



## Investigating the Impact of E-Learning on Employees' Performance and Work Commitment: A Case Study of Private Sector School and College Employees in SWAT

Akhter Hussain<sup>1</sup>, Prof. Dr. Hazrat Bilal<sup>2</sup>, Dr. Nasir Shaheen<sup>3</sup>, Rezwan Ullah<sup>4</sup>, Asif Saud Jan<sup>5</sup> & Abdul Mateen<sup>6</sup>

<sup>1</sup>PhD Scholar, Center for Management & Commerce, University of Swat, Khyber Pakhtunkhwa Pakistan, 19120, Email: [sixsegma@live.com](mailto:sixsegma@live.com)

<sup>2</sup>Director/Professor, Centre for Management & Commerce, University of Swat, Khyber Pakhtunkhwa Pakistan, 19120, Email: [hbilal@uswat.edu.pk](mailto:hbilal@uswat.edu.pk)

<sup>3</sup>Assistant Professor, Centre for Management & Commerce, University of Swat, Khyber Pakhtunkhwa Pakistan, 19120, Email: [nasirshaheen@uswat.edu.pk](mailto:nasirshaheen@uswat.edu.pk)

<sup>4</sup>PhD Scholar, Centre for Management & Commerce, University of Swat, Khyber Pakhtunkhwa Pakistan, 19120, Email: [rezwanullah1990@yahoo.com](mailto:rezwanullah1990@yahoo.com), ID: <https://orcid.org/0000-0003-3409-9347>

<sup>5</sup>PhD Scholar, Centre for Management & Commerce, University of Swat, Khyber Pakhtunkhwa Pakistan, 19120, Email: [asif.saud@uswat.edu.pk](mailto:asif.saud@uswat.edu.pk)

<sup>6</sup>Lecturer, Centre for Management & Commerce, University of Swat, Khyber Pakhtunkhwa Pakistan, 19120, Email: [abdulmateen@uswat.edu.pk](mailto:abdulmateen@uswat.edu.pk)

### ARTICLE INFO

#### Keywords:

E-learning, Employee Performance, Work Commitment, Private Sector, SWAT, Education, Digital Transformation

#### Corresponding Author:

Rezwan Ullah

Email: [rezwanullah1990@yahoo.com](mailto:rezwanullah1990@yahoo.com)

### ABSTRACT

*This study investigates the impact of e-learning on employees' performance and work commitment; private sector schools and colleges in SWAT. The research aim is to find and provide insights into the effectiveness of e-learning initiatives taken in improving educational institutions and employee performance. A qualitative case study approach; semi-structured interviews and formal document analysis to conduct the study. An online survey was conducted where 200 employees participated. This included both closed-ended and open-ended questions. Descriptive statistics shows 45% of respondents were aged 25-34, with a gender distribution of 60% male and 40% female. Mostly participants (50%) had a Bachelor's degree, and 30% had a Master's degree. This method showed that E-learning practices adopted by employees at 30% participated daily, 40% weekly, and 20% monthly. The satisfaction with e-learning was found as 25% very satisfied and 40% satisfied in the educational setting. The study results finds that e-learning has significantly improved employee performance by enabling e-skill acquisition and knowledge transfer that leads to improvements in teaching effectiveness and student outcomes. It also helps in improved employee work commitment by providing, continuous professional development*

*opportunities. The finding reveals a positive correlations, found between e-learning participation and job performance ( $r = 0.65, p < 0.01$ ) and, also between e-learning satisfaction and work commitment ( $r = 0.62, p < 0.01$ ). This study is limited to private sector educational institutions in SWAT that may affect the generalizability of the findings towards public sector or other large organizations in educational sector. This research confirms the e-learning impact on employee performance and work commitment in private sector educational institutions. Therefore, future research could be expanded to the scope where other regions and sectors; public sector and non-profit institutions can be included, to provide a more valuable understanding of e-learning's impact in such setting. The research findings and observations contributes to the existing body of knowledge by providing empirical evidence-the impact of e-learning on employee performance and work commitment in SWAT's private sector schools and colleges. It mainly highlights the importance of adopting and practicing effective e-learning strategies to improve educational outcomes and to support professional growth.*

---

## **Introduction**

E-learning or electronic learning has become an important element in educational and professional development settings. In particularly, in response to the increasing demand for leveraged and accessible learning solutions. As educational institutions constantly strive to enhance and improve their teaching effectiveness and overall organizational performance continuously, understanding the significance and, impact of e-learning on employees' performance and commitment becomes very important (Chen & Kao, 2012). This research focuses its best on studying private sector schools and colleges in the SWAT region, aims to explore how e-learning initiatives helps to influence employee performance and work commitment.

Research has shown, e-learning, can provide positive numerous benefits, that include improved knowledge retention, skill acquisition, and job performance (Srivastava & Agarwal, 2013). Moreover, e-learning also provides flexibility, which allows employees to learn at their own pace and to their convenience that can likely enhance their engagement and commitment level to their roles (Wang, Wang, & Shee, 2010). However, many challenges such as access to technology and digital literacy can influence the effectiveness of e-learning programs (Ellis & Kuznia, 2014). This study focuses to address these aspects by providing a detailed analysis of e-learning's initiatives and its impact on private sector educational employees in SWAT region.

## **Literature Review**

### **E-Learning and Employee Performance**

E-learning refers to the process of using electronic media, information and communication technologies in education (Chen & Kao, 2012). Its importance has been widely recognized and

accepted for its potential that enhances employee performance by providing continuous learning opportunities-that are flexible and accessible (Srivastava & Agarwal, 2013). Many Studies have concluded that e-learning can significantly improve job skills, productivity, and overall job performance by offering various learning tools and resources (Wang, Wang, & Shee, 2010).

### **E-Learning and Work Commitment**

Work commitment is referred to the psychological attachment and loyalty that an employee feels towards their organization (Meyer & Allen, 1991). The previous studies shows that, E-learning has been found to positively influence work commitment by adopting a culture of continuous improvement and professional growth (Ellis & Kuznia, 2014). Organizations where employees engage in e-learning are more likely to feel supported and valued by their organization that leads to higher levels of engagement and commitment (Chen & Kuo, 2011).

### **Integration of E-Learning in Educational Institutions**

Pre-dominantly educational institutions have rapidly adopted e-learning methods to enhance teaching effectiveness and student outcomes (Alavi & Leidner, 2001). The use and integration of e-learning into professional development as well growth plans can help educators constantly improve their skills and knowledge, which is essential for maintaining high educational standards (Srivastava & Agarwal, 2013). However, there are challenges such as technology access and digital literacy that must be addressed to ensure the successful implementation of effective e-learning programs (Ellis & Kuznia, 2014).

## **Research Framework and Hypotheses**

### **Research Framework**

The literature review on e-Learning, employee performance and work commitment for this study, in order to find out their relationship, this research framework is designed to find the independent variable e-learning, dependent variable; employee performance, and work commitment. This framework provides the empirical data on how e-learning initiatives influences these dependent variables in private sector schools and colleges of SWAT region.

### **Hypotheses**

1. Hypothesis 1 (H1): E-learning initiatives significantly improves employee performance in private sector schools and colleges.
2. Hypothesis 2 (H2): E-learning positively contributes/influences employee work commitment in private sector educational institutions.

### **Research Instruments and Data Collection**

A field study was conducted by using survey instrument (questionnaire) designed to obtain data that was based on a complete review of the literature. This survey included both closed- open-ended and ended questions to collect quantitative and qualitative data. The questions of the survey assessed the frequency of e-learning participation, satisfaction with basic e-learning content, perceived improvements in job skills by employees and their productivity, and also the levels of work commitment and engagement.

## **Sample Size and Survey Administration**

The primary data, sample size was determined using a stratified random sampling technique to ensure the representation across different demographic groups. A total of 200 employees from various private sector schools and colleges in SWAT region were surveyed. Thus, the survey was administered online to facilitate easy access and participation, with constant follow-up reminders sent to ensure a high response rate.

## **Analysis and Results**

### **Data Analysis Methods**

In data analysis, the collected data were analyzed using descriptive statistics, correlation analysis and thematic analysis for open-ended responses. Descriptive statistics summarized the demographic data and, the frequency of e-learning practices. The correlation analysis method was used to explore the relationships between e-learning practices, employee performance and, work commitment. Thematic analysis was conducted upon open-ended responses of the population to identify recurring themes and patterns.

### **Descriptive Statistics**

#### **Demographic Information:**

- The majority of respondents were aged 25-34 (45%), followed by 35-44 (30%), under age 25 (15%), 45-54 years (8%), and 55 and above (2%).
- Gender distribution stats: 60% male and 40% female.
- Education level: Respondents, 50% had a Bachelor's degree, 30% had a Master's degree, 15% had an Associate degree, and 5% had a Doctorate.
- Job positions/level: 40% were of mid-level, 30% had entry-level, 20% senior level, 7% management, and 3% executive level.
- Years of experience: 35% had 1-3 years' experience, 25% had 4-6 years, 20% had less than 1 year, 15% had 7-10 years, and 5% had more than 10 years of experience.

#### **E-Learning Practices:**

- Frequency of participation: 30% daily, 40% weekly, 20% monthly, 8% rarely, and 2% never.
- Satisfaction with e-learning content: 25% very satisfied, 40% satisfied, 20% neutral, 10% dissatisfied, and 5% very dissatisfied.
- Types of e-learning tools used: 70% used learning management systems while 60% used webinars and, 50% online courses, also 40% used mobile learning apps, and 30% used virtual classrooms.

### **Correlation Analysis**

#### **E-Learning and Employee Performance:**

- A significant positive correlation ( $r = 0.65$ ,  $p < 0.01$ ) was found between the frequency of e-learning participation and self-assessed job performance.

- Satisfaction with e-learning content was positively correlated with perceived improvements in job skills ( $r = 0.58, p < 0.01$ ).
- Use of diverse e-learning tools showed a moderate positive correlation ( $r = 0.50, p < 0.05$ ) with overall productivity.

#### **E-Learning and Work Commitment:**

- A significant positive correlation ( $r = 0.62, p < 0.01$ ) was found between e-learning satisfaction and work commitment.
- The perceived impact of e-learning on professional growth was positively correlated ( $r = 0.55, p < 0.05$ ) with the intent to stay with the organization.
- Frequency of e-learning participation was moderately correlated ( $r = 0.47, p < 0.05$ ) with engagement levels.

#### **Thematic Analysis**

##### **Key Themes:**

- **Skill Enhancement:** Respondents frequently mentioned that e-learning helped them acquire new skills and knowledge, which translated into better job performance.
- **Flexibility and Accessibility:** E-learning was praised for its flexibility, allowing employees to learn at their own pace and convenience.
- **Continuous Improvement:** Many respondents noted that e-learning fostered a culture of continuous improvement and professional development, contributing to higher work commitment.

#### **Discussion**

##### **Impact on Employee Performance**

The findings of this study suggest that e-learning has a positive impact on employee performance in private sector schools and colleges. The ability to access a variety of learning materials and participate in training programs contributes to skill enhancement and job productivity. This is consistent with previous research indicating that e-learning can effectively support employee development and improve performance outcomes (Wang, Wang, & Shee, 2010; Chen & Kao, 2012).

##### **Impact on Work Commitment**

E-learning also positively influences work commitment by providing employees with opportunities for continuous learning and professional growth. Employees who perceive e-learning as a valuable resource are more likely to feel engaged and committed to their organization (Ellis & Kuznia, 2014). The study's findings align with Meyer and Allen's (1991) conceptualization of work commitment, highlighting the importance of professional development in fostering employee loyalty and engagement.

##### **Practical Implications**

Educational institutions should consider integrating comprehensive e-learning programs into their professional development plans to enhance employee performance and work commitment.

Providing access to a range of e-learning tools and ensuring their relevance to employees' roles can maximize the benefits of these initiatives. Additionally, addressing challenges such as technology access and digital literacy is crucial for the successful implementation of e-learning programs (Chen & Kuo, 2011; Srivastava & Agarwal, 2013).

## **Conclusion**

This study provides empirical evidence on the impact of e-learning on employee performance and work commitment in private sector schools and colleges in SWAT. The results indicate that e-learning positively affects both employee performance and work commitment, highlighting its value as a tool for professional development. Future research should explore the generalizability of these findings in other regions and sectors to provide a more comprehensive understanding of e-learning's impact.

## **Recommendations**

Modern day organizational performances are contributed by employees output and the role of technology cannot be ignored. E-learning process, in organization is regarded important by this study. The findings of this study recommends that employees work commitment when aligned with the use of modern day technology yields into more output that leads to attainability of more; organizational goal and individual as well. Therefore, this study conducted in educational institutions provided a recommendation to other organizations as well to focus on the use of digital learning and, for that purpose provide such environment. Such environment and resources, if provided may help to the effective use of such digital tools that can lead to maximum attainability.

## **Limitation and Directions for Future Research**

This study, e-learning on employees' performance and work commitment has some limitations as it is conducted in the private sector schools and colleges in SWAT in Pakistan. Therefore it is suggested to conduct research in other sector; public, NGO's sponsored, financial sector and tech sector that can provide more meaningful and contrast results to study the implications of e-learning, employees' performance and work commitment. Studies, if conducted will provide a more coherent and comparative analysis of different attributes if linked like demographic, access to technology and social background as the current study does not include such factors in general. Future research can be conducted and data could be collected in relation to employee's e-learning skills and organizational objective also.

## **References**

1. Alavi, M., & Leidner, D. E. (2001). Review: Technology-mediated learning: A review of the literature. *Information Systems Research*, 12(1), 1-38.
2. Chen, C. J., & Kuo, Y. T. (2011). The impact of e-learning on work commitment: A case study of public sector employees. *Journal of Workplace Learning*, 23(3), 150-166.
3. Chen, S. H., & Kao, T. C. (2012). The impact of e-learning on student performance: A review of the literature. *Journal of Educational Technology & Society*, 15(1), 145-155.
4. Ellis, R., & Kuznia, J. (2014). The role of e-learning in professional development: Insights from the field. *International Journal of Training and Development*, 18(4), 305-323.
5. Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95-105.

6. Huang, R. H., & Liaw, S. S. (2018). Investigating the role of e-learning systems in the work performance of employees. *International Journal of Human-Computer Interaction*, 34(4), 351-363.
7. Johnson, A., & Becker, S. (2017). The impact of digital learning technologies on student engagement and achievement. *Educational Technology Research and Development*, 65(2), 381-406.
8. Kim, C., & Lee, M. J. (2015). The effects of e-learning on the development of professional skills. *Journal of Workplace Learning*, 27(3), 200-218.
9. Kumar, V., & Ambrose, L. (2019). E-learning and employee productivity: A study of corporate training programs. *Journal of Business Research*, 100(1), 227-236.
10. McLoughlin, C., & Lee, M. J. (2010). The three Ps of pedagogy: Improving the practice of online learning. *Australian Journal of Educational Technology*, 26(2), 119-137.
11. Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89.
12. Moore, M. G., & Kearsley, G. (2011). Distance education: A systems view of online learning. *Cengage Learning*.
13. Noe, R. A., & Wilk, S. L. (1993). Investigation of the factors that influence employees' participation in development activities. *Journal of Applied Psychology*, 78(2), 291-302.
14. Oliveira, T., & Martins, M. F. (2011). Literature review on e-learning and its impact on employees' performance. *Journal of Organizational Behavior*, 32(6), 864-893.
15. Park, S. Y., & Kim, Y. K. (2018). E-learning and job satisfaction: Exploring the role of e-learning in improving job satisfaction. *Journal of Workplace Learning*, 30(6), 483-500.
16. Peters, M. A., & Olssen, M. (2005). E-learning and educational reform: The case of e-learning in education. *Educational Philosophy and Theory*, 37(4), 343-357.
17. Rosenberg, M. J. (2006). E-learning: Strategies for delivering knowledge in the digital age. *McGraw-Hill*.
18. Srivastava, S., & Agarwal, S. (2013). E-learning and its impact on employee performance: A case study. *Journal of Organizational Behavior*, 34(2), 145-160.
19. Wang, M. C., Wang, H. H., & Shee, D. H. (2010). The effects of e-learning on job performance: A meta-analysis. *Computers in Human Behavior*, 26(6), 1652-1663.