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Internal Audits as a Source of Ethical Behavior, Efficiency, and Effectiveness in Work Units

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Abstract This study of internal auditors and auditees, who engage in both financial and operational internal audits in Israel, extends theory and research on internal audits in organizational units. It develops and tests a model that examines the role of top management and internal auditors in facilitating learning from internal audits and driving perceived performance improvement. We argue that support from the top management for the internal audit as well as the auditor's capacity (skills, resources, and behaviors) facilitate learning from audits and help audited units to improve ethicality, efficiency, and effectiveness in organizations. The results of time-lagged survey data provide general support for the hypothesized indirect relationships between auditor capacity, auditor–auditee relational exchanges, learning from audits, and three different perceived performance measures: ethical behavior, efficiency, and effectiveness. We discuss the implications for research on internal audits, proactive learning, ethics, and performance improvement of organizational units in the public sector.

Keywords Internal audit · Performance improvement · Auditor–auditee exchange · Learning from audits · Work units

Control mechanisms are institutionalized to provide reasonable assurance to public constituents such that the activities of for-profit and not-for-profit organizations are appropriately monitored. One such low-anchored control mechanism is the internal audit. Recent legislation (e.g., the Sarbanes–Oxley Act) points to the crucial role played by internal auditors in achieving compliance. While evaluating the accuracy of financial reports by channeling attention to detecting irregularities is vital, audits are not only concerned with regulation compliance. Rather, scholars have noted that this 'rule-based approach' is perhaps one of the most significant problems underlying the epic scandals that rocked Enron and WorldCom, because it does not incorporate a fundamental response to the issue of 'ethical principles' (Satava et al. 2006) that circumscribes the moral obligations of both auditees and auditors. A variety of problems have been identified in these cases including a lack of independence (e.g., Enron—Arthur Anderson) and fraudulent behaviors (e.g., WorldCom) that underpin the "ethical relevance" of auditing.[1]

The audit process is designed to point to deficiencies and errors in ways that help the organization to rectify or preempt their recurrence (Fayol 1949). The internal auditor assesses the extent to which auditees' actions are consistent with the law, organizational norms, and good business practice (Dittenhofer 1997). However, the internal auditor undertakes other audits including safety audits, operational audits, financial audits, information security audits, risk management, survivability and disaster recovery (DRP) audits, security and forensic accounting, and management audits. The Institute of Internal Auditors (IIA) defined the unique way the auditor contributes to this process. Specifically, the auditor helps enhance the value of the organization and improve its performance by assisting in building better governance mechanisms, and improving the risk management and control of enterprise resources and actions (The IIA 1999).

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[1] We thank an anonymous reviewer for pointing out this issue.

Auditors implement diagnostic tools that facilitate learning from failure and develop a better understanding of work processes (Cardera and Ragan 2003; Weick and Sutcliffe 2001). As such, internal audits are fundamental mechanisms for reliability (Weick and Sutcliffe 2001) and continuous performance improvement. They also influence the ethical reasoning process and ethical behavior of the organization and its members (Bailey et al. 2003; Karcher 1996; Lin et al. 2011; Stead et al. 1990).

The literature has underscored an expectation gap in auditing (Commission on Auditors' Responsibilities 1978; Liggio 1974; Porter 1993). In defining this gap, the Commission on Auditors' Responsibilities indicated that auditors need to 'consider whether a gap may exist between what the public expects or needs and what auditors can and should reasonably expect to accomplish' (p. xi) (in Porter 1993, p. 50). We follow this line of thinking and argue that the normative expectation is that auditors will act on behalf of the public by conducting an internal audit that will provide reasonable assurance that an organization operates efficiently and effectively and conduct its activities ethically and responsibly. The Committee of Sponsoring Organizations of the Treadway Commission (COSO) guidelines for good audit practice recommended that internal auditors should review the internal control system, with particular attention to the climate and practices and the role of the internal auditor as a monitor of the control system within the organization (COSO 1992). This refers to the culture of ethics and integrity of the organization, employee professionalism, and the skills needed for completing work tasks, allocating duties and responsibilities, and reporting rules. The emphasis is on cultivating organizational norms of ethical and integrity, which Ginosar (2011) defined as the essential role of an internal audit as it helps set up checks and balances throughout the system. Conversely, audit failure can lead to poor governance and engender large-scale unethical conduct and organizational fraud (Soltani 2014).

While scholars and practitioners assume that auditing can drive better organizational outcomes (OAG 2011), research indicates that in a relatively large swath of organizations, deficiencies tend to re-occur (Bar-Lev 2010). This suggests that even if auditors do quality work (e.g., reporting accurately and depicting a fair picture of the organizational system), auditees often overlook reported malfunctions and fail to learn from them, and may be reluctant to take the necessary steps to rectify and enhance effectiveness. The need to stem organizational irregularities and fraud, promote continuous operational improvement, and respond to external turmoil often result in further control and supervision. However, this does not tend to lead to satisfactory outcomes (Sikka et al. 2009) and raises the question of why internal audits do not fully achieve their goal (Arena et al. 2006), and why the expectation gap in auditing has not been resolved (Commission on Auditors' Responsibilities 1978; Liggio 1974; Porter 1993). Specifically, it is unclear how auditors and top management facilitate auditees' learning from internal audits and which implications should be drawn for continuous improvement of ethical behavior, efficiency, and effectiveness.

In an attempt to understand the mechanisms that contribute or inhibit the full utilization of audits, researchers have underscored the need to improve auditors' ethical conduct and skills (Arena and Azzone 2009; SEC 2003) and overall audit quality (Monaghan 2007). A major obstacle in deriving the full benefits from internal audits is the initial tendency to withdraw and the negative attitude often seen on the part of auditees toward the audit. This is particularly damaging when the internal auditor has no direct authority over the auditees, and thus limited access to information, explanations (DeAngelo 1981), and essential resources (Pickett and Pickett 2010). To develop quality, effective audits, researchers have stressed the need to heighten auditees' willingness to cooperate with the auditors (Woods et al. 2009). This has to do with the relational exchange auditors and auditees are able to form and cultivate. However, relatively little is known about the *relational dynamics* between auditors and auditees and their influence on ethical behavior, efficiency, and the effectiveness of audited organizational units. For example, Carmeli and Zisu (2009) noted the importance of understanding how and why relational features such as trust in the employer and psychological safety affect internal audit quality, but their study did not specifically explore the relational dynamics between auditors and auditees.

Auditors may need to develop their own skills and proficiency and devote resources to make sure that the audit is done in a way that creates more respectful interactions with auditees. This can help in uncovering malfunctions and risks, and thereby drive better performance. Drawing on social learning theory (Bandura 1977), we argue that a high level of *proficiency* is vital because it builds role modeling through which auditees are more willing to engage in learning such that major issues are identified and suitable responses are developed (DeAngelo 1981). Finally, the top management plays a role in utilizing the internal audit function, since organizational leaders are often involved in the design of the work plan for the internal auditor, the ways in which organizational members perceive the internal audit function, and the auditing process itself. For example, research has shown that perceived organizational and management support is crucial to shape a climate of psychological safety and facilitate a quality internal audit (Carmeli and Zisu 2009).

Thus, the three key actors in the internal auditing process are the auditor, the auditee, and the management team. In this study, we attempt to elucidate the ways in which internal audits can help improve the performance of audited organizational units. We develop a model, presented

in Fig. 1, that integrates and examines whether and why three key forces—management support, auditors' resources and skills, and relational dynamics between auditor and auditees—promote auditees' learning from the audit and thereby drive perceived performance improvement of audited units.

The paper is structured as follows: We first discuss the role of internal audits in performance improvement in organizational settings, followed by detailed theorizing about the importance of top management support and auditors' capacity to facilitate high-quality exchanges between auditors and auditees. We then discuss how this exchange facilitates learning from internal audits and the ways in which the latter influences the audited performance in terms of ethical behavior, efficiency, and effectiveness. These two sections are followed by the method and the findings. Finally, we discuss the implications of the findings for theory and practice and specify the limitations and avenues for future research.

Internal Audits and Organizational Performance Improvement

Internal audits aim to help organizations meet their goals and objectives efficiently and effectively. In a field experiment on bank branches, Eden and Moriah (1996) found significant performance improvement in branches where an internal audit was conducted, compared to branches where no audit was carried out. Not only did the internal audit help enhance the value of the branches, it also contributed to the organization as a whole. One of the values of an audit is the ability to identify transgressions in the ways work processes are carried out such that critical damage is prevented (Eden and Moriah 1996). Other studies using Eden and Moriah's (1996) internal audit model have shown that internal audits are important drivers of the performance of both industrial firms (Carmeli and Tishler 2004a) and local governments (Carmeli and Tishler 2004b). However, designing an effective audit system is complex and challenging, and a focus on examining how internal audit drive improvement in three core performance dimensions—ethicality, efficiency, and effectiveness in organization—is needed.

Management Support, Auditor Capacity, and Auditor–Auditee High-Quality Exchange

Top Management Support

One reason that prevents internal audits from leading to performance improvement is that auditees often develop resistance to the audit (Mints 1972). Funnell and Wade (2012) noted that "the first set of auditee reactions to performance audits, fear and suspicion, embraces emotions ranging from mistrust to paranoia (and that) such reactions should be identified is consistent with the literature on auditor–auditee relationships" (p. 440). This level of concern can even escalate into animosity where "criticism, cynicism, contempt, even hatred, for the auditors" may develop (Funnell and Wade 2012, p. 441).

Often, an audit is not perceived by the organization as a vital process (Allen 1996; Carmeli and Zisu 2009).

The Hypothesized Research Model

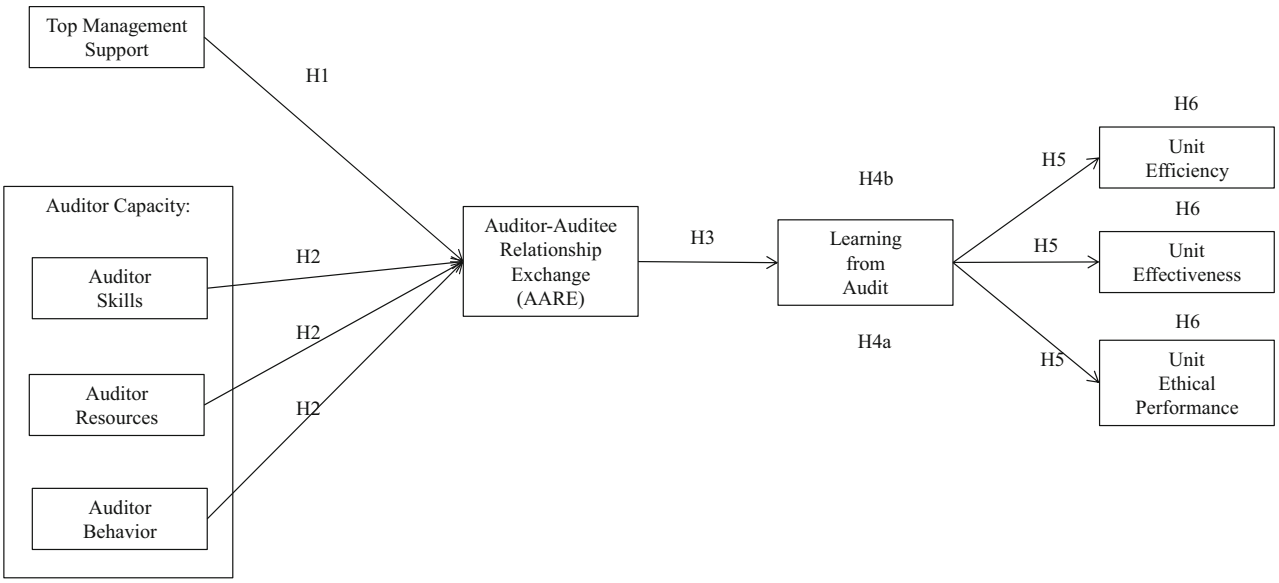

Fig. 1 The hypothesized research model

Auditees have described auditors in menacing terms such as inspector, policeman, prosecutor, investigator, and accuser, among others (Pickett and Pickett 2010; Wade 2008). This is why it is important for top management teams to convey an explicit message that they value audits. If the CEO and the top executives fail to acknowledge the auditor as a professional expert, their approach and attitudes are likely to be negative, such that audits are seen as technical exercises that merely incur further costs. This negativity toward audits is contagious and can develop into an implicit message that the auditors are "against us" and nothing but "trouble makers," resulting in the emergence of two sub-cultures within the organization (Schein 1996) that may undermine the willingness of the audited units to cooperate with internal auditors.

A lack of top management support can also be viewed as a situation where there is weak ethical leadership, which prompts auditors to have greater doubts as regards auditees' work processes (Arel et al. 2012). In the absence of a clear message that the top management team is supportive of the audit, disagreements, resistance, and a sense of fear are likely to emerge. Hence, to motivate auditees to be more receptive toward the audit and learn from it, the top management needs to institutionalize a work framework in which cultural and social linkages among all players are structured and organized. Such a framework enables synergy among players and directs more attention to learning rather than to conflicts and resistance (Giddens 1984).

Managerial support of the audit means involvement and commitment to the success of the work processes by directing adequate attention and allocating needed resources. Top management support influences the level of cooperation of the auditees with the auditor and their willingness to accept the auditor's comments and suggestions and implement them (Schwartz et al. 2005). The audit process is likely to produce a list of malfunctions and improvement opportunities of the reviewed area. Hence auditees often are anxious about audits and tend to recoil. They are concerned about presenting the audit's findings to the top management and the implication that they may be perceived as incompetent. These concerns may trigger conflicts and an unsupportive approach, even unintentionally, which may further escalate to a point of misbehavior (e.g., contempt), spark a dispute, and create the impression that the auditor is "after" them and acting unprofessionally.

The top management's support for the audit activity conveys a message about its availability to discuss audit-related issues, and its ability to act as an arbiter of differences between auditors and auditees, particularly when they degenerate into interpersonal conflicts. Three psychological processes underlie management support (which largely determines organizational support via attention and the resource allocation process) (Eisenberger et al. 1986; Eisenberger et al. 2002; Rhoades and Eisenberger 2002), and facilitate greater receptiveness and cooperation. First, employees reciprocate support with a greater sense of obligation and commitment to act in a way that contributes to better organizational functioning. Second, management's support signifies caring, approval, and respect through which individuals' socio-emotional needs are fulfilled. This, in turn, leads individuals to incorporate organizational membership and role status into their social identity, and thereby develop affective commitment toward the organization. Third, support augments beliefs that the organization recognizes and rewards employees who exhibit high performance (i.e., performance–reward expectancies). Supportive management motivates auditees to engage in audit activities because they develop a stronger commitment to the audit activity, and sense that the audit is perceived by the management team as a key mechanism to enhance performance outcomes. Similarly, we theorize that when auditees feel that the top management cares about their socio-emotional needs, it lessens feelings of embarrassment about mistakes, as well as fear of loss of their positive image and possible sanctions. This is consistent with Carmeli and Zisu (2009), who noted that when auditees "believe that their competencies are valued and appreciated by the organization, they are likely to sense trust and feel psychologically safe to raise issues and have their voice heard about problems in the organization without fearing that their status or image will be damaged" (p. 896). Finally, when auditees know that cooperating with the auditor's work is linked to a performance–reward mechanism, they may expend more efforts to make the audit activity more beneficial by forming a more positive relationship exchange with the auditor.

Hypothesis 1 Top management support for internal audits is positively related to auditor–auditee relationship exchanges (AARE) in work units.

Auditor Capacity

Auditor capacity comprises professional skills, economic resources, and behaviors toward auditees. Auditors' *professional skills* are manifested in their knowledge and experience (DeAngelo 1981; OAG 2004), and professional credibility (Deis and Giroux 1992). Auditors must not only possess an academic background but also specific training experience (Firth 1990). Auditors in multinational organizations must be familiar with international audit standards to carry out a reliable audit in geographically dispersed units. For example, standards for food and drug approval differ between the USA and Europe. Auditors also need to become knowledgeable in information systems so that they can assess related risks and control mechanisms (ISACA

2007). Thus, it is not surprising that the IIA (2010) encouraged continuing professional training programs to further cultivate auditors' skills and enable them to address evermore complex audit activities. Further, auditors need to act professionally; otherwise, they risk compromising their independence or overlooking fundamentals and even negligently dealing with inaccuracies (Satava et al. 2006).

Auditors also need *resources* to carry out audit activities. The amount of resources determines the audit scope and depth at a particular period of time (Light 1993). A lack of resources may result in poor audits. For example, Shapeero et al. (2003) found that a low work hour budget led auditors to report a lower number of hours of work (than they actually put into the job), or the termination of the audit prior to its full completion. When auditors face significant budgetary constraints, they tend to narrow the audit scope (e.g., review a non-comprehensive sample) (Murray 1995), even when it is clear that a more extensive check is needed. Another resource that helps auditors in the audit activity is accessibility to information. Without the ability to access useful information, auditors may derive wrong conclusions that may lead auditees to adopt practices that are not valid or justifiable.

Auditors' *behavior* is also crucial for an effective internal audit process. They need to develop an ability to interact with a sense of dignity and respect toward the auditees because the way an audit is delivered is crucial for learning and performance improvement. Organizational members do not feel comfortable under scrutiny and thus a large part of the effectiveness of audit activities relates to the extent to which the auditors develop skills that allow them to form positive relational interactions with the auditees. Ha'elion (1996) found that the ability of an auditor to build positive interactions with the auditees was more positive with a learning orientation emphasizing teaching and instructing than one that strenuously focused on error detection as a means for reprimands and sanctions.

Auditors and auditees may have different goals and different interests. Compared to the auditor, the level of interest of the auditees in the progress of the process is relatively low. Thus, auditors need to use approaches that will connect the auditees and foster their engagement in the process. For example, an initial discussion with the auditees is crucial because it lessens stressors and helps create mutual expectations. It must be made clear that the auditor has no prior or current agenda and that the audit process is not in any way personal. This is why conveying a message of objectivity to the auditees is so crucial.

Auditors who are not perceived as highly professional, either because they fail to report transgressions and errors or over-exaggerate mistakes, are not likely to gain support from the management team and may face difficulties in soliciting cooperation from the auditees. Berg (1992) stressed that forming a quality connection with the auditees and a problem-solving orientation were linked to a lower level of resistance toward the audit and the auditor. In a study that examined the stock value of audited publicly traded companies in the UK, it was found that the market value of these companies plummeted after the authorities discovered that the auditors were not doing their job properly, and that the auditors' fees were low compared to a group of auditors who proved they could deliver credible professional services (Firth 1990). When internal auditors develop a high professional capacity (hereafter, auditor capacity), they are perceived as experts the auditees are likely to listen to and learn from. We suggest that auditors' professionalism behaviors help auditees to develop a sense of respect toward them, because they are perceived as knowledgeable about the issues at hand. This cultivates exchanges in which auditees and auditors are less defensive, but more open, respectful, and receptive toward each other. Thus,

Hypothesis 2 Auditor capacity (professional skills, resources, and behavior) is positively related to AARE in work units.

Auditor–Auditee Relationship Exchange and Auditees' Learning from Audits

Auditing activities give members considerable learning opportunities by exposing specific imperfections and providing recommendations and solutions (Eden and Moriah 1996). The ways internal auditors conduct their audit can inform auditees as to how they can spot and identify deficiencies. In addition, auditors' suggestions and recommendations are also an invaluable repository of knowledge and tacit "know-how" (Argote 1999; Simonin 1997; Stata 1989) for auditees.

The audit process is often characterized by an extensive interaction between the auditors and auditees (Dittenhofer 1997). A high level of cooperation from auditees is essential for auditors. Auditees are often a source of important information, as well as explanations for deviations from normative or best practice. Auditors engage in discussions with auditees regarding identified deficiencies and their implications, as well as the potential ways to rectify and learn from them. Managing interactions in a way that suppresses negativity and cultivates the auditees' positive attitude toward the audit process are keys to auditees' motivation to engage in learning from the audit activity.

The auditees should be informed about wrongdoings and how to avoid poor practices, the essence of accountability, and moral obligations to act ethically. For example, in the case of the GM scandal, the defect was identified years before the crisis erupted. Internal documents showed that

the switch needed to be replaced but the hierarchy failed ethically by not taking responsibility for customers' safety and their right to know about the problem. The reluctance to act (because they feared it would harm GM's image) and fully address the problem undermine norms of transparency, dignity, and accountability. Specifically, the major ethical issue in the GM ignition switch case involved a potential cover-up of the problem for many years, as manifested in the fact that GM engineers were aware of the problem but the company did not initiate a recall and failed to act responsibly toward customers and the public. Thus auditors play a critical role in showing how to improve the ethicality (Morris 2014) and accountability of an organization.

However, an internal audit tends not to be seen by the organization and its members as a beneficial process (Allen 1996; Carmeli and Zisu 2009). Auditees report feelings of apprehension and alienation toward the audit and auditors (Pickett and Pickett 2010) and may develop a sense of disengagement in the auditing process (Wade 2008). The resources invested by the auditees, the risk to their image and status, their integrity, and the lack of adequate reward for their investment, may create cognitive dissonance. The latter may create conflicts with the auditor and resistance to the process.

The work relationships between the internal auditor and the auditees are a key mechanism that can help facilitate learning and enhance performance (Wang et al. 2005). Drawing on social exchange theory (Blau 1964, Homans 1961), we theorize about the quality of AARE that emerges during the audit activity and suggest that AARE is likely to facilitate fruitful discussions, which are crucial for proactive learning from the audit. Proactive learning refers to the learning orientation that groups and their members develop and their level of engagement in the process, such that the emphasis is on cultivating skill, knowledge, and competence (Bunderson and Sutcliffe 2003; Bell and Kozlowski 2002; Kozlowski et al. 1999). Through this positive interaction, a collaborative learning orientation is augmented and auditees develop a sense that learning from an audit is meaningful, which is a key to engagement in such work behavior (see Kahn 1990). When individuals engage in active learning, they are more open to revealing mistakes and discussing them. In addition, previous studies suggest that auditees who develop a sense that the audit is an important learning mechanism (Eden and Moriah 1996) and feel comfortable interacting with the auditors are likely to have a positive attitude toward the audit and engage and learn from it. Conversely, auditees who develop a sense of frustration from their involvement in the audit process may be less capable of internalizing comments and recommendations or using them to develop know-how (Blakeney et al. 1976). Thus,

Hypothesis 3 AARE are positively related to learning from an audit in work units.

The Mediating Role of the AARE

We also suggest that the AARE mediates the link between auditor capacity and learning from an audit, as well as the link between management support and learning from an audit. This is because auditor capacity can help make a significant difference in the dynamics that are formed with auditees. Auditors who convey a high level of professionalism, enjoy adequate resources, and engage in a professional and respectful manner while interacting with auditees can create a climate of increased openness and receptiveness to the audit activity, which is conducive to learning from the audit. In addition, top management support for the audit activities can facilitate auditees' cooperation with the auditors as part of a process in which auditees attempt to adhere to normative expectations and act in a way that is consistent with the top management's orientation and approach to the audit activity.

Specifically, we suggest that the presence of an internal auditor has positive implications for the audited organization, because she or he can point out when particular behaviors deviate from those that are legitimate in the community and facilitate discussion with the auditees and their management team about the ways to improve these practices. Following ethical rules or creating commitment to a code of conduct of what Reynolds and Ceranic (2007) termed "doing well by doing good" is likely to shape normative expectations which are anchored in transparency and good reasoning. Deviant behavior revealed by internal auditors can serve as a basis for learning in which auditees reflect on why and how it occurred—not just for the sake of improving efficiency and effectiveness, but also to build an ethics of care for the stakeholders of the organization. The International Organization for Standardization puts forward the ISO 26000 guidelines (ISO/TMB/WG/SR, 2006) that encourage "an ethical and transparent way that contributes to the health and welfare of society" rather than just improving efficiency. "Standardized ethics initiatives" (e.g., ISO 26000), despite the challenges they pose, "provide promising approaches that complement the rule-based approach legislation to create a more ethical, responsible, organizational system" (Gilbert and Rasche 2008, p. 756). Thus,

Hypothesis 4a AARE mediate the link between auditor capacity and learning from audits in work units.

Hypothesis 4b AARE mediate the link between top management support for the internal audit and learning from audits in work units.

Learning and Performance Improvement in Audited Units

Learning from an audit drives performance improvement because the audit activities provide a unique opportunity for auditees to learn how to approach and complete the tasks at hand. When auditees develop proactive learning where they value the learning process, they develop a more open and adaptive approach toward issues and events. Internal audits also help auditees to perform better since the auditor can provide a fresh comprehensive look at how tasks are completed based on systematic information gathering, questioning, and clarifying (Eden and Moriah 1996). We expand on the social learning perspective (Bandura 1977) to suggest that auditors influence the ethical behavior of auditees by modeling professionalism. Auditees constantly evaluate the auditor's credentials and her or his professionalism while conducting the audit activity. Some auditees described a good auditor as a guide (Berg 1992). An auditor, who pays attention to details, employs professional practices, plans and conducts organized and systemized review process, implements internal controls in her or his work, and in the findings she or he presents is likely to serve as a role model that can influence auditees' orientation and attitudes, which in turn can translate into behavioral outcomes. Specifically, auditees learn from auditors when the latter act as professional experts from whom there are clear benefits to learn and develop new knowledge assets. This is why auditees are more willing to attend to and learn from auditors who are proficient and are perceived as authorities in their domain. Put differently, auditees are likely to be attentive to professional auditors if they are perceived as credible authorities from whom they can learn about dealing with deviant behaviors within and outside the organization, and find ways to improve the ethicality of the organization. Thus,

Hypothesis 5 Learning from an audit is positively related to a work unit's (ethical behavior, efficiency, effectiveness) performance improvement.

In the previous sections, we argued that when auditors have a high level of expertise, act professionally, and enjoy adequate resources, as well as receive support from the top management, and are capable of developing positive relationship exchanges with the auditees, this facilitates learning from audits, and thereby drives performance improvement. This suggests a complex mediation process whereby auditors and top management drive performance improvement through the ability to influence and shape positive relationship exchanges and facilitate engagement in learning from audits. Thus,

Hypothesis 6 Auditor capacity and top management support are indirectly related to work unit performance improvement sequentially through AARE and learning from audits.

Method

Sample and Data Collection

We focused on audited work units since an internal auditor primarily delves into work units to evaluate their practices. The internal audit function covers both operational and financial areas. Overall, we collected data from 79 audited units and received 316 and 244 questionnaires from the auditees at Time 1 and Time 2, respectively (a response rate of 77 %, and an average of 3 respondents in each unit). The respondents were managers, auditees, and auditors. Responses were anonymous. Respondents indicated the names of their grandparents at the top of the Time 1 and Time 2 questionnaires, which made it possible to associate them.

The audits covered a wide variety of work units including marketing and public relations (3 %), finance (25 %), human resources (16 %), technical support (2 %), training (9 %), information systems (10 %), R&D (3 %), administrative (22 %), various projects (8 %); 2 % of the respondents did not provide information. Forty-seven of the respondents were female. The average age and tenure of the respondents were 43 (SD 7) and 14 (SD 6) years, respectively.

We tested the model using a structured survey which was administered at two points in time with a lag of four weeks. At Time 1, we asked the auditees to assess the level of support of the organization's management team for the audit activity, as well as the auditor's resources and style during the audit. In addition, we asked them to assess their interactions (social exchanges) with the auditor. At Time 2, we asked the auditees to assess their engagement in learning from the audit, and then asked them to assess their performance on three dimensions: efficiency, effectiveness, and ethical conduct. We collected data from multiple respondents in each audited unit. The time gap was designed to address the short-term memory effect of respondents and thus reduce potential response bias. In addition, we used different sources for the data on the independent and mediating variables [collected from auditees and following Kozlowski and Klein (2000) we evaluated them as composition constructs] and dependent variables. This research design enabled us to reduce common method biases associated with using either single-source data or cross-sectional design (Podsakoff et al. 2012).

Measures

All measurement items are listed in Table 3 in "Appendix" section. Responses were on a 5-point scale (1 = not at all; 2 = to a low extent; 3 = to some extent; 4 = to a large

extent; and 5 = to a very large extent). Before aggregating the scores from each unit's respondents, we calculated ICCs, RWG (j), and ADM. The RWG measure represents the degree of agreement in the group (between group members) for a scale with (j) items, each measured on a Likert scale. ICC is a reliability assessment where ICC1 represents the degree of variability between subjects in one group due to their membership in this group, and ICC2 provides an estimate of the reliability of the group means. ADM represents the level of agreement (disagreement) in a group by measuring the dispersion around the mean.

Unit Performance Improvement

We used three dimensions of unit performance improvement: efficiency, effectiveness, and ethical behavior. We were particularly interested in performance related to (or derived from) the audit activity and thus asked respondents to focus on the degree of improvement resulting from the audit activity, in accordance with Goodman, Ravlin, and Schminke's (1987) suggestion that "group measures of performance must be both fine-grained and related to the task" (in Ancona and Caldwell 1992, p. 654). *Efficiency* and *effectiveness* were assessed by seven items adapted from Ancona and Caldwell's (1992) study, and *ethical behavior* was assessed by adapting six items from the Carmeli and Zisu (2009) sub-scale of the audit as deterrence from misconduct, as conceptualized by Eden and Moriah (1996). For all items, we used the term "unit". Factor analysis produced a three-factor solution that together explained 66.19 % of the variance. Item loadings ranged from 0.51 to 0.88. The Cronbach's alpha and aggregation statistics were satisfactory: efficiency ($\alpha = 0.86$; ICC2 = 0.81; ADM = 0.46, RWG = 0.82), ethical conduct ($\alpha = 0.89$; ICC2 = 0.84; ADM = 0.61, RWG = 0.75), and effectiveness ($\alpha = 0.71$; ICC2 = 0.70; ADM = 0.41, RWG = 0.83).

Learning from the Audit

Following Eden and Moriah's (1996) study as well as recent works by Carmeli and Zisu (2009) and Penini and Carmeli (2010), we used a 5-item scale to assess the extent to which auditees learned from the audit at the unit level. Factor analysis results indicated a one-factor structure with item loadings ranging from 0.71 to 0.79 and an explained variance of 56.49 %. The Cronbach's alpha and aggregation statistics were satisfactory ($\alpha = 0.81$; ICC2 = 0.79; ADM = 0.46, RWG = 0.84).

Auditor–Auditee Relationship Exchange

To assess relationship exchanges between auditor and auditees, we adapted a 7-item scale developed by Liden and Graen (1980), which was originally aimed at measuring leader–member exchange. We revised the items to make them applicable to relationship exchanges in the context of an audit. Unlike leader–member exchange, auditors do not engage in assessing auditees' potential or career horizons, and their relationships are not continuous or have a sense of reciprocity. Further, there is no hierarchical relationship between auditor and auditees as in leader–member exchanges. Thus, we specifically revised three items and conducted an exploratory study among auditors, auditees, and academic audit specialists to determine construct validity. The results of a factor analysis produced a one-factor structure which explained 57.02 % of the variance (item loadings ranged from 0.48 to 0.86). The Cronbach's alpha and aggregation statistics were satisfactory ($\alpha = 0.85$; ICC2 = 0.83; ADM = 0.48, RWG = 0.89).

Top Management Support

We adapted 6 items from Penini and Carmeli's (2010) study, which was based on Eisenberger et al.'s (1997) concept and measure of perceived support and added one item after open interviews with auditors and auditees. We replaced the term "my organization" with "the organization's management" to reflect management support for the audit activity. Factor analysis results indicated a one-factor structure with item loadings ranging from 0.60 to 0.76 and an explained variance of 48.06 %. The Cronbach's alpha and aggregation statistics were satisfactory ($\alpha = 0.81$; ICC2 = 0.80; ADM = 0.46, RWG = 0.85).

Auditor Capacity

In line with the Ma'yan (2008) study, we assessed three dimensions of auditor capacity: skills, resources, and professional behavior. Factor analysis results indicated a two-factor structure; one factor, auditor skills and resources, had an eigenvalue of 3.84 and an explained variance of 48.30 %, whereas the second factor, auditor behavior, had an eigenvalue of 1.06 and an explained variance of 13.24 %. Item loadings ranged from 0.44 to 0.79. The Cronbach's alpha and aggregation statistics for both factors were satisfactory ($\alpha = 0.80$; ICC2 = 0.80; ADM = 0.49, RWG = 0.83; $\alpha = 0.73$; ICC2 = 0.70; ADM = 0.45, RWG = 0.82).

Control Variables

We controlled for prior audit experience, unit size, and auditees' tenure in the organization. Having an experience with an audit is important because it helps auditees to know what is likely to occur during the process and prepares them mentally. We used number of years since the last audit as a proxy for experience, under the assumption that going

through such scrutiny more recently would likely mean that the auditees might be more psychologically prepared. In addition, we controlled for unit size because the complexity inherent to larger organizational systems may make them less susceptible to internal audits. We also controlled for organizational tenure because auditees who work for an organization for a longer period of time develop a more comprehensive understanding of organizational practices.

Data Analysis

In order to compensate for the sample size at the unit level, the model was tested using path analysis with AMOS 20 software (Arbuckle 2011). We calculated several goodness-of-fit indices to assess the fit of the research model. These indices included the Chi square statistic divided by the degrees of freedom (χ^2/df), the comparative fit index (CFI), the Tucker–Lewis coefficient (TLI), and the root mean square error of approximation (RMSEA). Following Jöreskog and Sörbom (1993) and Kline (1998), the following criteria of goodness-of-fit indices were used to assess the model fit: the χ^2/df ratio is recommended to be less than three, the values of NFI, CFI, and TLI are recommended to be greater than 0.90, RMSEA is recommended to be less than 0.05, and to be "acceptable" if it is smaller than 0.08.

Results

The means, standard deviations, and correlations among the research variables are presented in Table 1. We included two combined measures—auditor capacity and overall unit performance—although we tested for the influence of their factors, as derived from the abovementioned factor analysis. The bivariate correlations indicated that the independent variables (management support, auditor capacity (auditor skills and resources, and auditor behavior) were positively related to both mediators, namely the AARE and learning from audits. Learning from audits was positively associated with both unit efficiency and ethical behavior, but was not significantly related to unit effectiveness. The control variables were not significantly correlated with either mediator or the three unit performance improvement measures.

In the model comparisons and hypothesis tests, auditor capacity was constructed as consisting of three dimensions, but following factor analysis results which indicated a two-factor structure that we used in our subsequent tests. In what follows, we present the results of the hypothesized mediating relationships through a series of nested path models (see Table 2).

The results in Table 2 show that the baseline model fits the data reasonably well. All paths, except for those from the control variables to firm performance, were significant. We also tested four related models (Models 1, 2, 3, and 4). Model 1 was identical to the baseline model, except that a direct path from learning from the audit to unit effectiveness was removed. Model 2 was identical to the baseline model, except that a direct path from learning from the audit to unit effectiveness was removed, and the path from AARE to unit effectiveness was added. Model 3 was identical to the baseline model except that a path from learning from the audit to unit effectiveness was removed, and the paths from AARE to unit effectiveness and from auditor behavior to learning from the audit were added. Model 4 was identical to the baseline model except that learning from the audit to unit effectiveness was removed, and the paths from AARE to unit effectiveness, from auditor behavior to learning from the audit, and auditor resources to AARE were added.

The results of Model 4, which are illustrated in Fig. 2, showed a better fit with the data compared to both the baseline (hypothesized) and other comparative models. The following fit-of-indices were obtained for Model 4 ($\chi^2 = 15.5$, df = 13; CFI = 0.99; NFI = 0.939; TLI = 0.972; RMSEA = 0.042; $\Delta\chi^2 = 2.96$, $p < 0.05$), suggesting that this model was more parsimonious and fit the data well (hereafter, the revised model).

The results of the revised model indicated that management support was positively related to AARE (0.35, $p < 0.01$), in support of Hypothesis 1. Hypothesis 2 was partially supported as the results indicated significant relationships only between auditor behavior and AARE (0.44, $p < 0.01$). The results supported Hypothesis 3, which posited a significant and positive relationship between AARE and learning from the audit (0.35, $p < 0.01$). Hypothesis 4a was partially supported since the findings indicated an indirect influence of auditor skills and behavior on learning from the audit, through AARE. However, auditor resources were not significantly related to AARE, but rather had a direct influence on learning from the audit. The findings supported Hypothesis 4b, because management support was indirectly, through AARE, related to learning from the audit.

The findings partially supported Hypothesis 5, which posited a positive relationship between learning from the audit and all three unit performance improvement measures. Learning from the audit, as expected, was related to both unit efficiency and unit ethical behavior (0.41, $p < 0.01$; 0.49, $p < 0.01$, respectively), but no statistically significant association was found between learning from the audit and unit effectiveness (0.14, p = n.s.). We also found partial support for Hypothesis 6 in that management support had a direct influence on unit effectiveness (0.33, $p < 0.01$). However, the results indicated an indirect influence of top management support on both unit efficiency and ethical behavior. We also followed the Preacher and

Table 1 Means, standard deviations (SD), and correlations

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
Unit size	3.31	1.18	–											
Last experience	1.6	1.3	−0.12	–										
Tenure in the organization	14.3	6.6	−0.17	0.01	–									
Top management support	4.04	0.42	0.19	−0.04	−0.01	–								
Auditor capacity (skills and resources)	3.53	0.37	−0.14	0.11	−0.01	0.40**	–							
Auditor capacity (behavior)	4.13	0.36	−0.13	0.14	−0.07	0.29**	0.54**	–						
Auditor capacity (skills, resources, behaviors)	3.76	0.32	−0.16	0.14	−0.03	0.40**	0.93**	0.80**	–					
Auditor–Auditee relationship exchange (AARE)	3.46	0.33	−0.03	0.17	0.09	0.47**	0.48**	0.54**	0.56**	–				
Learning from audit	3.52	0.43	0.05	0.04	−0.05	0.39**	0.40**	0.29**	0.40**	0.44**	–			
Unit efficiency	2.86	0.46	0.11	0.26*	−0.10	0.36**	0.38**	0.36**	0.41**	0.56**	0.58**	–		
Unit ethical performance	2.82	0.54	0.08	0.20	−0.15	0.15	0.34**	0.15	0.30**	0.29**	0.49**	0.66**	–	
Unit effectiveness	3.49	0.45	0.21	−0.07	−0.03	0.40**	0.07	0.08	0.08	0.12	0.27*	0.22*	−0.01	–
Unit overall performance (ethical, efficiency, effectiveness)	2.94	0.39	0.15	0.23	−0.15	0.34**	0.39**	0.25*	0.37**	0.46**	0.61**	0.87**	0.92**	0.25*

Auditor capacity (7) and unit overall performance (13) are both measures that incorporate their respective dimensions; we used only the dimensions/factors in our analysis

$N = 79$

* $p < 0.05$; ** $p < 0.01$

Hayes (2008) procedure for calculating bootstrapping for our mediation hypotheses. For the links auditor skills and behavior → AARE → learning from the audit, the bootstrap confidence interval (CI) for this coefficient did not include zero (CI (95 %) = [0.03, 0.527]), indicating a reliably significant effect. However, for the links auditor resources → AARE → learning from the audit, the CI included zero, indicating a non-significant effect. Thus, Hypothesis 4a was partially supported. We found support for Hypothesis 4b, as the CI did not include zero. Finally, we did not find support for the hypothesized fully mediated model, as the CI for this model included zero.

Discussion

In this study, we sought to shed light on the ways top management, internal auditors, and auditees can facilitate learning from audits and drive performance improvement of organizational units such that a safer, more reliable, and effective system is cultivated. The results indicate that management support as well as auditor proficiency and respectful and fair behavior toward auditees are keys to the development of a positive auditor-auditee relationship exchange, which in turn results in learning from the audit, which can thus foster a learning orientation or proactive learning in work units. We also found that auditor resources are important for learning from an audit. Finally, the findings indicate that perceived learning from an audit is a key to improve both unit efficiency and promote ethical behavior, but does not have a significant influence on unit effectiveness, a performance improvement measure that is affected directly by top management support.

Our findings also show how auditors and the organization's management team facilitate learning from discrepancies and even transgressions, and point out that when this is proactive and collaborative in nature, this learning helps improve work processes and the outcomes of organizational units in terms of efficiency, effectiveness, and ethical behavior. We contribute to the literature by showing that the top management can explicitly use the internal audit function to promote a learning orientation (Bell and Kozlowski 2002; Kozlowski et al. 1999) which signals that proactive learning from internal audits is a useful mechanism for improving ethicality, efficiency and effectiveness in the organization. Similarly, we advance the social learning perspective (Bandura 1977) to inform research on internal auditing by explaining why auditors can be perceived as credible authorities for motivating learning, and thereby help augment ethical behaviors, as well as drive efficiency and effectiveness. Our research underscores the internal audit function and the significant role of internal auditors and the top management in inducing changes in the desired

Table 2 Comparisons of path analysis models

	χ^2	Df	NFI	CFI	TLI	RMSEA	χ^2/df
Baseline model (paths are illustrated in Fig. 1)	18.11	14	0.927	0.981	0.950	0.056	1.29
Model 1: Learning → Unit effectiveness—removed	19.64	15	0.921	0.978	0.947	0.058	1.31
Model 2: AARE → Unit Effectiveness—added	15.29	13	0.938	0.989	0.970	0.044	1.18
Model 3: Auditor behavior → Learning—added	18.08	13	0.927	0.974	0.934	0.065	1.39
Model 4 (the revised model): Auditor resources → AARE—added	15.15	13	0.939	0.990	0.972	0.042	1.17

We allowed covariances between the independent latent variables

AARE auditor–auditee relationship exchange

* $p < 0.05$; ** $p < 0.01$

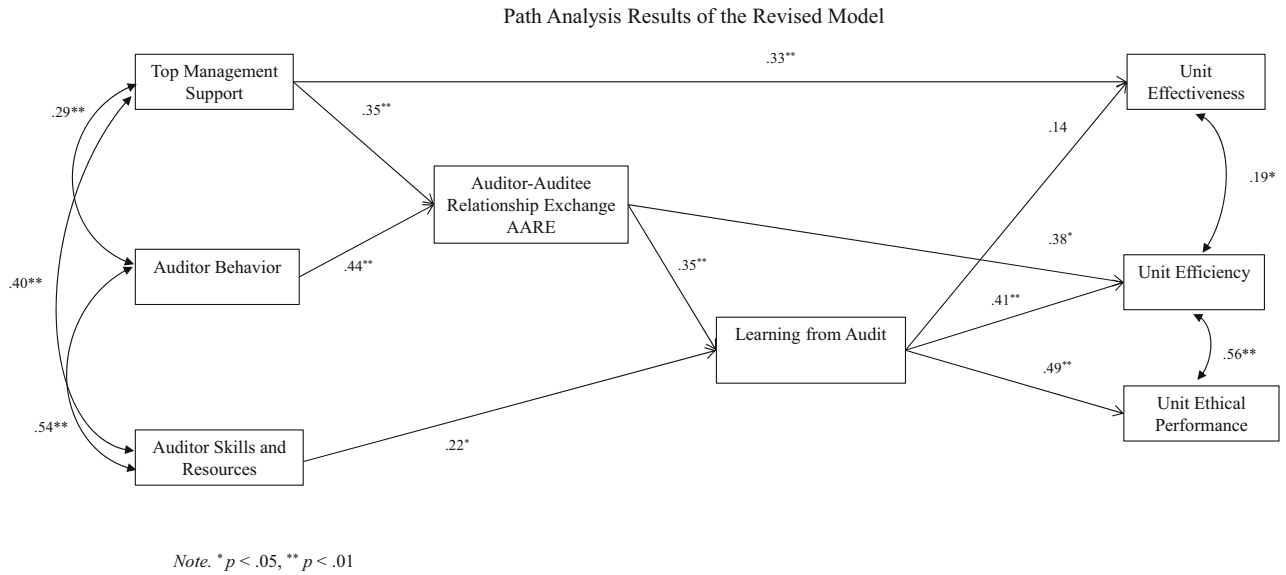

Fig. 2 Path analysis results of the revised model

direction, thereby driving continuous improvement in ethics, efficiency, and effectiveness across organizational units.

Specifically, an internal audit is an important organizational tool and its understanding and evaluation are critical to unraveling how it influences audited units' outcomes (Albrecht et al. 1989). An internal audit contributes to better organizing, greater consistency, a higher level of reliability, and the promotion of ethical behavior in the organization, which are all important yet difficult to build and design (Bailey et al. 2003; Karcher 1996; Lin et al. 2011; Sikka et al. 2009; Stead et al. 1990; Woods et al. 2009). In newly developed environments, auditing activities are even more important for multiple constituents including investors, managers, employees, regulators, suppliers, and customers. However, these constituents, who need internal audit services often, may be disappointed because their expectations are not fulfilled as a result of misalignment of the formal role and duty of auditors (Koh and Woo 1998). Our study indicates that an internal audit can create a value-added contribution. The findings highlight the confluence of auditor capacity (skills and behavior) and management support and their contribution to form positive work relationships between auditors and auditees.

Our model identifies key players in the organization who have a significant influence on achieving the full potential of internal audit activities—auditors, top management, and auditees. We specify the importance of auditor capacity, which comprises the resources available to the auditors (Light 1993), their stock of professional skills (Firth 1990), and professional approach and behavior toward auditees. These components enable an internal auditor to influence by modeling (Bandura 1977) and thus to lessen the inherent stressors and potential fears of auditing, an issue that is difficult to address and overcome (Eden and Moriah 1996). In addition, the findings show the key role of management in valuing and supporting the audit activity. Top management support sends a clear message to the entire organization that the internal audit function is a crucial organizational mechanism and that it is primordial to allocate resources and attention to fulfill its potential. This is consistent with previous research showing that when

auditees feel that the organization and its executives are supportive of the audit process, a better quality and more effective audit can be conducted (Penini and Carmeli 2010; Daugherty and Tervo 2008), which also ensures the independence of the auditors in the process (DeAngelo 1981).

Our research further underscores the fact that audit activities require a high level of cooperation from the auditees (Woods et al. 2009). It is highly challenging to create such a cooperative mode of operation with members who are under scrutiny and feel that their image and status are at risk. Integrating the social learning perspective (Bandura 1977), social exchange theory (Gouldner 1960) as it applies to audit research (Bell 2010) helps to elucidate why and how positive relational exchanges are cultivated and why they are so important for reducing the level of dissonance among auditees such that learning from the audit activity is promoted. Moreover, we extend the theoretical conceptualization of the audit as a learning mechanism (Eden and Moriah 1996) and elaborate on the rationale that audit reports contain important feedback concerning new opportunities for improvement (Bar Nir 1992; Ha'elion 1996; Moriah 1993).

Our study also extends theory and research regarding the performance implications that can be directly derived from internal audits. We show that beyond efficiency and effectiveness, an audit is a key mechanism to promote ethical behavior in work units. We found that the highest impact of learning from an audit was on ethical behavior. During the audit, the auditor evaluates the organizational risks and diagnoses transgressions (e.g., laws, employee rights, etc.) which can cause damage to the (internal and external) environment. The contribution of the internal auditor to responsibility and accountability is no less valuable than the potential impact on continuous financial performance improvement (Lamberti and Lettieri 2009). This is because the auditor helps preserve ethical values by evaluating whether decisions, work conditions and policies are aligned with the ethical norms in the organization (Pearsall and Ellis 2011) and assesses the extent to which these practices are legitimized. In so doing, internal auditors help organizations to develop greater awareness of legitimacy and appropriateness, and the need to promote actions aimed at building a more ethical organizational system. Failure to provide quality audits is likely to lead to poor governance and result in unethical conduct and negative consequences (Soltani 2014). While our research supports Eden and Moriah's (1996) argument about the ability of internal auditors to identify transgressions and prevent critical damage, these outcomes may not always be achieved. This is because either formal procedures are obstructive, or deviant behaviors might not be detected by the auditors. We argue that the importance of the internal auditor's function comes to the forefront particularly in these circumstances. This is because the internal auditor needs to continuously evaluate formal procedures, determine whether the latter are deemed inappropriate, and recommend revisions while specifying the underlying reasons that necessitate them. Misdetection of deviant behaviors often occurs because auditees fear and distrust the audit activity, which inhibits their willingness and ability to work together with auditors to identify misconduct. Finally, we concur with Satava et al.'s (2006) argument that auditors often adopt a rule-based approach, rather than focusing on the ethical norms that need to be developed. Thus, promoting proactive learning from internal audits can shape a more comprehensive approach that takes into account issues of responsibility such that the ethicality in an organization is nurtured (Gilbert and Rasche 2008; Satava et al. 2006).

Our research also has important managerial implications. To overcome cognitive dissonance (Festinger 1957) among auditees, as well as to address constituents' expectations that organizations should continuously improve their conduct and outcomes, we suggest that auditors and top management facilitate this agenda by encouraging auditees to instigate such improvements. We argue that auditors and top management can help make a difference by motivating auditees to achieve the value-added contribution of internal audits.

At the same time, for organizations to be able to prompt learning from an audit and create new knowledge bases among audited units, they need to pay close attention to employing auditors with adequate resources (e.g., financial, information, encouragement) and a high level of professional skills such that the allocated resources are utilized properly and effectively (Friedberg 1995), as well as auditors who are relationally astute and able to form positive exchanges with auditees and help them overcome the feelings of suspicion and fear associated with the process.

Limitation and Future Research Directions

The nature of a survey study calls for caution when interpreting the results because the questions can affect the responses, although we used valid measures. We also cannot draw conclusive causal inferences. However, we used a time-lagged design to test our mediation model. Such a time lag, although not very lengthy, enables more rigorous tests of mediation, and is considered an effective approach to reduce potential common method variance (Johnson et al. 2011). In addition, correlated errors among individuals' assessments of the unit variables were averaged out in the aggregation of ratings to the unit level (Glick 1985).

Another issue concerns the representativeness of the sample and the generalizability of our findings to other occupational and societal settings. Although we used

random sampling to access multiple respondents in work units, only a portion of the members in each work unit provided data for the analyses, and caution should be exercised regarding the representativeness of the sampled individual members in the units. However, we assessed intragroup agreement (rwg(j) and ADm) and group reliability (ICC), and these statistics suggest that there was ample agreement and shared variance on the focal construct measures. Future research is also needed to examine our model in different organizational settings to determine the extent to which the findings can be generalized. Further, while attention has been given to large scandals in for-profit organizations, only limited research has been directed toward audits among public sector entities (Penini and Carmeli 2010). Our focus on public sector entities is important for building our knowledge base and understanding this phenomenon, but this also requires caution when generalizing the findings. Clearly, in public sectors, audits are crucial to ensure that these organizations maintain normative rules of conduct and sustain their legitimacy while using public resources.

The reporting relationship of internal auditors should also be taken into consideration since it may influence the orientation, conduct, and outcomes of the audit activity (Ahlawat and Lowe 2004). However, in the setting of governmental agencies, the reports are sent to the ministry. The Minister is equivalent to the auditing committee since she or he is not part of the current activities and operations led by the CEO. In local authorities and public organizations, there is an auditing committee. We did not find a significant difference between these types of organizations or reporting structure. However, this opens up opportunities for further research on the level of support or importance that the board of directors and audit committee attribute to the internal audit activity and its implications.

We also encourage research on different modes of learning from audits and performance improvement. For example, our focus was on learning from the direct experience of audits but organizations and their work units can learn from others' experience (vicarious learning), or engage in contextual learning (learning from experience of others who operate in the same sector). It is unclear whether different learning modes may have differential performance implications. For example, one can speculate about the influence of learning from failures through audits on ethical behavior, as compared to efficiency and effectiveness. Further, future studies can shed light on these issues by investigating both the task and learning goal orientations of auditees and their implications for performance improvement. Performance improvement can take many forms and "ideal performance management systems are rare" (Aguinis 2013, p. 27). We believe that measuring three performance facets—ethicality, efficiency and effectiveness—as we did here is a strength as this approach allows relevant performance dimensions to be included (i.e., thoroughness) and consistency across contexts (standardization), and at the same time is practical (Aguinis 2013). Nonetheless, future research is encouraged to explore other performance improvement dimensions such as reliability, resilience, and innovation.

We also did not examine specific leader behaviors and their influence on learning from audits. In addition, we did not examine whether and how the board of directors and the audit committee's support may shape the internal audit activity. Beyond the leadership function in this process, we also need to unravel the role of auditees in the process; for example, how the level of identification and role identity influence an auditee's willingness to cooperate with the auditor, or how the status of the auditee affects his or her orientation and behavior. We also do not know how intragroup dynamics influence the willingness of members to cooperate with the auditor and learn from the audit; it is unclear whether cohesive units or groups are more inclined to cooperate than less cohesive groups.

Conclusion

This study examined the role of top management, auditors, and auditees in realizing the potential and driving the positive performance implications of internal audits. We found that top management support for the internal audit and auditor skills and behavior are key mechanisms in developing positive relational exchanges between auditors and auditees, which in turn results in learning from the audit, a process conducive to ethicality, efficiency, and effectiveness in organizations. We also found that the auditor's resources are important in facilitating learning from an audit. Our findings help account for the complex process by which auditors and the management of the organization facilitate proactive learning (learning orientation), which is often hindered by fear and suspicion (Funnell and Wade 2012) and a general sense of unease under scrutiny (Wood and Wilson 1988), and drive improvement of multiple performance measures in audited organizational units. We underscore the opportunity for top management to utilize the internal audit function to induce change in the desired direction, thereby promoting continuous improvement in organizational units across multiple dimensions: ethical behavior, efficiency, and effectiveness.

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Appendix

See Table 3.

Table 3 Measurement items

Unit performance improvement
The internal audit makes work processes more efficient in the unit (efficiency)
The unit's performance following the internal audit is better (efficiency)
The internal audit improves the quality of work outcomes in the unit (efficiency)
The internal audit helps the unit to become more productive (efficiency)
The internal audit helps to increase savings in the unit (efficiency)
The internal audit diminishes the occurrence of wrongdoing in the unit (ethical)
The internal audit contributes to members' adherence to our ethical code (ethical)
The internal audit prompts employees to comply with the organizational rules (ethical)
The internal audit motivates the unit's members to voice personal accountability (ethical)
The internal audit compels members to keep customers' information strictly confidential (ethical)
The internal audit helps to preserve employees' rights in the unit (ethical)
The internal audit helps our unit to meet its work goals and perform well above its expectations (effectiveness)
After an audit, the unit performance shows continuous improvement (effectiveness)
Auditor–auditee relationship exchange
During the audit, auditor and auditees discussed recommendations to overcome difficulties
During the audit, we felt the auditor's work was constructive
During the audit, we felt the auditor understood our problems and needs
During the audit, we developed a positive opinion about the auditor's work
During the audit, we shared problems we encountered at work
The auditor enjoyed our full cooperation
We reject everything that emerged during the audit (reverse-scored)
Learning from audit
We learned how to improve work processes from the audit
The internal audit provided important feedback for the unit on how we do the work
The internal audit enhanced our "know-how" skills
Reflecting on the audit findings contributed to our knowledge
In the unit, we rectified errors and mistakes following the internal audit
Top management support
The top management paid attention to the internal auditor's comments
The top management really cares about the internal audit and its findings
The top management considers the internal auditing to be a valuable element
The top management showed very little support for the auditing process (reverse-scored)
Employees were supported during all stages of the internal audit process
Employees were provided with sufficient resources to learn and improve following the internal audit process
The top management encouraged us to cooperate with the internal auditor
Auditor capacity
The auditor made a comprehensive audit
The auditor allocated appropriate resources and means to conduct a quality audit
The auditor was capable of pointing out major deficiencies
The auditor conducted a high quality audit
The auditor was proficient in the areas she or he reviewed
The auditor treated the auditees in the unit fairly
The auditor approached the auditees in a respectful way
The audit was superficial and was done to create an external impression (reverse-scored)

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