mampu mengakomodasi kebutuhan siswa dalam pembelajaran *online* dilakukan secara nyaman dan efisien.

Faktor *Performance Expectancy*, *Social Influence*, *Self-Efficacy*, dan *Information Quality* memberikan pengaruh positif yang signifikan terhadap keberlanjutan pembelajaran *e-learning*. Pengaruh kewajiban dari sekolah yang mengharuskan untuk pembelajaran secara *online* sehingga harus mengintegrasikan dan mengkolaborasikan pembelajaran secara perlahan untuk mencapai hasil yang optimal. Keyakinan serta kemampuan individu yang dimiliki siswa terhadap teknologi juga mampu dengan baik melakukan adaptasi terhadap perubahan pembelajaran. Sistem yang diimplementasikan juga mampu mengakomodasi kebutuhan siswanya. Namun *Effort Expectancy* dan *Facilitating Conditions* tidak

memberikan pengaruh yang signifikan terhadap keberlanjutan *e-learning*. Kedua faktor tersebut dirasa sudah sesuai dengan kemampuan usaha siswa dan gawai yang dimiliki mampu mengakses *e-learning* sehingga tidak memberikan pengaruh yang signifikan.

5.2. Saran

Penelitian masih memiliki kekurangan dan keterbatasan dalam pelaksanaannya. Keterbatasan pada sekolah negeri yang telah menerapkan *e-learning* dan tidak seragamnya *platform* pembelajaran yang digunakan. Penelitian juga belum mempertimbangkan lebih jauh peran dari guru maupun karyawan yang masih dalam satu lingkungan sekolah. Memungkinkannya perluasan dari faktor yang dibutuhkan berdasarkan lingkungan penelitian selanjutnya.

DAFTAR PUSTAKA

- [1] Bhavya Bhasin, Gautam Gupta, and Sumedha Malhotra, "Impact of Covid-19 Pandemic on Education System," *EPRA Int. J. Environ. Econ. Commer. Educ. Manag.*, no. June, pp. 6–8, 2021, doi: 10.36713/epra6363.
- [2] J. Traxler, "Distance learning—Predictions and possibilities," *Educ. Sci.*, vol. 8, no. 1, 2018, doi: 10.3390/educsci8010035.
- [3] S. Kumar Basak, M. Wotto, and P. Bélanger, "E-learning, M-learning and D-learning: Conceptual definition and comparative analysis," *E-Learning Digit. Media*, vol. 15, no. 4, pp. 191–216, 2018, doi: 10.1177/2042753018785180.
- [4] M. Janelli, "E-learning in theory, practice, and research," *Vopr. Obraz. / Educ. Stud. Moscow*, vol. 2018, no. 4, pp. 81–98, 2018, doi: 10.17323/1814-9545-2018-4-81-98.
- [5] T. Snoussi, "Learning Management System in Education: Opportunities and Challenges," *Int. J. Innov. Technol. Explor. Eng.*, vol. 8, no. 12S, pp. 664–667, 2019, doi: 10.35940/ijitee.11161.10812s19.
- [6] I. Journal, "IRJET- E-Learning Effectiveness in Higher Education E-Learning Effectiveness in Higher Education."
- [7] Z. Denan, Z. A. Munir, R. A. Razak, K. Kamaruddin, and V. P. K. Sundram, "Adoption of technology on e-learning effectiveness," *Bull. Electr. Eng. Informatics*, vol. 9, no. 3, pp. 1121–1126, 2020, doi: 10.11591/eei.v9i3.1717.
- [8] R. Elcullada Encarnacion, A. A. Galang, and B. J. Hallar, "The Impact and Effectiveness of E-Learning on Teaching and Learning," *Int. J. Comput. Sci. Res.*, vol. 5, no. 1, pp. 383–397, 2021, doi: 10.25147/ijcsr.2017.001.1.47.
- [9] M. Roman and A. P. Plopeanu, "The effectiveness of the emergency eLearning during COVID-19 pandemic. The case of higher education in economics in Romania," *Int. Rev. Econ. Educ.*, vol. 37, no. 54, p. 100218, 2021, doi: 10.1016/j.iree.2021.100218.
- [10] B. J. Ali and G. Anwar, "Implementation of e-learning system readiness: The effect of the cost readiness on implementing e-learning," *Int. J. Electr. Electron. Comput.*, vol. 6, no. 3, pp. 27–37, 2021, doi: 10.22161/eec.63.4.
- [11] A. Mehta, N. P. Morris, B. Swinnerton, and M. Homer, "The Influence of Values on E-learning Adoption," *Comput. Educ.*, vol. 141, no. December 2018, 2019, doi: 10.1016/j.compedu.2019.103617.
- [12] A. J. M. Karkar, H. K. Fatlawi, and A. A. Al-Jobouri, "Highlighting e-learning adoption challenges using data analysis techniques: University of

- Kufa as a case study,” *Electron. J. e-Learning*, vol. 18, no. 2, pp. 136–149, 2020, doi: 10.34190/EJEL.20.18.2.003.
- [13] M. U. Ahmed, S. Hussain, and S. Farid, “Factors influencing the adoption of e-learning in an open and distance learning institution of Pakistan,” *Electron. J. e-Learning*, vol. 16, no. 2, pp. 148–158, 2018.
- [14] K. Al-Qeisi, C. Dennis, A. Hegazy, and M. Abbad, “How Viable Is the UTAUT Model in a Non-Western Context?,” *Int. Bus. Res.*, vol. 8, no. 2, 2015, doi: 10.5539/ibr.v8n2p204.
- [15] M. Altalhi, “Towards Understanding The Students’ Acceptance Of Moocs: A Unified Theory Of Acceptance And Use Of Technology (UTAUT),” *Int. J. Emerg. Technol. Learn.*, vol. 16, no. 2, pp. 237–253, 2020, doi: 10.3991/ijet.v16i02.13639.
- [16] K. D. P. Novianti, “Analisis Evaluasi E-learning Menggunakan Integrasi Model D&M dan UTAUT,” *Techno.Com*, vol. 18, no. 2, pp. 122–133, 2019, doi: 10.33633/tc.v18i2.2217.
- [17] A. Alshehri, M. J. Rutter, and S. Smith, “An implementation of the UTAUT model for understanding students’ perceptions of Learning Management Systems: A Study within Tertiary Institutions in Saudi Arabia,” *Int. J. Distance Educ. Technol.*, vol. 17, no. 3, pp. 1–24, 2019, doi: 10.4018/IJDET.2019070101.
- [18] M. Kayali and S. Alaaraj, “Adoption of Cloud Based E-learning in Developing Countries: A Combination of DOI, TAM and UTAUT IJCMIT IJCMIT International Journal of Contemporary Management and information Technology Adoption of Cloud Based E-learning in Developing Countries: A Combina,” *Int. J. Contemp. Manag. Inf. Technol.*, vol. 1, no. 1, 2020, [Online]. Available: www.ijcmit.com.
- [19] A. Mosunmola, A. Mayowa, S. Okuboyejo, and C. Adeniji, “Adoption and use of mobile learning in higher education: The UTAUT model,” *ACM Int. Conf. Proceeding Ser.*, pp. 20–25, 2018, doi: 10.1145/3183586.3183595.
- [20] S. A. Salloum and K. Shaalan, “Factors Affecting Students’ Acceptance of E-Learning System in Higher Education Using UTAUT and Structural Equation Modeling Approaches,” *Adv. Intell. Syst. Comput.*, vol. 845, pp. 469–480, 2019, doi: 10.1007/978-3-319-99010-1_43.
- [21] L. Wan, S. Xie, and A. Shu, “Toward an Understanding of University Students’ Continued Intention to Use MOOCs: When UTAUT Model Meets TTF Model,” *SAGE Open*, vol. 10, no. 3, 2020, doi: 10.1177/2158244020941858.
- [22] I. Alvi, “College students’ reception of social networking tools for learning in India: an extended UTAUT model,” *Smart Learn. Environ.*, vol. 8, no. 1, 2021, doi: 10.1186/s40561-021-00164-9.

- [23] I. Y. Alyoussef, "E-learning acceptance: the role of task–technology fit as sustainability in higher education," *Sustain.*, vol. 13, no. 11, 2021, doi: 10.3390/su13116450.
- [24] Y. T. Prasetyo *et al.*, "Determining factors affecting acceptance of e-learning platforms during the covid-19 pandemic: Integrating extended technology acceptance model and delone & mclean is success model," *Sustain.*, vol. 13, no. 15, pp. 1–16, 2021, doi: 10.3390/su13158365.
- [25] A. Sattari, M. Abdekhoda, and V. Z. Gavvani, "Determinant factors affecting the web-based training acceptance by health students, applying UTAUT model," *Int. J. Emerg. Technol. Learn.*, vol. 12, no. 10, pp. 112–126, 2017, doi: 10.3991/ijet.v12i10.7258.
- [26] C. Agyei and Ö. Razi, "The effect of extended UTAUT model on EFLs' adaptation to flipped classroom," *Educ. Inf. Technol.*, vol. 27, no. 2, pp. 1865–1882, 2022, doi: 10.1007/s10639-021-10657-2.
- [27] S. A. Raza, W. Qazi, K. A. Khan, and J. Salam, "Social Isolation and Acceptance of the Learning Management System (LMS) in the time of COVID-19 Pandemic: An Expansion of the UTAUT Model," *J. Educ. Comput. Res.*, vol. 59, no. 2, pp. 183–208, 2021, doi: 10.1177/0735633120960421.
- [28] H. P. Yueh, J. Y. Huang, and C. Chang, "Exploring factors affecting students' continued Wiki use for individual and collaborative learning: An extended UTAUT perspective," *Australas. J. Educ. Technol.*, vol. 31, no. 1, pp. 16–31, 2015, doi: 10.14742/ajet.170.
- [29] M. R. Fearnley and J. Amora, "Learning Management System Adoption in Higher Education Using the Extended Technology Acceptance Model Volume 8 – Issue 2 IAFOR Journal of Education: Technology in Education Volume 8 – Issue 2 IAFOR Journal of Education: Technology in Education Volume," *IAFOR J. Educ. Technol. Educ.*, vol. 8, no. 2, pp. 89–106, 2020.
- [30] S. R. Ekayanti and Irwansyah, "UTAUT in communication technology of learning management system," *2018 Int. Conf. Adv. Comput. Sci. Inf. Syst. ICACSYS 2018*, pp. 253–258, 2019, doi: 10.1109/ICACSYS.2018.8618172.
- [31] M. Bellaaj, I. Zekri, and M. Albugami, "The continued use of e-learning system: An empirical investigation using UTAUT model at the University of Tabuk," *J. Theor. Appl. Inf. Technol.*, vol. 72, no. 3, pp. 464–474, 2015.
- [32] S. Alharbi and S. Drew, *The role of self-efficacy in technology acceptance*, vol. 880. Springer International Publishing, 2019.
- [33] A. Chang, "UTAUT and UTAUT 2: A Review and Agenda for Future Research," *The Winners*, vol. 13, no. 2, p. 10, 2012, doi: 10.21512/tw.v13i2.656.
- [34] F. Muhammad Abubakar and A. B. Hartini Ahmad Director, "The

Moderating Effect of Technology Awareness on the Relationship between UTAUT Constructs and Behavioural Intention to Use Technology: A Conceptual Paper,” *Aust. J. Bus. Manag. Res.*, vol. 3, no. 02, pp. 14–23, 2013.

- [35] M. I. Ahmad, “Unified Theory of Acceptance and Use of Technology (UTAUT): A Decade of Validation and Development,” *Fourth Int. Conf. ICT our lives 2014*, no. 1, pp. 1–13, 2014.
- [36] A. S. MB. Alazzam, “Review of Studies With Utaut As Conceptual Framework,” *Eur. Sci. J.*, vol. 10, no. 3, pp. 249–258, 2015.
- [37] M. D. Williams, N. P. Rana, and Y. K. Dwivedi, *The unified theory of acceptance and use of technology (UTAUT): A literature review*, vol. 28, no. 3. 2015.
- [38] K. P. Gupta, S. Singh, and P. Bhaskar, “Citizen adoption of e-government: A literature review and conceptual framework,” *Electron. Gov.*, vol. 12, no. 2, pp. 160–185, 2016, doi: 10.1504/EG.2016.076134.
- [39] P. Lai, “the Literature Review of Technology Adoption Models and Theories for the Novelty Technology,” *J. Inf. Syst. Technol. Manag.*, vol. 14, no. 1, pp. 21–38, 2017, doi: 10.4301/s1807-17752017000100002.
- [40] K. Tamilmani, N. P. Rana, N. Prakasam, and Y. K. Dwivedi, “The battle of Brain vs. Heart: A literature review and meta-analysis of ‘hedonic motivation’ use in UTAUT2,” *Int. J. Inf. Manage.*, vol. 46, pp. 222–235, 2019, doi: 10.1016/j.ijinfomgt.2019.01.008.
- [41] V. Venkatesh, M. G. Morris, G. B. Davis, and F. D. Davis, “User acceptance of information technology: Toward a unified view,” *MIS Q. Manag. Inf. Syst.*, vol. 27, no. 3, pp. 425–478, 2003.
- [42] M. T. Moore, “Hoyle CFA Chapter - Final Running head : CONFIRMATORY FACTOR ANALYSIS Confirmatory Factor Analysis Timothy A . Brown and Michael T . Moore Correspondence concerning this chapter should be addressed to Timothy A . Brown , Center for Anxiety & Related Disor,” no. July 2012, 2014.
- [43] N. S. Lukas, “Identifikasi faktor-faktor dominan terhadap penerimaan smart city di yogyakarta oleh masyarakat umum menggunakan model utaut,” 2017.
- [44] M. Waluyo, “Mudah Cepat Tepat Penggunaan Tools AMOS dalam Aplikasi SEM. (Minto Waluyo, 2016),” *Mudah Cepat Tepat Pengguna. Tools Amos Dalam Apl. Penulis*, pp. 1–130, 2016.
- [45] A. Y. Nawangsari, *STRUCTURAL EQUATION MODELING PADA PERHITUNGAN INDEKS KEPUASAN PELANGGAN DENGAN MENGGUNAKAN SOFTWARE AMOS (Studi Kasus: Perhitungan Indeks Kepuasan Mahasiswa FMIPA UNY Terhadap Operator IM3)*. 2011.

- [46] P. Y. Chen and G. J. Hwang, "An empirical examination of the effect of self-regulation and the Unified Theory of Acceptance and Use of Technology (UTAUT) factors on the online learning behavioural intention of college students," *Asia Pacific J. Educ.*, vol. 39, no. 1, pp. 79–95, 2019, doi: 10.1080/02188791.2019.1575184.
- [47] H. V. Osei, K. O. Kwateng, and K. A. Boateng, "Integration of personality trait, motivation and UTAUT 2 to understand e-learning adoption in the era of COVID-19 pandemic," *Educ. Inf. Technol.*, vol. 27, no. 8, pp. 10705–10730, 2022, doi: 10.1007/s10639-022-11047-y.
- [48] A. Gunasinghe, J. A. Hamid, A. Khatibi, and S. M. F. Azam, "The adequacy of UTAUT-3 in interpreting academician's adoption to e-Learning in higher education environments," *Interact. Technol. Smart Educ.*, vol. 17, no. 1, pp. 86–106, 2020, doi: 10.1108/ITSE-05-2019-0020.
- [49] E. T. Lwoga and M. Komba, "Antecedents of continued usage intentions of web-based learning management system in Tanzania," *Educ. Train.*, vol. 57, no. 7, pp. 738–756, 2015, doi: 10.1108/ET-02-2014-0014.
- [50] A. Mujalli, T. Khan, and A. Almgrashi, "University Accounting Students and Faculty Members Using the Blackboard Platform during COVID-19; Proposed Modification of the UTAUT Model and an Empirical Study," *Sustainability*, vol. 14, no. 4, p. 2360, 2022, doi: 10.3390/su14042360.
- [51] E. Eren, "European Journal of Educational Research," *Eur. J. Educ. Res.*, vol. 10, no. 3, pp. 1199–1213, 2021, [Online]. Available: https://www.researchgate.net/profile/Ebrun-Eren/publication/348382981_Education_Policies_in_the_Context_of_Political_Communication_in_Turkey/links/5ffc2aeba6fdccdc846cc03/Education-Policies-in-the-Context-of-Political-Communication-in-Turkey.pdf.
- [52] S. Balkaya and U. Akkucuk, "Adoption and use of learning management systems in education: The role of playfulness and self-management," *Sustain.*, vol. 13, no. 3, pp. 1–27, 2021, doi: 10.3390/su13031127.
- [53] S. N. A. Shah, A. U. Khan, B. U. Khan, T. Khan, and Z. Xuehe, "Framework for teachers' acceptance of information and communication technology in Pakistan: Application of the extended UTAUT model," *J. Public Aff.*, vol. 21, no. 1, 2021, doi: 10.1002/pa.2090.
- [54] P. Qiao, X. Zhu, Y. Guo, Y. Sun, and C. Qin, "The Development and Adoption of Online Learning in Pre- and Post-COVID-19: Combination of Technological System Evolution Theory and Unified Theory of Acceptance and Use of Technology," *J. Risk Financ. Manag.*, vol. 14, no. 4, p. 162, 2021, doi: 10.3390/jrfm14040162.
- [55] M. Blut, A. Yee, L. Chong, Z. Tsigna, V. Venkatesh, and J. B. Thatcher, "Meta-Analysis of the Unified Theory of Acceptance and Use of Technology (UTAUT): Challenging its Validity and Charting a Research

- Agenda in the Red Ocean,” *J. Assoc. Inf. Syst.*, vol. 23, no. 1, pp. 13–95, 2022, doi: 10.17705/1jais.00719.
- [56] H. A. Jalil, M. Rajakumar, and Z. Zaremohzzabieh, “Teachers’ Acceptance of Technologies for 4IR Adoption: Implementation of the UTAUT Model,” *Int. J. Learn. Teach. Educ. Res.*, vol. 21, no. 1, pp. 18–32, 2022, doi: 10.26803/ijlter.21.1.2.
- [57] L. Yekefallah, P. Namdar, R. Panahi, and L. Dehghankar, “Factors related to students’ satisfaction with holding e-learning during the Covid-19 pandemic based on the dimensions of e-learning,” *Heliyon*, vol. 7, no. 7, p. e07628, 2021, doi: 10.1016/j.heliyon.2021.e07628.
- [58] D. Yeboah, “Validation of Non-Linear Relationships-Based UTAUT Model on Higher Distance Education Students’ Acceptance of WhatsApp for Supporting Learning,” *Texila Int. J. Acad. Res.*, vol. 7, no. 2, pp. 27–39, 2020, doi: 10.21522/tijar.2014.07.02.art004.
- [59] M. Altalhi, “Toward a model for acceptance of MOOCs in higher education: the modified UTAUT model for Saudi Arabia,” *Educ. Inf. Technol.*, vol. 26, no. 2, pp. 1589–1605, 2021, doi: 10.1007/s10639-020-10317-x.
- [60] M. A. Almaiah, M. M. Alamri, and W. Al-Rahmi, “Applying the UTAUT Model to Explain the Students’ Acceptance of Mobile Learning System in Higher Education,” *IEEE Access*, vol. 7, pp. 174673–174686, 2019, doi: 10.1109/ACCESS.2019.2957206.
- [61] C. M. Chao, “Factors determining the behavioral intention to use mobile learning: An application and extension of the UTAUT model,” *Front. Psychol.*, vol. 10, no. JULY, pp. 1–14, 2019, doi: 10.3389/fpsyg.2019.01652.
- [62] A. Alshehri, M. Rutter, and S. Smith, “The Effects Of Utaut And Usability Qualities On Students’ Use Of Learning Management Systems In Saudi Tertiary Education,” *J. Inf. Technol. Educ. Res.*, vol. 19, pp. 891–930, 2019, doi: 10.28945/4659.
- [63] A. Shahzad, R. Hassan, A. Y. Aremu, A. Hussain, and R. N. Lodhi, “Effects of COVID-19 in E-learning on higher education institution students: the group comparison between male and female,” *Qual. Quant.*, vol. 55, no. 3, pp. 805–826, 2021, doi: 10.1007/s11135-020-01028-z.
- [64] S. A. Salloum, A. Qasim Mohammad Alhamad, M. Al-Emran, A. Abdel Monem, and K. Shaalan, “Exploring students’ acceptance of e-learning through the development of a comprehensive technology acceptance model,” *IEEE Access*, vol. 7, pp. 128445–128462, 2019, doi: 10.1109/ACCESS.2019.2939467.
- [65] M. M. M. Abbad, “Using the UTAUT model to understand students’ usage

- of e-learning systems in developing countries,” *Educ. Inf. Technol.*, vol. 26, no. 6, pp. 7205–7224, 2021, doi: 10.1007/s10639-021-10573-5.
- [66] T. T. Wijaya and R. Weinhandl, “Factors Influencing Students’ Continuous Intentions for Using Micro-Lectures in the Post-COVID-19 Period: A Modification of the UTAUT-2 Approach,” *Electron.*, vol. 11, no. 13, 2022, doi: 10.3390/electronics11131924.
- [67] Z. Teng, Y. Cai, Y. Gao, X. Zhang, and X. Li, “Factors Affecting Learners’ Adoption of an Educational Metaverse Platform: An Empirical Study Based on an Extended UTAUT Model,” *Mob. Inf. Syst.*, vol. 2022, 2022, doi: 10.1155/2022/5479215.
- [68] A. S. Al-Adwan, M. Nofal, H. Akram, N. A. Albelbisi, and M. Al-Okaily, “Towards a Sustainable Adoption of E-Learning Systems: the Role of Self-Directed Learning,” *J. Inf. Technol. Educ. Res.*, vol. 21, no. June, pp. 245–267, 2022, doi: 10.28945/4980.
- [69] P. J. B. Tan, “Applying the UTAUT to understand factors affecting the use of english e-learning websites in Taiwan,” *SAGE Open*, vol. 3, no. 4, 2013, doi: 10.1177/2158244013503837.
- [70] D. Abdou and S. M. Jasimuddin, “The use of the UTAUT model in the adoption of E-learning technologies: An empirical study in France based banks,” *J. Glob. Inf. Manag.*, vol. 28, no. 4, pp. 38–51, 2020, doi: 10.4018/JGIM.2020100103.
- [71] M. Arif, K. Ameen, and M. Rafiq, “Factors affecting student use of Web-based services: Application of UTAUT in the Pakistani context,” *Electron. Libr.*, vol. 36, no. 3, pp. 518–534, 2018, doi: 10.1108/EL-06-2016-0129.
- [72] D. Liu *et al.*, “Using the Unified Theory of Acceptance and Use of Technology (UTAUT) to investigate the intention to use physical activity apps among university students in Guangzhou, China: Cross-sectional survey,” *JMIR mHealth uHealth*, vol. 7, no. 9, pp. 1–9, 2019, doi: 10.2196/13127.
- [73] M. K. Hunde, A. W. Demsash, and A. D. Walle, “Behavioral intention to use e-learning and its associated factors among health science students in Mettu university, southwest Ethiopia: Using modified UTAUT model,” *Informatics Med. Unlocked*, vol. 36, no. December 2022, p. 101154, 2023, doi: 10.1016/j.imu.2022.101154.
- [74] R. R. Ahmed, D. Štreimikienė, and J. Štreimikis, “the Extended Utaut Model and Learning Management System During Covid-19: Evidence From Pls-Sem and Conditional Process Modeling,” *J. Bus. Econ. Manag.*, vol. 23, no. 1, pp. 82–104, 2021, doi: 10.3846/jbem.2021.15664.