

Received: April 2024
Accepted: December 2024
DOI: 10.7862/rz.2024.hss.46

Lena GRZESIAK¹
Wojciech ULRYCH²

HOW AUDITOR-ORIENTED EMPLOYEE PERFORMANCE MANAGEMENT AFFECTS INTERNAL AUDIT EFFECTIVENESS BY REDUCING ITS CONSTRAINTS

This manuscript aims to determine how audit-oriented employee performance management (A-OEPM) practices influence internal audit effectiveness (IAE) mediated by internal audit constraints (IAC). The study was conducted in late 2021 by using a quantitative approach (CAWI method). In this type of practice, managers are not engaged in employee development, and they use management by objective method instead of EPM. They exclude team-oriented practices from the A-OEPM-IAE relations. Neither a job description tool nor a career development plan was used. Instead, only the practices that support up-to-date IA tasks and responsibilities are important for managerial decisions. The paper fills a gap in management literature by examining the relationships between A-OEPM, IAC, and IAE. In order to overcome the IAC, the A-OEPM could be a valuable tool to help both parties implement organizational changes necessary to achieve IAE.

Keywords: internal audit effectiveness, internal audit constraints, internal auditors, employee performance management, practices, quantitative research, Poland.

1. INTRODUCTION

The management literature defines *performance management* differently, presenting perspectives of strategy, organisation behaviours, operations management, economics, accounting and human resource management (HRM) (Hutchinson, 2013). The term *employee performance management* (EPM) derives from an HRM perspective and should be understood as continuous improvement of employee performance. EPM is an integrated process in which line managers (together with their subordinates) agree on a set of expectations, measures, and performance reviews in order to plan performance improvement and personal development and, less frequently, pay for performance (Den Hartog, Boselie, Paauwe 2004). The presented EPM concept is a set of HRM practices designed to influence individual and organisational effectiveness (Boselie, 2010).

¹ Lena Grzesiak, University of Lodz, Poland; e-mail: lena.grzesiak@uni.lodz.pl (corresponding author). ORCID: 0000-0001-5078-1675.

² Wojciech Ulrych, University of Lodz, Poland; e-mail: wojciech.ulrych@uni.lodz.pl. ORCID: 0000-0002-9477-2479.

Through the use of EPM, cultural change can be achieved by influencing individual behavior to inhibit constraints (Armstrong and Ward 2005; Houldsworth and Jirasinghe 2006). The line managers own EPM. Their responsibility is to introduce HRM practices to create and develop employee attitudes (Atkinson, Shaw, 2006). They can also help to prevent staff from returning to previous habits and to support their newly acquired knowledge and skills (Brinkerhoff, 2006; Harrison, 2009). In this context, the need of continuous development of internal auditors is a must and derives from professional audit regulations to abide by.

In turn, internal audit effectiveness (IAE) is the outcome of the internal auditors' activities, duties, professional practices and responsibilities through a high commitment with The International Standards for the Professional Practice of Internal Auditing (further: Standards) (2016), goals, objectives, policies and procedures (Ussahawanitchakit and Intakhan, 2011). Moreover, the internal auditors work improves management processes, develops internal control system, and consequently enhances organisation effectiveness and eliminates adverse effects for a particular organisation. In accordance with management literature, the EPM system could help to achieve IAE.

However, the relationship between an internal auditor and an auditee (an audited person) is usually seen as a conflict source (Kałużny, 2008). Many internal auditors are compared to "bad police" officers who search for irregularities only (sometimes deliberately and forcefully) (Grzesiak, 2021a). Internal audit may be misunderstood in the organization due to the internal audit constraints (IAC): as for example incorrect understanding of its role or lack of recognition that it is a part of the organization (Mouri, Anderson, 2017). The EPM could overcome the IAC, too.

The paper aims to determine how audit-oriented employee performance management (A-OEPM) practices influence IAE mediated by the IAC. From the literature review we can say that very effective CAE excels at the development and mentoring of people, and has the courage to develop a talent model that goes together well with both a company's business and internal audit's vision (PWC, 2016). As a consequence A-OEPM should have advantages for both: IAE and IAC. However, there are some cases showing that the internal auditors' work does not meet the Standards' requirements (see: Stanowisko..., 2022). Contextual factors (MODs) also affect the relationships. To this end, it was necessary to build a model (A-OEPM → IAC → IAE). Consequently, the paper fills a gap in the management literature, as still very little is known about these relationships.

2. LITERATURE REVIEW

2.1. Internal Audit Effectiveness (IAE)

According to The Institute of Internal Auditors (IIA), an international organization of internal auditors, internal audit (IA) is defined as:

an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes (Standards, 2016).

This definition indicates not only that IA is a systematic and disciplined approach supporting the achievement of the organization's goals but also clarifies IA and its character, aims and scope.

The above definition stresses that internal audit should be independent and objective. There is a close relationship between these traits (Moeller, 2018) hence they must be considered together (Stewart, Subramaniam, 2010).

Standards (2016) define independence as: “the freedom from conditions that threaten the ability of the internal audit activity to carry out internal audit responsibilities in an unbiased manner”. Independence means that internal auditors are free to express their own opinions and provide insights based on collected and objective data, and their widely understood experience. Independent auditors must also be impartial and free from conflicts of interest (Deloitte, 2018).

Objectivity is as

an unbiased mental attitude that allows internal auditors to perform engagements in such a manner that they believe in their work product and that no quality compromises are made. Objectivity requires that internal auditors do not subordinate their judgment on audit matters to others (Standards, 2016).

According to the Standards (2016), the internal auditor should obtain substantive support and external assistance if he feels unable to provide an objective opinion (for example due to lack of competence). In order to be objective, the internal auditor's opinion must not only be independent from others' opinions, but also be performed “with faith in the results” – in the fact that internal audit can improve the functioning of the organization (Skoczylas-Tworek, 2014). An internal auditors' assessment must be preceded by consideration of all circumstances related to the case: the internal auditors establish the facts, leaving aside their own preferences at work (Standards, 2016).

In accordance with the IA definition, the IA objectives are to add value to the organization and improve the operational activities (Standards, 2016). The value added by internal audit is a measurable or immeasurable benefit to the organization. The intermediate goal of IA is to assist the management in achieving the objectives of the organization (Ruud, Jenal, 2005). In addition to these goals, the organization's management may also establish other objectives for the internal audit (Millichamp, 1996; Moeller, 2018).

It is also critical for the internal auditors to consider the expectations of the internal audit stakeholders in their work (Ahmad, Taylor, 2009). These expectations are based mainly on their particular needs and do not remain constant over time (Ngah, 2016; PwC, 2011). Grzesiak (2021b) identified the internal audit expectation gap in Poland, understood as “the extent to which the function does not meet the expectations of auditees, managers, executives, and audit committee members”.

Ridley (2008) stated that a modern internal audit is based on „3E” what means effectiveness, efficiency and economy. Lenz, Sarens and Jeppesen (2018) observed that „effectiveness is the most important of the three ‘Es’”. In addition to evaluating the effectiveness of other processes, internal audits must also be effective on their own (Arena and Azzone 2009). However, an IA definition created by the IIA does not include IAE directly (The Institute of Internal Auditors, 2011). IAE is not self-explanatory and it is defined differently by researchers (Lenz et al., 2017). Mihret, Yismaw (2007) stated that “Internal audit is effective if it meets the intended outcome it is supposed to bring about”. In turn Dittenhofer (2001) stated that “[...] it has been traditional in internal auditing that

the determination of internal auditing effectiveness can be accomplished by evaluating the quality of internal auditing procedures”.

Arena and Azzone (2009) in their discussion on IAE distinguished two groups of approaches. According to the first, it is determined by the match between the internal audit in the organization and the features of internal audit resulting from the Standards (as for example independence and objectivity). Anderson (1983), Glazer and Jaenike (1980) represent such an approach. The second approach to the effectiveness of the internal audit depends on the subjective assessments attributed to the internal audit activity in the organization by the managers of this organization. In this case an assessment of the IAE can be made also by referring to the expectations of the internal audit stakeholders (as quoted in: Cohen, Sayag, 2010).

The literature review indicates that effective internal audit can benefit a variety of activities and be useful for the organization, the internal audit department, individual internal auditors, and the audit committee (a committee of a board of directors, fundamental component of good corporate governance) (Dubis, Jain, Manchanda, Thakkar, 2010). Effective internal audit contributes greatly to the effectiveness of auditees in particular and the organization in general, as well (Dittenhofer, Evans, Ramamoorti, Ziegenfuss, 2011). In spite of the fact that it does not guarantee that all functions in an organization are functioning as intended (Winiarska, 2007), the studies have shown that IAE offers the following benefits in fraud detection (Drogalas et al., 2017), performance improvement (mainly in audited processes and areas) (Eden and Moriah, 1996). Moreover IAE is an important part of new public management (Mizrahi, Ness-Weisman, 2007), support for organizations (private and public) (Badara, Saidin, 2013, Unegbu, Kida, 2011), one of the governance basics (Rittenberg and Hermanson, 2003) and *management training ground* (Cohen and Sayag, 2010).

IAE is influenced positively or negatively by different factors (Endaya and Hanefah, 2013; Lenz and Hahn, 2015). They are mainly associated with: (1) the core of internal audit; (2) internal auditors; (3) the management staff, (4) the others IA' stakeholders, (5) internal audit department (Grzesiak, 2021a). Although studies on IAE factors are relatively common in the literature, it is stated that they have not yet been fully explored (Bednarek, 2017) – there is no consensus among researchers regarding the full catalogue of factors determining the IAE (Endaya and Hanefah, 2013). IAE may be positively or negatively affected by these factors.

2.2. Internal Audit Constraints (IAC)

Internal audit can also be perceived as an imposed activity by organizational members (Allen, 1996, as quoted in: Ma'ayan and Carmeli, 2016). Most people consider internal audit as a cost-generating activity that does not contribute to the organization's success. Internal audit is often treated as „necessary evil”, and perceived as the activity that may cause problems for others. The internal auditor is often accused of being “jack-of-all-trades” and “master of none” (Moeller, Brink, 2009). Based on a study by Gorący (2013), it was determined that non-economist students have limited experience with IA. Gorący (2013) suggests further that Polish society has a low level of knowledge about internal audit. Lange (2016) makes similar observations as well.

Internal audit conclusions and report with recommendations are presented as constructive criticism and suggestions for improving the process (Tariku, 2015). An organization's management may find them useful in the decision-making process (Moeller,

2018). Changes in processes and recommendations proposed by internal auditors in the reports may cause discomfort and fear in the eyes of auditees. It is uncomfortable for anyone to be audited. Internal auditors surveyed by Grzesiak (2021a) observed anxiety, stress, and fear among the auditees; the latter do not often perceive cooperation with the internal audit as their professional responsibility. It is said that the auditees feel comfort only at the end of the audit task, and fear is felt the rest of the time (Carmeli, Zisu, 2009). This fact is explained by Sawyer et al. (2003). In their opinion, identifying weaknesses and shortcomings indicates that internal auditors (and not those audited) are viewed positively and as the committed employees. Hence the internal auditor-auditee relationship involves "often great emotions", generates conflict (Skoczylas-Tworek, 2014) and disrupts internal auditors' work (Dittenhofer et al., 2011). That's why attitudes towards internal audit(ors) are mostly negative (Grzesiak, 2021a). Sawyer et al. (2003) describe them as an integral part of the profession.

Internal auditors are expected to concentrate on process effectiveness and avoid interpersonal conflicts, auditee unique features and weaknesses. At the one hand, internal auditors must know how to treat people and converse with auditees. On the other hand, employees must be encouraged to better cooperate with internal audit staff to improve the applications of internal audit standards (Shamki, Alhajri 2017).

Internal auditor must provide assurance and consulting services which respectively derive from the control and advisory functions (Lisiński, 2011). The scope and detail of the audit task determine the resources required to perform the internal audit (Light, 1993, as quoted in: Ma'ayan and Carmeli, 2016; Moeller, 2018). In order to accomplish its objectives, the internal audit department should be equipped with adequate resources (Arens et al., 2012). However, this requirement is not always fulfilled (c.f. Grzesiak, 2021a, MacRae, van Gils, 2014, Salehi, 2016).

Internal auditor needs much more independence, but audit committee often exercise too weak power in the internal audit. There are some difficulties in applying an idealist conception of independence and hardly practicing management principles (Roussy, 2015). The IAE can be reduced by pressure on internal auditors as well (Karssing, Jeurissen, Zaal, 2017). An internal auditor should be aware that there may be a real possibility that he/she may be pressured to change conclusions at some point during his/her career. There can be not only various sources of pressure on the internal auditor (including managers at all levels or other employees) but also its different manifestations, (as for example pay cuts, transfers to other positions, terminations or being "eased into retirement", budget cuts, exclusions from important meetings, and being ostracized by individuals in the organization) (Rittenberg, 2016). The ineffectiveness of internal auditing can be attributed to ineffective management controls that may be detrimental to the organization's objectives (Dittenhofer, 2001). Likewise, an effective internal audit requires the chief audit executive (CAE) to report to management from time to time regarding the internal audit activities, authority, responsibility and performance relative to their plan (Badara and Saidin, 2013).

2.3. Auditor-oriented employee performance management practices (A-OEPM)

EPM is a continuous process with the stages of planning, acting, monitoring and reviewing performance (Armstrong 2009; Kreitner and Kinicki, 2007). The induction and socialization stages have been added to these four stages by some researchers (Aguinis, 2009; Hutchinson, 2013). The management literature lists a widely accepted approach towards EPM practices. EPM is similar to the PDCA (Plan, Do, Check, Act) approach regarding change introduction (Armstrong, 2009) (Table 1).

Table 1. Similarity of typical EPM and PDCA practices

EPM			PDCA
Armstrong (2009)	Aguinis (2009)	Hutchinson (2013)	Miller et al. (2014)
<p>Plan</p> <ul style="list-style-type: none"> • role definition, • objectives setting, • competencies, • performance improvement plan, • performance development plan <p>Act</p> <ul style="list-style-type: none"> • carry out role • implement performance improvement plan • implement personal development plan <p>Monitor</p> <ul style="list-style-type: none"> • monitor performance • provide continuous feedback • provide coaching • deal with underperformers <p>Review</p> <ul style="list-style-type: none"> • dialogue and feedback • agree strengths • build on strengths • agree areas on improvement 	<p>Prerequisites</p> <ul style="list-style-type: none"> • mission and strategic goals • job analysis <p>Performance planning</p> <ul style="list-style-type: none"> • goals setting in terms of results and behaviors • development/ performance plan <p>Performance execution</p> <ul style="list-style-type: none"> • supervisor's observation and documentation • goals and standards updates • feedback and coaching • resources provision • reinforcement <p>Performance assessment</p> <ul style="list-style-type: none"> • results and behaviours assessment process • development/performance plan evaluation <p>Performance review</p> <ul style="list-style-type: none"> • appraisal meeting between the manager and employee to review their assessments and provide feedback (what has been done and how) • plan for the future development • pay-for-performance <p>Performance renewal and re-contracting</p> <ul style="list-style-type: none"> • goals adjustment • thinking over the previous stages 	<p>Induction and socialization</p> <ul style="list-style-type: none"> • onboarding <p>Performance planning</p> <ul style="list-style-type: none"> • clarifying role expectation • agreeing performance measures • setting objectives • formulating personal development plan <p>Counselling and support</p> <ul style="list-style-type: none"> • ongoing review and feedback • identifying poor performance problems <p>Review and feedback</p> <ul style="list-style-type: none"> • discuss progress • clarify expectations • provide feedback • give recognition • assess performance • identify development needs <p>Identifying training, development and reward outcomes</p> <ul style="list-style-type: none"> • identifying needs 	<p>Plan</p> <ul style="list-style-type: none"> • problems identification • reasoning of goals setting • current situation analysis • problems sources • improving actions <p>Do</p> <ul style="list-style-type: none"> • plan introduction <p>Check</p> <ul style="list-style-type: none"> • process and results monitoring <p>Action</p> <ul style="list-style-type: none"> • standardisation • reflection • planning for the future

Source: own work.

The CAE, who is responsible for effectively managing the internal audit activity, must develop and maintain a quality assurance and improvement program within the internal audit department in the same vein to conform with Standards (2016) for the professional practice of internal auditing. The CAE must plan objectives, tasks and manage and

periodically review for internal auditor staff. The activities go well with the EPM assumptions, presented above (Standards, 2016).

There are few papers on internal auditor-oriented employee performance management (A-OEPM) practices. They have yet to be fully recognised and deeply discussed, compared to IAE and the organisational performance level, which are widely discussed within the literature (Ernst&Young, 2008; Ziegenfuss, 2000). However, an internal auditor assists the organisation in meeting their objectives (Badara, Saidin, 2013).

Bear in mind that internal auditors act upon the internal control system and must comply with the global Standards (2016), which require them to develop an independent IA committee and IA board to support their job autonomy (Skoczylas-Tworek, 2014). This remark means that the CAE reports administrative issues to the audit committee whilst simultaneously reporting to the hierarchical structure of the organisation's general director. The Standards (2016) describe how to structure an IA department but leave the final decision in a board of directors' hands. However each organisation varies and acts upon different contextual factors, and the Standards (2016) only help to build the IA department. Nevertheless, there are no formal rules regarding IA department development and its organisational subordination in Polish private companies (Skoczylas-Tworek, 2014).

Consequently, indicating a specific internal auditor's responsibilities within the job description is challenging and ambiguous. They derive from a differentiated scope of regulations, for example the Standards (2016) and other guidelines (see Moeller, 2018), specific audit areas, for example comprehensive auditing, management-oriented auditing, financial auditing, participative auditing (see Skoczylas-Tworek, 2014) and widely accepted practices (for example studying accounting records or preparing compliance reports).

The Standards (2016) set out that an internal auditor's activity must include processes of control, risk management and corporate governance. They must keep their organisation management accountable regarding the areas mentioned above. With this in mind, an internal auditor provides assurance services and advisory activities regarding support in the introduction of post-inspection recommendations (Standards, 2016).

A wide variety of duties and tasks aforementioned above require an internal auditor to possess high professional qualifications, competencies, and an enhanced organisation status to meet different obligations (Ramamoorti, 2003). There is a wide variety of IA certificates to obtain and some of which have features of international authorisations (Skoczylas-Tworek, 2014).

Internal auditors are expected to present specific competences. They include the issues regarding how the employee precepts reality, excluding its distortion and universalism, meaning that Standards (2016) and rules must be abided by them. They should also have competences in processes or areas of aggregation, problem-solving, creativity and even fraud detection capability. Internal auditors must be: honest, brave, loyal, aware, and take quick, flexible, simple actions, able to form opinions, enthusiastic about acting, and avoid conflict of interest (Kush, 2009; Standards 2016).

Individual objectives derive from the above formal rules, IA areas dedicated to a particular internal auditor, performance requirements and IA practices. Practically, the objectives stem from the internal audit department prepared by the CAE (Standards, 2016). They must concentrate on the inputs and outputs of an open system regarding the effectiveness of the audited area (Piotrowski, 1996). Therefore, personal development and improvement plans are essential to an internal auditor's professional job. They are continuously obligated to broaden their professional knowledge regarding the Standards

(2016) requirements, to know better contextual factors, and to be well familiar with audited organisations regularly (Skoczylas-Tworek, 2014).

Supporting internal auditors by their superior in monitoring, feedback and coaching is based on strict rules within the Standards (2016). Since the CAE must develop and maintain a quality assurance and improvement program, they must conduct ongoing monitoring, which is an integral part of the day-to-day supervision, review, and measurement of the internal audit activity. Ongoing monitoring is thus incorporated into practices used to manage internal auditors. The CAE is obligated to obtain competent advice and assistance or even decline the consulting activities if their subordinates lack of knowledge and skills (Standards, 2016).

Conformance with the Standards (2016) for the professional practice of IA is essential in meeting the responsibilities of internal auditors and the internal audit activity (Bota-Avram et al., 2010). This is why the internal auditor-oriented performance appraisal (A-OPA) criteria stem from The Code of Ethics (2016) and attribute and performance standards (Standards, 2016).

In practice, some most commonly used metrics for measuring IAE at the level of internal audit departments are fundamentals of A-OPA criteria (Ernst&Young, 2008; Ziegenfuss, 2000): completed audits comparing to audit plan, length of time for issuing audit reports, results from auditee surveys, the significance of audit findings and recommendations, staff experience and education level, auditing viewed by the audit committee, management expectations of internal auditing.

However, in public sector internal audit activity regarding performance monitoring can be insufficiently developed at the level of the departments (Dascalu et al., 2016), and thus it could improperly influence A-OPA. The above remark illustrates how an increase in an organization's effectiveness can sometimes be attributed solely to the performance of the internal auditor. The internal auditor may operate effectively, but their recommendations may not be implemented. Larkin et al. (1990) indicated that gender affected internal auditor performance appraisal – male performance was rated higher than female performance. However, women earned higher grades in college, were more motivated and reported higher levels of job satisfaction.

EPM is usually seen as an approach towards individual employee performance improvement. Moreover, it is a must to consider team performance which stems from how individuals cooperate and their input towards team success (Brumback, 2003). Arena and Azzone (2009) survey emphasizes that the IAE is influenced by the characteristics of the internal audit team.

2.4. Contextual factors (MODS) and IA

Contextual factors include private and public organizations. The results of studies conducted in various countries indicate that public managers and employees perceive a weaker relationship between their work' results and remuneration, professional promotion or the sense of job security than staff corresponding to their position in the private sector (Crewson; 1997, Jin, Rainey, 2020, as quoted in: Rudolf, 2020). This perception affects their greater absenteeism, weaker work commitment and lower work performance (Mastekaasa, 2020). The public sector's existence keeps it from delivering typical market products. Hence public managers should be appropriately motivated to take actions focused on efficiency and be more inclined to put discipline in spending funds. They use few economic indicators or far less information on a given market functioning in decision-making (Rudolf, 2020). Managers are restricted from influencing their

subordinates and experience various financial and organizational limitations (Rainey and Chun, 2005). HRM in the Polish public sector seems far less developed in methods and practices (Sidor-Rządkowska, 2013).

In turn, the IA experience is indispensable (Czerwiński, 2004). According to Bailey (2010), the internal auditor is one of the 'hottest' professions globally, with growth opportunities. Audit experience is considered the skills that the auditors obtained when auditing the tasks by applying relevant audit standards, accounting guidance and their error-specific experiences (Musig, Ussahawanitchakit, 2011). Some findings show a significant relationship between IAE, its scope and auditors' experience (Shamki, Alhajri 2017). The analysis of job advertisements for internal auditors shows that the competencies most sought after by employers are, respectively: formal education (in the case of Poland and Germany) and professional certificates (in the case of Great Britain and the USA) (Grzesiak, 2019). The internal auditors knowledge should be derived from their professional and life experience, which, according to the majority of the surveyed internal auditors, means that young people should instead not become internal auditors (Grzesiak, 2021a). According to research by Van Peurse (2004), experienced internal auditors can significantly impact the organisation's management.

The obligation to conduct an internal audit is reserved for certain Polish organisations, for example those from the public sector, insurance companies, banks, and companies listed on the Warsaw Stock Exchange (Grzesiak, 2021a). In the Polish public sector, there are three possible situations: an internal audit is mandatory, an internal audit is mandatory, but when the specific conditions are fulfilled, or an internal audit is not mandatory (Public Finance Act of 27 August 2009, article 274).

Based on a review of the management literature, the following research questions were developed:

- RQ1: Is it possible to build A-OEPM, IAC and IAE constructs from the selected items according to the statistical requirements?
- RQ2: Is it possible to develop the A-OEPM → IAC → IAE model according to the statistical requirements?
- RQ3: Are the A-OEPM practices able to decrease the IAC to reduce its influence on IAE?
- RQ4: Is IAC a mediator for the A-OEPM → IAE model according to the statistical requirements?
- RQ5: How do MODs affect the model?

3. METHOD

3.1. Theory model, variables and hypotheses development

The research aimed to develop, verify and analyse the hypothesis of the influence of audit-oriented employee performance management (A-OEPM) practices on IAE mediated by the internal audit constraints (IAC), as presented in the model (Figure 1). The use of EPM can be helpful to inhibit organisational constraints through employee behaviour influence (Armstrong and Ward 2005; Houldsworth and Jirasinghe 2006). The model was moderated by four particular moderators (MODs) that could change the relations between the constructs.

The research questions helped to develop and build the model. Four hypotheses were constructed:

- H1: A-OEPM is positively related to IAE
- H2: A-OEPM is negatively related to IAC
- H3: IAC is negatively related to IAE
- H4: MODs differentiate the relationship between variables in the model.

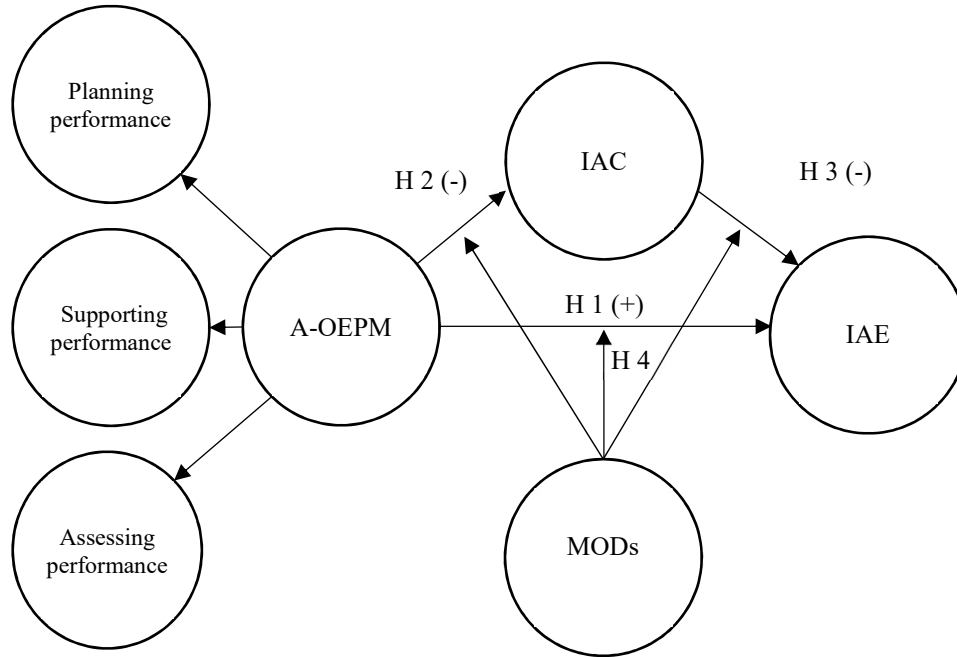


Figure 1. Model presenting the influence of A-OEPM on IAE mediated by the IAC (n=128)

Source: own work.

The model was developed using modelling of structural equations in SMART PLS-SEM 3 software (Ringle et al., 2015). The initial step of the modelling needed to develop three constructs (A-OEPM, IAC and IAE) based on management literature review (Table 2). The A-OEPM construct was to have included three latent variables with separate set of items per each reflecting three sets of EPM practices within planning, supporting and assessing employee performance (see Appendix 1). Correlations of the positions in total for some items (especially regarding planning stage) were not satisfactory (below 0.4) and had to be excluded from the constructs. Having items excluded from the constructs that represent typical EPM practices (such as job descriptions and personal development plans) was quite surprising. It is especially intriguing to remove any team activity towards an individual during planning, supporting and assessing performance. All the EPM practices refer only to the interactions between manager and individuals and may reflect specific power share between the parties. As a consequence there is a single A-OEPM construct with a set of practices mainly reflecting planning (i.e. improving), supporting and assessing an employee's job performance without paying special attention to personal development

and team-oriented practices. In contrast, only a single item was excluded from both the IAC and IAE constructs.

Table 2. Development of constructs

Construct	Measurement and references based on:	Amount of items; see Appendix 1
Audit-oriented EPM (A-OEPM)	(Aguinis, 2009), (Armstrong, 2012), (Hutchinson, 2013)	18
Internal Audit Effectiveness (IAE)	(Arena, Azzone 2009), (Badara, Saidin, 2013), (Endaya, Hanefah, 2013), (Lenz, Hahn, 2015), (Lenz et al., 2017), (Standards, 2016)	11
Internal Audit Constraints (IAC)	(Arena, Azzone 2009), (Badara, Saidin, 2013), (Lenz, Hahn, 2015), (Lenz et al., 2017)	6

Source: based on authors findings.

All model constructs achieved adequate Cronbach's alpha (above 0.7), factor loading (above 0.5) and their value in the variance test reached at least 70% (Table 3).

Table 3. Reliability Coefficients of the Constructs

Constructs	Items	Factor loading	Cronbach's Alfa (min. 0.7)	CR (rho_a) (min. 0.7)	CR (rho_c) (min. 0.7)	AVE (min. 0.5)
A-OEPM	PL 2	0.621	0.910	0.917	0.927	0.587
	PL 4	0.687				
	SU 1	0.706				
	SU 2	0.641				
	SU 4	0.695				
	AP 4	0.826				
	AP 5	0.837				
	AP 6	0.874				
IAC	AP 7	0.870	0.756	0.768	0.836	0.507
	IAC 1	0.765				
	IAC 2	0.734				
	IAC 3	0.623				
	IAC 4	0.768				
IAE	IAC 5	0.656	0.896	0.907	0.914	0.518
	IAE 2	0.563				
	IAE 3	0.729				
	IAE 4	0.714				
	IAE 5	0.713				
	IAE 6	0.663				
	IAE 7	0.764				
	IAE 8	0.754				
	IAE 9	0.683				
	IAE 10	0.808				
IAE 11	0.780					

Source: based on authors findings.

Discriminant validity has been established in this structural equation model using the Fornell-Larcker criterion and Heterotrait-Monotrait (HTMT) ratio results. The minimum acceptable value of 0.7 through diagonals by Fornell-Larcker criterion is fulfilled (see Fornell, Larcker, 1981). There is no single convention for a threshold value that would indicate high discriminant validity within HTMT – a common proposal value is < 0.90 between two constructs (Henseler et al., 2015) (Table 4).

Table 4. The Fornell-Larcker criterion

Constructs	Fornell-Larcker criterion			HTMT ratio results	
	A-OEPM	IAC	IAE	A-OEPM	IAC
A-OEPM	0.766	---	---	---	---
IAC	-0.367	0.712	---	0.418	---
IAE	0.507	-0.682	0.720	0.555	0.798

Source: based on authors findings.

3.2. Sample

The authors conducted the survey in late 2021 using the Computer-Assisted Web Interview (CAWI) method. A five-point Likert scale questionnaire with closed items was used to collect respondents' opinions. The social network such as LinkedIn, and closed professional forums for internal auditors on Facebook were used to collect the data. The research was also promoted by authors during online and in-real conferences on internal audit.

Table 5. Descriptive statistics and correlation between constructs (n = 128)

No.	Spearman's Rank correlation	A-OEPM	IAC	IAE	Mean	Std. dev.
(1)	A-OEPM	1.000	0,509879*	- 0,360793*	3,428819	1,016144
(2)	IAC	0,509879*	1.000	- 0,645995*	2,397	0,9708
(3)	IAE	- 0,360793*	- 0,645995*	1.000	3,8586	0,971
MOD_1	Private sector and public sector	-0,211560*	-0,058809	0,112708		
MOD_2	Up to 10 years' IA experience and 11 years' IA experience and more	-0,156887	-0,188103*	0,125930		
MOD_3	I am a member of the IIA: yes / no	0,039028	0,004481	0,013476		
MOD_4	The organization I work for is required to use internal audit: yes / no	-0,085247	-0,148466	0,217571*		

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

Source: based on authors findings.

The total research sample consisted of 128 internal auditors who worked (as employees) in internal audit departments across Poland. This means that the sample was selected

randomly based on the availability of respondents. There is a must to highlight the fact that potential respondents were highly reluctant to participate in the survey.

The degree of association between the three constructs (A-OEPM, IAC and IAE) and selected moderators (MOD_1, MOD_2, MOD_3 and MOD_4) was examined by correlation analysis. The data suggest that moderators MOD_1, MOD_2 and MOD_4 have a significant and weak correlation with the A-OEPM, IAC and IAE constructs (Table 5).

The data in Table 5 points out that respondents representing private-sector assessed A-OEPM practices better than public-sector representatives (MOD_1). In turn, less IA-experienced respondents found IAC more problematic than more experienced individuals (MOD_2). It was also found that respondents who were obligated to introduce IA into practice assessed IAE worse than those who introduced it voluntarily (MOD_4).

4. RESEARCH FINDINGS AND DISCUSSION

4.1. General model

The model of the influence of A-OEPM on IAE mediated by the IAC was constructed in accordance with the theory presented previously. Regression analysis was employed to check the results of the tested hypothesis. The final model was developed (Table 6) with a set of items behind the constructs.

The model shows a weak and statistically significant influence of A-OEPM practices on IAE (SRW = 0.296, $p < 0.001$). IAC is a partially mediating construct in the model. The standardized indirect effect between A-OEPM and IAE is higher than the direct effect by 0.211, amounting to 0.506 ($p < 0.001$).

Table 6. The model of A-OEPM – IAE mediated by IAC (n=128)

Constructs	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	p-value
IAC → IAE	-0.574	-0.575	0.057	10.121	***
A-OEPM → IAC	-0.367	-0.387	0.069	5.350	***
A-OEPM → IAE	0.296	0.300	0.069	4.312	***

Note: $p < .001$ ***

Source: based on authors findings.

Table 7 shows the goodness-of-fit measures for the model, which were mostly achieved. The following three measures are highlighted here:

- The R^2 is a measure of the model's explanatory power and represents the amount of variance in the endogenous constructs explained by all the exogenous constructs linked to it (Hair et al., 2019).
- The F^2 assesses how strongly one exogenous construct contributes to explaining a certain endogenous construct in terms of R^2 .
- A value less than 0.10 (or of 0.08 – in a more conservative version) are considered a good fit in terms of SRMR measure.

Table 7. Results of the A-OEPM – IAE mediated by IAC model fits (n=128)*

The goodness-of-fit measure	Model			Result
Chi-square (λ^2) p-value	Chi-square = 720.442 Probability level = .000			requirement was not achieved
R ²	A-OEPM = .135 IAE = .542			weak explanatory power regarding A-OEPM and moderate for IAE
Adjusted R ²	A-OEPM = .128 IAE = .534			
F ²		A-OEPM	IAE	strong effect for IAE – IAC relation and weak for the rest relations
	A-OEPM	---	0.165	
	IAE	0.165	---	
	IAC	0.156	0.621	
Standardised root mean square residual (SRMR)	0.09			requirement was achieved
Exact model fit test – d_ ULS	2.365			result accepted
Exact model fit test – d_ G	1.228			result accepted
Bentler-Bonett Index – NFI (Normed Fit Index)	0.658			moderate fit
RMS Theta	0.165			requirement was achieved

* the measures values were interpreted based on (Hooper et al., 2008) and (Ringle et al., 2015).

Source: based on authors findings.

4.2. Moderators (MODS)

In this study, moderators are used to show how a type of economic sector (MOD_1), IA work experience (MOD_2), the membership in IIA (MOD_3) and internal audit requirement in an organization (MOD_4) influence the relationship between variables in the model.

Table 8. Internal audit work experience (n=128)

	up to 10 years' IA experience				over 11 years' IA experience				
	Path Coefficients Original	STDEV	t-Value	p-Value	Path Coefficients Original	STDEV	t-Value	p-Value	p-Value original 1-tailed
A-OEPM → IAC	-0.403	0.125	3.222	0.001	-0.361	0.089	4.059	0.000	0.610
A-OEPM → IAE	0.188	0.107	1.749	0.081	0.372	0.093	3.987	0.000	0.905
IAC → IAE	-0.670	0.087	7.720	0.000	-0.508	0.080	6.387	0.000	0.917

Source: based on authors findings.

The internal audit years' experience is the only contextual factor differentiating the model (Table 8). Employees with up to 10 years of internal audit experience change the model, with the IAC taking on a fully mediating role between A-OEPM and IAE. These findings fit perfectly with the previous remarks regarding the need for audit experience, which derives over time from their professional and life experience. Less experienced internal auditors must learn to overcome IAC to become more experienced professionals who can significantly impact the organization's management and consequently be able to build bridges between A-OEPM and IAE.

4.3. Implications for theory and practice

This study provides new evidence on A-OEPM for IA practices in Poland that commonly highlight the consequence of power share in relations between CAE and internal auditors. CAEs are not engaged in employee development and they use management by objective method instead EPM. In practice, CAEs exclude team-oriented practices from the above relations. Interestingly, neither a job description tool or a career development plan were used. On the one hand, internal auditors do not have neither the full management nor coworkers support. On the other hand they are not sure whether the stakeholders' expectations are met. As a consequence internal auditors very often invest their own private resources in themselves in order to meet the Standards' requirements regarding the competence development (see: Grzesiak, 2021a). However, only the practices that support up-to-date IA tasks and responsibilities, in terms of setting objectives, performance improvement plans, monitoring, feedback, coaching and performance appraisal, are of the highest importance for managerial decisions.

In spite of the above shortages regarding the A-OEPM practices it could be an excellent measure to overcome the IAC and help both parties to introduce the organizational change to achieve IAE. This phenomenon is clearly observed for less experienced internal auditors whose job mainly concentrates on reducing IAC to improve IAE.

4.4. Limitations and research opportunities

Online research does not allow the researcher to ensure that respondents understand the questions correctly. The relatively long questionnaire (as in this research) may have led respondents to choose random answers. The results of the study may have been affected by interpretation errors and low control over the circumstances in which the questionnaire was completed. The sample tested was comparatively small and it is not possible to speak of representativeness in statistical terms. The perspective of the respondents can only reflect opinions.

Due to the fact that the study was conducted within Polish national culture context, the findings need to be interpreted with caution as the answers provided by auditors may vary between countries. This may impact the model results and, consequently, the conclusions.

5. DISCUSSION AND HYPOTHESES VERIFICATION

According to the EPM system, a manager is responsible for the staff's development to make them fulfil obligations and achieve professional goals through mutual trust, development, positive reinforcement and effective communication (Armstrong, 2009; Hutchinson, 2013). Similarly, the CAE coordinates the work of IA department. The CAE must share tasks among subordinates according to their competencies and job responsibilities (Skoczylas-Tworek, 2014). However, the larger organisation is considered,

the higher dispersed responsibility for the organisation among IA staff is observed (Moeller, 2018).

The findings show that the respondents are doubtful about added value for stakeholders, which should have been an item within the IAE construct. This could have happened as a result of either a never-ending drive for professional perfection or a signal for management's help. Unfortunately, lacking managerial support in career building is a massive obstacle in the development-oriented A-OEPM system. Hence, it puts the whole of the internal auditors learning responsibility into their own hands.

Since an internal auditor's work experience improves the competences over time to decrease the IAC, the CAE needs to plan and introduce a set of A-OEPM practices. The findings show that the less experienced internal auditors are, the CAE's highest concern to develop the A-OEPM practices.

The good news is that the respondents do not perceive the organization staff as a threat that maliciously interfere with IA activities. It could help them to do their job and makes the CAE activities regarding A-OEPM more plausible.

Not all of the moderators studied are relevant to highlight significant differences or strengths between the model constructs. IA work experience differentiates the model according to the management literature. The findings do not support the management literature regarding some contextual factors and previously expected differences in the model between the public and private sectors. The same conclusion goes for a share of the Standards (2016) participation in IA professional development and universality of internal audit practices among organizations. The results are confusing and need further, deepened studying.

In light of all the results presented, it is possible to confirm all four hypotheses (there is no reason to reject any hypothesis). Bearing the findings in mind, the research questions stated in this research have yielded the following answers:

1. A set of items for each of the three constructs was developed based on the management literature.
2. It is possible to develop the A-OEPM → IAC → IAE model according to the statistical requirements.
3. The A-OEPM practices were able to decrease the IAC to reduce its influence on IAE.
4. IAC is partly mediator of the model.
5. Out of four selected contextual factors, only the work experience fully moderated the model, which shows the high significance of the A-OEPM practices for less experienced internal auditors.

It is a must to highlight that in order to overcome the IAC, the A-OEPM could be a valuable tool to help CAEs and internal auditors implement organizational changes necessary to achieve IAE.

6. CONCLUSIONS

The results can help managers to deal more professionally with the IA performance. Consequently, the A-OEPM needs more attention and a further need for current and future studies to expand the research on audit staff experience and A-OEPM practices. It is believed that further research can usefully develop the framework of practices. Contextual factors are the key to analysing the A-OEPM → IAC → IAE model. Perhaps it could reveal significant differences in the model construct for public and private sectors, as the literature

emphasizes the differences in managing these entities. There is a need to find out why team practices mean less than it was previously expected, and whether *CAE – team – individual* communication channels are properly developed. Moreover, it is a must to be more familiar with the real influence of the Standards (2016) on A-OEPM in the Polish economic reality.

We hope that our findings provide an essential spark to take a closer look at internal auditors as human beings and will help shift the researcher's scope of interest beyond the functional IAE.

Notes:

1. The overview of the expectations placed on internal auditors is described in (Grzesiak, 2021a).
2. Their review is included in (Grzesiak, 2021a).

REFERENCES

- Aguinis, H. (2009). *Performance management*, 2ed ed. Harlow: Pearson/Prentice Hall International.
- Ahmad, Z., Taylor, D. (2009). *Commitment to Independence by Internal Auditors: The Effects of Role Ambiguity and Role Conflict*. "Managerial Auditing Journal", Vol. 24(9). DOI: 10.1108/02686900910994827.
- Allen, R.D. (1996). *Managing internal audit conflicts*. "Internal Auditor", Vol. 53.
- Anderson, U. (1983). *Quality Assurance for Internal Auditing*, Institute of Internal Auditors. Altamonte Springs, FL.
- Arena, M., Azzone, G. (2009). *Internal audit effectiveness: relevant drivers of auditees satisfaction*, Working paper [Access: 14.10.2022]. Access on the internet: https://www.researchgate.net/publication/251896275_INTERNAL_AUDIT_EFFECTIVENESS_RELEVANT_DRIVERS_OF_AUDITEES_SATISFACTION.
- Arens, A.A., Elder, R.J., Beasley, M.S. (2012). *Auditing and assurance services: an integrated approach*, 14th Edition. New Jersey: Pearson Education.
- Armstrong, K., Ward, A. (2005). *What Makes for Effective Performance Management?* London: The Work Foundation.
- Armstrong, M., (2009). *Armstrong's handbook of performance management. An evidence-based guide to delivering high performance*, 4th edition. London: Kogan Page.
- Atkinson, C., Shaw, S. (2006). *Managing performance* [In:] Lucas, R., Lupton, B., Mathieson, H., eds., *Human Resource Management in an International Context*, Chartered Institute of Personnel and Development.
- Badara, M., Saidin, S. (2013). *The Journey so far on Internal Audit Effectiveness: a Calling for Expansion*. "International Journal of Academic Research in Accounting, Finance and Management Sciences", Vol. 3, No. 3
- Bailey, J. (2010). *Core competencies for today's internal auditors. A Component of the CBOK Study*. Altamonte Springs: The Institute of Internal Auditors Research Foundation.
- Bednarek, P. (2017). *The relationship between organisational attributes and internal audit effectiveness*. "Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu", Vol. 474. DOI: 10.15611/pn.2017.474.01.
- Boselie, P. (2010). *Strategic Human Resource Management: a balanced approach*. London-Columbus, OH: McGraw-Hill, New York.

- Bota-Avram, C., Popa, I., Stefanescu, C. (2010). *Methods of measuring the performance of internal audit*. "The Annals of The "Ștefan cel Mare" University of Suceava. Fascicle of The Faculty of Economics and Public Administration", Vol. 10, No. Special.
- Brinkerhoff, R.O. (2006). *Increasing impact of training investments: an evaluation strategy for building organisational learning capability*. "Industrial and Commercial Training", Vol. 38, No. 6. DOI: 10.1108/00197850610685824.
- Brumback G.B., (2003). *Blending the "we/me" in performance management*. "Team Performance Management: An International Journal", Vol. 9, No. 7/8. DOI: 10.1108/13527590310507417.
- Carmeli, A., Zisu, M. (2009). *The relational underpinnings of quality internal auditing in medical clinics in Israel*. "Social Science & Medicine", Vol. 68, No. 5. DOI 10.1016/j.socscimed.2008.12.031.
- Cohen, A., Sayag, G. (2010). *The effectiveness of internal auditing: an empirical examination of its determinants in Israeli organisations*. "Australian Accounting Review", Vol. 20, No. 3. DOI: 10.1111/j.1835-2561.2010.00092.x.
- Crewson, P.E. (1997). *Public-service motivation: Building empirical evidence of incidence and effect*. "Journal of Public Administration Research and Theory", Vol. 7, No. 4.
- Czerwiński, K. (2004). *Audyt wewnętrzny*. Warszawa: Wydawnictwo InfoAudit.
- Dascalu, E.D., Marcu, N., Hurjui, L. (2016). *Performance Management and Monitoring of Internal Audit for the Public Sector in Romania*. "Amfiteatru Economic", Vol. 18, No. 43.
- Deloitte (2018). *Internal audit 3.0. The future of internal audit is now* [Access: 1.07.2023]. Access on the internet: <https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Audit/gx-internal-audit-3.0-the-future-of-internal-audit-is-now.pdf>.
- Den Hartog, D.N., Boselie, P., Paauwe, J. (2004). *Performance management; a model and research agenda*. "Applied Psychology: An International Review", Vol. 53, No. 4. DOI: 10.1111/j.1464-0597.2004.00188.x.
- Dittenhofer, M. (2001). *Internal auditing effectiveness: An expansion of present methods*. "Managerial Auditing Journal", 16(8). DOI: 10.1108/EUM0000000006064.
- Dittenhofer, M., Evans, R.L., Ramamoorti, S., Ziegenfuss D. (2011). *Behavioral dimensions of internal auditing: an exploratory survey*. The Institute of Internal Auditors Research Foundation [Access: 3.05.2023]. Access on the internet: https://www.internaudit.cz/download/Publikace-IIA/5015.2.dl-Behaviorial%20Dimensions-Survey%20report-FINAL_copy%20for%20web%20zip.pdf.
- Drogalas, G., Pazarskis, M., Anagnostopoulou, E., Papachristou, A. (2017). *The effect of internal audit effectiveness, auditor responsibility and training in fraud detection*. "Accounting & Management Information Systems", Vol. 16, No. 4.
- Dubis, G.S., Jain P., Manchanda, A., Thakkar, R. (2010). *IPPF practice guide: measuring internal audit effectiveness and efficiency*, The Institute of Internal Auditors [Access: 21.03.2019]. Access on the internet: <https://global.theiia.org/standards-guidance/Member%20Documents/Practice%20guide%20Measuring%20Internal%20Audit%20Effectiveness.pdf>.
- Eden, D., Moriah, L. (1996). *Impact of internal auditing on branch bank performance: A field experiment*. "Organizational Behavior and Human Decision Processes", Vol. 68, No. 3. DOI: 10.1006/obhd.1996.0104.
- Endaya, K.A., Hanefah, M.M. (2013). *Internal audit effectiveness: an approach proposition to develop the theoretical framework*. "Research Journal of Finance and Accounting", Vol. 4, No. 10.

- Ernst&Young. (2008). *Escalating the role of internal audit*. Ernst&Young Global Internal Audit Survey [Access: 30.05.2023]. Access on the internet: http://www.ey.com/global/content.nsf/International/AABS_-_Advisory_-_Escalating_the_role_of_internal_audit.
- Fornell, C., Larcker, D.F. (1981). *Evaluating Structural Equation Models with Unobservable Variables and Measurement Error*. "Journal of Marketing Research", Vol. 18, No. 1. DOI: 10/cwp.
- Glazer, A.S., Jaenike, H.R. (1980), *A Framework for Evaluating an Internal Audit Function*. Foundation for Audit Ability Research and Education. Altamonte Springs, FL.
- Goraćy, J. (2013), *Audyty wewnętrzny w opiniach nieekonomistów* [In:] Winiarska K., ed., *Kontrola zarządcza oraz audyt wewnętrzny w teorii i praktyce*. Szczecin: Wydawnictwo Naukowe Uniwersytetu Szczecińskiego.
- Grzesiak, L. (2019), *Wymagania kompetencyjne stawiane audytorom wewnętrznym w świetle ogłoszeń o pracę – analiza porównawcza*. „Edukacja Ekonomistów i Menedżerów”, Vol. 1, No. 51. DOI: 10.5604/01.3001.0013.2370.
- (2021a). *Kapitał ludzki jako czynnik skuteczności audytu wewnętrznego*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- (2021b). *An Internal Audit Expectation Gap in Poland*. "Annales Universitatis Mariae Curie-Skłodowska, Sec. H Oeconomia", Vol. 55, No. 3. DOI: 10.17951/h.2021.55.3.37-50.
- Hair, J.F., Risher, J.J., Sarstedt, M., Ringle, C.M. (2019). *When to use and how to report the results of PLS-SEM*. "European Business Review", Vol. 31 No. 1. DOI: 10.1108/EBR-11-2018-0203.
- Harrison R., (2009). *Learning and Development*, 5th edition, CIPD, London.
- Henseler, J., Ringle, C.M., Sarstedt, M. (2015). *A New Criterion for Assessing Discriminant Validity in Variance-based Structural Equation Modeling*. "Journal of the Academy of Marketing Science", Vol. 43, No. 1. DOI: 10.1007/s11747-014-0403-8.
- Hooper, D., Coughlan, J., Mullen, M.R. (2008). *Structural Equation Modelling: Guidelines for Determining Model Fit*. "The Electronic Journal of Business Research Methods", Vol. 6, No. 1.
- Houldsworth, E., Jirasinghe, D. (2006). *Managing and Measuring Employee Performance*. London: KoganPage.
- Hutchinson, S. (2013). *Performance Management. Theory and Practice*. London: Chartered Institute of Personnel & Development.
- Jin, R.Q., Rainey, H.G. (2020). *Positive in public service: Government Personnel, constrained incentives, and positive work attitudes*. "International Public Management Journal", Vol. 23, No. 1.
- Kałużny, S. (2008). *Kontrola wewnętrzna. Teoria i praktyka*. Warszawa: PWE.
- Karssing, E., Jeurissen, R., Zaal, R. (2017). *Moral courage and internal auditors*. The Institute of Internal Auditors, Netherlands, Nyenrode Business Universiteit [Access: 27.02.2024]. Access on the internet: <https://www.iaa.nl/SiteFiles/Moral%20Courage%20and%20Internal%20Auditors-bw-web.pdf>.
- Kreitner, R., Kinicki, A. (2007). *Organizational behavior*, 7th edition. New York: McGraw-Hill International Edition.
- Kush, B.D. (2009). *Auditing Leadership. The professional and leadership skills you need*. Hoboken: John Wiley & Sons.
- Lange, Ł. (2016). *Antropolog jako audytor wewnętrzny*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.

- Larkin, J.M., Hooks K.L. (1990). *Does Gender Affect Internal Auditors' Performance? "Woman C.P.A."*, Vol. 52, No. 2, Article 6 [Access: 3.07.2023]. Access on the internet: <https://egrove.olemiss.edu/wcpa/vol52/iss2/6>.
- Lenz, R., Hahn, U. (2015). *A synthesis of empirical internal audit effectiveness literature pointing to new research opportunities*. "Managerial Auditing Journal", Vol. 30, No. 1. DOI: 10.1108/MAJ-08-2014-1072.
- Lenz, R., Sarens, G., Hoos, F. (2017). *Internal audit effectiveness: multiple case study Research Involving Chief Audit Executives and Senior Management*. "EDPACS", Vol. 55, No. 1 [Access: 15.03.2023]. Access on the internet: https://www.researchgate.net/publication/312045439_Internal_Audit_Effectiveness_Multiple_Case_Study_Research_Involving_Chief_Audit_Executives_and_Senior_Management/link/5a29bfbeaca2728e05dae913/download.
- Lenz, R., Sarens, G., Jeppesen, K.K. (2018). *In search of a measure of effectiveness for internal audit functions: an institutional perspective* [Access: 23.06.2023]. Access on the internet: https://www.researchgate.net/publication/327061036_In_Search_of_a_Measure_of_Effectiveness_for_Internal_Audit_Functions_An_Institutional_Perspective.
- Light, P.C. (1993). *Monitoring government: Inspectors general and the search for accountability*. Washington DC: Brookings Institution Press.
- Lisiński, M. (2011). *Procedury realizacji systemu audytu wewnętrznego* [In:] Lisiński, M., ed., *Audyt wewnętrzny w doskonaleniu instytucji* Warszawa: Polskie Wydawnictwo Ekonomiczne, p. 215–226.
- Ma'ayan, Y., Carmeli, A. (2016). *Internal Audits as a source of ethical behavior, efficiency, and effectiveness in work units*. "Journal of Business Ethics", Vol. 137, No. 2.
- MacRae, E., van Gils, D. (2014). *Nine elements required for internal audit effectiveness in the public sector. A global assessment based on the IIA's 2010 Global Internal Audit Survey*. CBOK The Global Internal Audit Common Body of Knowledge, The IIA Research Foundation [Access: 27.02.2024]. Access on the internet: https://www.iaa.nl/SiteFiles/IIA_leden/NineElements-Required-for-Internal-Audit-Effectiveness-in-the-Public-Sector.pdf.
- Mastekaasa, A. (2020). *Absenteeism in the public and the private sector: Does the public sector attract high absence employees?* "Journal of Public Administration Research and Theory", Vol. 30, No. 1. DOI: 10.1093/jopart/muz003.
- Mihret, D.G., Yismaw, A.W. (2007). *Internal audit effectiveness: an Ethiopian public sector case study*. "Managerial Auditing Journal", Vol. 22, No. 5. DOI: 10.1108/02686900710750757.
- Miller, J., Wróblewski, M., Villafuerte, J. (2014). *Kultura kaizen, Budowanie i utrzymanie kultury ciągłego doskonalenia*. Warszawa: MT Biznes sp. z o.o.
- Millichamp, A.H. (1996). *Auditing*, 7th edition. London: DP Publications.
- Mizrahi, S., Ness-Weisman, I. (2007). *Evaluating the Effectiveness of Auditing in Local Municipalities using Analytic Hierarchy Process (AHP): A General Model and the Israeli Example*. "International Journal of Auditing", Vol. 11, No. 3. DOI: 10.1111/j.1099-1123.2007.00364.x.
- Moeller, R. (2018). *Nowoczesny audyt wewnętrzny*. Warszawa: Wydawnictwo Nieoczywiste.
- Moeller, R.R., Brink, V.Z. (2009). *Brink's Modern Internal Auditing: A Common Body of Knowledge*. Hoboken: Wiley.
- Mouri, M., Anderson, D.J. (2017). *Stakeholders' advice to the chief audit executive* [Access: 3.07.]. Access on the internet: <https://www.iaa.nl/actualiteit/nieuws/stakeholders-advice-to-the-chief-audit-executive>.

- Musig, P., Ussahawanitchakit, P. (2011). *Dynamic audit competency and the antecedents and consequences: Evidence from tax auditors in Thailand*. "International Journal of Business Research", Vol. 11, No. 3.
- Ngah, J. (2016). *Optimizing internal audit*. "Internal Auditor", Vol. 73, No. 4.
- Piotrowski, W. (1996). *Organizacja i zarządzanie – kierunki, koncepcje, punkty widzenia* [In:] Koźmiński, A.K., Piotrowski, W., eds., *Zarządzanie. Teoria i praktyka*. Warszawa: PWE.
- Public Finance Act of 27 August 2009, as amended, Journal of Laws 2009 no 157 item 1240.
- PwC (2011). *Maximising the value of internal audit: who dares wins* [Access: 19.03.2023]. Access on the internet: retrieved from <https://www.pwc.com.au/assurance/assets/maximising-value-who-dares-wins-sep11.pdf>.
- (2016). *2016 State of the Internal Audit Profession Study. Leadership matters: Advancing toward true north as stakeholders expect more* [Access: 4.03.2024]. Access on the internet: <https://www.pwc.pl/pl/pdf/2016-state-of-the-internal-audit-profession.pdf>.
- Rainey, H.G., Chun, Y.H. (2005). *Public and Private Management Compared* [In:] E. Hood, E., Lynn, L.E., Pollitt, Ch., eds., *The Oxford Handbook of Public Management*. Oxford: Oxford University Press.
- Ramamoorti, S. (2003). *Internal auditing: history, evolution, and prospects* [In:] Bailey, A., Gramling, A., Ramamoorti, S., eds., *Research Opportunities in Internal Auditing*. Altamonte Springs: The Institute of Internal Auditors [Access: 23.06.2019]. Access on the internet: <https://na.theiia.org/iiaarf/Public%20Documents/Chapter%201%20Internal%20Auditing%20History%20Evolution%20and%20Prospects.pdf>.
- Ridley, J. (2008). *Cutting edge internal auditing*. Wiley, Chichester.
- Ringle, C.M., Wende, S., Becker, J.-M. (2015). *SmartPLS 3, Boenningstedt: SmartPLS GmbH* [Access: 3.07.2023]. Access on the internet: <http://www.smartpls.com>.
- Rittenberg, L., Hermanson, D.R. (2003). *Internal audit and organizational governance*. The IIA Research Foundation [Access: 7.07.2023]. Access on the internet: <https://na.theiia.org/iiaarf/Public%20Documents/Chapter%202%20Internal%20Audit%20and%20Organizational%20Governance.pdf>.
- Rittenberg, L. (2016). *Ethics and pressure balancing the internal audit profession*. The Internal Audit Foundation [Access: 27.02.2024]. Access on the internet: <https://www.iaa.nl/SiteFiles/Publicaties/CBOK%20Ethics%20and%20Pressure%20Oct%202016%20compressed.pdf>.
- Roussy, M. (2015). *Welcome to the Day-to-Day of Internal Auditors: How Do They Cope with Conflicts? Auditing: "A Journal of Practice & Theory"*, Vol. 34, No. 2. DOI: 10.2308/ajpt-50904.
- Rudolf, W. (2020). *Zarządzanie publiczne w lokalnym sektorze kultury*. Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Ruud, T.F., Jenal, L. (2005). *Licht im Internal-Control-Dschungel. „Begriffsdefinitionen sind unerlässlich. Der Schweizer Treuhänder"*, Vol. 79, No. 6–7.
- Salehi, T. (2016). *Investigation factors affecting the effectiveness of internal auditors in the company: case study Iran*. "Review of European Studies", Vol. 8(2). DOI: 10.5539/res.v8n2p224.
- Sawyer, L.B., Dittenhofer, M.A., Scheiner, J.H (2003). *Sawyer's internal auditing: the practice of modern internal auditing*. The Institute of Internal Auditors. Altamonte Springs Florida, 5 th edition. Florida.
- Shamki, D., Alhajri, T. (2017). *Factors influence internal audit effectiveness*. "International Journal of Business and Management", Vol. 12, No. 10. DOI: 10.5539/ijbm.v12n10p143.

- Sidor-Rządkowska, M. (2013). *Zarządzanie zasobami ludzkimi w administracji publicznej. Ocena i rozwój członków korpusu służby cywilnej*, Warszawa: Wolters Kluwer Polska SA.
- Skoczylas-Tworek, A. (2014). *Audyty we współczesnej gospodarce rynkowej*, Łódź: Wydawnictwo Uniwersytetu Łódzkiego.
- Stewart, J., Subramaniam, N. (2010). *Internal audit independence and objectivity: emerging research opportunities*. "Managerial Auditing Journal", Vol. 25, No. 4. DOI: 10.1108/02686901011034162.
- Stanowisko Zarządu IIA Polska dotyczące usługodawców audytu wewnętrznego (2022) [Access: 4.03.2024]. Access on the internet: <https://www.iaa.org.pl/aktualnosci/stanowisko-zarzadu-iaa-polska-dotyczace-uslugodawcow-audytu-wewnetrznego>.
- Tariku, T. (2015). *Determinant of internal auditor effectiveness: case of Ethiopian public sectors*. "International Journal of Advance in Management and Economics", Vol. 4.
- The Institute of Internal Auditors (2011). *Global summary of the Common Body of Knowledge study 2010. A call to action: stakeholders' perspectives on internal auditing* [Access: 20.03.2023]. Access on the internet: https://www.iaa.nl/SiteFiles/IIA_leden/CBOK%20Stakeholders%20USA%20only%20.pdf.
- (2016). *The International Standards for the Professional Practice of Internal Auditing* [Access: 3.07.2023]. Access on the internet: <https://www.iaa.org.pl/o-nas/standardy>.
- The Code of Ethics (2016). Florida: The Institute of Internal Auditors.
- Unegbu, A.O., Kida, M.I. (2011). *Effectiveness of internal audit as instrument of improving public sector management*. "Journal of Emerging Trends in Economics and Management Sciences", Vol. 2, No. 4.
- Ussahawanitchakit, A, Intakhan, A. (2011). *Audit professionalism, audit independence and audit effectiveness of CPAs in Thailand*. "International Journal of Business Research", Vol. 11, No. 2.
- Van Peurse, K. (2004). *Internal auditors' role and authority: New Zealand evidence*. "Managerial Auditing Journal", Vol. 19, No. 3. DOI: 10.1108/02686900410524382.
- Winiarska, K. (2007). *Audyty wewnętrzne w 2007 roku. Standardy międzynarodowe – Regulacje krajowe*. Warszawa: Wydawnictwo Difin.
- Ziegenfuss, D.E. (2000). *Developing an Internal Auditing Department Balanced Scorecard*. "Managerial Auditing Journal", Vol. 15, No. 1/2.

Appendix 1. Questionnaire items regarding constructs

Internal Audit Constraints (IAC)

- IAC_1: In their attitudes, the auditees and the management staff let me understand that they do not understand the core of internal audit
- IAC_2: In an organization, internal audit is understood as an activity that generates only costs
- IAC_3: Misunderstanding of internal audit in an organization causes, among others, that there is an atmosphere of understatement / fear around its activities
- IAC_4: In the organization, internal audit is not treated as an important and necessary function of the organization
- IAC_5: The organization tries to influence my independence and objectivity as an internal auditor
- IAC_6: In an organization, internal audit activity is maliciously disrupted by others

Internal Audit Effectiveness (IAE)

- IAE_1: The organization meets the expectations of stakeholders (clients) of internal audit
IAE_2: The activity of internal audit in the organization is subordinated to the Standards
IAE_3: Internal audit adds value to the organization
IAE_4: Internal audit improves the operation of the organization
IAE_5: In the organization, the management staff is ready to implement post-audit recommendations
IAE_6: Internal audit has the resources necessary to improve the organization's operations
IAE_7: Internal audit has the resources to cause change
IAE_8: Internal audit is understood within the organization
IAE_9: Internal audit meets the goals set for it in the organization
IAE_10: Internal audit activity is seen as important within the organization
IAE_11: The organization uses the full potential of internal audit

Auditor-oriented Employee Performance Management (A-oEPM)**PL –performance plan**

- PL_1: I have a job description
PL_2: I have individual employee goals
PL_3: As a team member, I have team goals
PL_4: In case of underperformance, a remediation plan for a single audit team member is established
PL_5: I have a "what" and "how" plan to improve my own work effectiveness
PL_6: I have a career development plan

SU – performance support

- SU_1: My work performance is monitored on an ongoing basis by my immediate superior
SU_2: My immediate supervisor provides me with continuous feedback regarding my work
SU_3: My team members provide me with continuous feedback regarding my work
SU_4: My immediate supervisor is my workplace coach/ workplace trainer
SU_5: The members of my team provide me with advice at work

AP – performance assessment

- AP_1: My performance appraisal takes the form of a conversation with the immediate supervisor
AP_2: The team has its share in my performance appraisal
AP_3: The other employees has their share in my performance appraisal
AP_4: During performance appraisal I receive feedback regarding my work performance for a given period
AP_5: The findings from performance appraisal relate to my strengths
AP_6: The findings from performance appraisal relate to ways to build my work effectiveness based on my strengths
AP_7: The findings from performance appraisal relate to the areas of work that I have to improve

