Internal Control in the Public Sector of Ghana: A Case Study

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Original Research Article

ABSTRACT

Internal control is considered to be a key corporate governance mechanism. The purpose of this study is to provide an account of the internal control activities and their challenges from the staff perspective and an insight into the process from the Internal Auditor within the context of the Kumasi Office of Ghana Highways Authority (GHA). The data was obtained from the staff through questionnaire administration and interviewing the Internal Auditor on the process.
The data analysis was descriptive and inferential statistics while the interview responses were analyzed via an interpretative approach. The results revealed that staffs are familiar with the existence of systems for internal control. The purpose of internal controls at GHA was the most critical aspect of its internal control activities. Internal control activities suggest that the tender committee formed to evaluate tender documents and goods bought through contracts are appropriately recorded in books had the majority consensus respectively. The internal auditor suggested that enforcing the formation of an Audit Committee in the region and provision of adequate logistics for internal auditors will improve the internal control activities of GHA. The study recommends that the management of GHA at the regional office must create an environment that can positively influence the control consciousness of entity personnel.

Keywords: Internal control systems; internal control activities; internal auditing; public sector.

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1. INTRODUCTION

Most organizations aim to stay profitable and maintain control of their operations. However, this is not the case for most organizations which can be attributed to a company's internal activities. One of the key drivers to a successful company is its internal control activities.

Organizational culture is defined as a pattern of basic assumptions that a group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration [1]. Organizational culture affects the organizational climate of most organizations and for internal controls to be effective they must be supported by the organizational culture [1]. Managers of organizations have a role to play for sound internal control to be effective [2].

The backbone of internal control systems is based on organizational policies, procedures, and practices when it is well communicated to their staff [3]. The internal control system encompasses the control environment, risk assessment, control activities, and monitoring activities [4]. Irrespective of whether a large public company or a private company, there is benefit and value in adopting an internal control program [5]. Effective internal control provides the guarantee that goals of organizations are going to be met and risks are controlled with benefits in terms of provision of more timely and accurate information for decision-makers, increases risk awareness across an organization, facilitates consistency and efficiency, may help prevent fines and penalties from regulators and reinforcement of achieving strategic objectives [6]. The effective use of internal control mechanisms will help organizations to achieve their objectives and possibly mitigate their risk [7]. Most organizations use the COSO Framework as a benchmark for their internal control activities [8]. Internal audit has a major role in internal controls activities [9]. Dealing with internal controls is, and always has been an issue in audits of all sizes [10]. Internal auditors must be proactive to establish themselves as the driving force of internal controls activities of any organization [11]. The audit committee influences internal control [12].

1.1 Why this Study?

Internal control is inherently complex and consists of many activities across, up and down, and inside and outside an organization [4]. There have been demands for greater accountability and transparency in the operations of the public sector of Ghana hence the Public Accounts Committee (PAC). The mandate of the PAC is to examine the audited accounts showing the appropriation of the sums granted by Parliament to meet the public expenditure of the government as presented to the House by the Auditor General of Ghana.

Traditionally internal control had a fairly direct relationship to the accounting records [2]. However, internal control has significantly expanded its dimensions into general management control and corporate governance. Companies that have major control failures suffer the consequences of financial and reputational issues such as Lloyds TSB (2008) relied on a rescue plan from the British Government and Lehman Brothers (2008) filed for bankruptcy protection [3]

Weak internal control systems in the public sector had led to the misuse of funds by government agencies and this is becoming a problem [13]. Efforts have been made over the years to curtail the financial mistakes and imprecisions in the public sector in Ghana of which the Kumasi Office of Ghana Highways Authority is no exception. Staff must have a fair understanding of internal controls and their readiness to make it work irrespective of the nature of the organization. Staff commitment to follow through with the internal control mechanism of an organization is critical to its success [8]. However, the concept of internal control seems to be under-explored within the public sector of Ghana. The purpose of this study is to provide an account of the internal control activities and their challenges from the perspectives of the staff and an insight into the process from the Internal Auditor within the context of the Kumasi Office of Ghana Highways Authority.

2. STUDY SETTING AND METHODOLOGY

2.1 Study Setting

The Ghana Highways Authority (GHA) was selected as a case company due to its size and its mandate in the construction of trunk roads, bridges, and culverts for the government of Ghana. The choice of the study's site was influenced by accessibility and readiness for the staff to participate voluntarily in the study and its proximity to the authors.

2.2 Methodology

2.2.1 Design

The study made use of a mixed-method design comprising quantitative and qualitative approaches. The study adopted a descriptive cross-sectional study as it investigated internal control activities and their challenges in the public sector of Ghana in March 2019. A single case study strategy was adopted by the study via a survey and interviews. The target population for the study were the staff of the Regional office of GHA. The justification of the mixed-method approach is that the strength of one method can be used to overcome the weakness of another method. Moreover, narrative and non-textual information can add meaning to numeric data while numeric data can add precision to narrative and non-textual information.

2.2.2 Population and sample size

The population of the study covers the staff of GHA at the Regional Office. A sample size of forty-two (42) was conveniently selected from eleven departments at the Regional Office and purposively selected the Internal Auditor of the Kumasi Office due to his expert knowledge of internal control activities. The determination of sample size was non-statistical; it was based on the availability of the right respondents who have a fair knowledge of the issues under discussion. Most importantly the respondent is voluntarily ready to be part of the study.

The data collected for this study was through a questionnaire and interview guide. The questionnaire was self-administered after briefing the respondents on how to fill the questionnaire while the interview was face-to-face with the Internal Auditor. The questionnaire had thirty-five questions on sampled respondents' characteristics, internal control systems, and internal control activities.

2.2.3 Data collection instruments

2.2.3.1 Questionnaire

Questionnaires were used to solicit information from the staff. The questionnaire had thirty-five questions on sampled respondents' characteristics, internal control systems, and internal control activities. The write-up of the questionnaire came up after thorough reading of the literature on internal control systems and activities. The sub-themes of the questionnaire were measured by open and closed-ended questions. Most of the questions adopted the five-Likert scale. A self-administered questionnaire was used to gather information from the staff through the drop-and-collect technique. This involves leaving a questionnaire with a respondent and going back to pick it up. This was used due to the educational level of the staff as they have the knowledge and ability to fill the questionnaire. The self-administered questionnaire helps to avoid interviewer bias and allows the study the opportunity to ask a bit more complex questions.

2.2.3.2 Interview guide

Interviews give the interviewee the opportunity to describe experiences in detail and to give their perspectives and interpretations of these experiences [14]. The purpose for using interviews but not other methods is that it helps to obtain unique information or interpretation held by the person interviewed. The data collected for this study was through an interview guide. In designing the interview guide substantial sources of information were drawn from the literature; the use of open-ended questions was to encourage descriptive and reflexive answers. The interview guide contains six items which were on the role of the Internal Auditor (IA), benefits of internal control activities, challenges of internal control activities, and how it could be improved. The interview was face-to-face with the Internal Auditor. Though one person, he represents the larger population with the knowledge of the interaction.

2.4 Data Analysis

2.4.1 Quantitative analysis

Descriptive statistics such as mean, percentages and frequencies were used and the ranking of the responses used Kendall's Coefficient of Concordance. The internal control systems had (W^a) = 0.743 meaning that 74.3% of the respondents agreed with how the themes were ranked using Kendall's coefficient of concordance. In terms of internal consistency of the scales used it was revealed that internal control systems had an α of 74.3% with six items while internal control activities had an α of 98.6% with twenty-four items. The reliability of the scales was good as the Cronbach's alpha values were more than 70% of each scale.

2.4.2 Qualitative analysis

The interview analysis adopted Wolcott's three dimensions of the qualitative research approach which are description, analysis and interpretation [15]. The interview responses were analyzed via an interpretative approach.

2.5 Ethics

The study considered all the ethical issues and its compliance in conducting the research in terms of respondents' voluntary consent to be part of the study and assurance of their privacy in terms of confidentiality and anonymity.

3. RESULTS AND DISCUSSION

3.1 Sampled Staffs

In all forty-one (41) staff took part in the questionnaire administered. The sample had 66% males and 34% females. It can be said that the GHA Kumasi Office in terms of the workforce had male dominance. All eleven departments contributed to the result of this study. The Accounts department contributed 17%, followed by Administration and Materials with 14% each. Supply, Maintenance, and Quantities accounted for 9%, 7% and 7% respectively whiles the other five departments contributed 22%. The composition of the departments cut across which gives broad-based participation. The educational level of sampled staffs had 22% as Diploma holders with 71% completed Bachelor Degree while 7% had obtained Post Graduate Qualification. The staff's level of education was high to enhance their knowledge and appreciation of the internal control systems and procedures at GHA. Working experience of the sampled staffs in terms of years had 66% with one to five years whereas those with six to ten years accounted for 29%. Some of the staff who have worked with GHA for over ten years had a representation of 5%. Staff working experiences could be a factor in their knowledge of internal control.

3.2 Internal Control Systems

This section captures staff knowledge of the internal control systems at GHA. It was revealed in Table 1 that 93% had a fair appreciation of the internal control systems and their application to the operations of the regional office while 7% had no idea of the operations of the internal control systems. This is still a concern as the 7% are part of the workforce and must have a working knowledge of the internal control systems of the regional office. This result is in agreement with Moeller [3] indicating that internal control is about the policies, processes, tasks, and behaviours of a company. It is in line that the greater majority of the sampled staff are aware of the existence of GHA internal control systems as this will be evident in their day-to-day work. Having a fair knowledge of the internal control by the staff of GHA is a good start but its observance is everything. Furthermore, the result supports Graham [8] suggestion that it is the responsibility of workers to make sure that in their daily working life must be conscious of internal controls and carry it out in the operations of their company.

When asked about the type of internal controls systems at GHA, as shown in Table 1 indicated that 91% of the sampled staff stressed it has been formalized while 9% opined that it is an informal system. This result aligns with Hightower [5] suggested there is a need for an internal control manual that goes beyond roles and responsibilities but it is a philosophy, culture, and a way of thinking of an organization. The formal state of the internal control was appropriate as it would set the purposes, objectives, and expectations for staff. The study operationalizes adequacy to represent how good something is. Staff was asked to describe their knowledge of the adequacy of the internal control system of GHA. The results revealed that 45% opined that the internal control system is adequate for the running of the operations of the GHA while 46% were indifferent to the adequacy with 9% indicating that the internal control system is not adequate. There is a concern as most of the staff could not affirm the adequacy of the internal control system. This can be assumed as a failure on the part of management as they owned the process. The result is not in line with OECD [2] stating that the ownership of internal control resides with managers is the first line of defence. It can be assumed that management is not communicating to staff on the internal control performance, which might also be a culture issue or management is not leading by example in terms of complying with internal controls.

The result on the effectiveness of the internal control systems of GHA confirmed that 41% see it as effective as it is achieving its intended purpose at GHA. However, 7% stated that is not effective with 52% having indifferent opinions on

the issue. As a company, it is not best for staff to be engaged without a proper orientation on internal control activities at GHA. The result will benefit from PwC [6] indicating that effective internal control provides sound assurance that the right things are been done. This study suggests that more has to be done by management in terms of communicating the strengths and deficiencies to both upstream and downstream on the effectiveness of the GHA internal control system.

Respondents were asked about their knowledge of the GHA internal control framework as evidence of its use. The result indicates that 66% had no idea whether there is an internal control framework for GHA. On COSO Framework, 25% opined that they are aware that GHA uses such a framework in the application of its internal control activities while 9% stated that they know it is COCO. In this respect, it is appropriate to suggest that internal control is effective and achievable by a company's operations if it becomes the culture of that company. In practice, the result is not a worrying situation as a staff level of responsibility gives him/her access to

certain information on a company's operations. It was no surprise that staffs were aware of the COSO framework due to its acceptability and popularity as affirmed by Graham [8] that serves as a benchmark for assessing the effectiveness of internal controls.

For the GHA internal control system, respondents were given the options based on efficiency, transparency, compliance, and control. The majority of the sampled staff representing 47% affirmed that the purpose of the internal control system is to have control over the activities of the operations of the organization. The result aligns with the views of PwC, [6], OECD [2] and Domnisoru et al., [1] all of them stressing the need for a robust control system to achieve the intended objectives and correct deviating from a company's operations. The study suggests that the management of GHA at the regional office must create an environment that can positively influence the control consciousness of entity personnel. Moreover, there must be a need for management to make sure that control policies and procedures are executed and offenders are punished.

Table 1. Related issues on internal control systems

Variable	Category	Frequency	Percentage	Mean rank	Ranking W^a= .743
Knowledge of the existence of internal control systems	Yes	38	93	2.07	5th
	No	3	7		
	Total	**41**	**100**		
System of internal control	Formal	37	91	2.11	4th
	Informal	4	9		
	Total	**41**	**100**		
Adequacy of GHA internal control system	Adequate	18	45	3.27	3rd
	Neutral	19	46		
	Not adequate	4	9		
	Total	**41**	**100**		
Effectiveness of GHA internal control system	Effective	17	41	3.27	3rd
	Neutral	21	52		
	Not Effective	3	7		
	Total	**41**	**100**		
Framework for internal control system	COCO	4	9	5.05	2nd
	COSO	10	25		
	No idea	27	66		
	Total	**31**	**100**		
Purpose of GHA internal control system	Efficiency	9	22	5.23	1st
	Transparency	7	17		
	Compliance	6	14		
	Control	19	47		
	Total	**41**	**100**		

Source: Fieldwork data, 2020

Efficiency came second with a representation of 22% as these staff opined that the purpose of the internal control system is to bring about efficiency in the operations of an organization. The views of the staff agree with COSO [4] assertion that robust internal control has the potential to improve the efficiency and effectiveness of a company's operations and reporting. The third rank was on transparency which had 17% of the staff's representation believe that the purpose of internal control will help to bring about transparency in the operations of the business. OECD [2] asserted that there is a need for organizations to ensure integrity, transparency, and accountability of their operations to the stakeholders. Furthermore, PwC [6] advised that transparency brings about commitment to staff integrity.

Biegelman and Bartow [16] opined that a culture of compliance takes time to develop hence the need for organizations to establish compliance standards. Compliance is important as it comes forth with a representation of 14% as opined by the sampled staff. The result suggests that it is a good practice for a company to comply with laws and regulations. The views of the sampled staff aligned with COSO [4] stating that most leading companies have approximately 75% of their controls as preventative controls. The benefit of compliance is that it saves the cost of litigations and penalties of noncompliance which in the long term affect the company's reputation in the eyes

of stakeholders. Likewise, Graham [8] noted that compliance risk carries significant penalties and sanctions for violating the laws relating to operating an organization.

3.3 Internal Control Activities

The study considered twenty-four internal control activities at the regional office of the GHA, Kumasi. The agreed percentage scores by the respondents on the themes of the activities as seen in Fig. 1 had 92% respectively for tender committee and recording of books. Receiving money, periodic audit, and relevant source documents had 87% each. This was followed by receiving of goods with 85%, authorizing the transactions and supporting documents had 82% each. Also, buying of goods and charge for Lab Test had 80% respectively. The 78% representation was on payment, appropriate books, and attendance books respectively. Management approval, independent audit, the price for the form, and approval by Regional Highway Director accounted had 75% each. In addition, general payment had 70% whereas quality check and documentation had 68% each. The rest of the themes were approval of Lab test with 58%, safety & health had 56%, cash bank daily with 53%, and site inspection with 43%. The discussion on the internal control activities will be on the four highest percentage scores and the least four percentage scores.
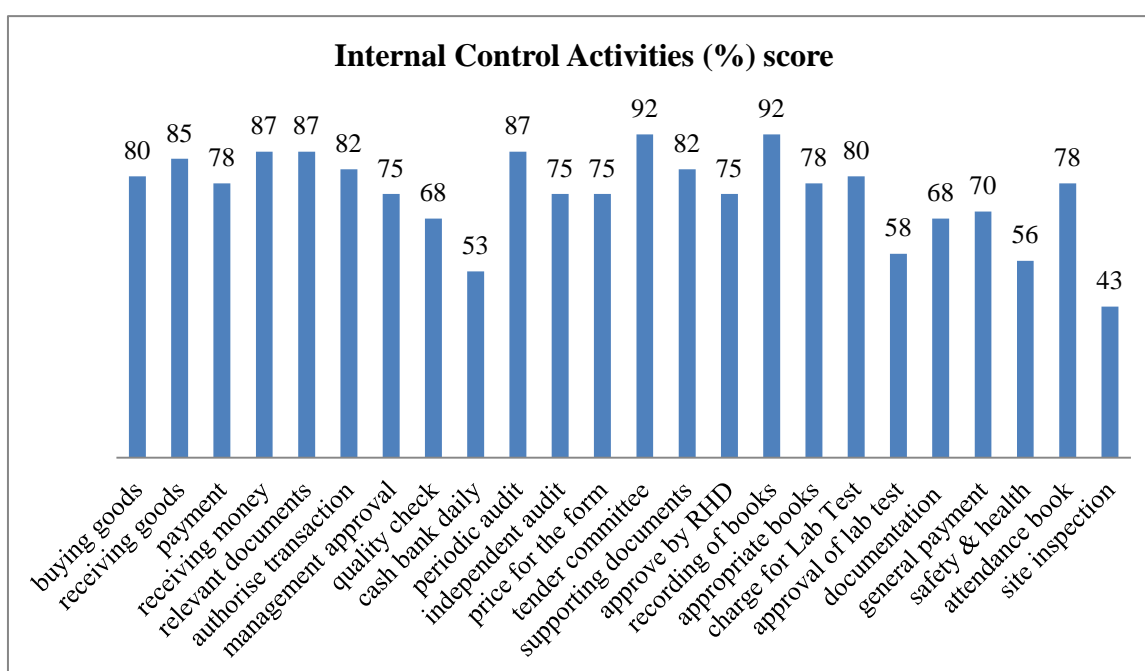

Fig. 1. Internal control activities

The two leading internal control activities as agreed by the respondents were the formation of the tender committee and the recording of books had 92% respectively. This implies that the tender committee evaluates the various contract documents and goods bought or procured through the contract are recorded in the appropriate books. The tender committee is a compliance issue as part of the Public Procurement Act of Ghana. Information aid decision-making in most organizations hence having records of procured goods and services through contracts must have proof of evidence in the appropriate books for tracing the source of the supply and auditing purposes. The result aligns with Moeller [3] stressing that policies and processes are there to be followed to facilitate effective and efficient operations through internal control mechanisms.

The other top percentage score on the internal control activities had 87% representation respectively on receiving money, periodic audit, and relevant documents. It is of good practice for periodic auditing internal controls as it will provide insight into the operational activities through oversight verifications on internal controls to ensure compliance, prevention, and detection. All the source documents must be kept as records of transactions and serve as evidence of activity for decision-making and auditing purposes. The result is in line with COSO [4] in that for an internal control activity to be effective its focus must be on preventive and detective controls.

The least four themes as indicated through the knowledge of the staff reveal that among the internal control activities is the unannounced job site inspection for operational compliance having 43% the reason being that internal auditors lack support from management and sometimes fuel to undertake such assignment is a problem. The second least had 53% which is cash received are kept and used for other purposes instead of banking them with the 24hrs stated by the Financial Administration Act. The third least which had 56% is on written safety and health policy to minimize hazards. This is a concern as staff knowledge on this is weak, this should have guided them to reduce employee illness and injury greatly. This is management oversight hence management must consider regular training to inform staff on the need to follow the laid down procedures on health and safety issues to avoid accidents. The fourth least percentage score was 58% Lab test was approved by RHD before work is done. Most of the Laboratory tests performed come from contractors with political influences, so they influence the internal controls. The least percentage score calls for a holistic and comprehensive internal control mechanism across the board. This is important as robust and efficient systems and processes are a prerequisite for good control governance. Biegelman and Bartow [16] were of the view that there is a need for a conscious effort to ensure that compliance standards are met. The four least percentage score indicates that staffs see them as a challenge which could be assumed that its disclosure is a problem or not transparent hence there is a call on the results as opined by the sampled staff for the management of GHA to ensure compliance of all the internal control activities for better governance.

3.4 Interview with the Internal Auditor (IA) of GHA on Pertinent Issues on Internal Control

The role of the internal audit in any organization cannot be downplayed. When the IA was asked about what he does at GHA, this was his response "*Prepare a quarterly report on operations to management. Vetting of requests, and applications and making recommendations before payment. Evaluate internal control and make recommendations on how to improve its operations.*" The response agrees with Diamond [9] stressing the need for the office of the internal auditor to improve and add value to an organization's operations through a flawless reviewing and objective evaluation of all the activities of that organization through possible recommendations for efficient operational performances if given the independence it needed to do its work. This study is of the view that this will help GHA to ensure that procedures are followed in line with the internal control mechanism put in place at the Regional Office.

The IA was of the "*view that internal controls hinge on effective policies and procedures and believes that for the processes to be efficient, there is the need for transparency and separation of duties in those who matter*". This response supports COSO [4] in that there must be a structured framework to govern internal control activities.

On the benefits of internal control activities to GHA. The IA stressed that "*compliance to laid down procedures is key couple with deterring*

staff from attempting fraud thereby protecting the assets and making them accountable for their actions this helps to establish monitoring procedures and increases financial reliability and integrity". The view of the IA aligns with KPMG [7] suggesting that internal controls give the company assurances on what must be done and see to it that it is done. Hightower [5] affirmed that there are benefits and value in adopting an internal control program.

On GHA internal control activities challenges, the IA responded that *"a deficiency of understanding of the process, managerial override, users access right for the information system, political interference, lack of independence".* The concerns of the IA have a confirmation by OECD [2] indicating that some of the challenges are organizational culture, leadership, and staff readiness to make the system work.

The IA had this to say on what can be done to improve internal control activities at Ghana Highways Authority: *"Enforcing the formation of Audit Committee in the region, provision of adequate logistics for internal auditors for them to work effectively and independently, provide adequate training to staffs, ensure duties are segregated, correct errors promptly, develop written policies and procedures and develop adequate physical control of assets, the commitment by management, provision of fines and punishment to those who violate the compliance of law and statute".* The concern of the IA is legitimate but it boils down to management commitment and leadership to see it through. The recommendations from the IA must be part of the review and assessment of the embedded process of the internal controls if approve and implemented would make the internal control process robust. The IA's recommendation is in agreement with Diamond [9], KPMG [7], ICAEW [10] and Lisic et. al., [12] all of them affirmed the potency of the Audit Committee to improve the usefulness of the internal control system through it oversight role and the personnel on such committees.

4. CONCLUSION

For a business to achieve its goals and protect its investment then internal controls become critical. Internal controls are policies, procedures, processes, and practices that are designed by the management of a company to protect its assets to ensure efficiencies and effectiveness in its operations. Sound internal control policy starts

with objectives and expectations which must be communicated to staff. The study aimed to explore the staff's knowledge of internal control activities and their challenges within the context of the Kumasi Regional Office of the GHA.

The results suggest a highly educated staff with one-third having over six years of working experience. The result shows that a significant majority of staff had a higher knowledge of the existence of the internal control systems in that the policies and procedures on them had been communicated to them. Staff knowledge of the internal control framework was very weak which can be attributed to a staff level of responsibility and access to information on the job.

The purposes of internal control were diverse but the staff affirmed that controlling the operations of GHA comes ahead of efficiency, transparency, and compliance in terms of ranking. The work of the tender committee was seen to deliver its mandate and conscious efforts on documentation, reconciliation, and recording of activities in the appropriate books complied with the laid down procedures. The lack of logistics for fieldwork was a challenge.

The interview with the IA concluded that the managerial override, lack of independence, and political interference slow down the robustness of the internal control activities of GHA. The IA suggested that the formation of the Audit Committee as an oversight entity to monitor other controls and provision of adequate logistics for internal auditors will improve internal auditing. Top management's commitment toward internal control practices and internal auditing must be supported with the necessary resources for its mandate.

A limitation to this study is that this study is a single case study of GHA where the focus was on one of its regional offices. The scope was on getting the views of the staffs and the internal auditor on internal controls related issues. Notwithstanding the limitations of the study in terms of generalizing the result but the insights in the study outweigh its limitations. This is one of the few empirical studies that have linked internal control activities and internal auditing based on staff knowledge. Within the context this is the first time such a study has been conducted on GHA at the Regional Office, however it would be interesting and insightful to conduct a comparative study of all the regional offices of GHA with these variables/themes/constructs with

the current study to reveal similarities and differences in their approach to internal controls and internal auditing.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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