

HUMAN RESOURCE MANAGEMENT | RESEARCH ARTICLE

Optimizing Civil Servant Performance Management through Internal Compliance Distance Learning Program

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ARTICLE HISTORY

Received: May 11, 2026

Revised: June 16, 2026

Accepted: June 22, 2026

DOI

<https://doi.org/10.52970/grhrm.v6i2.2272>

ABSTRACT

While in public sector organizations, internal compliance is regarded as one of the main human resource control mechanisms in supporting the implementation of effective public sector performance management, it is suspected that there is weak empirical evidence of whether or not distance learning as a scaled-up technique for building competency is effective in producing behavioral change among the Civil Servants (ASN), let alone effective in its ability to produce performance outcomes. The purpose of this study is to conduct an evaluation of the Distance Learning Program (PJJ) implementation and effectiveness in terms of skill change at the level of behaviors after training at these Directorate General of Customs and Excise. The study used a quantitative method that used a 360-degree questionnaire and asked 29 alumni, their supervisors and colleagues to complete the questionnaire at a level 3 (behavioral) post-training evaluation approach, instrument validity was confirmed by Cronbach's Alpha testing, competitor change was found by comparing the pre-test and post-test results. The results indicate that average competency score of respondents before undergoing the training ranged from 7.43–8.22 and after training ranged from 9.17–9.49 in various sub-activities, while respondents also supported that the training was able to transfer knowledge and change their behavior in the workplace. These findings theoretically contribute to the limited literature on the relationship between the outcomes of distance learning and the performance management of civil servants' compliance efforts in the public sector and provide policymakers evidence on how to continue developing and scaling distance-based training in the scope of integrated civil servant competency development strategies.

Keywords: Internal Compliance, Civil Servants, Distance-Based Learning, Public Sector, Performance Management.

JEL Code: M53, H83, J24.

I. Introduction

Government institutions are strategic actors in implementing public policy in the fields of oversight, law enforcement, service delivery and the optimization of the performance of the State Civil Apparatus (ASN). The internal compliance oversight function is an integral component in the mandate and will be an important aspect to sustaining accountable performance, the effectiveness of internal controls and integrity of the

organization. Practically, it can be seen from the results of empirical studies in local governments in Indonesia, both internal control system maturity and internal auditor capability, are factors that become predictors of performance accountability, in addition to the audit opinion and the characteristics of regional revenue in local governments in Indonesia. Practically, empirical evidence in the local government in Indonesia shows that the maturity of internal control systems and the capability of internal auditors are factors that become predictors of performance accountability along with the other factors are audit opinion and regional revenue characteristics of local governments in Indonesia. Broadly speaking, literature also suggests that governance and internal control processes are increasingly going beyond compliance duties to serve as strategic tools that promote transparency, mitigate risk and generate long-term value for the organization (Giannopoulos et al., 2025).

But this research body focuses on the structural and institutional aspects of internal control and audit functions, system maturity, governance structure and framework, audit committee effectiveness, and not on the way in which the internal control and audit functions and the system matures as the result of the development of the competencies of its actors. A 20-year systematic review of internal audit research identified that although the quality of the internal audit function is well established as an effective lever for the risk management function in an organization, the internal audit function's growing strategic role has received less attention, with less understanding of how internal auditors' knowledge, skills, and abilities are developed and abilities converted to the organization's outputs (Nkansa et al., 2025). Similarly, a mixed method study in Ghana discovered that internal controls and risk management practices were also positively related to value creation, but that there was no statistically significant relationship between the direct contribution of the internal audit function to risk management and value added – internal audit was primarily providing assurance on the processes that are managed by separate compliance and risk functions (Amo et al., 2026).

The need to fill this gap is growing increasingly urgent in the context of ongoing Indonesian governance reform. Law No. 20 of 2023 on State Civil Apparatus further established merit-based personnel management and enhanced oversight institutions' oversight of ASN adherence to codes of ethics and conduct within government bodies. In this dynamic environment, internal compliance roles themselves are in the making: For example, in the late period of 2025, the Directorate General of Customs and Excise (DJBC) has issued new institutional guidance that asks all units to create structured matrices of risks for their risk control functions (SE-16/BC/2025). With the developments mentioned above and continuous public discussions around integrity problem in customs administration (Sumadi & Bayunitri, 2025), it is clear that the competency of ASN in internal compliance is now an essential factor determining the integrity of the institution and the people's trust in it. In human resource management (HRM), training is viewed as the process by which an organization changes the knowledge, skills and attitudes of its employees, and has been shown to be related with better employee performance, morale and organizational outcomes (Mamaqi, 2023). The organizational level of the PM literature also confirms the connection between the two, suggesting that certain PM practices positively correlate with organizational development, such as organizational vision and mission, employee participation, and pay-for-performance schemes for manufacturing sector in India (Kumar, 2022). However, the evidence is from a private sector, manufacturing setting, and it remains unclear whether the competency-to-performance model is relevant to public sector workers whose job descriptions are centered on regulatory compliance and not production.

Some answers (although not full) come from research on distance and online-based training. A large-scale study of the usage of E-learning in the public sector identified that information systems success factors and the motivation of the learners were significant determinants of a successful E-learning system, based on system usage, user satisfaction and the net impact (Nurhayati & Rachmawati, 2021). Another study using the Kirkpatrick model indicated that virtual training was more effective than offline training, but it did not include working professionals as part of a formal performance management system (PMMS); instead, the study focused on higher education students (Suraj & N, 2023). Although very flexible, a study on e-learning adoption in Indonesian higher education revealed that the effectiveness of distance education could not be ensured

just because the medium of instruction is online, there were still some constraints, such as infrastructure constraints, learner fatigue and digital competence problems. The effectiveness of distance education is very dependent on the design quality and readiness of the environment, but depends on the medium of distance education (Darwin, 2025).

When considered as a whole, these strands of literature clearly indicate an existing gap. In the studies of internal control and audit functions (Amo et al., 2026; Giannopoulos et al., 2025; Nkansa et al., 2025; Rahmasari & Setiawan, 2022), they explore various aspects of institutional accountability and governance outcomes without considering the development of individual ASN competencies. The assessment models adopted in the studies related to distance learning (Darwin, 2025; Nurhayati & Rachmawati, 2021; Suraj & N, 2023) involve various assessment scores, such as the Kirkpatrick's model, which do not go beyond assessing learner's reaction and learning to checking learner's competence and evaluating the training effectiveness (i.e., showing whether the competence acquired in distance learning is implemented in the workplace and reflected in the performance). Studies of performance management itself (Kumar, 2022) are performed in private sector work settings which may not be generalizable to private sector roles which are compliance oriented. This is especially important as distance learning becomes more prevalent as an institutional training modality, and despite the fact that no study has yet examined whether distance-based internal compliance training results in actual measurable competency gains via multi-rater feedback within the context of an actual performance management system.

The purpose of this study is to assess the implementation and effectiveness of Distance Learning Program (Pembelajaran Jarak Jauh/PJJ) in Internal Compliance on Directorate General of Customs and Excise based on the conception of Level 3 (behavioral) post training evaluation. Study validity and reliability is done by Cronbach's alpha test, competency changes are carried out by comparing the results of the pre and post test, while the training's changes are done through the form of a 360 degree form which was completed by alumni, supervisors and colleagues. This research is hoped to make a significant theoretical and practical addition to the performance management literature as it applies to a public sector, compliance-based framework with empirical behavioral level evaluation data, and as a means of producing empirical evidence and data for policy makers on the extent to which distance organization internal compliance training for work performance positively impacts observable work performance behaviors and accountability and organizational performance management contributions.

II. Literature Review and Hypothesis Development

2.1. Performance Management in the Public Sector

Performance management is generally recognized as a systematic procedure that ensures organisations link their employee's competencies, behaviours and results to organisational goals (Kumar, 2022). In the public sector, performance management is a management process that not only helps monitor the outputs of employees, but can also be used to build competencies that enable accountability, service quality and organisations to be effective. The working environment of public institutions is significantly different from that of the private sector; it is more spartan and involves more legal accountability, public scrutiny, and bureaucratic procedures. Therefore, the conduct and compliance of the employees with the rules and regulations of the organisations are all that becomes important in the performance management systems.

Recent studies have identified the special needs of performance measurement for public Sector organizations. Hill & Plimmer (2024) noted that competing organizational goals, organisational constraints and public service motivation affect how performance systems are put into practice, which can lead to inflexible task orientated performance goals that do not capture contextual and developmental components of employees' performance. Likewise, a study of performance management systems in the public sector revealed that their effectiveness differs significantly by country, as a result of institutional capacity, technological infrastructure and managerial capability (Hill & Plimmer, 2024). The review also indicates that

the practice of public sector performance evaluation has moved from the simple reliance on objective measures of output to increasingly using measures of behavior and competency. The changes suggest that the link between employee competencies and behaviours and the effectiveness of public organizations has been acknowledged as a key influencing factor in the shift toward performance management. As such, competency enhancement measures such as employee training and development have become significant tools to support the performance management goals.

2.2. Internal Control, Internal Compliance, and Civil Servant Competency

Internal compliance is how well staff will comprehend and adhere to the organisation's rules, ethical standards, internal controls and accountability mechanisms. In government institutions, internal compliance is playing a key role in protecting the integrity, transparency and efficient governance. While the formal structures and control mechanisms provide structural support to compliance, their effectiveness will rely on the skill sets of the staff members who are supposed to implement them. Several studies that have been conducted in Indonesia has shown that human resource competency is important in supporting the effectiveness of internal control. According to Rahmasari and Setiawan (2022), the level of government internal control systems and the competence of local government internal auditors have significant impact on the local government accountability for performance. In the same fashion, Wibowo and Murwaningsari (2024) found that government internal control and accountability significantly and positively impact the sustainability of government non-tax revenue at the central government institutions and government non-tax revenue mediated the relationship between leadership and human resource competencies and revenue outcomes. Based on the panel data of 43 ministries and institutions, Angelia and Wibowo (2025) also concluded that the internal control and the capability of government internal auditor have significant positive influence on the level of non-tax revenue performance.

Other evidence from local government suggests that human resource competencies enhance the effectiveness of internal control systems and quality of financial reporting. The author of the Mediaty study (2025) discovered that the relation between internal control systems and financial reporting quality is significantly moderated by employee competency. The need for employee competency to aid internal control and governance is also a key finding in studies conducted in other countries on internal audit effectiveness and the management of compliance (Amo et al., 2026; Giannopoulos et al., 2025; Nkansa et al., 2025). The sum of these studies is proof that the strength of the internal control and compliance regimes greatly rely on the skills of the employees. Previous research has proven the significance of compliance related skills; however, there has been little focus on the process by which compliance related skills are acquired. Little empirical evidence exists, in particular, on whether or not interventions that seek to improve the skills of internal compliance lead to observable changes in behaviour among civil servants, particularly in distance-learning contexts.

2.3. Training as a Mechanism for Competency Development

The development of employee competencies is widely accepted to be one of the main ways that organizations build these competencies. Training helps the employees gain knowledge, skills and attitudes that supports them in their work tasks and for effective job performance through structured learning experiences (Mamaqi, 2023). In public government, training is a strategic instrument in the supporting role of organization adaptation, administration reform and capacity building. Studies that analyzed the human resource development in public administration concluded that there is a growing importance of using competency-based training approaches in public administration that involved digital learning, adaptive learning, and continuous professional development (Muhani, 2023). Such advances are part of a wider trend aimed at enhancing the skills of civil servants as they strive to meet the growing demands for holding them accountable, transparent, and delivering quality service.

But the effectiveness of the training should not only depend on the knowledge or skills that are acquired by the participated persons in the process of learning. The ultimate goal of training is to transfer learning to the workplace or job to behaviour and job performance. Transfer of training is the process of how much knowledge, skill and attitude that is gained in the training are transferred, retained, and transferred to the workplace (Paul et al., 2024). As such, training is only truly successful if behavioral changes observed are associated with the adoption of new competencies in the participant's work activities. Therefore, assessing the transfer of training success to the workplace is of special significance in the context of competency-based training – including in-house compliance roles.

2.4. Distance Learning Effectiveness in Public Sector Training

Featured by advancement of information technology, organizational training programs are also being rearranged to use distance learning as a scalable and cost-effective training method, which that the majority of organizations are now using. There are several benefits to distance learning, such as increased accessibility, flexibility and reaching people spread geographically. Research evidence generally backs up the effectiveness of distance learning in the public sector. According to Nurhayati and Rachmawati (2021), among the Indonesian public servants, the success of e-learning is significantly affected by learner motivation, system quality, information quality and user satisfaction. In a similar manner, Suraj & N (2023) used the Kirkpatrick model in their research to identify that virtual training is a better option than face-to-face training in terms of its effectiveness.

All this, however, means that the effectiveness of distance learning is dependent on the quality of implementation. Learning effectiveness in online learning may be limited due to technological limitations, learner fatigue, and the different levels of digital competence of the educators and learners according to Darwin (2025). The results allow us to conclude that the effectiveness of distance learning is not guaranteed just because it is learning by distance. More significantly, previous research on the effectiveness of distance learning has been mostly concerned with satisfaction, knowledge gained by the learners and the use of the system. Fewer studies have investigated the transfer of competencies acquired in the context of distance learning into on-the-job performance, especially in compliance training for the public sector. This disparity points to the need for additional studies assessing the behavioral effects of distance education training programs.

2.5. Kirkpatrick Model and Behavioral-Level Evaluation Consists of Two Parts

The Kirkpatrick Four-Level Model continues to be one of the most popular models for assessing training effectiveness. There are four successive steps of evaluation: reaction, learning, behavior, and results. Reaction and learning evaluation are designed to determine participants' reactions and learning, while behavioral evaluation is designed to determine whether or not participants practice the competencies acquired in training their workplaces. The Kirkpatrick framework has been validated in recent empirical studies in different organizational contexts. The study results by Paul, Burman and Singh (2024) indicate that positive trainee reactions significantly affect learning outcomes, which in turn affect organizational outcomes and behavioral change in banking employees by applying the method of structural equation modeling. The same was found in Faisal-E-Alam & Islam (2025) that they found that positive learning experiences help in the application of behavior in work.

The Kirkpatrick model also has been successfully applied to the evaluation of capacity building programs and public sector learning interventions. Rucks et al. (2024) showed that the process and foundation of the framework can be adapted to be relevant to organizational contexts, but its foundation is very similar in that it promotes a sense of learning acquisition, application of behavior, and organizational impact. To assess whether competencies gained as a part of the internal compliance training are then transferred to the workplace, it would be most appropriate to measure using Kirkpatrick Level 3 (Behavior). Behavioral

evaluation is a direct assessment of the translation of training outcomes into observable work practice, as opposed to reaction and learning level evaluation.

2.6. Multi-Rater (360-Degree) Feedback as a Behavioral Evaluation Method

It can be hard to measure behavioral change using self-assessment; people could overestimate or underestimate their own competency building process. To overcome this, organisations are increasingly using multi-rater or 360-degree feedback systems, which include feedback from staff, their peers, and their supervisor. They have found that a 360-degree assessment yields a more accurate picture of an employee's skills and behaviors who are evaluated using multiple sources in the workplace than any single source assessment. Research by Dalvi, et al. (2023) showed that multiple raters have a wider view of what employees are doing because they're able to include multiple perspectives. Likewise, Fan et al. (2024) underscored the benefits of the multi-evaluator approach in terms of the methodology, as it ensures greater reliability of the assessment and minimizes individual assessor bias.

Multi-rater assessment is an effective approach for training evaluation when behavioral change is best assessed by those who work with them in the workplace. Thus, the purpose for using 360 degree feedback is comparable to the goals set for Kirkpatrick Level 3 evaluation, which seeks to gain insight into the degree to which a trained behaviour or competency is reflected in the workplace. The current research aims to use assessments from alumni, supervisors, and peers to provide a more comprehensive assessment of the change in behavioral competencies after the Distance Learning Program on Internal Compliance. Based on these findings, we hypothesize that:

H1: Participation in the Distance Learning Program on Internal Compliance improves the internal compliance competencies of civil servants.

H2: Participation in the Distance Learning Program on Internal Compliance improves the behavioral application of internal compliance competencies in the workplace.

Sub-hypotheses:

H2a: The program improves competencies related to public complaint management.

H2b: The program improves competencies related to data analysis, information presentation, and reporting.

H2c: The program improves competencies related to internal control monitoring.

H2d: The program improves competencies related to Internal Control over Financial Reporting (PIPK).

H2e: The program improves competencies related to follow-up actions on functional supervisory audit findings.

H2f: The program improves competencies related to performance management activities.

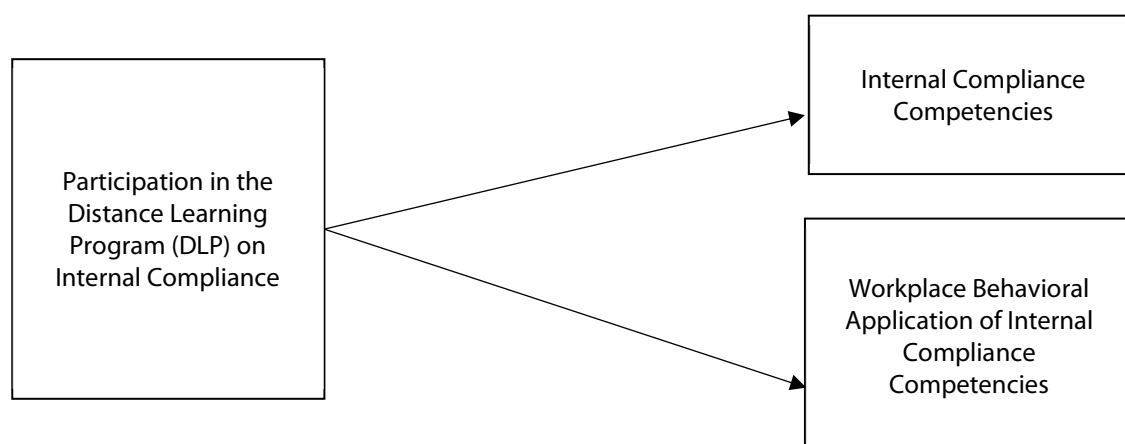


Figure 1. Conceptual Framework

III. Research Method

The design of this study was the post-training evaluation (Evaluasi Pascapembelajaran/Epaspem) to test the effectiveness of distance learning program or pelatihan jarak jauh (PJJ) of the Customs and Excise Training Center (Ketent) in the field of internal compliance. The evaluation was directed towards Kirkpatrick Level 3 (Behavior) that looks at how well competencies learned in training are carried over and put into practice in a workplace after training is completed.

3.1. Research Design and Participants

The study was carried out in the framework of the post-training assessment of the 2025 Internal Compliance Distance Learning program organised by the Customs and Excise Training Center. The target population was the employees of Directorate General of Customs and Excise (DJBC) that had completed the training program successfully. Purposive sampling was used to select participants according to the criteria following the post training evaluation guidelines. To qualify for part of the assessment, the participant(s) had to: (1) successfully complete the training and demonstrate competency at the required level, (2) be prepared and ready to apply the competencies they learned in training, and (3) be engaged in some internal compliance-related duties within their respective work units. There were 29 training alumni who were involved in the evaluation process. A 360-degree approach was used to gather evaluations from immediate supervisors and colleagues of the alumni participants as well as from alumni participants themselves, for a comprehensive assessment of the application of competency in behavior.

3.2. Data Collection Procedure

The data was obtained by using the structured questionnaire done with the help of Google forms. It is an integrated questionnaire developed jointly by the Learning Evaluation and Certification Subdivision, Training Instructors and the Subject matter experts (SMEs) of Directorate General of Customs and Excise. The development of the instruments was based on the competency standards and learning objectives in the Internal Compliance Distance Learning Program curriculum. Participants' competency was evaluated about three months after completion of the training program to allow adequate time to be applied to competency in the workplace. All of the respondents were asked to rate competency implementation on pre and post training observable work behaviours and competency indicators. A 360-degree feedback model enabled more competency information to be collected from self, supervisor and colleagues,ly reducing the likelihood of self-report bias in behavioral measurement and increasing the objectivity of the information.

3.3. Measurement of Variables

The primary variable examined in this study was internal compliance competency, defined as the ability of employees to effectively perform activities associated with internal compliance functions within the Directorate General of Customs and Excise. Given the broad scope of internal compliance responsibilities and the diversity of participants' job assignments, competency measurement was organized into six competency domains derived from the basic competencies specified in the program's Terms of Reference (TOR):

- a. Public Complaint Services;
- b. Data Analysis, Information Presentation, and Reporting;
- c. Monitoring of Internal Controls within the Directorate General of Customs and Excise;
- d. Internal Control over Financial Reporting (ICFR/PIPK);
- e. Follow-up of Functional Supervisory Audit Findings; and
- f. Performance Management within the Directorate General of Customs and Excise.

Each competency domain was measured using multiple questionnaire items assessed on a ten-point Likert scale, where higher scores indicated higher levels of competency implementation and behavioral application in the workplace.

3.4. Instrument Validity and Reliability Testing

The instrument of the questionnaire was first measured for its validity and reliability before the data is analyzed. For instrument validation and reliability test, the measurement model was tested using Partial Least Squares structural equation modeling (PLS-SEM) technique, which was used specifically for this purpose. The construct of indicators was analyzed for construct validity based on indicator loading values and item validity analysis to assess the degree of appropriateness of each item representing the competency construct it was designed to measure. The internal consistency of the measurement scales was determined by Cronbach's alpha reliability coefficient, and was assessed to check reliability. It was found that all the questions of the questionnaire met the requirements for validity and their loading values were in the acceptable range. In addition, the Cronbach's Alpha coefficients for each of the competency dimensions were between 0.816 and 0.999, which is above the 0.70 cut-off. These results have shown that the instrument has validity and reliability of internal consistency that is quite good, it can be used in further analysis.

3.5. Data Analysis Techniques

Data analysis was done in two steps. The measurement model was evaluated using PLS-SEM, which was used to test the validity and reliability of the measurement. In this phase the accuracy and consistency of measurement of the competency dimensions targeted were guaranteed. Secondly, descriptive statistical analysis was used to assess the effectiveness of the training. The competency scores were computed as the average scores that respondents give with the five-point likert scale. The success of training was measured by the average competency scores obtained before and after training in Internal Compliance Distance Learning Program. Competency improvement was obtained by subtracting the post-training competency scores from the pre-training competency scores for each competency domain. Positive score differences were taken as indicators of the improvement of competency and behavioral transfer of learning after the training. The analysis was carried out at two levels. Overall competency improvement was first analyzed to determine the overall effectiveness of the program. Second, competency changes were examined by each of the six internal compliance domains to find those showing the greatest and least advances. Results were then displayed in tables and graphic displays to aid in interpretability and comparison of competency growth by domain.

IV. Result and Discussion

4.1. Measurement Model Evaluation

a. Validity Testing

Items in each questionnaire were tested for validity to assure that they were assessing the construct of competency. The results showed that all materials used on competency domains of Public Complaint Services (PENGADUAN), Internal Control over Financial Reporting (PIPK), Follow-up of Functional Supervisory Audit Findings (APF), and Performance Management (KINERJA) fulfilled the validity criteria. In particular, the mean of the calculated correlation coefficient (r -count) for all items before and after training always had significant correlation coefficient values at 5% level on the corresponding r -table values. The results above suggest that the questions in the questionnaire had acceptable construct validity and that it was able to measure the skills of each internal compliance function. Measurement for the competency domain of Data Analysis, Information Presentation, and Reporting was done via a single item indicator. Therefore there was no possibility to do construct validity and internal consistency reliability testing because testing requires

several indicators of the same construct. However, it was still kept as it closely matches the training goal and is a direct representation of the competency being measured.

Table 1. Validity Test Results – Public Complaint Services

Item	r-count (Before)	r-count (After)	r-table (5%)	Result
COMPLAINT1	1.000	0.904 (N=9)	0.666	Valid
COMPLAINT2	1.000	0.950 (N=9)	0.666	

Table 2. Validity Test Results – Internal Control over Financial Reporting (PIPK)

Item	r-count (Before)	r-count (After)	r-table (5%)	Result
PIPK1	0.999	0.995 (N=10)	0.631	Valid
PIPK2	0.999	0.998 (N=10)	0.631	
PIPK3	0.992	0.998 (N=10)	0.631	
PIPK4	0.999	0.995 (N=10)	0.631	
PIPK5	0.999	0.998 (N=10)	0.631	

Table 3. Validity Test Results – Follow-up of Functional Supervisory Audit Findings (APF)

Item	r-count (Before)	r-count (After)	r-table (5%)	Result
APF1	0.992	0.996 (N=8)	0.706	Valid
APF2	0.991	0.996 (N=8)	0.706	

Table 4. Validity Test Results – Performance Management

Item	r-count (Before)	r-count (After)	r-table (5%)	Result
PERFORMANCE1	0.952	0.958 (N=16)	0.497	Valid
PERFORMANCE2	0.943	1.000 (N=16)	0.497	
PERFORMANCE3	0.963	1.000 (N=16)	0.497	
PERFORMANCE4	1.000	1.000 (N=16)	0.497	
PERFORMANCE5	0.979	1.000 (N=16)	0.497	
PERFORMANCE6	0.965	0.974 (N=16)	0.497	
PERFORMANCE7	0.970	0.986 (N=16)	0.497	

In general, the overall correlation coefficient of the items showed that they had values above the minimum critical values, suggesting the instrument was able to measure the competency constructs it intended to measure. The correlation values were consistently high, indicating a good matching between individual indicators and competency domains, which can be used for the competence assessment process following the use of the instrument.

b. Reliability Testing

The internal consistency of each measurement scales was tested by Cronbach's alpha all of the questions were run on a reliability test. Based on the commonly accepted guideline, Cronbach alpha value of 0.70 and greater suggest acceptable reliability, 0.80 and higher suggest good reliability, and 0.90 is considered excellent reliability (Hair et al., 2017).

Table 5. Reliability Test Results

Variable	Cronbach's Alpha (Before)	Cronbach's Alpha (After)	Interpretation
Public Complaint Services	1.000	0.816	Reliable
Internal Control Monitoring	0.982	0.962	
Internal Control over Financial Reporting (PIPK)	0.999	0.998	

Follow-up of Functional Supervisory Audit Findings (APF)	0.982	0.992	
Performance Management	0.996	0.997	

The reliability results showed that the measures for all competency dimensions were higher than the recommended cut-off score of 0.70. The internal consistency of the post training Cronbach's alphas ranged from 0.816 to 0.998 indicating strong to excellent reliability. Thus, it can be inferred that the instrument used is sufficiently reliable when assessing the competency change of the learner after taking part in the Internal Compliance Distance Learning Program.

4.2. Competency Improvement Following Training

The effectiveness of the Internal Compliance Distance Learning Program was measured through competency levels before and after training for six competency areas. The outcomes demonstrate positive change in all areas measured, allowing competencies learnt during training to be applied in the participants' work activities.

Table 6. Comparison of Competency Scores Before and After Training

Competency Domain	Before	After
Public Complaint Services	8.22	9.44
Data Analysis, Information Presentation, and Reporting	7.97	9.44
Internal Control Monitoring	7.71	9.44
Internal Control over Financial Reporting (PIPK)	7.52	9.43
Follow-up of Functional Supervisory Audit Findings (APF)	7.43	9.37
Performance Management	7.54	9.24

In all domains, competency scores for pre-training ranged from 7.43 – 8.22, improving to 9.24 – 9.44 for the post-training scores. The greatest change was seen in APF competency domain and the smallest change was in Public Complaint Services. However, growth was observed at all areas indicating competency development in the training program at the behavioral level. The results are consistent with the Kirkpatrick Level 3 evaluation model which focuses on the use of new skills in the workplace to demonstrate learning. This finding is also in accordance with the studies made by Nurhayati, Rachmawati (2021) and Suraj & N (2023), which found that e-learning is an effective learning approach to achieve competency which is directly related to participants' job duties. In addition, the results expand on the literature by showing competency development also occurs via multi-rater review processes using supervisors and colleagues' evaluations.

The first hypothesis suggested that the Internal Compliance Distance Learning Program significantly enhances the competencies of the civil servants regarding the internal compliance. The first hypothesis proposed that there is a significant enhancement of internal compliance competence for civil servants when they participated in the Internal Compliance Distance Learning Program. H1: The Distance Learning Program on Internal Compliance will have a positive impact on enhancing the competencies of civil servants in internal compliance. H1: The Distance Learning Program on Internal Compliance has an impact toward improving the competencies of civil servants in internal compliance significantly.

As seen in the data of Table 6, the average competency scores for the pre-test are in the range of 7.43–8.22 and for the post-test, the scores are in the range of 9.24–9.44, showing a consistent increase across all competency areas. The above findings suggest that competency level has been improved after the training program. Hence the hypothesis, H1 is accepted. In addition, the effectiveness of the training is measured at the Kirkpatrick three level of training (Behavior), in which training effectiveness is measured by applying the learned competency in workplace. Competency improvements were measured by a 360-degree assessment

process with supervisors, colleagues, and training participants, which provided evidence that competencies gained were then applied to work activities.

The Distance Learning Program on Internal Compliance has a substantial positive impact on the behavioral application of internal compliance competencies in the workplace. The results showed competency gains in all Internal Compliance Functions measured, with evidence of competency gains also provided by Multi-Rater assessments, indicating that the participants had transferred the learning outcomes to the workplace. Thus the acceptance of the H2 is H2.

a. Public Complaint Services

The Public Complaint Services had the lowest competency improvement of the six competency domains evaluated, rising from 8.22 pre-teaching to 9.44 post-teaching (an average growth of 1.22 points). While the degree of improvement was not as strong as in other areas, the results nonetheless suggest that competency has improved after the completion of the Internal Compliance Distance Learning Program.

Table 7. Competency Improvement in Public Complaint Services

No.	Statement	Before	After	Change
1	Able to evaluate public complaint outcomes	8.22	9.44	1.22
2	Able to use the Public Complaint Application (SIPUMA)	8.22	9.44	1.22
Average		8.22	9.44	1.22

The relatively small gain found for the competency area may be due to the relatively high baseline competency of the participants before training. The highest pre-training score was obtained within the domain of Public Complaint Services, indicating that participants had extensive experience and familiarity with complaint-handling procedures in this domain prior to participating in the training. As a result, there was a ceiling effect in respects of opportunities for further improvement compared with other areas of technical competency. However, post training competency was at a high level of implementation after attending training (post training score 9.44). This result aligns with the previous study, which found that the online learning environment can be used for the purpose of strengthening the acquired skills and promoting lifelong learning (Muhani, 2023). It also corresponds to the findings of Nurhayati and Rachmawati (2021) which revealed that successful implementation of e-learning was good for the development of competency in public-sector employees. The Kirkpatrick level 3 results show that after this training, participants could apply and reinforce their competencies in complaint handling to the work activities they conduct. The competency of Public Complaint Services has increased in their observed activities, which supports H2a as participation in the Internal Compliance Distance Learning Program led to better competency in the management of public complaints. Thus, H2a is okay.

b. Data Analysis, Information Presentation, and Reporting

The competency domain of Data Analysis, Information Presentation, and Reporting demonstrated a positive improvement of 1.47 points, increasing from 7.97 before training to 9.44 after training. This result indicates that participants enhanced their ability to process compliance-related information and communicate findings effectively following training participation.

Table 8. Competency Improvement in Data Analysis, Information Presentation, and Reporting

No.	Statement	Before	After	Change
1	Able to perform data analysis, information presentation, and reporting in the field of internal compliance enforcement	7.97	9.44	1.47
Average		7.97	9.44	1.47

As was assessed by one item only, the training appeared to be useful in enhancing analytical and reporting skills of the participants, as indicated in the observed improvements. Such skills can be significant in internal compliance settings as part of the process of evidence-based monitoring, decision making, and accountability. The results comply with existing research that shows that digital learning environments can facilitate the development of competencies that are analytical and knowledge-based, provided learning materials are organized and directly relevant to work demands (Darwin, 2025). In addition, the findings of this competency domain indicate that distance learning is an effective method to teach this competency and that cognitive and analytical skills are more amenable to distance learning than are generally believed to be. The improvement in competency scores indicates that participants gained competency for interpreting compliance-related information and conveying their results. Thus, H2b will be accepted.

c. Internal Control Monitoring

The Internal Control Monitoring domain recorded a substantial increase of 1.74 points, with the average competency score rising from 7.71 before training to 9.44 after training. Improvements were observed across all competency indicators, demonstrating broad-based competency development in monitoring and control activities.

Table 9. Competency Improvement in Internal Control Monitoring

No.	Statement	Before	After	Change
1	Able to conduct Entity/Work Unit-Level Internal Control Evaluation (EPITE)	7.81	9.44	1.63
2	Able to monitor compliance with the Code of Ethics	7.74	9.44	1.70
3	Able to prepare Activity-Level Internal Control Monitoring Plans (PPITA)	7.69	9.44	1.75
4	Able to conduct Key Control Monitoring (PPU)	7.68	9.44	1.76
5	Able to conduct Information and Communication Technology-Based Control Monitoring (PPTIK)	7.65	9.44	1.79
6	Able to formulate conclusions regarding internal control effectiveness	7.66	9.44	1.78
Average		7.71	9.44	1.74

The greatest gain in score was for Information and Communication Technology-Based Control Monitoring (PPTIK) which rose 1.79 points. This finding can be attributed to the increased role of technology in the governance within the public sector and the digital governance monitoring systems in today's organizations. These competencies could have been seen as anything but positive and relevant to the job roles of the participants. The results obtained are in line with previous studies that focus on the competency of employees as one of the factors that can improve the effectiveness of internal control (Angelia & Wibowo, 2025; Rahmasari & Setiawan, 2022). Past studies have mainly concerned the relationship between competency and control effectiveness, but the current study extends the literature by showing that distance-based training can be used as a means of building the competencies. Furthermore, the general enhancement of all the indicators in the monitoring category leads to the assessment of transfer of learning from training to practice. The finding is consistent with transfer-of-training theory which states that transfer is considered successful when the newly learned skills are transferred to the workplace (Rucks et al., 2024). Training positively impacted on competencies associated with internal control monitoring through the significant gains on training in all the monitoring competencies, providing support for H2c. In this context, therefore, H2c is accepted.

d. Internal Control over Financial Reporting (PIPK)

The Internal Control over Financial Reporting (PIPK) domain exhibited one of the largest improvements among all competency areas, with the average score increasing by 1.91 points from 7.52 before training to 9.43 after training.

Table 10. Competency Improvement in Internal Control over Financial Reporting (PIPK)

No.	Statement	Before	After	Change
1	Able to conduct Internal Control over Financial Reporting assessments (PIPK)	7.61	9.49	1.88
2	Able to conduct Entity-Level Internal Control Testing	7.56	9.43	1.87
3	Able to conduct Process/Transaction-Level Internal Control Testing	7.51	9.42	1.91
4	Able to assess control effectiveness and control weaknesses	7.47	9.41	1.94
5	Able to compile overall conclusions regarding internal control over financial reporting	7.44	9.40	1.96
Average		7.52	9.43	1.91

The greatest improvement was in the ability to reach any overall conclusions about internal control over financial reporting (+1.96), followed by the ability to assess control effectiveness and control weaknesses (+1.94). The results indicated that the program tapped into higher order analytical skills more than into lower order skills. It may be attributed to the fact that PIPK activities are structured, have standardised methods and frameworks, and have systematic evaluation processes where online learning environment is an effective delivery system. The training seems to have improved the understanding of control assessment processes and the synthesis of audit and control evidence and drawing meaningful conclusions. The results are in line with the previous study that noted that employee competency is very important in creating effective internal control systems and reporting financial accountability (Mediaty et al., 2025; Wibowo & Murwaningsari, 2024). The findings further offer empirical support that distance learning can enhance technical skills of functions related to financial governance and compliance. The improvements in all PIPK indicators were noticeable, hence supporting H2d which states that the training enhanced participants competencies on internal control over financial reporting. Thus, H2d is accepted.

e. Follow-up of Functional Supervisory Audit Findings (APF)

The Follow-up of Functional Supervisory Audit Findings (APF) domain demonstrated the highest competency improvement among all evaluated domains. The average score increased by 1.94 points, rising from 7.43 before training to 9.37 after training.

Table 11. Competency Improvement in Follow-up of Functional Supervisory Audit Findings (APF)

No.	Statement	Before	After	Change
1	Able to coordinate and manage follow-up actions related to supervisory audit findings	7.43	9.36	1.93
2	Able to use audit finding follow-up management applications (Team Central/Teammate)	7.43	9.37	1.94
Average		7.43	9.37	1.94

The significant rise in this category indicates that participants' newly gained skills were readily transferred into the work setting. An obvious explanation is that the activities related to APF are very procedural, operational in nature, and closely linked with participants' daily activities. As a result, the gained skills could be transferred right after the training period. In addition, the significant gains related to Team Central/Teammate use further suggest that digital training delivery has the potential to facilitate the learning of competencies related to the use of technology in operations. This result aligns with the previous studies that indicated that online learning environments are more effective when learning content is based on the procedures of learning and system-based tasks (Nurhayati & Rachmawati, 2021). The APF domain shows evidence of behavioural transfer at a Kirkpatrick Level 3 level, with some of the highest levels seen across all of the competency areas measured; significant levels of transfer of competencies directly relevant to the participants' operational roles. The APF competency domain had the greatest increase across all of the

assessed domains and was used as a good indicator for meeting the H2e competency domain. Hence H2e is accepted as a correct answer.

f. Performance Management

The Performance Management domain demonstrated positive growth, with the average competency score increasing by 1.70 points from 7.54 before training to 9.24 after training.

Table 12. Competency Improvement in Performance Management

No.	Statement	Before	After	Change
1	Able to prepare performance agreements	7.46	9.33	1.87
2	Able to prepare Employee Performance Targets (SKP)	7.50	9.30	1.80
3	Able to prepare Main Work Outcomes (HKU)	7.52	9.26	1.74
4	Able to prepare Additional Work Outcomes (HKT)	7.54	9.23	1.69
5	Able to conduct performance evaluations	7.56	9.21	1.65
6	Able to utilize the e-performance information system	7.58	9.19	1.61
7	Able to simulate performance management processes within DJBC	7.60	9.17	1.57
Average		7.54	9.24	1.70

The highest gain was noted for the ability to make performance contracts (+1.87), and the lowest gain was for the ability to simulate the performance management processes (+1.57). In general, the findings have shown that the training improved the participants' knowledge regarding the processes of performance planning, setting target, performance evaluation and administration of performance. The significance of these findings takes on a new meaning in the context of the management of public-sector performance: employee competencies are key in achieving the organization's goals and objectives. In recent years, public sector performance systems have increasingly been competency-based, focusing on both the behavioural and developmental aspects as well as the traditional output-oriented aspects, (Hill and Plimmer, 2024). The observed improvements in this study indicate that distance learning can make a significant contribution to enhancing those competencies.

Overall, the findings from all six competency domains indicated that the Internal Compliance Distance Learning Program was effective in bringing about levels of competency changes at the behavioural level among civil servants. The results support and complement earlier research on the effectiveness of e-learning in developing professional competencies and expand the body of literature by indicating the applicability of online learning in special internal compliance functions in the public sector in Indonesia. In addition, a 360-degree evaluation approach provides high confidence that the observed improvements are based on real changes in workplace behaviours – and not just participants' perceptions – further supporting the effectiveness of the training program at Kirkpatrick Level 3. The positive improvement in all the performance management indicators supports H2f that is the training helped the participants to develop their competence in relation with the activities of performance management. So, the answer to the question is yes, H2f is accepted.

V. Conclusion

The evaluation used in this study was Kirkpatrick level 3 (Behavior) evaluation approach. The findings showed that attending the programme was linked to improvement in skills and competency in the six key areas of internal compliance which were assessed, namely Public Complaint Services, Data Analysis, Information Presentation and Reporting, Internal Control Monitoring, Internal Control over Financial Reporting (PIPK) and Follow-up of Functional Supervisory Audit Findings (APF) and Performance Management. The competency scores for pre-training ranged from 7.43 to 8.22 and for post-training ranged from 9.24 to 9.44 with the largest improvement seen in APF (1.94 points) and PIPK (1.91 points). The results

indicate that training was effective at the behavioural level because the skills acquired were transferred to the workplace.

Theoretically, this study builds on the public-sector literature of public-sector performance management, internal compliance and training evaluation by providing empirical evidence that improvements in behavior resulting in competency outcomes can be measured for civil servants who undertake distance learning. Existing literature has developed a good foundation for the need for employee competency and its importance to internal control effectiveness, accountability and organizational performance, but few studies have investigated the possibility of building these competencies in a distance-based training intervention. This study builds upon the Kirkpatrick model, which is traditionally limited to only four evaluation areas related to learner behavior taken from the workplace, by applying a 360-degree evaluation process that incorporates the voices of supervisors, colleagues, as well as training participants. The study also offers evidence that the competency gains that develop during online training can be extrapolated to behavior within the workplace, as part of compliance functions within the public sector.

In terms of practical application, the results justify the continuation and expansion of the use of distance learning in the competency development process at DJBC. The significant gains in competency in all the areas examined in terms of compliance, suggest the need to plan the use of distance learning more systematically in civil servant development programmes. Special focus should be placed on improving the technical competency areas in which the greatest competency gains were found (internal control monitoring, financial reporting controls, and audit follow-up processes). Furthermore, organizations can improve the efficacy of training by integrating remediation activities into training including mentoring, workplace coaching, and periodic competency assessments to sustain the transfer of training and development of competency over time.

This study has its shortcomings, but it has made some contributions. Firstly, it was a relatively small sample of 29 training alumni and the results of the study cannot be generalized. Second, the research used a behavioral outcomes post-training evaluation design and failed to investigate the longer term impact on competency retention and/or on the organization. Larger and more diverse samples in other public-sector institutions (across multiple PSIs) should therefore be considered for future research to enhance external validity. Longitudinal designs can also be used to evaluate if competency gains persist and if they are associated with overall organization outcomes. In addition, qualitative methods (e.g., interviews, focus groups or case studies) might offer more in-depth information about the factors that affect competency transfer, learning application and post distance learning intervention behavioural change. Lastly, future analyses can be conducted for training effectiveness, competency development, internal compliance performance and organizational accountability relationship through the use of more sophisticated analysis methods like structural equation modeling (SEM).

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