

Corporate ethical climate and effectiveness of internal audit activities of firms

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ABSTRACT

This research evaluated the relationship between the corporate ethical climate and the effectiveness of internal audit activities within cooperatives and corporations in Digos City, Philippines. Specifically, the study aimed to identify the dimensions of corporate ethical climate that most significantly impact internal audit effectiveness. A standardized questionnaire was distributed to 150 board members from various cooperatives and corporations. The research showed an overarching high level of corporate ethical climate across various indicators, with the exception of self-interest, which was rated slightly lower. In parallel, the effectiveness of internal audit activities was also ranked as very high. Analysis via Pearson product-moment correlation indicated a significant association between ethical climate and audit effectiveness. Stepwise regression analysis further pinpointed personal interest and organizational interest as key predictors of audit activity effectiveness, suggesting that higher ethical standards within these domains correlate with more effective audits.

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1. INTRODUCTION

Over the past few years, numerous company crises have arisen due to inadequate ethical practices. Empirical data has demonstrated that unethical accounting practices have led to corporate downturns and financial slumps worldwide (Umo & Paul, 2021). Accounting professionals, particularly internal auditors, are facing an increasingly difficult task. Their role is not only to recover from financial crises but also to avoid such situations from occurring in different industries and company organizations (Tallaki & Bracci, 2020; Passetti, et al., 2021). Often, these concerns were mostly caused by or resulted from the ineffectiveness and problems of internal audits. The presence of internal auditing difficulties, such as compromised auditor independence, inadequate audit abilities, lack of management support, and subpar audit quality, has contributed to instances of fake financial reporting and misappropriation of assets (Ma'ayan & Carmeli, 2016).

Internal auditors have a significant impact on company organizations as they assess and analyze the efficiency of controls implemented to ensure adherence to business rules and procedures. Recently, internal auditors have taken on additional responsibilities beyond accounting. These include managing risks, evaluating how well operations are functioning, ensuring efficiency, and overseeing compliance with regulations (Coetzee & Lubbe, 2014; Harun & Qun, 2016). The internal audit function, with its risk assessment and compliance mechanism, plays a crucial role in building robust and efficient corporate governance frameworks, leading to greater organizational success (El-Kassar, Elgammal & Bayoud, 2014; Tusek & Barisic, 2016).

Researchers have found that ethical corporate climate has an impact on the effectiveness of internal audit function. Corporate ethics plays a major role in a business enterprise's affairs (Kgomo & Plant, 2015; Sajari et al., 2023). It sets the atmosphere for a welcoming and acceptable audit practice that revolves around corporate governance, risk management and controls (Ndreca & Dibra, 2023). The board of directors and top management set the tone for an ethical environment in which all members of an organization must adhere to (Gupta et al., 2022).

In addition, ethical leadership of an entity is a key factor in ensuring that audit is effectively deployed in an organization (Mandal, 2023). Corporate leaders that value ethical practices allow auditors to discharge their role as assurers and consultants without reservation. In many instances, the quality of audit is dependent on how the management views and treats audit as partners in sustaining the organization (Svanberg & Ohman, 2013; Soltani & Maupetit, 2015). In effect, internal audit function becomes effective and value-adding when supported by policies and structures by the management. In the works of Ma'ayan and Carmeli (2016), they accentuated that corporate ethical climate and effectiveness of internal audit function are associated with one another. They argued that ethical behavior of top management impacts the conduct of audit, and the quality of the results and recommendations of internal auditors. Their claim suggests that the kind and amount of support from top management for the internal audit as well as the auditor's capacity like skills, resources, and behaviors determine the value and effectiveness of the audit.

Similarly, in the study of Domino, Wingreen and Blanton (2015), the internal auditor's perception of corporate ethical climate and how they accept it as a norm impacts their effectiveness. Increased task engagement and commitment on internal audit mandate is dependent on the perceived level of auditor's personal fit to the organization's ethical climate. The more that the ethical climate of the organization supports the audit function, the more the internal auditors can make their work rigorous, valuable and intensive which then impact the quality of audit outcomes.

Significant research also cited that ethical climate that prioritizes on individual and personal interest other than organizational goals influences internal auditors to opt for unethical decisions in conditions where their own interest is challenged (Ismail, 2015). This context proposed that when ethical climate is strong, internal auditors fulfill their roles with emphasis not on personal fulfillment but on the welfare of stakeholders. It was also emphasized that internal auditors are inculcated with the culture of "benefit for all" in performing their activities (Ismail & Yuhanis, 2018).

Moreover, Akpotu and Omesi (2013) further claimed that unethical behavior of internal auditors minimizes their capacity to attain audit quality and even could lead to failure and ineffectiveness of audit firms to strengthen public trust and confidence. More specifically, several studies revealed that the code of conduct, which is a proxy concept for ethical climate in auditing literature, is considered as relevant and critical component of internal auditor's decision-making process and quality of audit activities (Ghani, Hassan & Ilias, 2021; Lamberton, Mihalek & Smith, 2005; Matinov, 2004). On the other hand, Larkin (2000) suggests that experienced internal auditors are better at identifying ethical and unethical circumstances compared with internal auditors with less than 5 years of service. In this premise, the effectiveness of internal audit activities is not only influenced by the auditor's ethical decision-making processes, but also influenced by their experiences over time.

In a study emphasizing workplace friendship, Rumens (2017) cited that workplace friendship is associated with the capacity of the organization to improve outcomes such as productivity and

performance and motivate employees to conform to organizational climate. It is an important tool that motivates organizational support, which later influence performance effectiveness. Specifically, several researchers insinuated the importance of organizational relationship, such as friendship and management support, in determining the effectiveness of internal audit activities (Mihret & Yismaw, 2007; Mihret & Woldeyohannis, 2008). The pronouncement is strongly agreed by Alzeban and Gwilliam (2014) stating that management support positively impacts internal audit activities. This suggests that workplace friendship, and other form of bond established within the comfort of organization, persuasively affect how audit is carried through in the organization.

On the variables being studied, it can be noted that team climate was perceived to be a measure and can manipulate the organization's behavior in order to improve its activities and operations (Goh & Eccles, 2009). As averred, team climate involves working with the team in order to establish a common set of values and ways of working. It emphasizes the role of top management in influencing work and individual behavior. Specifically, top management holds important function in utilizing internal audit role since the leaders are usually engaged with the design of the work plan of internal auditors (Ma'Ayan & Carmeli, 2016). This idea was confirmed by Carmeli and Zisu (2009) in their work as they posited that management team shapes and facilitates the effectiveness of internal audit activities.

The impact of ethical climate on the efficiency of audit operations is linked to the understanding of the fundamental principles of the theory of planned behavior, which emphasizes the individual's purpose to engage in specific activity (Ajzen, 2015; Xiao & Wu, 2008). This encompasses the decision-making activities of internal auditors (Buchan, 2005) and the perceived behavioral control (Cheng, 2017) required to achieve efficacy in audit work. According to Mahdavi and Daryaei (2016), demonstrating a positive attitude towards strong corporate governance and audit operations can enhance the relationship between a corporation and its stakeholders, ultimately leading to improved organizational functioning. This statement affirms that the ethical state of the company has an impact on the actions of its members and stakeholders, resulting in more valuable internal audit efforts.

The literature exemplifies the multitude of references collated from various resources which serve as the background of the study which contributed to the development of conceptual and theoretical underpinnings of the study. It has expanded and enriched the researcher's knowledge and had opened windows of discourse from all fronts and perspectives. These also underscore the necessity of evaluating how ethical climate of corporations and cooperatives impacts the effectiveness of internal audit activities. Studying these variables is important because appropriate organizational climate and behavior may enhance the effectiveness and quality of internal audit activities, hence the public can be assured of a transparent, accountable and well-managed organizations.

While internal auditors are expected to attain their goals and objectives effectively, the realization of the effectiveness of their audit activities depends on the type of entity being measured (Turetken, Jethefer & Ozkan, 2019). The claim is paralleled to the pronouncement that internal auditors from public firms are more exposed to different work conditions and to more ethical concerns compared with those from the private firms (Pappa & Filos, 2019). Researchers (e.g., Buye, 2020; Khanal, Gupta & Bhattarai, 2022; Oni et al., 2022) argued that the behaviors of the public servants are guided by the public expectations, of which public servants must act with fairness, responsibility, accountability, and honesty. These public expectations bound employees to act ethically and appropriately under the law and the professional code (Rothwell & Baldwin, 2006). Henceforth, the result of the study which centers on internal audit effectiveness may be influenced by the type of entity along with the underlying ethical climate within their organization.

While previous studies have examined the connection between the internal audit function and audit quality (Jiang, André & Richard, 2018) and ethical culture (Sweeney, Arnold & Pierce, 2010), there is a lack of research specifically investigating the influence of ethical climate on the quality of internal audit activities. Furthermore, the majority of the studies have focused on large entities in

Western countries, neglecting the examination of local organizations, including both corporations and cooperatives. This is particularly relevant in the case of Digos City, where such organizations are thriving and where numerous auditors and accounting professionals are actively engaged. Under these circumstances, the researcher became intrigued by the opportunity to analyze and explore the ethical climate within enterprises and cooperatives in the area.

This study aimed to determine which domain of corporate ethical climate best influences the effectiveness of internal audit activities in Digos City. Specifically, this study addressed the following objectives: (1) to describe the level of corporate ethical climate among business organizations, both corporations and cooperatives, in terms of self-interest, organizational interest, efficiency, friendship, team interest, stakeholder orientation, personal morality, and rules and laws; (2) to assess the level of effectiveness of internal audit activities of the audit unit in terms of independence of internal audit, management support, competency of internal audit, and quality of internal audit; (3) to establish the significance of the relationship between corporate ethical climate and effectiveness of internal audit activities; and (4) to identify which domain/s of corporate ethical climate significantly influence effectiveness of internal audit activities among firms.

2. RESEARCH METHOD

2.1 Research Design

This study utilized quantitative, non-experimental research design utilizing correlational technique. This study is quantitative in nature because it works with numerical data and treats data using descriptive and inferential statistics to establish association or ascertain prediction between variables (Edmonds & Kennedy, 2016). Also, a descriptive type of research was used in the study to assess the present status of the phenomenon represented by the variables (Creswell, 2013). This research design is concerned with how, what is, or what exists relative to some preceding event that has influence or affected a present condition or event (Kothari, 2004).

Furthermore, quantitative, non-experimental method is concerned with the procedures used to organize, describe and summarize data, while correlation design describes the statistical association between two or more variables (Leroux, 2009). This research approach is appropriate because the study aimed to establish the significance of the relationship between corporate ethical climate as the independent variable and effectiveness of internal audit function as the dependent variable.

2.2 Research Respondents

This study involved 150 members of the Board of Directors who are currently active in the corporate affairs of corporations and cooperatives in Digos, Davao del Sur. As of the conduct of this study, there were 453 total number of board of directors in Digos City. Out of the total population, 150 were identified as the sample size, drawn-out using Raosoft software. Identification of the minimum or appropriate sample size was largely dependent on the careful and detailed planning of research (Delice, 2010). The purpose of sampling is to produce a result that is capable of detecting the smallest magnitude of the influence and the extent to which the study is relevant (Faber & Fonseca, 2014).

Moreover, representation of samples was made possible using stratified random sampling. This approach considered the number of members of the Board from each cooperative and corporation surveyed. Identifying the samples provides each firm the same relative importance and reliability as in taking the whole population (César & Carvalho, 2011). The employment of stratified random sampling ensures the objectivity and credibility of the study results.

In aiming to produce reliable and valid results, inclusion, exclusion and withdrawal criteria was set. To be a qualified respondent, he or she must be a member of the Board of Directors, male or female, of legal age and that the cooperative or corporation's physical location is within the City of Digos. In contrast, exclusion criteria include: a minor who cannot give consent, a resident- alien, and those not residing and without a business registered in the Province of Davao del Sur. Further, the respondents may decide to discontinue or withdraw his or her participation on the research as he or

she deems necessary for whatever reasons and may or may not provide these reasons to the researcher for evaluation and reporting processes.

2.3 Research Instruments

There are two sets of adapted questionnaires used in obtaining data and information relative to the objectives of the study. The first is a five-point Likert-type scale adapted from the works of Maesschalck (2005). The instrument measures the eight indicators of corporate ethical climate namely, *self-interest, organizational interest, efficiency, friendship, team interest, stakeholder orientation, personal morality, and rules and laws*. The Cronbach's α for the level of corporate ethical climate of the respondents was 0.897, described as good. Meanwhile, the second questionnaire is focused on measuring the effectiveness of internal audit activities and was adapted from Huong (2018). It measures the four indicators of the construct, namely: *independence of internal audit, management support, competence of internal audit, and quality of internal audit*. The level of effectiveness of internal audit activities obtained a Cronbach's α of 0.864 which can be described as good.

The questionnaires used in this study went through pilot testing and the reliability of the scales was established using Cronbach's alpha coefficient. Further, the adapted questionnaire was validated by the experts which obtained a general mean score of 4.24 described as very good.

2.4 Data Collection Procedure

The rigor of this study is essentially manifested through the data collection. After the approval of the research advisory committee, a formal permission to conduct the study was requested from the Dean of the Professional Schools. Separate letters were also prepared and forwarded to the corporate secretaries and/or Board members of the identified corporations and cooperatives in the research locale.

Upon the consent of the targeted study participants, the researcher scheduled the deployment of the survey instruments. Before the actual administration of the questionnaires, the researcher secured the email addresses of the identified respondents who were selected randomly. In the instrument through google form, the researcher explained the research tool and its purpose. The researcher properly oriented the respondents about the appropriate manner of accomplishing the questionnaires so to ensure valid and reliable results through a very clear instruction as embedded in the google form. The study participants could answer the questions within 15 to 20 minutes at their most convenient time. The filled-out questionnaires were immediately retrieved after a week.

After retrieving all responses, the data were encoded in spreadsheet format and were thoroughly checked before data analysis. Mean and standard deviation were used to determine the level as well as the variability of corporate ethical climate and effectiveness of internal audit activities. Pearson product moment correlation coefficient was used to establish the significance of the relationship between corporate ethical climate and effectiveness of internal audit activities, while stepwise regression was used to identify which domains of corporate ethical climate significantly influenced effectiveness of internal audit activities. The results were analyzed using appropriate statistical tools and were interpreted. With the results, conclusions were drawn, and recommendations were formulated.

2.5 Ethical Considerations

The study observed full ethical standards in administering the study and have undergone examination and approval from the University of Mindanao Ethics and Review Committee (UMERC) with approval number 2021-141.

3. RESULTS AND DISCUSSIONS

3.1. Level of Corporate Ethical Climate

Shown in Table 1 is the assessment on the level of ethical corporate climate as perceived by the board of directors of corporations and cooperatives. The overall mean score of 4.57 (SD = 0.414) for the corporate ethical climate indicates a very high ethical standard within the firms studied. This high

overall mean suggests that, generally, the corporate environment is perceived as highly ethical across various dimensions.

Going to each of the indicators, the self-interest indicator has an overall mean score of 3.52 (SD = 0.797), which is interpreted as high. This indicates that while there is a considerable level of self-interest present among employees, it is not the dominant climate. The individual items within this indicator show a moderate to very high concern for self-interest. For example, "*The people in our company are mostly out for themselves*" ($\bar{x} = 2.91$, SD = 1.15) and "*The people in our company protect their own interest above other considerations*" ($\bar{x} = 3.06$, SD = 1.12) suggest moderate levels of self-interest, whereas "*The people in our company are mostly concerned about what is best for themselves*" ($\bar{x} = 4.60$, SD = 0.58) reflects a very high level of self-interest in certain contexts.

The organizational interest indicator has a mean score of 4.61 (SD = 0.508), indicating a very high level of concern for the organization's financial interests. Items such as "*Organizational members are expected to do anything to further the financial interest*" ($\bar{x} = 4.67$, SD = 0.51) and "*Decisions here are primarily viewed in terms of money they generate for our company*" ($\bar{x} = 4.62$, SD = 0.55) highlight the firm's strong emphasis on financial success, which is consistently reflected across all related items. Efficiency also scored very high, with a mean of 4.64 (SD = 0.526). The items under this indicator reflect a strong emphasis on cost-efficiency, with high mean scores such as "*The major responsibility of our people in this company is to aim at cost-reduction*" ($\bar{x} = 4.66$, SD = 0.51) and "*Inexpensive solutions to problems are always sought here*" ($\bar{x} = 4.67$, SD = 0.55). This suggests that employees are highly focused on minimizing costs and maximizing efficiency.

Meanwhile, the team interest indicator scored the highest among all indicators, with a mean of 4.77 (SD = 0.448). This reflects a strong emphasis on collective well-being and teamwork. Items such as "*The most important concern is the good of all the people in our company*" ($\bar{x} = 4.78$, SD = 0.47) and "*A good and broad cooperation among all colleagues is considered to be very important in our company*" ($\bar{x} = 4.79$, SD = 0.46) underscore the company's commitment to fostering a cooperative and team-oriented environment. The friendship indicator has a very high mean score of 4.74 (SD = 0.503), reflecting the importance of interpersonal relationships within the company. High scores for items like "*Good interpersonal contacts (both with colleagues and with outsiders) are considered important in our company*" ($\bar{x} = 4.73$, SD = 0.50) and "*It is expected that each individual (both colleague and outsider) is cared for when making decisions here*" ($\bar{x} = 4.75$, SD = 0.54) indicate that the corporate culture highly values maintaining positive relationships and caring for individuals.

Stakeholder orientation also has a very high mean score of 4.77 (SD = 0.468), indicating a strong sense of responsibility towards external stakeholders. High mean scores for items like "*It is expected here that I will always do what is right for the citizens with whom you deal*" ($\bar{x} = 4.79$, SD = 0.47) and "*The effect of decisions on the citizens with whom we directly deal is a primary concern in our company*" ($\bar{x} = 4.77$, SD = 0.46) reflect a corporate culture that prioritizes ethical responsibility and accountability towards stakeholders.

The personal morality indicator also scores very high, with a mean of 4.73 (SD = 0.495). This suggests that the company respects individual ethical standards. Items like "*There is room for my professional ethics or personal morals in our company*" ($\bar{x} = 4.77$, SD = 0.46) and "*The most important consideration in our company is each employee's personal sense of right and wrong*" ($\bar{x} = 4.75$, SD = 0.53) highlight that employees feel encouraged to adhere to their own moral and ethical beliefs, suggesting a supportive environment for personal ethical conduct.

The rules and laws indicator shows the highest mean score, at 4.79 (SD = 0.431). This indicates a strong adherence to legal and procedural standards within the company. High mean scores for items such as "*It is very important to follow strictly our company's rules and procedures*" ($\bar{x} = 4.80$, SD = 0.42) and "*People are expected to comply with the law and public interest over and above other considerations*" ($\bar{x} = 4.79$, SD = 0.44) reflect the company's commitment to lawful and ethical behavior, emphasizing the importance of compliance with rules and regulations.

Overall, the descriptive statistics for corporate ethical climate suggest a firm environment that places significant emphasis on efficiency, interpersonal relationships, team spirit, stakeholder

responsibility, personal morality, and adherence to rules and laws. The study results indicate a significantly elevated degree of corporate ethical atmosphere, mostly driven by the respondents' high ratings on various measures of the variable, with the exception of self-interest. This outcome indicates that both the officials and staff of the corporations and cooperatives engage in ethical commercial transactions with the stakeholders, as determined by the Board and management.

This discovery corroborates the assertion made by Joyner and Payne (2002) that the ethical atmosphere is derived from the type of leadership and governance style that individuals responsible for governance have effectively nurtured and advocated. This climate fosters the cultivation of integrity and ethical values by implementing policies and processes that are infused with ethical principles, which every member of the company follows. This pertains to the notion that various organizations have their own subcultures, which impact the way individuals interact with each other and govern their behavior (Pagliaro, et al., 2018). In addition, according to Teresi et al. (2019) and Mnisri and Wasieleski (2020), a corporate ethical climate that prioritizes the interests of the organization and team, fosters friendship and responsibility, and encourages positive behavior and attitude towards members and stakeholders, enhances productivity, creativity, and creates a nurturing environment.

Table 1. *Ethical corporate climate among cooperatives and corporations*

Indicators	\bar{x}	SD	Descriptive Meaning
self-interest	3.52	.797	high
organizational interest	4.61	.508	very high
efficiency	4.64	.526	very high
friendship	4.74	.503	very high
team interest	4.77	.448	very high
stakeholder orientation	4.77	.468	very high
personal morality	4.73	.495	very high
rule of law	4.79	.431	very high
Overall	4.57	.414	very high

3.2. Level of Effectiveness of Internal Audit Activities

Shown in Table 2 is the perceived level of effectiveness of internal audit activities in cooperatives and corporations. The overall mean score of 4.76 (SD = 0.401) for the effectiveness of internal audit activities indicates a very high level of effectiveness within the firms studied. This high overall mean suggests that, in general, internal audit activities are perceived as highly effective across various dimensions. This comprehensive effectiveness is essential for maintaining the integrity and reliability of internal auditing processes, thereby contributing to the overall governance and operational efficiency of the organizations.

Table 2. *Effectiveness of internal audit activities in cooperatives and corporations*

Indicators	\bar{x}	SD	Descriptive Meaning
independence	4.69	.436	very high
competence	4.81	.401	very high
management support	4.74	.483	very high
quality of audit	4.81	.424	very high
Overall	4.76	.401	very high

Looking at the indicators, the independence indicator has an overall mean score of 4.69 (SD = 0.436), indicating a very high level of perceived independence among internal auditors. This is crucial as independence is fundamental to the objectivity of audit activities. The individual items within this indicator all reflect very high scores. For instance, "*Internal review audit are adequately free to perform their expert commitments and obligations*" ($\bar{x} = 4.75$, SD = 0.58) and "*The head of internal*

audit reports to a level internal the association that permits the internal audit to fulfill its obligations" ($\bar{x} = 4.75$, $SD = 0.60$) underscore the perceived autonomy and access necessary for effective auditing. Additionally, *"Internal audit staff have free access to all departments and workers in the organization"* ($\bar{x} = 4.81$, $SD = 0.47$) highlights the unrestricted access internal auditors have, further ensuring their ability to perform their duties without undue influence.

The competence indicator has a mean score of 4.81 ($SD = 0.401$), reflecting a very high level of professional capability among internal auditors. This is supported by high scores on items such as *"The professional knowledge of internal auditors is high"* ($\bar{x} = 4.82$, $SD = 0.46$) and *"Internal auditors are considered as professionals"* ($\bar{x} = 4.84$, $SD = 0.43$). These scores indicate that internal auditors are well-regarded for their expertise and professionalism. Moreover, *"Internal auditors improve their skills by listening carefully to advice and instruction from coaches and managers"* ($\bar{x} = 4.83$, $SD = 0.44$) and *"Internal auditors have adequate education"* ($\bar{x} = 4.85$, $SD = 0.39$) highlight the ongoing professional development and high educational standards maintained by the auditors.

The management support indicator scored very high, with a mean of 4.74 ($SD = 0.483$). This reflects strong backing from senior management, which is essential for the effective functioning of internal audit activities. High scores for items like *"Senior administration underpins internal audit to perform its obligations"* ($\bar{x} = 4.47$, $SD = 1.03$) and *"Internal audit furnishes senior administration with adequate, solid and pertinent reports about the work they perform and proposals made"* ($\bar{x} = 4.84$, $SD = 0.40$) underscore the significant support and involvement of senior management in audit processes. Furthermore, *"Internal audit department has adequate spending plan to effectively do its obligations and responsibilities"* ($\bar{x} = 4.82$, $SD = 0.49$) indicates that internal audit departments are well-resourced, which is crucial for their effectiveness.

Finally, the quality indicator also has a very high mean score of 4.81 ($SD = 0.424$), indicating a high level of quality in audit activities. Items such as *"Established internal audit's objectives were accomplished"* ($\bar{x} = 4.81$, $SD = 0.44$) and *"Internal audit's works was efficiently performed"* ($\bar{x} = 4.84$, $SD = 0.42$) reflect the perceived thoroughness and accuracy of internal audit processes. Additionally, *"Internal audit's findings are correctly justified"* ($\bar{x} = 4.82$, $SD = 0.43$) and *"Internal audit's recommendations can be easily implemented"* ($\bar{x} = 4.78$, $SD = 0.57$) suggest that audit findings and recommendations are not only accurate but also practical and actionable.

The perceived level of effectiveness of internal audit activities in corporations and cooperatives was found to be very high. This is because of the very high ratings given by the respondents on the measures of the said variable. This result implies that internal auditors are effective in their function especially when they are free from the influences of the management and when they receive support from the management through policies and structures that help them discharge their responsibilities. The mean scores also insinuated that auditors are perceived to be competent, objective, and professional in their work and are working hard towards helping the organization achieves its goals and objectives.

This finding is consistent with the ideas of several authors (e.g., Carcello et al., 2018; Newman & Comfort, 2018; Shahimi, Dato-Mahzan & Zulkifli, 2016) that with management's support, internal auditors can add more value to the company by providing an independent and objective assessment of the company's corporate governance, risk management processes, and internal control. When internal auditors have higher degree of independence, it allowed them to provide more substantial findings and recommendations. This is further supported by a literature citing that audit reports become so powerful when appropriately used by the management in making policies, developing strategies and in making decisions that affect the organization (Mihret & Yismaw, 2007). In addition, the success of internal audit function largely depends on the strength of management's support for the internal auditing process.

In addition, the results of the study agree with the propositions of Kwamena-Aikins (2012) and Tandiontong (2016) that having good academic track, appropriate audit skills, and wealth of experience, auditors can provide effective audit procedures, hence better recommendations to the auditee. This competency helps them determine the efficiency in conducting a systematic and

disciplined approach to evaluate and improve the effectiveness of the organization's activities (Baharud-din, Shokiya & Ibrahim, 2014). Further, the quality of audit findings and recommendations contribute to the success of internal audit function.

3.3. Significance on the Relationship between Corporate Ethical Climate and Effectiveness of Internal Audit Activities

Shown in Table 3 were the results of the test of relationship between the two variables tested in this study: corporate ethical climate and effectiveness of internal audit activities. Based on the Pearson correlation test conducted in each of the variable along with its indicators, the overall correlation of $r=0.640$, $p<0.05$, was considered to be significant. This means that the corporate ethical climate is significantly and positively correlated with effectiveness of internal audit activities. Moreover, doing a pairwise correlation among the measures of both variables, computed r -values ranged from 0.170 to 0.640, $p<0.05$. This implies that there is positive correlation between ethical corporate climate and effectiveness of internal audit activities in both individual and collective capacity. This indicates that the null hypothesis of no significant relationship between corporate ethical climate and effectiveness of internal audit activities is rejected.

Table 3. *Correlation matrix of corporate ethical climate and effectiveness of internal audit activities*

Ethical Corporate Climate	Effectiveness of Internal Audit Activities				Overall
	independence	competence	management support	quality	
self-interest	.294** (.000)	.170* (.038)	.223** (.006)	.207* (.011)	.244** (.003)
organizational interest	.482** (.000)	.551** (.000)	.517** (.000)	.514** (.000)	.560** (.000)
efficiency	.376** (.000)	.540** (.000)	.444** (.000)	.487** (.000)	.500** (.000)
friendship	.512** (.000)	.551** (.000)	.423** (.000)	.518** (.000)	.541** (.000)
team interest	.556** (.000)	.606** (.000)	.466** (.000)	.606** (.000)	.603** (.000)
stakeholder orientation	.520** (.000)	.583** (.000)	.460** (.000)	.582** (.000)	.579** (.000)
personal morality	.571** (.000)	.604** (.000)	.509** (.000)	.600** (.000)	.618** (.000)
rule and law	.508** (.000)	.563** (.000)	.512** (.000)	.600** (.000)	.591** (.000)
Overall	.583** (.000)	.623** (.000)	.539** (.000)	.618** (.000)	.640** (.000)

This finding concurs with the proposition of Svanberg and Ohman (2013) and Soltani and Maupetit (2015) implying that ethical corporate climate contributes to an effective internal audit function. Corporate leaders that value ethical practices allow auditors to discharge their role as assurers and consultants without reservation. In many instances, auditors get strength and motivation from the support and ethical leadership of the Board and the management where the extent and quality of audit is largely dependent. In effect, internal audit function becomes effective and value-adding when supported by policies and structures by the management.

To further support the significant relationship of the variables, Ma'ayan and Carmeli (2016) accentuated that corporate ethical climate and effectiveness of internal audit function are associated with one another. They argued that ethical behavior of top management impacts the conduct of audit, and the quality of the results and recommendations of internal auditors. The claim was strengthened by Domino, Wingreen and Blanton (2015) citing that the way the internal auditor's perceive corporate ethical climate and how they accept it as a norm impacts their effectiveness. Increased task engagement and satisfaction on internal audit is dependent on the perceived level of auditor's personal fit to the organization's ethical climate.

3.4. Influence of Corporate Ethical Climate and Effectiveness of Internal Audit Activities

Table 4 exhibits the stepwise regression analysis showing the predictive ability of the corporate ethical climate on effectiveness of internal audit activity. When the corporate ethical climate was regressed with indicators of effectiveness of internal audit activities using two models, two indicators posted to have statistical significance as evidenced by $p < 0.05$, the *personal morality* and *organizational interest*. These posted positive beta coefficients, which indicate that an increase of these variables would lead to a respective increase on effectiveness of internal audit activities, holding other variables constant, rejecting the second null hypothesis of no significant influence.

Table 4. *Final stepwise regression analysis showing the domain of corporate ethical climate that influences effectiveness of internal audit activities*

	Model	B	S.E.	β	t	Sig.	F	ΔR^2
1	(Constant)	2.394	.249		9.611	.000	91.399*	.378
	personal morality	.501	.052	.618	9.560	.000		
2	(Constant)	2.111	.258		8.170	.000	53.266*	.412
	personal morality	.357	.069	.440	5.194	.000		
	organizational interest	.209	.067	.264	3.120	.002		

* $p < 0.05$

Personal morality was the most influential indicator, posting a beta coefficient of 0.501 ($t=9.560$, $p < 0.05$) in the first model and 0.357 ($t=5.194$, $p < 0.05$) in the second model. In addition, a standardized beta coefficient of 0.357, in the second model, means that one-unit increase in personal morality would likely increase overall effectiveness of internal audit activities by about 0.37, holding other variables constant. On one hand, the organizational interest posted a beta coefficient of 0.209 ($t=3.120$, $p < 0.05$) signifying that one-unit increase in organizational interest would likely increase overall effectiveness of internal audit activities by about 0.209, holding other variables constant.

The link between the corporate ethical climate and effectiveness of internal audit activities warrants the determination of the domain which best influences effectiveness of internal audit activities. Regression analysis revealed that corporate ethical climate was found to significantly cause an incremental effect on the effectiveness of internal audit activities in a combined capacity. Looking into the individual determination of the domains of corporate ethical climate, however, revealed that only two of the measures cause significant increase on the overall effectiveness of internal audit activities. This means that consideration of corporate ethical climate at one time does not always warrant a favorable increase of effectiveness of internal audit activities. This supports the findings of Svanberg and Ohman (2013) that corporate ethics influence the quality and effectiveness of internal auditors.

Among the dimensions of corporate ethical climate, two factors have significantly influenced the effectiveness of internal audit activities, the personal morality and organizational interest. This is in line with the claims of Pappa and Filos (2019) personal morality enable internal auditors to improve personal commitment and choice, and promote exemplary behavior which centers on their daily function. Further, being able to get attached to the organization, a favorable behavior towards corporate governance and audit activities can help improve the relationship of the firm and its

stakeholders and will later influence the organization to function properly (Mahdavi & Daryaei, 2016). This interest to the organization makes them inspired to be effective as auditors.

Table 4 also shows the measure of fit of the regression analysis. The F value was 91.399 for the first model and 53.266 in the second model, both with $p < 0.05$, means that the entry of eight indicators as regressors to overall effectiveness of internal audit activities posed a significant linear relationship. Additionally, the R^2 value was 0.412 for the second model means that 41.2 percent of the variance of overall effectiveness of internal audit activities can be attributed to corporate ethical climate indicators, while the remaining 58.8 percent of the variance can be attributed by other variables not included or covered by this study.

Based on the results obtained, the following equation can be formulated:

$$Y = 2.111 + 0.357PM + 0.209OI$$

The model means that the predicted effectiveness of internal audit activities is equal to the 2.111 + .357 (Personal Morality) + .209 (Organizational Interest). This further implies that the effectiveness of internal audit activities in cooperatives increases by 0.357 and 0.209 units for each unit increase in the personal morality and organizational interest, respectively.

Finally, Table 5 shows the excluded variables in the two models of stepwise regression analysis. Self-interest, efficiency, friendship, team interest, stakeholder orientation, and rule of law were found to have no significant influence on overall effectiveness of internal audit activities in their singular capacities, yielding p-values greater than 0.05.

Table 5. *Excluded variables in the stepwise regression analysis*

	Model	Beta In	t	Sig.	Partial Correlation
1	self-interest	.093 ^b	1.396	.165	.114
	organizational interest	.264 ^b	3.120	.002	.249
	efficiency	.167 ^b	1.970	.051	.160
	friendship	.141 ^b	1.336	.184	.110
	team interest	.274 ^b	2.172	.031	.176
	stakeholder orientation	.237 ^b	2.242	.026	.182
	rule and law	.252 ^b	2.198	.029	.178
2	self-interest	.050 ^c	.753	.453	.062
	efficiency	-.044 ^c	-.368	.713	-.030
	friendship	.033 ^c	.301	.764	.025
	team interest	.165 ^c	1.256	.211	.103
	stakeholder orientation	.151 ^c	1.381	.169	.114
	rule and law	.165 ^c	1.409	.161	.116

a. Dependent Variable: Effectiveness

b. Predictors in the Model: (Constant), Personal Morality

c. Predictors in the Model: (Constant), Personal Morality, Organizational Interest

4. CONCLUSION

This research has revealed that the overall level of corporate ethical climate is very high. This level is true in all of its indicators: organizational interest, efficiency, friendship, team interest, stakeholder orientation, personal morality, and rule of law except self-interest which registered at a high level. On the other hand, the overall level of effectiveness of internal audit activities is also very high both in an aggregate and individual level: independence, competence, management support and quality of audit.

Meanwhile, the test of correlation showed that there exists a significant link between corporate ethical climate and effectiveness of internal audit activities both in an individual and aggregate capacity. In their singular capacities, all indicators of corporate ethical climate are

associated with the effectiveness of internal audit activities. This is confirmatory to the proposition of (Arena & Sarens, 2015; Svanberg & Ohman, 2013) that corporate ethical climate has a vital role to the effectiveness of internal audit activities.

Moreover, when corporate ethical climate was regressed, two indicators were found as significant predictors of internal audit activity, the personal morality and organizational interest. Between the two, personal morality best influences internal audit activity. The significant influence of the aggregated weights of these dimensions indicates that an increase in the overall condition of corporate ethical climate causes an increase on the effectiveness of internal audit activities. Hence, this finding supported the proposition of Domino, Wingreen and Blanton (2015) that corporate ethical climate predicts and effectiveness of internal audit activities.

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