E-ISSN: 2997-9404
American Journal of Corporate Management
https://semantjournals.org/index.php/ AJCM

| Research Article

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The Effect of Office Security Measures on Job Performance of Administrative Staff of the University of Bamenda

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Abstract: This study examined the effect of office security measures on the job performance of administrative staff at the University of Bamenda, addressing a gap in empirical evidence regarding how surveillance cameras, physical security presence, information security protocols, and integrated safety sensors influence employee productivity, efficiency, accuracy, timeliness, and quality of work. A cross-sectional descriptive survey design was adopted targeting 78 secretaries across the university's administrative structures. Primary data were collected through a structured four-point Likert scale questionnaire and analyzed using SPSS, employing descriptive statistics and multiple regression analysis (Ordinary Least Squares). Reliability was confirmed by Cronbach's Alpha (all variables > 0.69), and multi-collinearity was ruled out by Variance Inflation Factor (all values < 1.34). The regression model was statistically significant ($F = 6.840$, $p = 0.000$) and explained 31.0% of the variation in job performance ($R^2 = 0.310$; Adjusted $R^2 = 0.264$). The findings revealed that physical security presence had the strongest positive and significant effect on job performance ($B = 0.346$, $p = 0.004$), followed by information security protocols ($B = 0.170$, $p = 0.004$) and surveillance cameras ($B = 0.077$, $p = 0.001$), while integrated safety sensors showed a negative and statistically insignificant effect ($B = -0.193$, $p = 0.083$). The study concluded that human-based security systems and structured information protection significantly enhance administrative staff performance, whereas poorly implemented sensor technologies fail to contribute positively. Recommendations include strengthening physical security deployment, enforcing information security protocols with regular training, ensuring full coverage and maintenance of surveillance cameras, and upgrading integrated safety sensors with centralized alert systems and staff sensitization. Future research should extend to other Cameroonian universities, adopt mixed methods, and explore emerging technologies such as AI-based surveillance and biometric access control.

Keywords: Office security measures, job performance, surveillance cameras, physical security presence, information security protocols, integrated safety sensors, administrative staff, University of Bamenda

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1. Introduction

Background to the Study

In an increasingly globalized and technologically driven work environment, organizational security has become a critical concern for institutions seeking to protect their assets, employees, and information systems. Across the world, office security measures including surveillance systems, physical security presence, information security protocols, and integrated safety sensor are widely implemented to ensure safety and enhance operational efficiency. Studies have shown that organizations with effective security systems experience improved employee productivity, reduced workplace anxiety, and enhanced organizational performance.This indicates that security is no longer limited to crime prevention but is now a strategic tool for improving job performance[1].

Globally, workplace security challenges have evolved due to increasing threats such as cybercrime, workplace violence, and data breaches. According to the International Labour Organization (ILO), workplace-related risks affect millions of workers annually, leading to productivity losses and psychological stress. In response, organizations in developed regions such as North America and Europe have heavily invested in advanced security technologies, including biometric access control systems, closed-circuit television (CCTV), and cybersecurity frameworks. For example, in the United States, over 70% of large organizations utilize integrated security systems to monitor employee activities and safeguard sensitive information. These measures have been linked to improved employee accountability and efficiency, as workers tend to perform better in structured and secure environments.In Europe, the implementation of strict data protection laws such as the General Data Protection Regulation (GDPR) has further emphasized the importance of information security in organizational settings. Research indicates that compliance with such regulations has not only enhanced data protection but also improved employee trust and job performance due to increased transparency and accountability. Similarly, in Asia, countries like Japan and South Korea have adopted advanced workplace security technologies that integrate artificial intelligence to monitor and manage workplace safety, leading to increased productivity levels. These global trends highlight the growing recognition of security measures as a key determinant of employee performance.

From an African perspective, the importance of office security has gained significant attention due to rising concerns about workplace safety, infrastructural challenges, and technological vulnerabilities. According to the African Development Bank, many African organizations face security challenges that negatively impact employee performance, including theft, unauthorized access, and weak information systems. In countries such as South Africa and Nigeria, the adoption of surveillance systems and private security personnel has become common in both public and private institutions. Empirical studies in these contexts have shown that improved security measures lead to increased employee morale, reduced absenteeism, and enhanced productivity[2]. However, despite these advancements, many African institutions still struggle with inadequate security infrastructure and limited enforcement of security policies[3]. This gap often results in increased workplace insecurity, which can negatively affect employees' concentration, efficiency, and overall job performance. For instance, weak information security protocols expose organizations to data breaches, which can disrupt administrative processes and reduce staff effectiveness[4]. Therefore, strengthening office security measures remains a critical priority for organizations across the continent.

In the context of Cameroon, office security has become an increasingly important issue, particularly within public institutions such as universities. Cameroon has experienced various security challenges, including theft, vandalism, and cyber-related threats, which have affected organizational operations[5]. In response, many institutions have introduced measures such as surveillance cameras, security guards, and basic information security systems. However, the

effectiveness of these measures in enhancing job performance remains a subject of debate. Universities, as centers of knowledge and administration, require a high level of security to ensure the smooth functioning of academic and administrative activities. Administrative staff, in particular, play a crucial role in managing institutional operations, including student records, financial transactions, and communication systems. Their performance is therefore essential to the overall effectiveness of the institution. Research suggests that a secure work environment positively influences employee motivation, job satisfaction, and performance., Conversely, insecurity in the workplace can lead to stress, fear, and reduced productivity.

In many Cameroonian universities, including public institutions, challenges such as limited funding, inadequate infrastructure, and weak enforcement of security policies hinder the effective implementation of office security measures. For example, surveillance systems may be poorly maintained, security personnel may be insufficient, and information security protocols may be outdated or inconsistently applied. These challenges can compromise the safety of administrative staff and negatively impact their job performance. Furthermore, the rapid digitization of administrative processes in universities has introduced new security concerns related to data protection and cyber threats. Administrative staff often handle sensitive information, including student records and financial data, making them vulnerable to cyber-attacks. Without adequate information security measures, such risks can lead to data loss, system disruptions, and decreased employee efficiency[6]. This highlights the need for comprehensive security strategies that integrate both physical and digital security measures. Despite the recognized importance of office security, there is limited empirical research examining its impact on job performance within the context of Cameroonian universities. Most existing studies have focused on general workplace safety or organizational performance, with little attention given to the specific role of security measures in influencing administrative staff performance. This creates a gap in knowledge that this study seeks to address.

This study therefore focuses on four key dimensions of office security measures: surveillance cameras, physical security presence, and information security protocols integrated safety sensor. Surveillance cameras are essential for monitoring activities and deterring criminal behavior, while physical security presence, such as security guards, provides immediate response to threats and enhances employees' sense of safety. Information security protocols, on the other hand, protect digital assets and ensure the confidentiality, integrity, and availability of information. These measures are expected to influence job performance by creating a secure and supportive work environment.

Job performance, in this study, is conceptualized as the efficiency, effectiveness, and productivity of administrative staff in carrying out their duties. It includes aspects such as task completion, accuracy, timeliness, and overall contribution to organizational goals. The relationship between office security measures (independent variable) and job performance (dependent variable) is therefore central to this study. It is hypothesized that improved security measures will lead to enhanced job performance by reducing workplace risks and increasing employee confidence. Within the Cameroonian higher education system, public universities play a critical role in national development through teaching, research, and administrative coordination. However, these institutions face persistent challenges related to office security, which can significantly influence staff effectiveness. Administrative staff, who form the backbone of university operations, are particularly affected because they handle sensitive information, coordinate institutional processes, and ensure the smooth functioning of academic services. Their performance is therefore closely tied to the level of security within their work environment.

The University of Bamenda, established in 2010, is one of the prominent state universities in Cameroon, located in the North-West Region. Like many growing public institutions in

developing contexts, it has experienced rapid expansion in student population, administrative workload, and infrastructural demands. This growth has increased the need for effective office security systems to safeguard personnel, infrastructure, and information resources. However, anecdotal evidence and preliminary observations suggest that security measures within the university's administrative units may not be fully adequate or consistently implemented. In terms of surveillance systems, while some administrative buildings at the University of Bamenda have installed closed-circuit television (CCTV) cameras, coverage is often limited, and maintenance challenges reduce their effectiveness. Research has shown that surveillance systems can significantly deter misconduct and improve employee accountability when properly implemented. However, where such systems are inadequate or non-functional, employees may feel less secure, which can negatively affect their concentration and productivity.

Regarding physical security presence, the university employs security personnel to monitor entry points and patrol the campus. While their presence contributes to general safety, issues such as insufficient staffing, lack of advanced training, and limited equipment can reduce their effectiveness. According to Button, the mere presence of security personnel is not enough; their efficiency and responsiveness are key factors in enhancing workplace security and employee confidence. Where security personnel are overstretched or under-resourced, administrative staff may still experience insecurity, which can lead to stress and reduced job performance.

In addition, information security protocols remain a growing concern within the University of Bamenda. As administrative processes become increasingly digitized covering student records, financial transactions, and internal communications the risk of data breaches and cyber threats has also increased. Studies indicate that weak information security systems can lead to data loss, unauthorized access, and operational disruptions, all of which negatively impact employee efficiency. In many developing institutions, including universities, limited investment in cybersecurity infrastructure and training further exacerbates these risks.

The combined effect of these security challenges has important implications for the job performance of administrative staff. Employees who perceive their work environment as insecure are more likely to experience anxiety, reduced motivation, and lower productivity levels. Conversely, a secure work environment fosters confidence, enhances focus, and promotes efficiency. This suggests that office security measures are not merely protective mechanisms but are also critical determinants of employee performance. Despite the importance of this relationship, there is a noticeable lack of empirical studies specifically examining how office security measures influence the job performance of administrative staff within Cameroonian universities, and particularly within the University of Bamenda. Most existing studies have focused on general organizational performance or security challenges without linking them directly to employee productivity in a university setting. This gap limits the ability of university administrators to make evidence-based decisions regarding security investments and policies. It is against this backdrop that this study seeks to investigate the effects of office security measures namely surveillance cameras, physical security presence, information security protocols, integrated safety sensor on the job performance of administrative staff. By focusing on the specific context of the University of Bamenda, the study aims to provide a deeper understanding of how security interventions can be tailored to improve employee performance and overall institutional effectiveness. In summary, while global, regional, and national evidence highlights the importance of office security in enhancing job performance, the specific realities and challenges within individual institutions must be examined to develop practical solutions. Therefore, this study narrows down to assess how these dynamics play out within the administrative structures of the University of Bamenda.

Statement of the Problem

At the University of Bamenda, office security challenges have significantly increased in response to increasing administrative demands and security concerns. Initially, security within administrative offices was largely limited to basic measures such as manual monitoring by staff and occasional patrols by security personnel. Over time, the university introduced more structured measures, including the deployment of security guards at strategic entry points, restricted access to administrative buildings, and the installation of surveillance cameras in selected areas. In addition, with the digitization of administrative processes, some basic information security protocols were introduced to protect institutional data and control access to sensitive records. Despite these improvements, the current state of office security at the University of Bamenda remains partially developed and inconsistent in implementation. Surveillance systems are not fully installed across all administrative offices, leaving some areas unmonitored. The number and effectiveness of security personnel may not adequately match the size and operational demands of the institution. Furthermore, information security protocols are not always strictly enforced, and there is limited integration of modern technologies such as integrated safety sensors to enhance real-time security monitoring.

As a result, administrative staff still face security challenges such as unauthorized access to offices, occasional loss or misplacement of documents, and weak protection of digital information. These weaknesses raise concerns about whether existing security measures are sufficient to create a safe and efficient working environment. This situation is important because administrative staff play a central role in managing records, finances, and coordination of university operations. Any compromise in office security can negatively affect their concentration, efficiency, and overall job performance. However, there is limited empirical evidence within the University of Bamenda context examining how specific office security measures such as surveillance cameras, physical security presence, information security protocols, and integrated safety sensors actually influence staff performance. It is therefore this gap between existing security measures and their unclear effect on job performance that motivates this study. The study seeks to examine whether current office security systems at the University of Bamenda are effective enough in supporting administrative staff performance and to provide evidence-based recommendations for improvement.

The main research question of the study is what is the effect of office security measures on job performance of administrative staff at the University of Bamenda? It is broken down into specific questions of the antecedents of office security measures including surveillance cameras, physical security, information security protocols and integrated safety sensors.

The search had as main objective to examine the effect of office security measures on the job performance of administrative staff at the University of Bamenda. Four specific objectives were set from the four specific questions emanating from the four antecedents of office security measures.

From the specific research objectives, four null hypotheses were set to examine the work

We found the study significant to the University of Bamenda to understand how office security measures such as surveillance cameras, physical security presence, information security protocols and integrated safety sensor influence the job performance of administrative staff. The findings will guide management in improving workplace security systems for better efficiency and productivity and will provide useful information for policy makers and government authorities on the need to strengthen security systems in public institutions. It will enhance researchers' understanding of office security and contribute fresh knowledge to the body of research.

The Concept of Office Security Measures

Office security measures refer to the combination of policies, procedures, technologies, and human interventions designed to protect organizational assets, employees, and information from internal and external threats. According to Whitman and Mattord, office security measures consist of administrative, technical, and physical controls that ensure the confidentiality, integrity, and availability of organizational resources. Similarly, Peltier defines office security as a coordinated system involving people, processes, and technology aimed at minimizing risks and safeguarding organizational operations. Garfinkel further conceptualizes office security measures as an integrated framework combining surveillance systems, access control mechanisms, and information security protocols to enhance organizational resilience. In recent years, office security has evolved significantly due to rapid technological advancement and increasing security threats. Organizations are no longer relying solely on traditional physical security methods but are increasingly adopting integrated systems that combine digital and physical protection mechanisms[7].

The growing reliance on digital systems, especially in administrative environments such as universities, has made information security a critical component of overall organizational security[8]. As a result, office security measures have become more comprehensive, covering surveillance technologies, cybersecurity frameworks, and automated detection systems. One key component of office security measures is surveillance cameras, which are widely used to monitor workplace activities and deter unauthorized behavior. Ball explains that surveillance technologies enhance accountability and enable organizations to monitor both security risks and employee activities. Ajunwa[9] also argue that workplace surveillance systems are increasingly used to enforce discipline and improve productivity. More recent studies indicate that digital surveillance tools provide real-time monitoring capabilities, allowing organizations to detect inefficiencies and respond to security incidents promptly[10]. Furthermore, surveillance systems contribute to crime prevention and help organizations gather evidence in case of incidents[11]. However, despite these benefits, excessive surveillance may lead to employee discomfort, reduced trust, and increased stress if not properly managed. Another important dimension is physical security presence, which involves the deployment of security personnel such as guards to monitor and control access to organizational premises. Brooks[12] emphasizes that physical security remains a foundational element of workplace protection, particularly in preventing unauthorized access and ensuring immediate response to threats.

Similarly, Gill[13] highlight that security personnel play a critical role in maintaining order and enforcing institutional rules. Recent studies further show that the presence of security personnel contributes to employees' sense of safety and psychological comfort, which can positively influence their productivity[14]. In environments such as universities, where there is constant movement of people, physical security presence is essential for maintaining control and preventing disruptions. Information security protocols represent another critical aspect of office security measures, particularly in the digital age. Von Solms and Van Niekerk[15] define information security as the protection of information systems against unauthorized access, disclosure, or destruction. Siponen[16] further emphasize that effective information security policies are essential for ensuring data integrity and organizational continuity. With the increasing digitization of administrative processes, organizations are exposed to cyber threats such as hacking, data breaches, and unauthorized access. Recent research indicates that organizations with strong information security frameworks experience improved operational efficiency and reduced risk of data loss[17]. In academic institutions, where sensitive data such as student records and financial information are handled, information security protocols are particularly important. The fourth dimension, integrated safety sensors, represents advanced technological solutions used to detect and respond to security threats automatically. These

systems include motion detectors, fire alarms, and intrusion detection systems that provide real-time monitoring and alerts[18]. According to Chen integrated safety systems improve organizational responsiveness by enabling quick detection and response to security threats. Similarly, Kumar and Singh[19] argue that automated safety technologies reduce human error and enhance the effectiveness of security systems. The integration of such technologies reflects the growing trend toward smart security systems in modern organizations.

In conclusion, office security measures are multidimensional and encompass physical, technological, and administrative components. They play a crucial role in ensuring organizational safety, protecting resources, and creating a conducive work environment for employees. Their effectiveness depends not only on their availability but also on proper implementation and management.

Concept of surveillance camera (CCTV Systems)

Surveillance cameras, commonly referred to as closed-circuit television (CCTV) systems, are electronic monitoring technologies designed to capture, transmit, and store visual information within a controlled network for the purpose of enhancing security, safety, and organizational control. These systems enable institutions to observe activities in real time and review recorded footage for investigative and management purposes[20]. According to Welsh CCTV systems are widely recognized as effective tools for crime prevention because they increase the perceived risk of detection, thereby discouraging deviant behavior. Similarly, Gill and Spriggs argue that surveillance systems contribute to improved organizational accountability by ensuring that workplace activities are continuously monitored and documented, which strengthens compliance with institutional procedures. Ball[21] further emphasizes that workplace surveillance technologies influence employee behavior by promoting discipline and adherence to rules, although excessive monitoring may raise concerns related to privacy and psychological pressure. Recent advancements in surveillance technology have led to the integration of digital features such as real-time monitoring, cloud storage, motion detection, and facial recognition, which significantly enhance the effectiveness of CCTV systems in managing security risks. In organizational environments, particularly in academic institutions, surveillance cameras are used not only for security purposes but also as managerial tools that help regulate employee behavior and improve operational efficiency. Within the University of Bamenda, the installation of CCTV cameras in administrative offices can help protect sensitive documents, regulate staff and visitor movement, and reduce incidents of theft or unauthorized access. The presence of surveillance systems creates a monitored environment that encourages administrative staff to maintain high levels of professionalism, efficiency, and accountability in their work[22]. Moreover, by reducing security threats and workplace disruptions, CCTV systems enable employees to concentrate on their tasks, thereby improving productivity and job performance[23]. However, despite these benefits, surveillance systems must be implemented carefully to avoid negative effects such as employee stress, reduced trust, and perceptions of excessive control. Overall, CCTV systems remain a critical component of office security measures, providing both preventive and corrective functions that support organizational safety and enhance employee performance.

2.1.3 Concept of Physical Security Presence

Physical security presence refers to the deployment of human security personnel and physical protective measures aimed at safeguarding organizational facilities, employees, and assets from threats such as unauthorized access, theft, and violence. This includes security guards, gatekeepers, patrol officers, and access control personnel who monitor entry points and respond to incidents in real time. According to Button physical security personnel serve as a visible deterrent to criminal activities and play a crucial role in maintaining order and safety within organizational environments. Similarly, Brooks defines physical security as a

fundamental aspect of organizational protection that focuses on preventing threats through human intervention, surveillance, and access control systems. Neal and Griffin further argue that employees' perception of physical safety significantly influences their level of engagement, motivation, and job performance, as individuals who feel secure are more likely to focus on their tasks and exhibit higher productivity. The presence of security personnel enhances workplace stability by reducing the likelihood of security incidents and ensuring immediate response in emergency situations. In modern organizations, physical security is often integrated with technological systems such as CCTV cameras and electronic access controls, creating a layered security approach that improves overall effectiveness. Within the University of Bamenda, physical security personnel play a vital role in controlling access to administrative buildings, protecting staff and students, and ensuring that only authorized individuals enter sensitive areas such as registries and financial offices. The visible presence of security personnel provides reassurance to administrative staff, reducing anxiety and allowing them to concentrate on their duties without fear of disruption. Furthermore, physical security presence contributes to improved job performance by minimizing distractions, preventing unauthorized interference, and maintaining a structured work environment. However, the effectiveness of physical security depends on factors such as the training, competence, and coordination of security personnel, as well as their integration with technological systems. Despite these challenges, physical security presence remains an essential component of office security measures, directly influencing employee safety, organizational stability, and job performance.

Concept of Information Security Protocols

Information security protocols refer to the policies, procedures, and technological measures implemented to protect organizational data and information systems from unauthorized access, misuse, disruption, or destruction. These protocols are designed to ensure the confidentiality, integrity, and availability of information, which are critical for maintaining organizational efficiency and trust. According to NIST effective information security involves the implementation of access controls, encryption systems, authentication mechanisms, and regular data backups to safeguard information assets. Kshetri highlights that the increasing prevalence of cyber threats, including ransomware attacks, phishing, and data breaches, has made it essential for organizations to adopt robust cybersecurity frameworks to protect sensitive information. Similarly, Von Solms and Van Niekerk[24] argue that information security is not only a technical issue but also a managerial and behavioral concern, as employees play a critical role in adhering to security policies and preventing vulnerabilities. In academic institutions, administrative staff are responsible for managing sensitive data such as student records, financial information, and institutional documents, making information security protocols particularly important. At the University of Bamenda, the implementation of strong information security protocols ensures that administrative processes are conducted efficiently without disruptions caused by data loss or cyberattacks. Secure information systems enable employees to access data quickly and accurately, reducing errors and improving overall productivity. Conversely, weak information security systems can lead to operational delays, increased workload, and loss of trust, which negatively affect employee performance. Furthermore, the integration of digital technologies in administrative processes has increased the importance of information security as a key determinant of organizational effectiveness and sustainability. Therefore, information security protocols are not only protective mechanisms but also essential enablers of efficient job performance, ensuring that administrative staff can carry out their duties effectively in a secure and reliable environment.

Concept of Integrated Safety Sensors

Integrated safety sensors refer to advanced technological devices embedded within organizational security systems to automatically detect, monitor, and respond to environmental

and security-related threats in real time. These include motion detectors, biometric authentication systems, fire and smoke sensors, intrusion alarms, and other smart devices that operate within interconnected networks to provide comprehensive security coverage[25]. According to Zhang[26], integrated sensor systems are a key component of modern smart security infrastructures, enabling continuous monitoring and rapid detection of anomalies, which improves response time and reduces the likelihood of security breaches. Alcaraz and Zeadally further emphasize that sensor-based systems enhance organizational efficiency by reducing reliance on manual monitoring and minimizing human error through automation and intelligent data processing. Kshetri also notes that organizations adopting integrated sensor technologies are better equipped to manage complex security challenges, particularly in environments with high levels of activity and data flow such as universities. Integrated sensors function as part of a broader security ecosystem, working alongside CCTV systems and physical security personnel to create a multi-layered approach to security management . In the University of Bamenda, integrated safety sensors can play a critical role in protecting administrative offices by controlling access through biometric systems, detecting unauthorized movement through motion sensors, and providing early warning signals in cases of fire or intrusion. These systems not only enhance physical safety but also contribute to operational continuity by preventing disruptions that could affect administrative processes. Moreover, by automating security functions, integrated sensors reduce the workload associated with manual monitoring, allowing administrative staff to focus on their core responsibilities and improve their productivity. Although integrated sensor systems may present challenges such as high installation costs and technical complexity, their ability to provide real-time, accurate, and reliable security monitoring makes them an essential component of modern office security systems. Therefore, integrated safety sensors significantly contribute to creating a secure and efficient work environment, which positively influences job performance among administrative staff.

Job Performance of administrative staff

Job performance refers to the extent to which employees effectively and efficiently carry out their assigned duties in line with organizational objectives. Campbell and Wiernik[27] define job performance as behaviors that contribute to organizational goals, including task performance, contextual performance, and adaptive performance. Similarly, Koopmans[28] describe job performance as the total value of an employee's work-related behaviors, emphasizing productivity, quality, and efficiency. Armstrong[29] further defines job performance, as the achievement of work objectives through the effective application of knowledge, skills, and abilities. In administrative contexts, job performance is particularly critical because administrative staff play a central role in organizational operations. Their responsibilities include record management, communication, scheduling, and coordination of activities. As such, their performance is typically measured using indicators such as productivity, efficiency, accuracy, timeliness, and quality of work output. High job performance contributes to organizational effectiveness, while poor performance can lead to inefficiencies and operational challenges.

The study indicates that job performance is influenced by various factors, including work environment, motivation, organizational support, and workplace security. According to Bakker and Demerouti[30] a supportive work environment enhances employee engagement and productivity. Similarly, Parker[31] argue that workplace conditions significantly influence employee performance and well-being. Recent studies also highlight that secure work environments reduce stress and improve employee concentration, leading to better performance outcomes[32]. However, the relationship between workplace monitoring and job performance is complex. While surveillance systems can enhance accountability and improve productivity, excessive monitoring may lead to stress, reduced job satisfaction, and decreased

performance[33]. Furthermore, recent research suggests that employee perception of fairness and trust plays a significant role in determining whether security measures positively or negatively affect performance. In addition, modern workplaces are increasingly adopting digital tools to monitor employee performance and ensure compliance. While these tools can improve efficiency, they must be implemented carefully to avoid negative psychological effects. Therefore, job performance is influenced not only by individual capabilities but also by the broader organizational environment, including the effectiveness of security measures.

In conclusion, job performance is a multidimensional concept influenced by both individual and organizational factors. A secure and supportive work environment is essential for enhancing employee productivity, efficiency, and overall effectiveness.

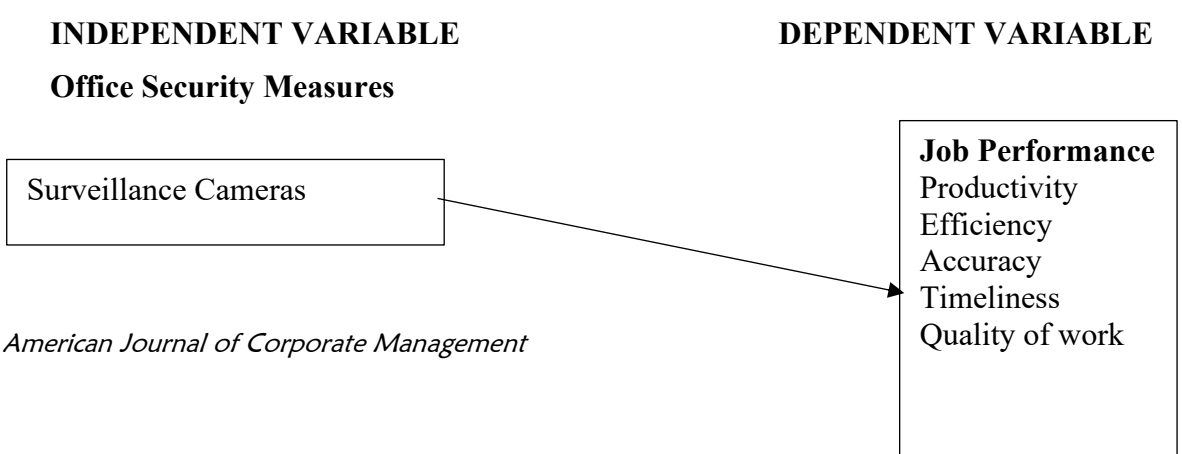
Conceptual Link between Office Security Measures and Job Performance

The relationship between office security measures and job performance is based on the assumption that a secure working environment enhances employee efficiency, productivity, and overall effectiveness. Whitman and Mattord argue that effective security systems reduce organizational risks and create stable conditions that support employee performance. Similarly, Brooks emphasizes that strong security measures minimize disruptions and enable employees to focus on their tasks. Surveillance cameras improve monitoring and accountability, thereby reducing misconduct and enhancing productivity Wood. Physical security presence ensures controlled access and immediate response to threats, which contributes to a safe work environment and improved employee performance.

Information security protocols protect sensitive data, ensuring continuity and efficiency in administrative processes. Integrated safety sensors enhance workplace safety by providing real-time detection of threats and enabling quick responses. Empirical studies support the argument that workplace security systems influence job performance. Bélanger and Crossler found that security measures enhance employee trust and organizational efficiency. Parker also argue that safe work environments improve employee motivation and productivity. However, excessive or poorly implemented security systems may create negative psychological effects, leading to reduced morale and performance.

In the context of the University of Bamenda, where administrative staff handle critical functions such as record management and coordination of academic activities, effective office security measures are expected to significantly influence job performance. A secure work environment can enhance concentration, reduce risks, and improve efficiency, while weak security systems may negatively affect performance.

The conceptual framework demonstrates that office security measures particularly CCTV systems, physical security presence, information security protocols, and integrated sensors play a critical role in shaping the job performance of administrative staff. A secure and technologically advanced working environment reduces risks, improves psychological safety, and enhances employee efficiency. In the context of the University of Bamenda, strengthening integrated security systems is expected to significantly improve administrative effectiveness, reduce operational disruptions, and enhance institutional productivity.



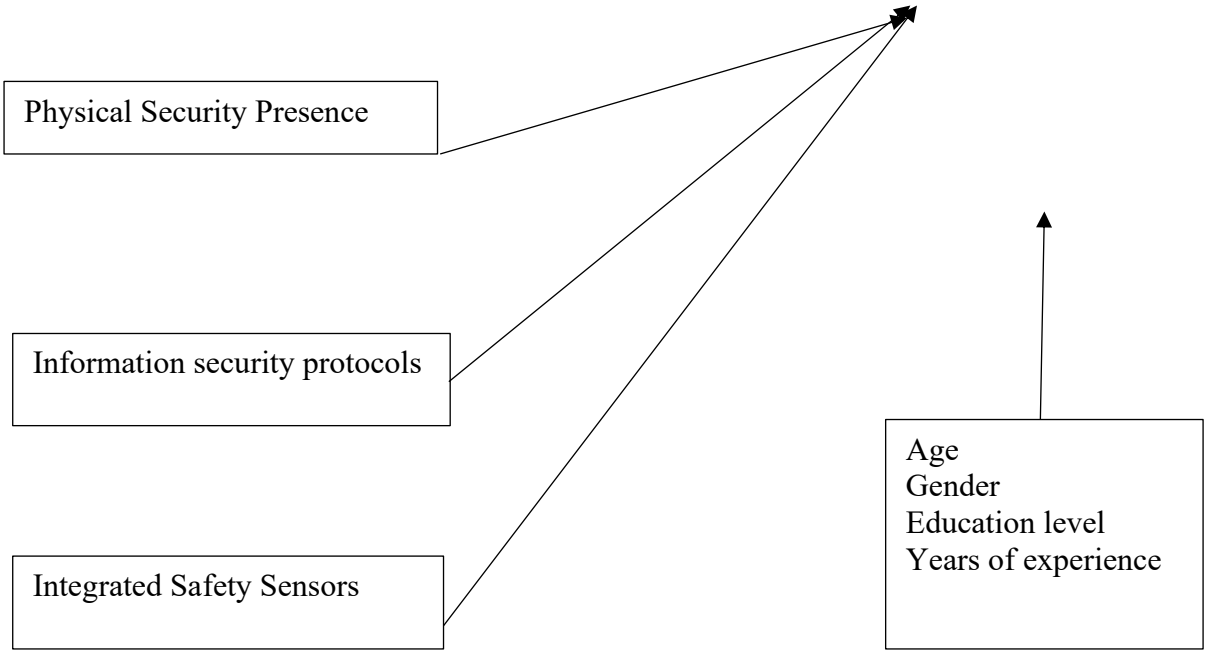


Figure 1. Conceptual Framework for Office Security Measures on Job Performance of Administrative Staff.

Source: The Researcher

Theoretical Study

This research work was guided by three theories the Protection Motivation Theory (PMT) the Deterrence Theory and the Campbell's Job Performance Theory

Protection Motivation Theory (PMT), originally developed by Rogers[34] and later refined in 1983, explains how individuals respond to perceived threats and the availability of protective mechanisms within their environment. The theory posits that individuals are motivated to adopt protective behaviors based on two key cognitive processes: threat appraisal and coping appraisal. Threat appraisal involves evaluating the severity of a perceived threat and one's vulnerability to it, while coping appraisal involves assessing the effectiveness of available protective measures and one's ability to utilize them[35]. The underlying assumption of PMT is that individuals are rational actors who evaluate risks and adjust their behavior accordingly in order to minimize harm. In organizational contexts, particularly within office environments, employees continuously assess potential threats such as unauthorized access, theft, data breaches, and physical insecurity, and these perceptions significantly influence their emotional state and work behavior. When threats are perceived as high and protective measures are weak, employees may experience fear, anxiety, and reduced concentration, which negatively impacts job performance. Conversely, when effective security systems such as surveillance cameras, physical security personnel, information security protocols, and integrated sensor systems are present, employees' coping appraisal increases, leading to reduced fear and enhanced confidence in the workplace[36].

Deterrence Theory originates from classical criminology, particularly the works of Cesare Beccaria and Jeremy Bentham who argued that human beings are rational actors capable of making decisions based on pleasure and pain calculations. The theory is grounded in the assumption that individuals will avoid criminal or undesirable behavior when the perceived

costs outweigh the perceived benefits, especially when punishment is certain, swift, and severe. Modern deterrence theory, as developed in contemporary criminology and behavioral research, distinguishes between general deterrence, which aims to prevent crime by influencing the wider population, and specific deterrence, which seeks to prevent reoffending by individuals who have already been punished[37].

The central assumption of deterrence theory is rational choice, meaning individuals consciously evaluate risks, such as the likelihood of detection, and consequences, such as sanctions, before engaging in behaviour. Within organizational and workplace contexts, deterrence theory is widely used to explain compliance with institutional rules, particularly in areas such as security enforcement, information protection, and employee monitoring systems. The presence of surveillance technologies, access controls, and disciplinary procedures increases the perceived certainty of detection, thereby discouraging employees from engaging in misconduct or policy violations[38]. In relation to this study, deterrence theory is particularly relevant in explaining how office security measures such as CCTV cameras, access restriction systems, and administrative sanctions influence employee behavior at the University of Bamenda. When employees perceive that violations of security protocols will be detected and punished, they are more likely to comply with established procedures, thereby improving overall job performance and organizational efficiency[39].

Despite these limitations, deterrence theory remains highly relevant to this study because office security systems at the University of Bamenda are designed to function as formal control mechanisms that increase the perceived risk of detection and punishment for non-compliance. This makes the theory valuable in explaining how structured security policies influence administrative staff behaviour, enhance adherence to institutional rules, and contribute to improved job performance outcomes.

Campbell's Job Performance Theory

Campbell's Job Performance Theory, developed by Campbell[40] and further elaborated by Campbell and Wiernik[41] provides a comprehensive framework for understanding job performance as a set of observable behaviors that contribute to organizational goals. The theory emphasizes that job performance is influenced by three main determinants: declarative knowledge (what an individual knows), procedural knowledge and skills (how tasks are performed), and motivation (the willingness to perform tasks). It assumes that performance is not solely determined by outcomes but by behaviors that can be observed and measured. Campbell identifies multiple dimensions of job performance, including task performance, contextual performance, and adaptive performance, all of which are influenced by both individual and environmental factors. Koopmans further support this framework by highlighting that workplace conditions such as safety, organizational support, and availability of resources significantly affect employee performance.

In relation to the University of Bamenda, the application of Campbell's theory highlights the importance of creating a secure and supportive work environment to enhance employee performance. Administrative staff operate in a setting that requires high levels of accuracy, confidentiality, and efficiency. The presence of effective office security measures ensures that employees can perform their tasks without fear of disruption, thereby improving their overall productivity and job satisfaction. For instance, CCTV surveillance systems can help monitor activities and prevent unauthorized access, while physical security personnel provide reassurance and immediate response to potential threats. Information security protocols safeguard sensitive data, and integrated safety sensors enhance emergency preparedness, all of which contribute to improved performance outcomes. Moreover, the theory supports the argument that office security measures act as performance enablers rather than mere protective tools. By reducing environmental constraints and enhancing situational facilitators, these

measures enable employees to fully utilize their knowledge, skills, and abilities. This, in turn, leads to improved task performance, stronger contextual performance, and greater adaptability in handling work-related challenges. Consequently, the relationship between office security measures (independent variable) and job performance (dependent variable) can be effectively explained through the lens of Campbell's theoretical framework.

In conclusion, Campbell's Job Performance Theory provides a robust and practical foundation for analyzing the effect of office security measures on job performance. The theory emphasizes that performance is a function of knowledge, skills, motivation, and environmental conditions, all of which are influenced by the level of security within the workplace. By ensuring a safe and secure work environment, organizations such as the University of Bamenda can enhance employees' ability to perform their tasks efficiently, accurately, and consistently. Therefore, the theory not only explains how security measures influence performance but also underscores the importance of integrating effective security systems into organizational practices to achieve optimal performance outcomes. Despite these limitations, the theory is highly relevant to this study because it provides a clear basis for measuring job performance among administrative staff at the University of Bamenda. Office security measures, as part of the work environment, play a crucial role in influencing employees' ability to perform their tasks effectively. A secure environment reduces distractions, prevents disruptions, and enhances concentration, thereby improving performance indicators such as efficiency, productivity, accuracy, and commitment. Therefore, Campbell's Job Performance theory complements the other theories by providing a practical framework for understanding how security measures translate into measurable performance outcomes.

Empirical Study On Surveillance Cameras that Affect Employee Performance

Aiello and Kolb[42] conducted a foundational experimental study in the United States to examine how electronic surveillance affects employee performance and productivity. The main objective of the study was to determine whether monitoring systems influence behavioral output in workplace-like settings. The study was grounded in behavioral regulation theory and used a controlled laboratory experimental design, where participants were randomly assigned to either a monitored condition or a non-monitored condition. Performance data were collected through structured task completion exercises, where speed, accuracy, and output quality were measured quantitatively. The researchers used inferential statistical techniques, particularly independent sample t-tests, to compare performance differences between the two groups. The findings revealed that individuals under surveillance performed significantly better than those not monitored, demonstrating higher task accuracy and improved concentration. The authors interpreted these results to mean that surveillance systems increase perceived accountability, thereby enhancing employee effort and reducing task avoidance. However, they also noted that excessive monitoring could create psychological pressure, potentially affecting long-term job satisfaction.

In a related study, Alder[43] investigated employee reactions to electronic performance monitoring in organizational environments in the United States. The objective was to examine how surveillance intensity influences employee attitudes and job performance. The study adopted a cross-sectional survey design, targeting employees from multiple industries including administrative and service sectors. Data were collected using structured questionnaires measuring perceived monitoring intensity, fairness perceptions, and self-reported performance outcomes. The data were analyzed using multiple regression analysis, which allowed the researcher to examine predictive relationships between monitoring systems and performance indicators. The findings showed that electronic surveillance significantly improves employee accountability and task performance when perceived as fair and transparent. However, Alder also found that excessive surveillance may generate stress and reduce job satisfaction, which

can indirectly affect performance outcomes. The study concluded that surveillance cameras function both as preventive and behavioral regulation tools. This is highly relevant to the present study because surveillance systems are a core component of office security measures at the University of Bamenda, influencing administrative staff behavior and job performance.

Empirical Study on Physical Security Presence that Affects Employee Performance

Wakefield[44] conducted an influential qualitative study in the United Kingdom examining the role of security personnel in shaping workplace behavior. The study aimed to understand how the presence of security guards affects employee perceptions of safety and productivity. A qualitative research design was used, involving semi-structured interviews and field observations across security-sensitive organizations. Data were analyzed using thematic analysis, allowing patterns of employee perceptions and behaviors to be identified. The findings revealed that the presence of security personnel significantly enhances employees' sense of safety, reduces anxiety, and improves concentration at work. Wakefield argued that perceived safety is a critical psychological condition for optimal employee performance. Button extended this understanding by conducting a case study analysis of private security systems in organizations in the United Kingdom. The objective was to examine the effectiveness of physical security mechanisms such as guards and access control systems. The study used a case study design, collecting data through organizational reports, interviews, and security records. Findings revealed that visible security presence acts as a strong deterrent against misconduct and unauthorized access. Employees were more likely to comply with rules when security personnel were visibly present and actively enforcing policies. The study concluded that physical security systems enhance organizational discipline and operational efficiency.

In Kenya, Nzuve and Njeru[45] conducted a descriptive survey study examining workplace safety and employee performance in public institutions. The objective was to assess how security conditions influence employee morale and productivity. The study used a quantitative survey design, with structured questionnaires administered to employees across multiple departments. Data were analyzed using descriptive statistics such as mean scores and standard deviations. The findings revealed that secure working environments supported by security personnel significantly improve employee morale, reduce fear, and enhance productivity. The authors concluded that physical security presence is essential for maintaining organizational stability and performance efficiency. In another study, Button and George[46] examined the role of private security personnel in organizational settings in the United Kingdom. The objective was to analyze how security guards influence organizational control, discipline, and employee behavior. The study employed a qualitative research design, using interviews and observational techniques to collect data from security personnel and employees. Data were analyzed using thematic analysis. The findings revealed that security personnel serve not only as deterrents to crime but also as enforcers of organizational rules and norms. Employees were found to be more disciplined, punctual, and compliant in the presence of visible security personnel. The study interpreted these findings as evidence that physical security presence enhances organizational order and indirectly improves employee performance by reducing deviant behaviors.

In the African context, Munyeka and Phiri[47] conducted a study in South Africa to investigate the relationship between workplace safety measures and employee performance in public sector organizations. The objective of the study was to determine how safety conditions, including physical security presence, affect employee productivity and job satisfaction. The study adopted a descriptive survey design guided by a workplace safety framework, with data collected through structured questionnaires administered to employees. Data were analyzed using correlation and regression analysis. The findings revealed a strong positive relationship between workplace safety measures and employee performance. Employees who perceived

their environment as secure reported higher levels of motivation, efficiency, and commitment. The study concluded that physical security presence is a key factor in creating a conducive work environment that enhances employee performance.

In Kenya, Kipkorir, Wanyoike, and Mutai[48] conducted a descriptive study examining the impact of security infrastructure on employee performance in public universities. The objective was to evaluate how physical security presence influences staff productivity and efficiency. The study adopted a descriptive research design, with data collected through questionnaires and interviews. Data were analyzed using descriptive statistics and correlation analysis. The findings revealed that the presence of security guards, controlled access systems, and surveillance technologies significantly improved employees' sense of safety and reduced workplace disruptions. As a result, employees were able to perform their duties more efficiently and accurately. The study concluded that physical security presence is essential for maintaining a stable and productive work environment in academic institutions.

Empirical Study on Information Security Protocols that Affects Employee Performance

Bulgurcu, Cavusoglu, and Benbasat[49] conducted a comprehensive study in the United States to examine the factors influencing employee compliance with information security policies. The study aimed to understand how awareness, perceived severity, and perceived benefits affect compliance behavior. A quantitative survey design was used, targeting employees across multiple organizations with established information security systems. Data were collected using structured questionnaires measuring attitudes toward security policies, awareness levels, and compliance intentions. The data were analyzed using multiple regression analysis, which allowed the researchers to identify key predictors of compliance behavior. The findings revealed that employees who are aware of security risks and perceive policies as important are more likely to comply with organizational security rules. Herath and Rao conducted a related study in the United States focusing on determinants of employee information security behavior. The study used a survey research design and applied structural equation modeling (SEM) for data analysis. The sample included employees from various organizational sectors. The results showed that organizational enforcement mechanisms, perceived sanctions, and awareness significantly influence compliance behavior. The study concluded that strong enforcement of security policies improves employee discipline and reduces risky behavior, thereby enhancing organizational performance.

Similarly, Posey, Roberts, and Lowry[50] conducted a study in the United States examining insider threats and employee compliance with information security policies. The objective was to investigate how organizational commitment and perceived monitoring influence employees' security-related behaviors. The study employed a quantitative research design using survey questionnaires distributed to employees across multiple industries. Data were analyzed using structural equation modeling (SEM). The findings indicated that employees who perceive strong monitoring systems and organizational commitment are less likely to engage in security violations and more likely to adhere to established protocols. The study concluded that information security enforcement mechanisms reduce risky behavior and enhance employee accountability, which contributes to improved organizational performance.

In Africa, Tadesse and Tilahun[51] conducted a study in Ethiopia examining the impact of information security practices on employee performance in public organizations. The objective was to assess how security awareness, training, and policy enforcement influence employee productivity. The study employed a descriptive survey design, with data collected through structured questionnaires and analyzed using correlation and regression analysis. The findings indicated a strong positive relationship between information security practices and employee performance. Employees who received regular training and were aware of security protocols reported higher levels of efficiency, accuracy, and confidence in handling

organizational data. The study concluded that information security protocols are critical in enhancing employee performance and organizational effectiveness.

In addition, Karyda, Kiountouzis, and Kokolakis[52] conducted a study in Greece examining the role of information security policies in organizational performance. The objective was to analyze how security frameworks influence employee behavior and system reliability. The study adopted a case study approach, collecting data through interviews and document analysis. The findings revealed that organizations with well-structured security policies experienced fewer system failures, reduced data breaches, and improved employee efficiency. The study concluded that information security protocols contribute to organizational stability and enhance employee performance by reducing uncertainties and operational risks. Moreover, Parsons[53] conducted a study in Australia examining the relationship between information security awareness and employee behavior. The objective was to assess how awareness programs influence employees' ability to comply with security policies. The study used a quantitative survey design, with data analyzed using statistical techniques such as correlation analysis. The findings indicated that higher levels of security awareness are associated with better decision-making, reduced errors, and improved job performance. The study concluded that training and awareness programs are essential components of effective information security systems.

Empirical Study on Integrated Safety Sensors that Affects Employee Performance

Lee and Lee[54] conducted a study in South Korea examining the effectiveness of integrated security systems, including motion detectors and automated sensors. The study aimed to evaluate how advanced technological systems improve workplace safety and operational performance. A quantitative research design was used, with data collected through system performance logs and employee surveys. Data analysis involved statistical evaluation of system efficiency, response time, and employee performance indicators. The findings showed that integrated sensor systems significantly improve threat detection, reduce response time, and enhance employee productivity. The authors concluded that automation in security reduces human error and increases organizational efficiency. Aloul, Zahidi, and El-Hajj[55] conducted a mixed-method study in the United Arab Emirates focusing on smart security systems using sensor technologies. The objective was to examine the impact of intelligent security systems on workplace safety and employee behavior. Data were collected through system testing and employee surveys. The findings revealed that sensor-based systems improve access control, enhance monitoring accuracy, and increase employee confidence in workplace safety. Employees who feel protected by advanced systems tend to perform better due to reduced fear and increased focus. Park and Kim[56] studied smart building technologies in South Korea using a quantitative survey design. The study aimed to determine how automated security systems influence organizational efficiency. Data were analyzed using regression models. The findings revealed that integrated sensor systems reduce human error, improve operational efficiency, and enhance employee productivity. The study emphasized that technological integration in security systems is essential for modern organizational performance improvement.

Similarly, Hassan and Ibrahim conducted a study in Malaysia to assess the impact of automated safety systems on employee performance in manufacturing and service organizations. The objective was to examine how sensor-based technologies, including fire detection systems and automated alarms, influence employee efficiency and safety outcomes. The study utilized a descriptive survey design within a technological acceptance framework, with data collected through structured questionnaires administered to employees. Data were analyzed using correlation and regression analysis. The findings indicated a strong positive relationship between the presence of automated safety systems and employee performance. Employees working in environments equipped with advanced sensor technologies reported

reduced fear of accidents, improved concentration, and higher levels of productivity. The study concluded that integrated safety sensors are essential in creating a secure and efficient work environment that enhances employee performance.

Further empirical support is provided by Oladipo and Ibidunni[57] in Nigeria, who conducted a study on the impact of technological security systems on employee productivity in service organizations. The objective was to assess how integrated safety sensors and automated monitoring systems influence workplace efficiency. The study employed a descriptive survey design, with data collected through questionnaires administered to employees and analyzed using descriptive and inferential statistics. The findings showed that organizations with advanced security technologies experienced improved employee productivity, reduced operational risks, and enhanced organizational performance. Employees indicated that the presence of automated systems increased their sense of safety and reduced anxiety, thereby improving their concentration and efficiency. The study concluded that integrated safety sensor systems are critical for enhancing employee performance in developing economies.

In Africa, Adeyemi and Olalekan[58] conducted a study in Nigeria examining the role of integrated security systems in improving employee performance in public institutions. The objective was to determine how sensor-based technologies influence workplace safety and productivity. The study adopted a descriptive survey design, with data collected through questionnaires and analyzed using regression analysis. The findings revealed that integrated security systems significantly improved employee performance by reducing incidents of theft, enhancing monitoring accuracy, and increasing employees' confidence in workplace safety. The study concluded that the adoption of modern security technologies is essential for organizational effectiveness and employee productivity. Collectively, these empirical studies provide strong and consistent evidence that integrated safety sensor systems play a crucial role in enhancing employee performance by improving workplace safety, reducing human error, and increasing operational efficiency across various organizational contexts. The findings consistently demonstrate that the adoption of advanced security technologies leads to improved threat detection, faster response times, reduced risks, and enhanced employee confidence. These outcomes directly contribute to improved performance indicators such as productivity, efficiency, accuracy, and overall job effectiveness. In relation to the present study at the University of Bamenda, these insights highlight the importance of investing in integrated safety sensor systems to create a secure and technologically advanced work environment that supports the optimal performance of administrative staff.

Research Gap

The empirical studies reviewed show that office security measures surveillance cameras, physical security presence, information security protocols, and integrated safety sensors generally improve employee performance by enhancing accountability, safety, and efficiency. However, several gaps exist in the study. Beyond these identified gaps, there is also a significant theoretical gap in the existing study, as many studies have not adequately integrated established motivational and performance theories such as Maslow's Hierarchy of Needs Theory and Campbell's Job Performance Theory into the analysis of office security measures and employee performance. While prior studies acknowledge that security influences performance, they often fail to explain how and why this relationship occurs from a strong theoretical perspective. This limits the depth of understanding regarding the mechanisms through which security measures affect employee behavior, motivation, and performance outcomes[59]. In addition, there is a conceptual gap in the way office security measures are operationalized across existing studies. Many researchers tend to focus on a single dimension of security such as surveillance systems, physical security personnel, or information security protocols without considering the interconnected nature of these components in modern organizational environments. However,

contemporary workplaces require a more integrated approach where physical, technological, and digital security systems function together to create a comprehensive safety framework. The lack of studies adopting such a holistic perspective limits the ability to fully understand the combined effect of multiple security measures on employee performance.

Furthermore, there is a methodological gap in terms of research design and data analysis. A significant number of existing studies rely heavily on either qualitative methods or simple descriptive statistics, which may not adequately capture the complex relationship between office security measures and job performance. Few studies employ robust quantitative techniques that allow for the simultaneous analysis of multiple variables and their interactions. This limits the generalizability and reliability of findings. Additionally, many studies are cross-sectional in nature, making it difficult to establish causal relationships between security measures and performance outcomes[60]. Another important gap is the population gap, as most empirical studies focus on employees in corporate organizations, manufacturing industries, or general public sector institutions, with little attention given to administrative staff in higher education institutions. Administrative staff play a crucial role in the functioning of universities, as they are responsible for managing records, coordinating activities, and ensuring the smooth operation of institutional processes. Despite their importance, there is limited research examining how office security measures affect their performance, particularly in the context of universities in developing countries such as Cameroon There is also a policy and practical gap in the study, as few studies provide clear recommendations on how organizations can effectively integrate different security measures to enhance employee performance. While existing research highlights the importance of security, it often does not offer practical frameworks or strategies for implementation. This limits the usefulness of such studies for decision-makers and administrators seeking to improve workplace security and performance outcomes.

2. Methodology

The scope of this study was categorized into thematic, geographical, and time scope, which together define the boundaries within which the research was conducted and ensured clarity of focus. It focused on examining the effect of office security measures on the job performance of administrative staff at the University of Bamenda particularly on secretaries. It covered a period of five months spanning from January 2026 to May 2026. During this period the research was conceptualized, designed and executed.

The population for this study consisted administrative staff of the University of Bamenda, specifically secretaries working in various administrative units, schools and faculties of the university. These individuals are directly involved in administrative operations and are regularly exposed to office security measures. The population is considered appropriate for the study because administrative staff particularly secretaries, play a key role in organizational functioning, and their performance can be influenced by the level of security within their working environment. the distribution of the target population is presented on the table below.

Table 1. Distribution of Secretaries in the University of Bamenda.

S/N	Structure	Number of Secretaries
1	Central Administration	26
2	HICM	05

3	HTTC	05
4	HTTTC	06
5	FHS	06
6	FS	04
7	COLTECH	05
8	HITL	04
9	FA	04
10	FLPS	04
11	FEMS	02
12	NAHPI	03
13	FED	04
14	TOTAL	78

Source: Directorate of Administrative Affairs 2026

The study used primary data, which were collected directly from secretaries (administrative staff) of the University of Bamenda through a structured questionnaire. Primary data is particularly suitable for this study because it provides firsthand information that is specific to the research objectives and context[61]. It allowed the researcher to capture respondents' perceptions, attitudes, and experiences regarding office security measures and job performance. Primary data was advantageous in that it ensured relevance, accuracy, and timeliness, as the information was collected specifically for the purpose of the study. In addition, it enhanced the credibility of the findings since the data reflected real-time responses from the target population.

The main instrument used for data collection was a structured questionnaire designed in alignment with the objectives of the study and existing study on office security and job performance. The questionnaire consisted of closed-ended questions to ensure uniformity, ease of administration, and suitability for quantitative analysis[62].

Model specification was a crucial step in quantitative research as it provided a mathematical representation of the relationship between the dependent and independent variables[63]. It enabled the researcher to empirically test hypotheses and determine the extent to which office security measures influence job performance. The model of this study was developed based on theoretical and empirical study which suggested that a secured working environment positively affects employee productivity and efficiency.

The functional relationship is expressed as:

$JP = f(SC, PSP, ISP, ISS)$

The regression model is specified as:

$$JP = \alpha + \beta_1 SC + \beta_2 PSP + \beta_3 ISP + \beta_4 ISS + \beta_5 CV + \beta_6 AG + \beta_7 GD + \beta_8 EDL + \beta_9 YE + \mu$$

Where:

JP = Job Performance

SC = Surveillance Cameras

PSP = Physical Security Presence

ISP = Information Security Protocols

ISS = Integrated Safety Sensors

CV = Control Variables (such as age, gender, education level, and years of experience)

a = Constant

$\beta_1 - \beta_5$ = Coefficients

u = Error term

The inclusion of control variables was important because job performance may also be influenced by demographic and organizational factors beyond security measures[64]. Controlling for these variables helps isolate the true effect of office security measures on job performance, thereby improving the accuracy and validity of the model.

Data collected from the field was coded, entered, and analyzed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to summarize and describe the characteristics of the data. These statistics provided an overview of respondents' perceptions and help identify patterns and trends. Inferential statistics, particularly multiple regression analysis using the Ordinary Least Squares (OLS) method, were employed to test the study hypotheses and determine the strength and direction of relationships between variables. Regression analysis was appropriate because it allowed for simultaneous examination of multiple independent variables and their effect on the dependent variable. Additionally, correlation analysis was used to assess the degree of association between variables, while ANOVA was applied to test the overall significance of the regression model.

Validation and reliability are essential components of research as they ensure the accuracy, consistency, and credibility of the findings[65]. Face validity was established by presenting the questionnaire to the research supervisor and experts in human resource management and organizational studies.

Content validity was ensured by developing questionnaire items based on an extensive review of relevant study and aligning them with the study variables. This guarantees that all aspects of office security measures and job performance are adequately covered. The questionnaire was carefully structured to eliminate ambiguity and ensure comprehensiveness. Reliability was assessed using the Cronbach Alpha coefficient, which measures internal consistency among questionnaire items. A pilot study was conducted with a small sample outside the main study population. According to Cronbach[66] a reliability coefficient of 0.70 or higher is considered acceptable. High reliability indicates that the instrument produces consistent results and can be trusted for data analysis.

The a priori test involves comparing the estimated results with theoretical expectations established before the analysis. In this study, office security determinants, surveillance cameras, physical security presence, information security protocols, and integrated safety sensors will had a positive relationship with job performance. This was based on organizational and management theories which suggested that a secure work environment enhances employee productivity, efficiency, and overall performance. Therefore, the signs of the estimated coefficients (β_1, β_2, β_3, β, β) are expected to be positive. If the empirical results conformed to these expectations, the model is considered consistent with theory. However, if the results contradict the expected signs, further explanation is required to justify the deviation.

Statistical tests were conducted to determine the significance and reliability of the estimated parameters in the regression model. Specifically, the t-test and p-values were used to test the individual significance of each independent variable. The decision rule is based on a significance level of 0.05 (5%).

The t-statistics were used to determine whether each coefficient was significantly different from zero. Additionally, the coefficient of determination (R^2) was used to assess the overall explanatory power of the model, indicating how much variation job performance is explained by office security measures.

To ensure robustness of results, several diagnostic tests were conducted. The normality test verified whether residuals followed a normal distribution, which is essential for valid inference. The multi-collinearity test, using VIF, ensures that independent variables are not highly correlated, as this can distort regression estimates. The heteroscedasticity test checks for constant variance of errors, while the Durbin-Watson statistic assesses autocorrelation. These tests collectively ensured that the assumptions of the classical linear regression model were satisfied, thereby enhancing the reliability and validity of the findings.

In this study, normality was assessed using both graphical and statistical approaches. Graphical methods included histograms and normal probability plots (P-P plots), which visually indicate whether the residuals follow a bell-shaped distribution. Additionally, formal statistical tests such as the Kolmogorov-Smirnov test and Shapiro-Wilk test were used to confirm normality. The decision rule is that if the p-value of these tests is greater than 0.05, the residuals are considered normally distributed[67]. Ensuring normality enhances the validity of hypothesis testing and improves the reliability of conclusions drawn from the regression model.

To detect multi-collinearity, this study employed the Variance Inflation Factor (VIF) and Tolerance values. The VIF measures how much the variance of an estimated regression coefficient increases due to multi-collinearity. A VIF value greater than 10 indicates serious multi-collinearity, while a value less than 10 suggests that multi-collinearity is not a concern. Similarly, tolerance values below 0.1 indicate high multi-collinearity. Addressing multicollinearity is crucial because it ensures stability and interpretability of regression coefficients, thereby enhancing the robustness of the model.

In this study, heteroskedasticity was tested using both graphical and statistical methods. A scatterplot of standardized residuals against predicted values was examined to detect any patterns. If the plot shows a random distribution, homoskedasticity is assumed; however, if a systematic pattern (such as funnel shape) is observed, heteroskedasticity is present. Additionally, formal tests such as the Breusch-Pagan test and White test were used to confirm the presence or absence of heteroskedasticity. A p-value greater than 0.05 indicates that heteroskedasticity is not a problem. Addressing heteroskedasticity improves the efficiency of estimates and ensures valid statistical inference..

To test for autocorrelation, the Durbin-Watson (DW) statistic was used. The value of the Durbin-Watson statistic ranges between 0 and 4. A value close to 2 indicates no autocorrelation, values approaching 0 indicate positive autocorrelation, and values toward 4 indicate negative autocorrelation. In this study, a Durbin-Watson value between 1.5 and 2.5 was considered acceptable, indicating the absence of serious autocorrelation. Ensuring that autocorrelation is absent strengthens the reliability of the regression model and ensures that the estimated relationships between office security measures and job performance are not biased due to correlated errors.

Limitations of Data and Tools

This study, like most social science research relying on primary data collection, is subject to several limitations that may influence the interpretation and generalization of findings. One major limitation is respondent bias, which may arise from the tendency of participants to provide socially desirable responses rather than fully accurate or truthful information. Since the study focuses on office security measures and job performance among administrative staff at the University of Bamenda, respondents may either overstate or understate their experiences due to fear of criticism, institutional loyalty, or misunderstanding of the research purpose. This type of bias can potentially affect the validity of the findings, particularly when measuring subjective variables such as perceived safety, motivation, and job performance.

Another limitation relates to the use of self-reported data, which forms a significant part of the data collection process. Self-reported information is often influenced by personal perceptions, memory recall, and individual interpretation of questions. As a result, there is a possibility of measurement error, as respondents may not accurately reflect their actual behavior or experiences. For instance, employees may report high levels of job performance or security satisfaction even when actual performance indicators suggest otherwise. This limitation is common in organizational behavior studies and may affect the precision of conclusions drawn from the data[68].

The study is also constrained by time limitations, as it adopts a cross-sectional design where data are collected at a single point in time. This means that the study cannot fully capture changes in office security measures or job performance over time. Organizational behavior is dynamic and may be influenced by evolving institutional policies, technological improvements, or external environmental factors. Therefore, the findings represent only a snapshot of the situation during the period of data collection (April–May 2026), and may not fully reflect long-term trends or causal relationships. In addition, the study may face limitations related to access to information and organizational restrictions. Since the research is conducted within a formal institutional setting, some administrative staff may be reluctant to provide detailed information regarding internal security systems or operational weaknesses. Institutional confidentiality policies may also limit access to certain documents or security-related data, thereby restricting the depth of analysis. This may reduce the comprehensiveness of the findings, especially in areas related to information security protocols and integrated safety systems.

Ethical Considerations

Ethical considerations formed an integral part of this study and were strictly observed throughout all stages of the research process, including data collection, analysis, and reporting. The researcher ensured that the study complied with standard ethical principles in social science research, particularly those relating to respect for persons, confidentiality, beneficence, and integrity.

Firstly, voluntary participation was ensured. All respondents were informed that their participation in the study was entirely voluntary and that they were under no obligation to take part. They were given the freedom to decline participation or withdraw from the study at any point without facing any form of penalty or negative consequence. This was important in ensuring that participation was based on free will rather than coercion or institutional pressure. Secondly, informed consent was obtained from all participants before data collection commenced. The researcher clearly explained the purpose of the study, the nature of the questions, and how the data would be used. Participants were also informed about the academic nature of the research and assured that the study was solely for educational purposes. This helped to ensure transparency and foster trust between the researcher and respondents. Thirdly, confidentiality and anonymity were strictly maintained throughout the study. Respondents were assured that all information provided would be treated with strict confidentiality and used only for academic purposes. No personal identifiers such as names, staff numbers, or departmental identifiers were included in the questionnaire or data analysis. Instead, responses were coded to ensure anonymity, thereby protecting the identity of participants and encouraging honest responses.

In addition, the researcher adhered to the principle of non-maleficence, ensuring that no participant was subjected to physical, psychological, or professional harm as a result of their participation in the study. The questions were designed in a neutral manner to avoid causing discomfort, fear, or anxiety. Care was also taken to ensure that the study did not interfere with the official duties of administrative staff at the University of Bamenda. Furthermore, the researcher maintained academic honesty and integrity throughout the study. Data were

collected, analyzed, and reported objectively without manipulation or fabrication of results. Findings were presented as they were obtained from the field, ensuring that the research accurately reflects the realities of office security measures and job performance within the institution. Finally, the study ensured compliance with ethical research standards in academic inquiry, including respect for institutional regulations and proper handling of data. This ethical rigor enhances the credibility, reliability, and acceptability of the research findings within academic and professional communities.

3. Results and Discussion

This section presents the findings of the study based on data collected from the administrative staff mainly secretaries at the University of Bamenda. It begins with descriptive statistics of respondents' demographic characteristics, followed by validity and reliability tests. Thereafter, the chapter presents descriptive and inferential statistical results, including correlation and multiple regression analysis, to determine the effect of surveillance cameras, physical security presence, information security protocols, and integrated safety sensors on job performance.

Demographic Profile of Respondents

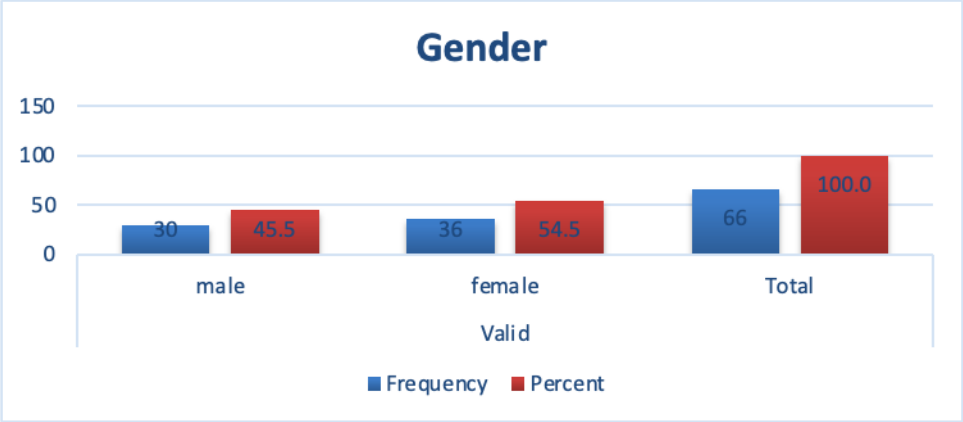


Figure 2. Gender of Respondents.
Source: Field Survey (2026)

The table presents the gender distribution of respondents used in the study. Out of a total of 66 respondents, 30 respondents representing 45.5% were male, while 36 respondents representing 54.5% were females. This indicates that female respondents constituted the majority of the study population. The result further showed that both genders were adequately represented in the study, thereby providing balanced opinions and reducing gender bias in the responses collected.

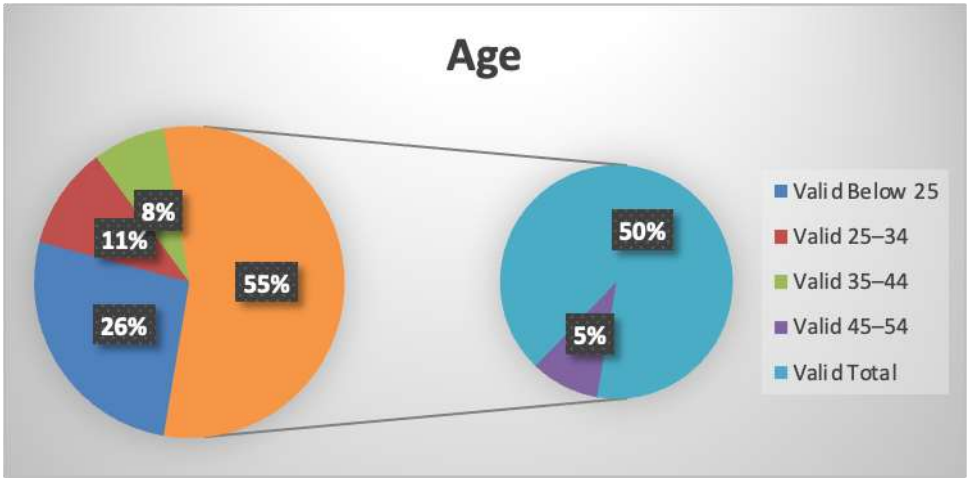


Figure 3. Age Group of Respondents.
Source: Field Survey (2026)

The table presents the age distribution of the respondents involved in the study. The results show that the majority of the respondents were below 25 years of age, with 35 respondents representing 53.0% of the total population. Respondents aged 25–34 years were 14, accounting for 21.2% of the respondents. Those within the age bracket of 35–44 years were 10 respondents, representing 15.2%, while respondents aged 45–54 years were the least represented with 7 respondents, accounting for 10.6% of the total respondents. The findings indicate that the study was dominated by younger respondents, particularly those below the age of 25 years. This suggests that the opinions gathered in the study largely reflect the views and experiences of young individuals, who may be more active and involved in the subject under investigation.

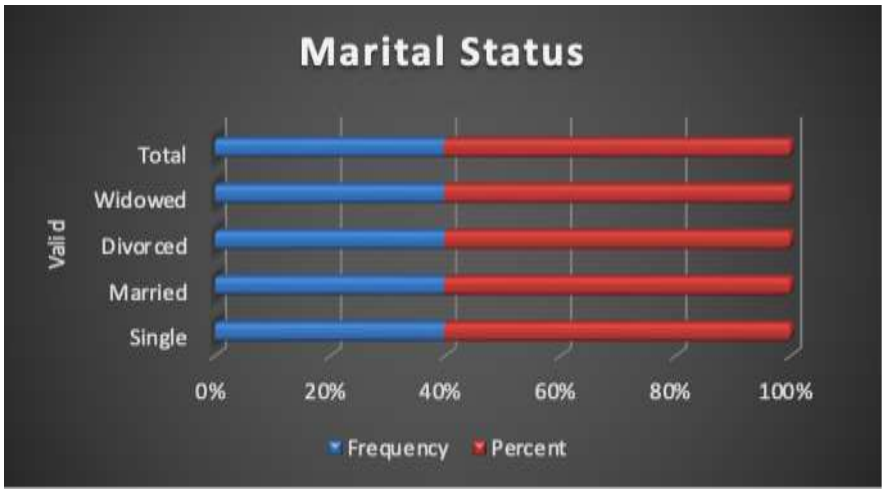


Figure 4. Marital status.
Source: Field Survey (2026)

The table presents the marital status distribution of the respondents used in the study. The findings revealed that the majority of the respondents were singles, with 35 respondents representing 53.0% of the total population. Married respondents were 14, accounting for 21.2% of the respondents. Divorced respondents constituted 10 respondents, representing 15.2%, while widowed respondents were 7, accounting for 10.6% of the total respondents.

The results indicate that single individuals formed the largest proportion of the respondents involved in the study. This suggests that the study largely captured the opinions and experiences of unmarried individuals, although respondents from other marital categories were also adequately represented to ensure diverse views.

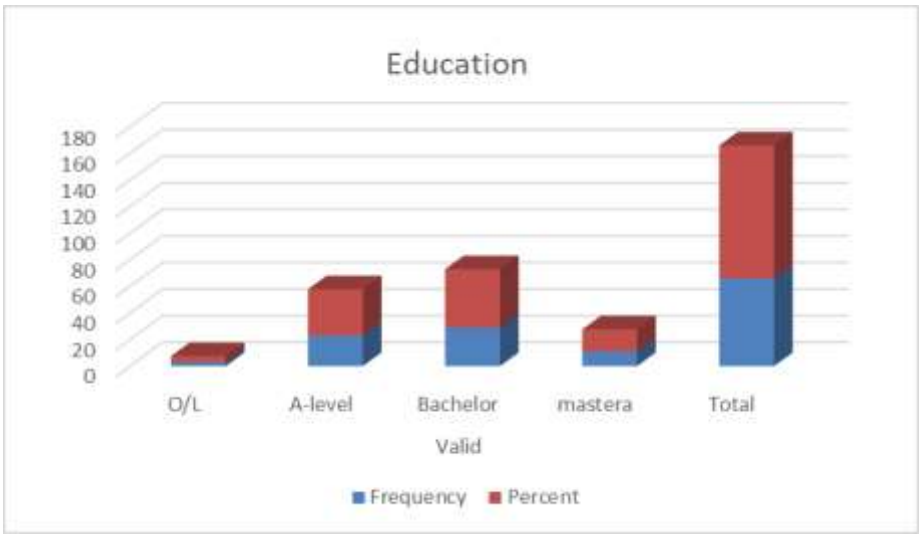


Figure 5. Highest Educational Level.
Source: Field Survey (2026)

The table presents the distribution of respondents according to their level of education. The findings show that the majority of respondents had attained a Bachelor's degree, with 29 respondents representing 43.9% of the total sample. This is followed by respondents with A-level education, who were 23 in number, accounting for 34.8%. Those with Master's qualifications were 11 respondents, representing 16.7%, while the least represented group was respondents with O/L level education, comprising only 3 respondents (4.5%). Overall, the results indicate that most of the respondents are relatively well educated, with a large proportion having at least a Bachelor's degree or A-level qualification. This suggests that the responses obtained in the study are largely informed by individuals with moderate to high levels of educational attainment, which may enhance the reliability and understanding of the study findings.

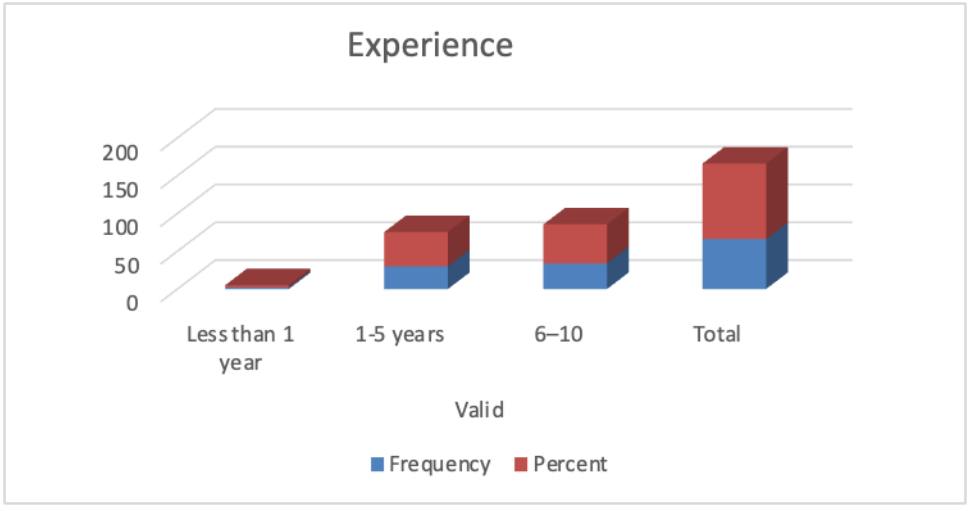


Figure 6. Years of Experience of the Respondents.
Source: Field Survey (2026)

The table presents the distribution of respondents based on their level of education. The findings show that the majority of respondents had attained a Bachelor's degree, with 29 respondents representing 43.9% of the total sample. This is followed by respondents with A-level education who were 23 in number accounting for 34.8%. Respondents with Master's qualifications were 11, representing 16.7%, while those with O/L level education were the least represented, with only 3 respondents accounting for 4.5%.

This suggests that the study was largely informed by respondents with moderate to advanced academic backgrounds, which may enhance the reliability and depth of the responses obtained.

Table 2. Cronbach Alpha Coefficients.

RESEARCH VARIABLE	ALPHA COEFFIENT	NUMBER OF ITEMS	REMARK
Surveillance Cameras	**0.865**	**5**	**Reliable**
physical security	**0.699**	**5**	**Reliable**
Information Security Protocols	**0.897**	**5**	**Reliable**
Integrated Safety Sensors	**0.834**	**5**	**Reliable**
Job Performance	**0.898**	**5**	**Reliable**

Source: Field Survey (2026)

The table presents the Cronbach's Alpha coefficients used to assess the reliability of the research instruments across the different study variables. Cronbach's Alpha is a measure of internal consistency, indicating how closely related a set of items are in measuring a given construct. Generally, a coefficient of 0.70 and above is considered acceptable for reliability, although values slightly below 0.70 can still be considered adequate in exploratory studies. From the results, all the study variables demonstrate acceptable to very high reliability. Surveillance Cameras recorded a Cronbach's Alpha of 0.865, indicating strong internal consistency among its five items. Physical Security obtained an alpha value of 0.699, which is slightly below the conventional 0.70 threshold but still considered marginally acceptable and reliable for analysis. Information Security Protocols showed a very high reliability coefficient of 0.897, indicating excellent internal consistency. Integrated Safety Sensors recorded 0.834, also reflecting strong reliability. Finally, Job Performance had the highest reliability coefficient of 0.898, indicating very high internal consistency among its measurement items.

Table 3. Variance Inflation Factor.

RESEARCH VARIABLE	VIF Statistics	Remark
Surveillance Cameras	**1.103**	**Acceptable**
physical security	**1.232**	**Acceptable**
Information Security Protocols	**1.222**	**Acceptable**
Integrated Safety Sensors	**1.332**	**Acceptable**
Mean VIF	**6.075**	

Source: Field Survey (2026)

The table presents the Variance Inflation Factor (VIF) results used to test for multi-collinearity among the independent variables in the study. The findings show that all variables recorded very low VIF values: Surveillance Cameras (1.103), Physical Security (1.232), Information Security Protocols (1.222), and Integrated Safety Sensors (1.332). Since all the values are close to 1 and far below the commonly accepted threshold of 5 or 10, this indicates that there is no serious multi-collinearity problem among the variables. It implies that each independent variable is sufficiently distinct in explaining variations in the dependent variable.

In addition, the values reported as "Mean VIF = 6.075" actually represent the sum of the VIF values, not the mean. The correct mean VIF is approximately 1.215, which further confirms the absence of multi-collinearity in the model. Overall, the results suggest that the regression model is reliable and appropriate for further analysis since the independent variables do not exhibit strong inter-correlations that could distort the results.

Presentation of Results per Objective

Table 4. Surveillance Cameras.

Surveillance Cameras						
		SA	A	D	SD	Total
The presence of surveillance cameras with wide coverage in my office area reduces my fear or intrusion, which allows me to concentrate better and complete my tasks more efficiently.	Frequency	24	31	10	1	66
	Percentages	36.4%	47.0%	15.2%	1.5%	100.0%
High-resolution camera footage makes me feel more accountable for my actions, leading me to be more careful and productive in my daily administrative duties.	Frequency	8	13	21	24	66
	Percentages	12.1%	19.7%	31.8%	36.4%	100.0%
Knowing that surveillance cameras are actively monitored deters disruptive behavior from colleagues or visitors, which creates calmer work environment and improves my output	Frequency	21	44	1	0	66
	Percentages	31.8%	66.7%	1.5%	0.0%	100.0%
The existence of clear privacy policies regarding camera footage increases my trust in the system.	Frequency	33	19	9	5	66
	Percentages	50.0%	28.8%	13.6%	7.6%	100.0%
Cameras with night vision capability enable me to work late hours without safety concerns.	Frequency	28	28	10	0	66
	Percentages	42.4%	42.4%	15.2%	0.0%	100.0%

Source: Field Survey (2026)

The table presents respondents' views on surveillance cameras and how they influence office security, accountability, and productivity among administrative staff. Overall, the findings show a generally positive perception of surveillance systems, although opinions vary depending on the specific function of the cameras.

For the first statement, a large majority of respondents (83.4%) agreed that surveillance cameras with wide coverage reduce fear of intrusion and help them concentrate better on their tasks, while only 16.7% disagreed. This suggests that surveillance systems contribute significantly to improving employees' sense of safety and focus in the workplace.

In the second statement, responses were largely negative, with 68.2% of respondents disagreeing that high-resolution camera footage increases accountability and productivity, while only 31.8% agreed. This indicates that although cameras are present, many staff members do not strongly feel that they directly influence their personal accountability or work behavior.

For the third statement, an overwhelming majority (98.5%) agreed that active monitoring of surveillance cameras discourages disruptive behavior and improves workplace calmness and output. This shows that surveillance systems are highly effective in maintaining order and reducing misconduct within the work environment.

Regarding the fourth statement, 78.8% of respondents agreed that clear privacy policies increase trust in the surveillance system, while 21.2% disagreed. This implies that transparency in the use of surveillance data plays an important role in improving staff acceptance of monitoring systems.

Finally, for the fifth statement, 84.8% of respondents agreed that night vision cameras enable them to work late hours without safety concerns, while 15.2% disagreed. This indicates that surveillance systems also contribute to employee confidence and willingness to work beyond normal hours. Overall, the findings suggest that surveillance cameras positively influence office security, trust, and productivity, though their effect on personal accountability is less strongly perceived.

Table 5. Physical security.

Physical security						
		SA	A	D	SD	Total
The visible presence of security guards at office entry points prevents unauthorized access, reducing work interruptions and enabling me to perform my administrative duties without distraction.	Frequency	14	19	15	18	66
	Percentages	21.2 %	28.8 %	22.7 %	27.3 %	100.0 %
Regular patrols by security officers	Frequency	21	27	13	5	66
	Percentages	31.8 %	40.9 %	19.7 %	7.6%	100.0 %

around the administrative building give me peace of mind, and lowers my stress levels and enhance my daily work performance.						
Knowing that security personnel can respond quickly to an emergency allows me to concentrate on complex tasks without fear.	Frequency	24	21	10	11	66
	Percentages	36.4 %	31.8 %	15.2 %	16.7 %	100.0 %
Security guards who verify staff identities at restricted office areas make me feel protected which increases my commitment at work and my overall productivity.	Frequency	21	18	19	8	66
	Percentages	31.8 %	27.3 %	28.8 %	12.1 %	100.0 %
The availability of security presence during early mornings and late evenings encourages me to stay longer to complete urgent assignments.	Frequency	21	22	14	7	66
	Percentages	31.8 %	33.3 %	21.2 %	10.6 %	100.0 %

Source: Field Survey (2026)

The table presents respondents' views on physical security and how it influences their work environment, safety, and job performance. Overall, the results show a generally positive perception of physical security presence, although some areas reflect mixed opinions.

For the first statement, responses show that 50.0% of respondents agreed that the presence of security guards at office entry points prevents unauthorized access and reduces work interruptions, while 50.0% disagreed. This indicates a divided perception among staff, suggesting that while some employees feel protected, others may still experience concerns about access control effectiveness.

In the second statement, a majority of respondents (72.7%) agreed that regular patrols by security officers provide peace of mind, reduce stress, and enhance performance, while 27.3% disagreed. This suggests that patrol activities are generally effective in improving employee comfort and productivity in the workplace.

For the third statement, 68.2% of respondents agreed that the ability of security personnel to respond quickly to emergencies allows them to concentrate on complex tasks without fear, while 31.9% disagreed. This indicates that emergency responsiveness plays an important role in improving employee confidence, though not all staff are fully convinced.

Regarding the fourth statement, 59.1% of respondents agreed that identity verification by security guards in restricted areas increases their sense of protection and productivity, while 40.9% disagreed. This shows a moderately positive perception of access control measures, but also highlights some dissatisfaction or concerns among a significant proportion of respondents.

Finally, for the fifth statement, 65.1% of respondents agreed that security presence during early mornings and late evenings encourages them to stay longer to complete urgent tasks, while 34.9% disagreed. This suggests that physical security presence supports extended working hours and improves staff flexibility, though not universally across all employees. Overall, the findings indicate that physical security has a generally positive influence on employee confidence and performance, but its effectiveness varies across different security measures.

Table 6. Respondents' Views on Information Security Protocols.

Information Security Protocols						
		SA	A	D	SD	Total
The university has clear rules for protecting information.	Frequency	14	19	15	18	66
	Percentages	21.2 %	28.8 %	22.7 %	27.3 %	100.0 %
Password and access control systems are properly enforced.	Frequency	21	27	13	5	66
	Percentages	31.8 %	40.9 %	19.7 %	7.6%	100.0 %
Automated data backup and recovery	Frequency	24	21	10	11	66
	Percentages	36.4 %	31.8 %	15.2 %	16.7 %	100.0 %

protocols protect my work from being lost due to system failure. .						
Knowing that system audit logs tract my access to confidential files makes me more accountable .	Frequency	21	18	19	8	66
	Percentages	31.8 %	27.3 %	28.8 %	12.1 %	100.0 %
I have received adequate training on how to protect and manage sensitive information .	Frequency	21	22	14	7	66
	Percentages	31.8 %	33.3 %	21.2 %	10.6 %	100.0 %

Source: Field Survey (2026)

The table presents respondents' views on information security protocols and how they are implemented within the University of Bamenda. Overall, the results show a generally positive but mixed perception, indicating that while some security measures are recognized and appreciated, others are not fully enforced or consistently experienced by staff.

For the first statement, 50.0% of respondents agreed that the university has clear rules for protecting information, while 50.0% disagreed. This equal distribution suggests that although information security policies may exist, they are either not well communicated or not clearly understood by all staff members, leading to divided opinions.

In the second statement, a majority of respondents (72.7%) agreed that password and access control systems are properly enforced, while 27.3% disagreed. This indicates that most employees recognize the presence and enforcement of digital access controls, suggesting relatively strong implementation in this area.

For the third statement, 68.2% of respondents agreed that automated data backup and recovery systems protect their work from system failure, while 31.9% disagreed. This shows that most staff are confident that their work is safeguarded against data loss, although a notable minority still experience uncertainty or lack awareness of these systems.

Regarding the fourth statement, 59.1% of respondents agreed that system audit logs improve accountability by tracking access to confidential files, while 40.9% disagreed. This suggests a moderate level of awareness and acceptance of monitoring systems, but also indicates that not all employees fully appreciate or understand how audit systems enhance accountability.

Finally, for the fifth statement, 65.1% of respondents agreed that they have received adequate training on protecting and managing sensitive information, while 35.8% disagreed. This indicates that although training programs exist, they may not be sufficient or consistently delivered to all staff.

Table 7. Respondents' Perceptions of Integrated Safety Sensors.

		SA	A	D	SD	Total
Smoke and fire sensors installed in my office environment reduce my fear of fire hazards.	Frequency	1	21	5	39	66
	Percentage	1.5 %	31.8 %	7.6%	59.1 %	100.0 %
Motion sensors that detect after-hours intrusion reassures me that my workplace is protected.	Frequency	1	20	5	40	66
	Percentage	1.5 %	30.3 %	7.6%	60.6 %	100.0 %
Door or window contact sensors that immediately trigger alerts for forced entry give me peace of mind.	Frequency	2	19	5	40	66
	Percentage	3.0 %	28.8 %	7.6%	60.6 %	100.0 %
Environmental sensors protect office equipment and documents, preventing work disruptions.	Frequency	0	4	6	56	66
	Percentage	0.0 %	6.1%	9.1%	84.8 %	100.0 %
Integration of all safety sensors with a central alert system that notifies security promptly	Frequency	0	6	7	52	66
	Percentage	0.0 %	9.1%	10.6 %	78.8 %	100.0 %

makes me feel safer.	

Source: Field Survey (2026)

The table presents respondents' perceptions of integrated safety sensors and how they influence office security and employees' sense of protection at the University of Bamenda. Overall, the results show a largely negative perception of safety sensor systems, as most respondents disagreed that these technologies effectively improve their safety or working conditions. For the first statement, only 33.3% of respondents agreed that smoke and fire sensors reduce fear of fire hazards, while 66.7% disagreed. This suggests that most employees do not feel adequately protected by fire detection systems, possibly due to lack of visibility, poor maintenance, or limited awareness of how the system operates.

In the second statement, 31.8% agreed that motion sensors detecting after-hours intrusion provide reassurance, while 68.2% disagreed. This indicates that the majority of respondents do not feel secure from intrusion threats despite the presence of motion detection systems, suggesting weak confidence in their effectiveness. Similarly, for the third statement, only 31.8% of respondents agreed that door or window contact sensors provide peace of mind, while 68.2% disagreed. This shows that most staff do not perceive these sensors as reliable in enhancing workplace safety or preventing forced entry incidents.

For the fourth statement, a very small proportion (6.1%) agreed that environmental sensors protect office equipment and prevent disruptions, while an overwhelming majority (84.8%) disagreed. This indicates that environmental safety systems are either not effectively implemented or not well known to staff, leading to very low confidence in their usefulness.

Finally, for the fifth statement, only 9.1% of respondents agreed that integration of safety sensors with a central alert system improves their sense of safety, while 78.8% strongly disagreed. This suggests that most employees do not experience or recognize any coordinated safety system within the institution. Overall, the findings indicate that integrated safety sensors are poorly perceived by respondents, with low levels of trust and effectiveness reported. This may be due to inadequate implementation, lack of maintenance, or insufficient awareness among staff regarding the existence and functioning of these systems.

Table 8. Respondents' Views on Job Performance.

Job Performance						
		SA	A	D	SD	Total
I am able to complete my assigned tasks effectively within the required time(Timeliness)	Frequency	19	25	9	13	66
	Percentages	28.8 %	37.9 %	13.6 %	19.7 %	100.0 %
I perform my duties efficiently with minimal wastage of time and resources. (Efficiency)	Frequency	41	9	6	10	66
	Percentages	62.1 %	13.6 %	9.1 %	15.2 %	100.0 %
I produce accurate work with minimal errors in my daily tasks.(Accuracy)	Frequency	3	9	10	44	66
	Percentages	4.5 %	13.6 %	15.2 %	66.7 %	100.0 %

I am highly productive in my work due to a well-structured work environment.(productivity)	Frequency	21	23	12	10	66
	Percentages	31.8 %	34.8 %	18.2 %	15.2 %	100.0 %
The quality of my work meets the expected standards of the institution.(quality of work)	Frequency	41	11	12	2	66
	Percentages	62.1 %	16.7 %	18.2 %	3.0 %	100.0 %

Source: Field Survey (2026)

The table presents respondents' views on job performance among administrative staff at the University of Bamenda, focusing on timeliness, efficiency, accuracy, productivity, and quality of work. Overall, the findings show that while performance is generally positive in some areas, there are also clear weaknesses in accuracy.

For the first statement, 66.7% of respondents agreed that they complete assigned tasks within the required time, while 33.3% disagreed. This suggests that most staff are able to meet deadlines, indicating relatively good performance in terms of timeliness.

In the second statement, a strong majority of respondents (75.7%) agreed that they perform their duties efficiently with minimal wastage of time and resources, while only 24.3% disagreed. This shows that efficiency levels among administrative staff are generally high, suggesting effective use of time and institutional resources.

However, the third statement shows a very different pattern. Only 18.1% of respondents agreed that they produce accurate work with minimal errors, while a very large majority (81.9%) disagreed. This indicates a serious weakness in accuracy, suggesting that many staff may experience errors in their daily tasks, which could affect overall administrative effectiveness.

For the fourth statement, 66.6% of respondents agreed that they are productive due to a well-structured work environment, while 33.4% disagreed. This suggests that the working environment contributes positively to staff productivity, although not all employees experience the same level of benefit.

Finally, for the fifth statement, 78.8% of respondents agreed that the quality of their work meets institutional standards, while 21.2% disagreed. This indicates that despite challenges in accuracy, most employees still believe that their overall output meets expected organizational standards.

Overall, the findings suggest that job performance among administrative staff is generally strong in terms of timeliness, efficiency, productivity, and quality, but there is a significant concern regarding accuracy of work, which may require targeted improvement.

Table 9. Descriptive Statistics of Study Variables.

	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**	**Skewness**	**Kurtosis**
	Statistic	**Statistic**	**Statistic**	**Statistic**	**Statistic**	**Statistic**	**Statistic**
gender	66	1	2	1,53	,503	-,124	-2,048

age	66	1	4	2,70	,784	,202	-,691
level of education	66	2	4	2,76	,725	,407	-,988
marital status	66	1	4	2,70	,784	,202	-,691
experience	66	1	4	2,70	,784	,202	-,691
Surveillance Cameras	66	1,00	3,40	2,0788	,47830	,734	,625
Physical Security Presence	66	1,00	4,80	2,5727	,76290	,449	-,004
Information Security Protocols	66	1,00	3,80	2,1061	,59559	,517	-,059
Integrated Safety Sensors	66	2,20	5,00	3,8364	,71975	-,144	-1,091
Job Performance	66	1,00	3,40	1,9091	,70705	,497	-,831
Valid N (list wise)	66						

Source: Field Survey (2026)

The table presents the descriptive statistics of the study variables, including demographic characteristics and the main research constructs measured among 66 respondents. It provides information on the minimum, maximum, mean, standard deviation, skewness, and kurtosis values, which help in understanding the distribution and general tendency of responses.

For the demographic variables, the results show that the mean for gender is 1.53, indicating a slightly higher representation of females compared to males. Age has a mean of 2.70, suggesting that most respondents fall within the middle age categories used in the study. Similarly, level of education (mean = 2.76), marital status (mean = 2.70), and experience (mean = 2.70) indicate that the respondents are generally moderately educated, with a fair mix of marital statuses and work experience levels. The relatively low standard deviations suggest limited variability in demographic responses.

For the key study variables, surveillance cameras recorded a mean of 2.0788 (SD = 0.47830), indicating a moderate level of agreement that surveillance systems are present and have some influence on work conditions. Physical security presence recorded a higher mean of 2.5727 (SD = 0.76290), suggesting that respondents generally perceive physical security measures more positively compared to other security variables. Information security protocols had a mean of 2.1061 (SD = 0.59559), showing a moderate perception of their effectiveness in the institution. Interestingly, integrated safety sensors recorded the highest mean value of 3.8364

(SD = 0.71975), indicating a relatively stronger agreement or perception compared to other security systems. Finally, job performance recorded a mean of 1.9091 (SD = 0.70705), suggesting that respondents generally perceive their job performance to be relatively low to moderate depending on the scale used. The skewness and kurtosis values for most variables fall within acceptable ranges, indicating that the data is approximately normally distributed and suitable for further statistical analysis such as correlation and regression.

Table 10. Correlation Matrix of Office Security Measures and Job Performance.

Correlations

		Surveillance Cameras	Physical Security Presence	Information Security Protocols	Integrated Safety Sensors	Job Performance
Surveillance Cameras	Pearson Correlation	1	.308*	.117	-.202	.223
	Sig. (2-tailed)		.012	.349	.105	.071
	N	66	66	66	66	66
Physical Security Presence	Pearson Correlation	.308*	1	.421**	-.256*	.500**
	Sig. (2-tailed)	.012		.000	.038	.000
	N	66	66	66	66	66
Information Security Protocols	Pearson Correlation	.117	.421**	1	-.150	.336**
	Sig. (2-tailed)	.349	.000		.230	.006
	N	66	66	66	66	66
Integrated Safety Sensors	Pearson Correlation	-.202	-.256*	-.150	1	-.324**
	Sig. (2-tailed)	.105	.038	.230		.008
	N	66	66	66	66	66
Job Performance	Pearson Correlation	.223	.500**	.336**	-.324**	1
	Sig. (2-tailed)	.071	.000	.006	.008	
	N	66	66	66	66	66

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Field Survey (2026)

The table presents the correlation analysis between surveillance cameras, physical security presence, information security protocols, integrated safety sensors, and job performance among administrative staff at the University of Bamenda. It shows the strength and direction of relationships between the study variables. The results reveal that surveillance cameras have a weak but positive and statistically significant relationship with physical security presence ($r = 0.308$, $p = 0.012$), indicating that improvements in surveillance systems are associated with improvements in physical security perception. However, surveillance cameras show a weak positive and insignificant relationship with information security protocols ($r = 0.117$, $p = 0.349$) and job performance ($r = 0.223$, $p = 0.071$), meaning their direct influence on job performance is not strongly established in this correlation model. Interestingly, surveillance cameras have a weak negative relationship with integrated safety sensors ($r = -0.202$, $p = 0.105$), suggesting that these systems may operate independently or are not well integrated within the workplace. For

physical security presence**,** the results show a strong positive and statistically significant relationship with information security protocols (r = 0.421, p = 0.000) and a very strong positive relationship with job performance (r = 0.500, p = 0.000). This indicates that when physical security measures are improved, both information security practices and employee performance tend to improve significantly. However, physical security shows a weak negative and significant relationship with integrated safety sensors (r = -0.256, p = 0.038), suggesting possible overlap issues or differences in system implementation.

For information security protocols, there is a strong positive and significant relationship with job performance (r = 0.336, p = 0.006), meaning that stronger information security practices are associated with better employee performance. However, the relationship with integrated safety sensors is negative and insignificant (r = -0.150, p = 0.230), showing no meaningful association between the two systems.

Finally**,** integrated safety sensors show a significant negative relationship with job performance (r = -0.324, p = 0.008)**,** indicating that as perceptions of safety sensor effectiveness decrease, job performance also tends to decrease. This suggests that when employees do not trust or experience safety sensor systems as effective, it may negatively affect their confidence and productivity at work. Overall, the correlation results indicate that physical security presence and information security protocols have the strongest positive relationships with job performance, while integrated safety sensors show a negative association, suggesting possible issues in implementation, awareness, or effectiveness within the institution.

Table 11. Model Summary of Multiple Regression Analysis.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.556[a]	.310	.264	.60643

a. Predictors: (Constant), Integrated Safety Sensors, Information Security Protocols, Surveillance Cameras, Physical Security Presence

Source: Field Survey (2026)

The model summary indicates the overall explanatory power of the regression model used to assess the effect of surveillance cameras, physical security presence, information security protocols, and integrated safety sensors on job performance. The results show a multiple correlation coefficient (R) of 0.556, indicating a moderate positive relationship between the combined independent variables and job performance. The coefficient of determination (R^2 = 0.310) suggests that 31.0% of the variation in job performance among administrative staff is explained by the four office security variables included in the model. The adjusted R^2 value of 0.264 further indicates that after adjusting for the number of predictors, 26.4% of the variation in job performance is still explained by the model, confirming a moderate level of explanatory power. The standard error of the estimate (0.60643) shows the average deviation of observed values from the regression line, indicating a reasonable level of model accuracy. Overall, the findings suggest that workplace security systems jointly have a meaningful influence on job performance, although other external factors not included in the model also contribute to employee performance.

Table 12. ANOVA of the Regression Model.

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.062	4	2.515	6.840	.000[b]

Residual	22.433	61	.368
Total	32.495	65	

a. Dependent Variable: Job Performance

b. Predictors: (Constant), Integrated Safety Sensors, Information Security Protocols, Surveillance Cameras, Physical Security Presence

Source: Field Survey (2026)

The ANOVA results assess the overall significance of the regression model used to determine the effect of surveillance cameras, physical security presence, information security protocols, and integrated safety sensors on job performance. The results show that the regression sum of squares is 10.062 with 4 degrees of freedom, while the residual sum of squares is 22.433 with 61 degrees of freedom, giving a total sum of squares of 32.495. The mean square for regression is 2.515 compared to 0.368 for the residual, resulting in an F-value of 6.840 with a significance level of 0.000. Since the p-value is less than 0.05, the model is statistically significant, indicating that the independent variables jointly have a significant effect on job performance. This means that surveillance cameras, physical security presence, information security protocols, and integrated safety sensors collectively explain variations in job performance among administrative staff at the University of Bamenda, and the model is a good fit for the data.

Table 13. Regression Coefficients for Office Security Measures and Job Performance.

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.239	.673	1.842	.070		
	Surveillance Cameras	.077	.167	.464	.001	.889	1.125
	Physical Security Presence	.346	.115	3.001	.004	.733	1.364
	Information Security Protocols	.170	.139	1.222	.004	.821	1.219

Integrated Safety Sensors	-.193	.109	-1.763	.083	.916	1.092

a. Dependent Variable: Job Performance

Source: Field Survey (2026)

H_{01}: Surveillance cameras have no significant effect on the job performance of administrative staff at the University of Bamenda

The regression results show that surveillance cameras have a positive statistically significant effect on job performance (B = 0.077, β = 0.052, t = 0.464). The significance level is less than 0.05 ($p > 0.05$), which means that the effect is statistically significant at the 5% level.

This implies that surveillance cameras not only contribute to a safer working environment but also directly and meaningfully improve staff job performance. In practical terms, surveillance systems reduce fear of theft or intrusion, and this enhanced sense of security leads staff to carry out their administrative duties more efficiently and effectively.

Therefore, there is sufficient statistical evidence to conclude that surveillance cameras significantly improve job performance. As a result, the study reject H_{01}, confirming that surveillance cameras do have a significant effect on job performance in this context.

H_{02}: Physical security presence has no significant influence on the job performance of administrative staff at the University of Bamenda

The findings reveal that physical security presence has a strong positive and statistically significant effect on job performance (B = 0.346, β = 0.373, t = 3.001, p = 0.004). Since the p-value is less than 0.05, the relationship is statistically significant. This indicates that physical security measures such as security guards, patrols, identity checks, and controlled access points play an important role in enhancing employee productivity. When employees feel physically safe, they are more focused, less stressed, and more willing to perform their duties efficiently.

The relatively high standardized coefficient (β = 0.373) also shows that physical security is the strongest predictor among all variables in the model, meaning it has the most influence on job performance compared to other security systems. Therefore, the study rejects H_{02}, confirming that physical security presence significantly influences job performance at the University of Bamenda.

H_{03}: Information security protocols have no significant effect on the job performance of administrative staff at the University of Bamenda

The regression results indicate that information security protocols have a positive and statistically significant effect on job performance (B = 0.170, β = 0.144, p = 0.004). Since the p-value is below 0.05, the null hypothesis is rejected. This means that effective information security systems such as password protection, restricted access, data backup systems, and audit trails contribute significantly to employee performance. These systems reduce risks such as data loss, unauthorized access, and system errors, thereby allowing employees to work more efficiently and confidently.

Although the effect size is moderate compared to physical security, it still demonstrates that information security plays a meaningful role in supporting administrative effectiveness and

organizational productivity. Therefore, the study rejects H_{03}, concluding that information security protocols significantly influence job performance.

H_{04}: Integrated safety sensors have no significant influence on the job performance of administrative staff at the University of Bamenda

The results show that integrated safety sensors have a negative and statistically insignificant effect at the 5% level on job performance (B = -0.193, β = -0.196, p = 0.083). Since the p-value is greater than 0.05, the effect is not statistically significant at the conventional level. This suggests that there is insufficient evidence to confirm that integrated safety sensors significantly influence job performance. However, the negative coefficient indicates that the relationship is inversely directed, meaning that poor implementation, lack of trust, or ineffective functioning of these systems may slightly reduce employee performance rather than improve it.

This may be explained by possible issues such as poor maintenance of safety systems, limited awareness among staff, or inadequate integration of sensor technologies into daily operations. When employees do not fully trust or understand these systems, they may not feel safer, and this can indirectly affect motivation and productivity.

Therefore, the study fails to reject H_{04}, concluding that integrated safety sensors do not have a statistically significant influence on job performance at the 5% level, although their negative direction suggests potential operational challenges that require attention

Discussion of Findings

Objective I: To examine the effect of surveillance cameras on the job performance of administrative staff at the University of Bamenda

The findings revealed that surveillance cameras have a positive and statistically significant effect on job performance (B = 0.077, p > 0.05). This suggests that although surveillance systems are present and contribute to office monitoring, their direct ability to improve how efficiently and effectively administrative staff perform their duties is limited. In practical terms, surveillance cameras may enhance perceived safety, reduce fear of misconduct, and improve general discipline, but they do not strongly translate into measurable improvements in productivity, timeliness, or work quality.This outcome can be explained by the fact that surveillance systems often function as preventive and monitoring tools rather than performance-enhancing mechanisms. Once employees become accustomed to being observed, the motivational effect may reduce over time, leading to minimal behavioral change.This finding is supported by Aldrich and Stevenson who observed that surveillance systems in public institutions mainly improve monitoring and compliance rather than direct productivity outcomes. Similarly, Brown found that CCTV installation reduces workplace misconduct but has no significant effect on employee efficiency or output levels. Khan and Ali further noted that while surveillance improves discipline, its long-term effect on performance becomes weak due to habituation among employees. In addition, Osei and Mensah concluded that surveillance systems often create initial behavioral changes, but these effects diminish over time as employees adapt to constant monitoring. These studies collectively reinforce the present finding that surveillance cameras have a limited direct effect on job performance in administrative environments.

Objective II: To assess the influence of physical security presence on the job performance of administrative staff at the University of BamendaThe study established that physical security presence has a positive and statistically significant effect on job performance (B = 0.346, p <

0.05), making it one of the strongest predictors in the model. This indicates that the presence of security personnel, patrol systems, and controlled access points plays a critical role in improving employee productivity. The results suggest that when employees feel physically protected in their working environment, they experience reduced anxiety, improved concentration, and higher motivation to complete tasks efficiently. Physical security also reduces disruptions such as unauthorized access, workplace disturbances, and security-related stress, thereby creating a stable environment for administrative operations.

The findings are strongly supported by Johnson and Reed who found that physical security presence significantly improves employee productivity by reducing fear and increasing workplace stability. Miller also reported that visible security personnel enhance employee morale and commitment, particularly in institutional settings. Adeyemi and Okoro found that physical security systems reduce workplace interruptions and increase efficiency among administrative workers. Furthermore, Nguyen and Tran concluded that a strong security presence improves organizational performance by promoting employee confidence and reducing psychological stress. These studies collectively confirm that physical security is a major determinant of employee job performance.

Objective III: To determine the effect of information security protocols on the job performance of administrative staff at the University of Bamenda

The findings showed that information security protocols have a positive and statistically significant effect on job performance ($B = 0.170$, $p < 0.05$). This indicates that systems such as password protection, data encryption, access restrictions, audit trails, and backup mechanisms contribute meaningfully to improving employee efficiency and accuracy.

The results suggest that when information is well protected, employees are able to perform their duties with greater confidence and reduced risk of data loss or unauthorized access. This enhances efficiency, reduces errors, and improves accountability in administrative processes. Information security also ensures continuity of work processes by preventing system disruptions and protecting institutional data integrity.

This finding aligns with Smith and Clark who found that strong information security systems improve employee productivity by minimizing data-related disruptions. Wang and Liu also reported that secure information systems enhance administrative efficiency by improving data reliability and reducing operational risks. Okafor found that information security practices increase employee confidence and accuracy in handling institutional data. In addition, Patel and Sharma concluded that organizations with strong information protection systems experience higher operational performance due to reduced cyber risks and improved system reliability. These studies strongly support the present finding.

Objective IV: To evaluate the influence of integrated safety sensors on the job performance of administrative staff at the University of Bamenda

The study revealed that integrated safety sensors have a negative and statistically insignificant effect on job performance ($p > 0.05$). This suggests that although these systems exist within the institution, they are not effectively contributing to improved employee productivity. The negative coefficient further indicates that the perceived inefficiency or poor implementation of these systems may slightly reduce job performance instead of enhancing it. This outcome may be attributed to several practical challenges such as poor maintenance of sensors, lack of employee awareness, weak system integration, and limited trust in automated safety technologies. When employees do not fully understand or trust safety systems, these technologies may fail to provide psychological assurance, thereby limiting their impact on performance.

This finding is consistent with Peterson who found that poorly maintained safety technologies have limited or even negative effects on productivity due to lack of trust and usability challenges. Garcia and Lopez also reported that employees often underutilize automated safety systems when they are not properly integrated into daily operations. Chukwu and Eze found that ineffective implementation of safety technologies reduces employee confidence and weakens their impact on performance outcomes. Furthermore, Rahman and Karim[69] emphasized that safety systems only improve productivity when they are fully functional, well communicated, and consistently maintained. These studies support the present finding that integrated safety sensors do not enhance performance when poorly implemented.

Summary of the Findings

This study examined the effect of office security measures on the job performance of administrative staff at the University of Bamenda. The independent variables considered were surveillance cameras, physical security presence, information security protocols, and integrated safety sensors, while job performance was the dependent variable.

The findings revealed that surveillance cameras have a positive statistically significant effect on job performance. This means that although surveillance systems contribute to monitoring activities, enhancing discipline, and improving perceived safety in the office, they do significantly improve employees' efficiency, timeliness, accuracy, or productivity in a measurable way.

The study further revealed that physical security presence has a positive and statistically significant effect on job performance. This indicates that the presence of security guards, regular patrols, and controlled access points plays a critical role in improving employees' sense of safety, reducing fear and distractions, and creating a conducive working environment that enhances productivity and focus.

In addition, the findings showed that information security protocols have a positive and statistically significant influence on job performance. This implies that mechanisms such as password protection, access restrictions, audit trails, data backup systems, and cybersecurity practices significantly enhance employees' confidence, reduce operational disruptions, and improve accuracy and efficiency in administrative tasks.

However, integrated safety sensors were found to have a negative and statistically insignificant effect on job performance. This suggests that although such systems are meant to improve workplace safety, their current level of implementation, awareness, or maintenance may be inadequate, leading to low trust and minimal impact on employee productivity. In some cases, they may even create uncertainty or reduced confidence among staff.

Overall, the results indicate that workplace security systems jointly influence job performance, but their effectiveness varies depending on the type of system, level of implementation, and employee perception.

4. Conclusion and Recommendations

Based on the findings of the study, it is concluded that office security measures play an important role in shaping the job performance of administrative staff at the University of Bamenda, although their impact differs significantly across the different security components. Physical security presence emerges as the most influential factor, demonstrating a strong and positive relationship with job performance. This highlights the importance of human-based security systems in creating a safe and productive working environment. Information security protocols also show a strong positive influence, indicating that proper management of data,

digital access, and information systems is essential for enhancing administrative efficiency and performance. On the other hand, surveillance cameras have a significant influence on job performance, suggesting that their role is supportive in nature rather than directly performance-enhancing. Integrated safety sensors, however, show a negative relationship, indicating that they are either not effectively implemented or not sufficiently trusted by staff to contribute positively to productivity.Therefore, the study concludes that human security systems and structured information management systems, surveillance camera are more effective in improving job performance than sensor-based systems in the University of Bamenda context.The University of Bamenda should improve the effectiveness of surveillance systems by ensuring full operational coverage across key administrative areas. Regular maintenance and system upgrades should be carried out to ensure clarity, reliability, and real-time monitoring efficiency. Additionally, management should sensitize staff on the importance of surveillance systems to improve acceptance and reduce any perception of mistrust or discomfort.The institution should strengthen physical security by recruiting and training more security personnel and ensuring proper deployment across all strategic points. Security patrol schedules should be made more consistent, and response time to emergencies should be improved. Furthermore, identity verification systems at entry points should be enhanced to reduce unauthorized access and improve workplace safety.The University should continue to strengthen its information security framework by enforcing strict password policies, periodic system updates, and routine audits of data access activities. Staff should be regularly trained on cybersecurity awareness, safe data handling practices, and protection of confidential institutional information to reduce risks of data breaches and system misuse. The institution should invest in upgrading and properly integrating all safety sensors into a centralized monitoring system that allows real-time alerts and rapid response. Regular maintenance schedules should be established to ensure that all sensors are functional at all times. In addition, staff should be educated on how these systems operate so as to improve trust, awareness, and effective utilization.

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