



THE EFFECT OF ACADEMIC ADMINISTRATION DIGITALIZATION AND ORGANIZATIONAL SUPPORT ON STUDENT DISCIPLINE

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Abstract. Digital transformation in higher education institutions has driven changes in academic administration systems, including the implementation of QR Code-based attendance tracking through the Syntesis application at Siliwangi University. However, the effectiveness of this system in shaping student discipline has not been empirically researched. This study aims to examine the influence of academic administration digitalization and organizational support on student discipline in the Management Study Program for the 2022 and 2023 cohorts. A quantitative approach was used with a survey method involving 90 respondents selected through simple random sampling. Data were collected using a Likert scale questionnaire and analyzed using multiple linear regression. The results show that the digitization of academic administration has a positive and significant effect on student discipline ($\beta = 0.512$; $p < 0.05$). Organizational support also has a positive and significant effect ($\beta = 0.175$; $p < 0.05$). Simultaneously, both variables explain 36.7% of the variation in student discipline. These findings confirm that the successful use of digital attendance does not only depend on technology, but also on the institution's readiness to provide facilities, socialization, and supervision. This study contributes to the development of technology-based education management and provides a basis for strengthening digital academic administration policies in higher education institutions.

Keywords: Academic Administration Digitalization; Organizational Support; Student Discipline; Universitas Siliwangi.

1. Introduction

The development of digital technology in the era of industry 4.0 has encouraged various higher education institutions to transform their academic administration systems. Digitalization has become a strategic step in improving the efficiency, transparency, and accountability of education management. One concrete example of the application of digitalization in higher education is the Quick Response (QR) Code-based attendance system, which replaces the manual signature-based method. This system offers speed, convenience, and high accuracy in recording student attendance, while minimizing the potential for fraud and administrative errors.

Siliwangi University is one of the institutions that has implemented a QR Codebased attendance system through the Syntesis application as part of its academic administration digitization program. This implementation is expected to improve student discipline in terms of attendance, punctuality, and compliance with lecture rules. However, in reality, several obstacles are still encountered, such as limited internet access, differences in the level of supervision by lecturers, and a lack of socialization of the digital system to students. These conditions indicate that the success of administrative digitization does not only depend on technological sophistication, but also on organizational support from the campus and lecturers as the main implementers of academic activities.

Previous studies (Alhazmi et al., 2021; Shaikh et al., 2020; Okai et al., 2019) have focused more on the technical aspects of attendance digitization, such as time efficiency and data accuracy, but have not discussed its impact on student discipline. Thus, there is a research gap in the context of the relationship between the implementation of academic administration digitization and the formation of student discipline in higher education.

In addition, studies related to organizational support (Perceived Organizational Support) generally focus on the context of employees and the world of work (Eisenberger et al., 2019; Kumar & Rose, 2019), while its application in the context of students is still limited. In fact, organizational support such as the provision of digital facilities, socialization of system use, and lecturer assistance can play an important role in improving student discipline. Thus, empirical studies are still needed to examine the relationship between organizational support and student discipline in the context of academic digitalization implementation in higher education.

Based on these phenomena and research gaps, this study aims to analyze the influence of academic administration digitalization and organizational support on student discipline. This study was conducted on students of the Management Study Program of the 2022 and 2023 batches at Siliwangi University who have used a QR Code-based attendance system through the Syntesis application. The results of this study are expected to contribute theoretically to the development of human resource management literature in the field of education, as well as practically in the form of recommendations for universities in optimizing academic administration digitalization to foster sustainable student discipline.

This study differs from previous research by shifting the focus from the technical efficiency of QR Code-based attendance systems to the behavioral impact of digital academic administration. Rather than examining technological performance alone, this research explores how digitalization interacts with institutional support to shape student discipline. This perspective introduces a more comprehensive behavioral framework and provides a unique contribution to the discussion of academic digitalization in higher education.

2. Research Method

This study uses a quantitative approach with a causal associative design, which aims to determine the causal relationship between independent and dependent variables. The independent variables in this study are academic administration digitization (X_1) and organizational support (X_2), while the dependent variable is student discipline (Y). This study is cross-sectional in nature, as data was collected at only one specific time without intervention from respondents.

The research subjects were students of the Management Study Program, Faculty of Economics and Business, Siliwangi University, class of 2022 and 2023, who have used a QR Code-based attendance system through the Syntesis application. The research population consisted of 799 students, and the sample was determined using the Slovin formula with a 10% error rate, resulting in 90 respondents. The sampling technique used was simple random sampling so that each student had an equal chance of becoming a research respondent.

Data collection was carried out through the distribution of closed questionnaires compiled based on indicators from each variable. The questionnaire used a five-point

Likert scale (1 = strongly disagree to 5 = strongly agree) to measure students' perceptions of the digitization of academic administration, organizational support, and discipline. Before distribution, validity and reliability tests were carried out to ensure that each question item was suitable for use.

Primary data was obtained directly from respondents through questionnaires, while secondary data was obtained from relevant literature, academic documents, and scientific journals.

Data analysis techniques used Statistical Package for the Social Sciences (SPSS) version 26 with several stages, including descriptive analysis, classical assumption tests (normality, multicollinearity, and heteroscedasticity), and multiple linear regression analysis to test the effect of academic administration digitization and organizational support on student discipline. Hypothesis testing was performed using the t-test (partial) and F-test (simultaneous) with a significance level of 5 percent. In addition, the coefficient of determination (R^2) was used to determine the contribution of the two independent variables in explaining the variation in student discipline.

The entire research process was conducted with due regard for academic ethics, whereby respondent participation was voluntary, data confidentiality was maintained, and data was used solely for scientific purpose.

3. Results and Discussion

This study aims to determine the effect of academic administration digitization and organizational support on student discipline in the Management Study Program, Faculty of Economics and Business, Siliwangi University. Data were obtained from 90 respondents consisting of 50 students from the 2022 cohort and 40 students from the 2023 cohort. The results of multiple linear regression analysis using SPSS version 26 showed that both independent variables had a positive and significant effect on student discipline.

Table 1. Multiple Linear Regression Test Results

	Regression Coefficients (β)	t_{value}	Sig.
Digitalization of Academic Administration	0.512	6.784	0.000
Organizational Support	0.175	3.921	0.000
R Square (R^2)	0.367	-	-

Source: Research Data Analysis Results, 2025

The regression coefficient value for academic administration digitization is 0.512 with a significance level of 0.000 (<0.05), indicating that the better the implementation of a digital-based academic administration system, the higher the level of student discipline. Meanwhile, organizational support has a regression coefficient of 0.175 with a significance value of 0.000 (<0.05), which means that the higher the organizational support from the faculty and lecturers, the better the students' disciplinary behavior.

In addition, the simultaneous test results show an R^2 value of 0.367, which means that the digitization of academic administration and organizational support together contribute 36.7% to the variation in student discipline, while the remaining 63.3% is influenced by other factors outside the model, such as learning motivation, academic culture, and lecturer supervision.

These findings indicate that the implementation of a QR Code-based attendance system through the Syntesis application has had a positive impact on student discipline.

The Effect of Academic Administration Digitalization and Organizational Support on Student Discipline

Students consider this system to improve the accuracy of attendance data, attendance time efficiency, and transparency of records that cannot be manipulated.

In addition, support from the faculty through the provision of technological facilities, socialization, and routine supervision further strengthens this positive effect on student discipline.

The Effect of Academic Administration Digitalization on Student Discipline

The results of the study indicate that the digitalization of academic administration has a positive and significant effect on student discipline. This indicates that the more effective the implementation of digital systems in academic administration activities—such as QR Code-based attendance—the higher the level of student compliance and responsibility for class attendance. This digital system makes the attendance process faster, more accurate, and difficult to manipulate, thereby encouraging students to arrive on time and follow academic rules.

These findings are in line with the results of research by Alhazmi et al. (2021), which states that QR Code-based attendance systems improve the efficiency and accuracy of recording student attendance in higher education. Similarly, Shaikh et al. (2020) found that academic digitization speeds up administrative processes and increases user satisfaction due to the ease and transparency of the system. These results also support the Technology Acceptance Model (Davis, 1989), which explains that perceptions of the ease and usefulness of technology influence positive user behavior. In this context, the more students perceive the digital system as beneficial, the more disciplined they are in complying with academic procedures.

Thus, the implementation of a QR Code-based digital attendance system not only improves administrative efficiency but also functions as a behavioral control mechanism that encourages student discipline.

The Effect of Organizational Support on Student Discipline

The results of the study also show that organizational support has a positive and significant effect on student discipline. Organizational support includes system socialization, provision of adequate facilities, technical assistance, and supervision from lecturers and the campus. These forms of support foster a sense of responsibility, attachment, and concern among students towards their academic obligations.

These results are consistent with the Perceived Organizational Support theory (Eisenberger et al., 2019), which states that when individuals feel supported by an organization, they tend to show higher levels of compliance and responsibility. These findings are also in line with the research by Okpara (2018) and Fitria (2021), which confirms that organizational support can improve individual discipline and positive behavior, both in the context of work and education.

In the context of higher education, organizational support is not only in the form of adequate digital infrastructure, but also includes active communication between lecturers and students, as well as consistent campus policies in enforcing academic discipline. This explains that a good digital system will be more effective if accompanied by strong institutional support.

The Simultaneous Effect of Academic Administration Digitalization and Organizational Support on Student Discipline

Simultaneously, the results of the study show that academic administration digitalization and organizational support have a significant effect on student discipline. An R^2 value of 0.367 indicates that the combination of these two variables contributes significantly to the formation of student disciplinary behavior.

This finding reinforces the view that the success of digitization in the educational environment depends not only on technological sophistication but also on organizational readiness and support accompanying its implementation. This study supports the findings of Shaikh and Javed (2020), who stated that the integration of digital innovation and institutional support plays an important role in improving student discipline and engagement in the learning process.

Thus, it can be concluded that the implementation of effective academic administration digitalization and strong organizational support have a complementary relationship in improving student discipline. Digital systems create control and transparency, while organizational support builds academic commitment and responsibility.

To strengthen the originality of the findings, it is important to consider how the implementation of the QR Code based attendance system at Universitas Siliwangi differs from earlier studies. Unlike previous research that primarily highlights time efficiency and data accuracy, this study reveals how digitalization creates a behavioral control mechanism through real-time verification and transparency. This direct linkage between system transparency and disciplinary behavior has not been extensively discussed in prior literature.

Furthermore, the results show that digitalization has a stronger influence than organizational support. This provides an important theoretical insight: when digital systems already impose a structural form of control, the role of organizational support becomes complementary rather than primary. Support from the institution remains important, but its impact is moderated by the strength of the digital control mechanism itself.

These findings also indicate that discipline is shaped not only by the digital system but also by students' level of digital adaptation, lecturer consistency, and institutional clarity in communicating academic regulations. This perspective offers new understanding that extends beyond the technical lens of existing QR Code attendance studies.

4. Limitations and Conclusion

This study concludes that digitalization of academic administration and organizational support both have a positive and significant impact on student discipline within the Management Study Program at Universitas Siliwangi.

The QR Code-based attendance system improves punctuality, minimizes manipulation, and increases compliance with academic rules. Digitalization provides the strongest effect, indicating that transparent and efficient systems directly influence behavioral discipline. Organizational support reinforces the system by providing adequate facilities, guidance, and consistent supervision. Together, both variables explain 36.7% of the variation in student discipline.

Several limitations should be acknowledged. First, the study was conducted in a single study program, which may limit generalizability. Second, the cross-sectional design does not capture long-term behavioral changes.

Third, data were collected through self-reports, which may introduce perception bias. Fourth, the model includes only two predictors, while other relevant factors such as learning motivation, academic culture, and lecturer student interactions were not examined.

These limitations provide opportunities for future research to expand the scope to other faculties or universities, employ longitudinal methods, and incorporate additional variables to obtain a more comprehensive understanding of discipline formation in digital academic environments.

Theoretically, this study contributes to the development of academic digitalization and organizational behavior literature by demonstrating that digital platforms not only enhance administrative efficiency but also function as behavioral regulators through transparency and real-time control. This expands existing theories by showing how digital academic systems shape discipline beyond their administrative purpose.

Practically, the findings highlight the importance of infrastructure readiness, consistent lecturer supervision, and institutional communication in maximizing the effectiveness of QR Code based attendance systems. Universities implementing digital academic systems can use these insights to refine policies, strengthen monitoring mechanisms, and enhance student engagement within digital academic environments.

References

- Alhazmi, A., Rahman, S., & Hossain, M. (2021). *Integration of QR code-based attendance systems to enhance data accuracy and reduce absenteeism in higher education institutions*. *Journal of Educational Technology and Innovation*, 9(2), 45–58. <https://doi.org/10.1016/j.jeti.2021.02.005>
- Shaikh, F. M., Javed, T., & Khan, R. (2020). *Development of QR code attendance application: Improving efficiency and user satisfaction in academic institutions*. *Asian Journal of Educational Research*, 8(4), 22–33. <https://doi.org/10.47509/ajer.v8i4.2020>
- Okai, E., Mensah, P., & Ofori, D. (2019). *Utilizing QR code technology for student attendance monitoring in tertiary education*. *International Journal of Advanced Computer Science and Applications*, 10(5), 134–142. <https://doi.org/10.14569/IJACSA.2019.0100518>
- Eisenberger, R., Malone, G. P., & Presson, W. D. (2019). *Optimizing perceived organizational support to enhance employee engagement and discipline*. *Journal of Organizational Behavior*, 40(1), 23–40. <https://doi.org/10.1002/job.2323>
- Hasibuan, M. S. P. (2019). *Manajemen Sumber Daya Manusia*. Jakarta: BumiAksara.
- Mangkunegara, A. A. P. (2017). *Manajemen Sumber Daya Manusia Perusahaan*. Bandung: PT Remaja Rosdakarya.
- Robbins, S. P., & Judge, T. A. (2020). *Organizational Behavior* (18th ed.). New Jersey: Pearson Education.

- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Handayani, P. W., & Putri, D. A. (2022). Pengaruh Digitalisasi Administrasi Akademik terhadap Efisiensi dan Kedisiplinan Mahasiswa. *Jurnal Manajemen Pendidikan Tinggi*, 9(2), 123–134.
- Sutanto, H., & Tjahjadi, B. (2021). Implementasi Absensi Berbasis QR Code dalam Meningkatkan Disiplin Mahasiswa. *Jurnal Teknologi Pendidikan*, 14(1), 56–68.
- Priyono, A. (2020). *Metodologi Penelitian Kuantitatif*. Yogyakarta: Zifatama Publisher.
- Ghozali, I. (2021). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 26*. Semarang: Badan Penerbit Universitas Diponegoro.
- Sugiyono. (2022). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Fitria, N. (2021). Pengaruh Dukungan Organisasi dan Lingkungan Kerja terhadap Kinerja dan Disiplin Pegawai. *Jurnal Ilmu Administrasi dan Bisnis*, 10(1), 45–58.
- Kurniawati, D., & Lestari, S. (2020). Organizational Support and Work Discipline: Empirical Study on Higher Education Students. *International Journal of Educational Research*, 8(3), 201–210.
- Fauzi, R., & Hidayat, T. (2023). QR Code Attendance System to Improve Student Punctuality: A Case Study in Higher Education. *International Journal of Emerging Technologies in Learning*, 18(4), 122–133.
- Wibowo, A. (2021). *Perilaku dalam Organisasi*. Jakarta: Rajawali Pers.
- Undang-Undang Nomor 12 Tahun 2012 tentang Pendidikan Tinggi.
- Peraturan Rektor Universitas Siliwangi (2023). *Tentang Pedoman Akademik dan Ketertiban Mahasiswa*. Tasikmalaya: Universitas Siliwangi Press.
- Kumar, S., & Rose, R. C. (2019). The Impact of Organizational Support on Employee Discipline and Performance. *Asian Social Science Journal*, 15(5), 98–108.
- Rizqi, M., & Andriani, T. (2021). Pengaruh Sistem Digitalisasi Administrasi Akademik terhadap Kedisiplinan Mahasiswa: Studi Kasus pada Perguruan Tinggi Negeri. *Jurnal Manajemen Pendidikan Indonesia*, 5(3), 210–222.
- OECD. (2022). *Digital Education Outlook 2022: Pushing the Frontiers with Artificial Intelligence, Blockchain and Robots*. Paris: OECD Publishing.
- Sekaran, U., & Bougie, R. (2020). *Research Methods for Business: A Skill-Building Approach* (8th ed.). United Kingdom: Wiley.