


THE EFFECT OF EXTERNAL EFFICACY ON THE MORAL COURAGE AND SELF-EFFICACY OF INTERNAL AUDITORS

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ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received 25 August 2023</p> <p>Accepted 27 November 2023</p>	<p>Purpose: This study investigates the effect of external efficacy (means efficacy and collective efficacy) on internal auditors' moral courage in the Tunisian context. This study also examines the effect of external efficacy on the self-efficacy of internal auditors.</p>
<p>Keywords:</p> <p>Internal Auditors; Moral Courage; Self-Efficacy; Means Efficacy; Collective Efficacy.</p>	<p>Theoretical framework: Previous auditing studies have revealed moral courage as the required tool for internal auditors to overcome their fears, break their silence about management fraud, and guide their ethical behaviors. Based on the social cognitive theory developed by Bandura and the model of the internal-external efficacy of Eden, this study tries to explain the association between means efficacy, collective efficacy, self-efficacy, and internal auditors' moral courage</p> <p>Design/Methodology/Approach: 163 questionnaires were collected from internal auditors working in Tunisian companies and a partial least squares—structural equation model was used to test the hypotheses.</p>
	<p>Findings: The results reveal a significant and positive effect of means and collective efficacies on internal auditors' moral courage. Similarly, these variables have a significant and positive effect on the self-efficacy of internal auditors.</p> <p>Research, Practical & Social implications: This study permits to offer practical solutions to professional institutions and organizations (e.g., the Institute of Internal Auditing) that aim to determine what might encourage internal auditors to tell the truth about management fraud and report corruption.</p> <p>Originality/Value: This research fills one of the major research gaps in accounting studies by revealing that the self-efficacy and courageous behavior of internal auditors can be fostered by furnishing the necessary tools and working with an efficacious team.</p> <p>Doi: https://doi.org/10.26668/businessreview/2023.v8i12.4029</p>

O EFEITO DA EFICÁCIA EXTERNA NA CORAGEM MORAL E NA AUTOEFICÁCIA DOS AUDITORES INTERNOS

RESUMO

Objetivo: Este estudo investiga o efeito da eficácia externa (eficácia dos meios e eficácia coletiva) na coragem moral dos auditores internos no contexto tunisiano. Este estudo também examina o efeito da eficácia externa na autoeficácia dos auditores internos.

Enquadramento teórico: Estudos anteriores de auditoria revelaram a coragem moral como a ferramenta necessária para os auditores internos superarem os seus medos, quebrarem o silêncio sobre a fraude de gestão e orientarem os seus comportamentos éticos. Com base na teoria social cognitiva desenvolvida por Bandura e no modelo de eficácia interna-externa do Éden, este estudo tenta explicar a associação entre eficácia de meios, eficácia coletiva, autoeficácia e coragem moral dos auditores internos

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Desenho/Metodologia/Abordagem: Foram coletados 163 questionários de auditores internos que trabalham em empresas tunisinas e um modelo de equações estruturais de mínimos quadrados parciais foi usado para testar as hipóteses.

Resultados: Os resultados revelam um efeito significativo e positivo dos meios e das eficácias coletivas na coragem moral dos auditores internos. Da mesma forma, estas variáveis têm um efeito significativo e positivo na autoeficácia dos auditores internos.

Implicações de pesquisa, Práticas e Sociais: Este estudo permite oferecer soluções práticas para instituições e organizações profissionais (por exemplo, o Instituto de Auditoria Interna) que visam determinar o que pode encorajar os auditores internos a dizer a verdade sobre fraude de gestão e denunciar corrupção.

Originalidade/Valor: Esta pesquisa preenche uma das principais lacunas de pesquisa nos estudos contábeis, revelando que a autoeficácia e o comportamento corajoso dos auditores internos podem ser promovidos fornecendo as ferramentas necessárias e trabalhando com uma equipe eficaz.

Palavras-chave: Auditores Internos, Coragem Moral, Auto-Eficácia, Significa Eficácia, Eficácia Coletiva.

EL EFECTO DE LA EFICACIA EXTERNA SOBRE EL CORAJE MORAL Y LA AUTOEFICACIA DE LOS AUDITORES INTERNOS

RESUMEN

Propósito: Este estudio investiga el efecto de la eficacia externa (significa eficacia y eficacia colectiva) sobre el coraje moral de los auditores internos en el contexto tunecino. Este estudio también examina el efecto de la eficacia externa sobre la autoeficacia de los auditores internos.

Marco teórico: Estudios de auditoría anteriores han revelado que el coraje moral es la herramienta necesaria para que los auditores internos superen sus miedos, rompan su silencio sobre el fraude en la gestión y orienten sus comportamientos éticos. Basado en la teoría cognitiva social desarrollada por Bandura y el modelo de eficacia interna-externa del Edén, este estudio intenta explicar la asociación entre eficacia de medios, eficacia colectiva, autoeficacia y coraje moral de los auditores internos.

Diseño/Metodología/Enfoque: Se recopilaron 163 cuestionarios de auditores internos que trabajan en empresas tunecinas y se utilizó un modelo de ecuación estructural de mínimos cuadrados parciales para probar las hipótesis.

Hallazgos: Los resultados revelan un efecto significativo y positivo de los medios y las eficacias colectivas en el coraje moral de los auditores internos. Asimismo, estas variables tienen un efecto significativo y positivo en la autoeficacia de los auditores internos.

Investigación, Implicaciones prácticas y Sociales: este estudio permite ofrecer soluciones prácticas a instituciones y organizaciones profesionales (por ejemplo, el Instituto de Auditoría Interna) que tienen como objetivo determinar qué podría alentar a los auditores internos a decir la verdad sobre el fraude en la gestión y denunciar la corrupción.

Originalidad/Valor: Esta investigación llena uno de los principales vacíos de investigación en los estudios contables al revelar que la autoeficacia y el comportamiento valiente de los auditores internos pueden fomentarse proporcionando las herramientas necesarias y trabajando con un equipo eficaz.

Palabras clave: Auditores Internos, Coraje Moral, Autoeficacia, Significa Eficacia, Eficacia Colectiva.

INTRODUCTION

A growing body of research has advocated that one way that internal auditors ensure sustained performance and contribute to corporate governance is through their voice (Chambers, 2019; Liu et al., 2020; Khelil & Khelif, 2022). Indeed, internal auditors are responsible for speaking up about management malpractices and potential problems and providing recommendations to protect not only the organization but also the investors and public interests (Wilson et al., 2018; Khelil, 2023). However, this does not tend to conduct sufficient outcomes (Sikka et al. 2009) and raises the question of why internal audits do not

fully reach their objective (Sarens, 2014), and why the expectation gap in auditing has not been resolved (Commission on Auditors' Responsibilities 1978; Liu et al., 2020).

Academicians and professionals have tried to offer answers to such questions by demonstrating that the fear of retaliation is the principal cause of the silence of internal auditors (Karssing et al., 2017; IIA, 2021; Khelil, 2023). Indeed, internal auditors need not only to know what the right thing to do is but also to have the moral courage to do it (Khelil et al., 2016).

This view is supported by Alshehri & Elsaied (2022) and Mansur et al. (2020) who claim that speaking up is a prosocial behavior that needs access to moral courage. Similarly, the Institute of Internal Auditors (2021) has recognized that telling the truth and presenting the facts requires a behavior of courage. In this context, moral courage has been described as the behavioral expression of authenticity in the face of disapproval; the discomfort of disagreement, or rejection (Lopez et al., 2010; Comer and Sekerka, 2018). It requires the desire to speak up or take action not only for oneself but also for others (Alshehri & Elsaied, 2022).

Business ethics scholar has defined moral courage as a moral competency and an attribute that motivates and enables employees to take the right path of action based on the ethics of their professions despite fear of economic or social consequences (Sekerka et al., 2009; Mansur et al., 2020; Deeg & May, 2021). In this manner, it contributes to consistency between moral intentions and behavior (Solomon, 1992).

Despite growing interest in the critical role of moral courage in maintaining employees' moral standards (Sekerka et al., 2009; Comer & Sekerka, 2018), few empirical works have uncovered the developmental processes of moral courage in organizational contexts in general and internal auditing contexts in particular. Until now, we can find the studies of Khelil and colleagues (2016, 2018, 2023) conducted in the Tunisian context and aimed to identify the determinants of internal auditors' moral courage. This present study is responsive to the call of Khelil et al. (2018b) to confirm their qualitative findings by examining the effect of external efficacy notably, means efficacy and collective efficacy on internal auditors' moral courage in the Tunisian context. In addition, the investigation of the effect of these variables on the self-efficacy of internal auditors permits to response to the call of Eden (1996) to examine the relationship between the different forms of efficacy (Agars & Kottke, 2020).

Social cognitive theory (Bandura, 1977, 1986) together with the internal-external efficacy model of Eden (2001) was integrated into our research to explain how external efficacy promotes the moral courage of internal auditors and their self-efficacy.

163 questionnaires were administered to Tunisian internal auditors, and then a partial-least squares–structural equation model (PLS-SEM) was used to examine our hypotheses. The use of PLS-SEM in this study permits making an original methodological contribution to the auditing and accounting literature, as such model is still underused by accounting scholars compared with other related disciplines (management, information systems, and psychology) (Hampton, 2015).

Our results show that external efficacy (means efficacy and collective efficacy) has a positive effect on internal auditors' moral courage and also on their self-efficacy. Given the significant role of moral courage in fostering the ethical behaviors of the internal auditors and based on that an ethical internal auditing function can improve corporate governance, we believe that these findings carry implications for Tunisian companies aiming to promote good corporate governance. Indeed, investigating what encourages internal auditors to break their silence and report financial irregularities permits reducing administrative corruption, deterring employee theft, and increasing firm performance (Asiedu & Deffor, 2017; Khelil, 2023).

This also research contributes to existent literature on audit and fraud. Indeed, studies on fraud reduction are still limited Khan et al. (2023).

The paper is organized as follows. Section 2 presents the social cognitive theory providing the theoretical rationale for the relation between our variables. Section 3 reviews relevant literature and develops the hypotheses. The research methodology is discussed in Section 4. The analysis and discussion of the results are presented in Section 5. Section 6 concludes the paper.

CONCEPTUAL FRAMEWORK

Social cognitive theory, developed by Bandura at the end of the 70s, is one of the social learning theories that subscribes to a model of emergent interactive agency (Bandura, 1986). According to Bandura (1989), individuals are neither independent agents nor merely mechanical conveyors of animating environmental influences. Rather, they make a causal contribution to their motivation and behavior within a system of reciprocal causation.

Efficacy is a key concept of the social cognitive theory. It is described as an agentic capability that enables an individual to influence the chain of events and to take a hand in shaping his/her life (Bandura, 1997). In other words, people guide and motivate their actions partly by their beliefs of efficacy (Eden, 2001; Khelil, 2023).

Bandura (2000) explains that perceived efficacy plays the main role in human functioning because it influences behavior not only directly but by its impact on other determinants, such as aspirations and goals, expectations, outcomes, as well as the perception of opportunities in the social environment and impediments>

Eden (2001) has extended the social cognitive theory by developing a model of internal-external efficacy. Such a model argues that behavior and task performance are enhanced by self-efficacy which is defined as an individual's confidence that he/she possesses the internal resources to successfully achieve a task (Walumbwa et al., 2011). Behavior and task achievement are also enhanced by external efficacy that covers collective efficacy and means efficacy (Eden, 2010; Yaakobi & Weisberg, 2020). Collective efficacy refers to an individual's confidence in the capacities of his/her group. Means efficacy pertains to an individual's belief in the utility of the tools at hand for task completion (Eden, 2010; Walumbwa et al., 2011).

Although several attempts have been made to establish theoretical links between the components of the internal-external efficacy model on one hand, and between these components and moral courage on the other hand (Hannah et al., 2010; Goud, 2005; Sekerka and Bagozzi, 2007), empirical evidence remains rare not only in auditing literature but in management literature in general.

Concerning internal auditing literature, the qualitative study of Khelil et al. (2018b) shows that both means efficacy and collective efficacy may foster the moral courage of internal auditors and reinforce their self-efficacy. Accordingly, in the present study, we will try to quantitatively examine the effect of external efficacy components on the moral courage and self-efficacy of internal auditors in the Tunisian context.

LITERATURE REVIEW

Collective Efficacy: Collective efficacy is extended by social cognitive theory from the conception of human agency (Bandura, 2000). It is defined by Bandura (1997) as being “concerned with the performance capability of a social system as a whole” (p. 469) and as “a group's shared belief in its conjoint capabilities to organize and execute the courses of action required to produce given levels of attainment” (p. 477). Khelil & Hussainey (2023) claim that a group's shared belief in its collective power is one of the principal ingredients of collective efficacy that permits it to achieve desired results. The authors explain that given that people do not live their lives in individual autonomy, many of the outcomes that they seek are achieved

only through interdependent endeavors. Therefore, they must work together to secure what they cannot fulfill on their own (Hannah et al., 2010).

A growing body of research provides evidence of the impact of perceived collective efficacy on group functioning by assessing its motivational and behavioral effects (Hannah et al., 2010; Khelil et al., 2018b). The results reveal that the higher the perceived collective efficacy is, the higher a group's motivational investment in its undertakings, the stronger its staying power in the face of setbacks and impediments, and the greater its performance accomplishments. Bandura (2000) goes further to say that a high sense of efficacy enhances prosocial orientations characterized by sharing helpfulness and cooperativeness.

This view is supported by the qualitative study of Khelil et al. (2018b) who reveal the perceived collective efficacy as a determinant of internal auditors' moral courage. Based on the responses of internal auditors interviewed, the authors emphasize that collective efficacy enhances moral courage among internal auditors by promoting their group's motivational commitment to its missions, performance, and resilience to adversity. The authors add that given that plurality creates strength, the higher collective efficacy is perceived, the stronger the endurance of internal auditors in the face of impediments and threats. Indeed, the enormity of certain challenges is reduced by recovering a commitment to working collectively and cooperatively. Based on that, Khelil et al. (2018b) recognize that Tunisian organizations require more collaboration between the members of the internal auditing group and working collectively to behave ethically and fight corruption by increasing their moral courage.

The findings that emerged from Khelil et al. (2018b) also show that group effectiveness and efficacy are largely a function of interaction processes as "*competencies are collective; no one can master everything alone*" (p.329). Accordingly, an efficacious internal auditing group promotes an internal auditor's self-efficacy, and then he/she becomes more confident about achieving his/her objective and task performance.

The significant role of the perceived collective efficacy in promoting an individual's self-efficacy is also supported by Hannah et al. (2010) who contend that collective efficacy not only has social contagion properties but also may increase one's self-efficacy. The authors give the example that a new soldier with limited self-efficacy beliefs can increase his/her efficacy by joining an elite military unit with a long history of success, confident leadership, and high standards.

Based on the above discussion, the following hypotheses are developed :

H1. The moral courage of the internal auditor is positively related to the perceived efficacy of his/her audit team.

H2. The self-efficacy of the internal auditor is positively related to the perceived efficacy of his/her audit team.

Means efficacy: Means efficacy is an important external source of efficacy beliefs (Eden, 2001). They are defined as a person's belief in the quality and utility of the tools available, including implements (e.g., computers, equipment, and software), bureaucratic tools (e.g., processes, procedures), and persons (e.g., supervisors, coworkers, followers) to accomplish a job (Eden, 2001; Yaakobi & Weisberg, 2020).

According to Eden (2010), people ascribe utility value to which tools or means can either facilitate or hamper their performance. Consequently, the subjective utility of external means motivates performance nourishes expectations for success, and compels employees to use the means energetically leading to improved performance.

The role of means efficacy in enhancing moral courage and overcoming fear has been recognized in previous literature (Hannah et al., 2010; Khelil et al. 2018b).

According to Hannah et al. (2010), like any human behavior, courageous behavior is embedded in a social system. For this reason, one must consider one's confidence in the resources that he/she has available to help achieve the goal sought through his/her courageous act.

Khelil et al. (2018b) support this view in their study by showing that the existence of efficacious means promotes internal auditors' moral courage. Indeed, it was a great consensus among interviewees that certain efficacious implements like audit software and information systems that are needed to detect fraud permitted to foster the courageous behavior of internal auditors.

Additionally, bureaucratic tools such as the existence of proofs and the charter place the internal auditors in a strong position and make them more resilient and not drawback. Consequently, this permits to reinforce internal auditors' courage to report fraud to the audit committee.

Moreover, Khelil et al. (2018b) show that working with other persons such as external auditors as well as with independent and expert audit committee members makes internal auditors more comfortable and more courageous when discussing and reporting sensitive information,

Interviewees explain that being supervised and controlled by expert audit committee members urges them to prove their effectiveness by performing their duties regarding fraud reports with objectivity and without fear. This result support the findings of An (2023) who proves that the activity and expertise of audit committee enhance the audit quality.

Khelil et al. (2018b) demonstrate also that enhancing means efficacy heightens the self-efficacy of the internal auditor and thus performance expectations, which in turn motivates greater effort, leading to the fulfillment of those high expectations by achieving good performance. Whereas disbelief in means efficacy reduces the internal auditor's self-efficacy and then reduces his/her motivation leading to poor performance.

This finding goes along with the view of Eden (2010) who claims that a high level of perceived self-efficacy fosters self-efficacy "*Wow! With a mitt like this, I'll catch any ball coming at me!*" (Eden, 2010, p.689). Conversely, disbelief in the utility of a necessary mean reduces the estimate of one's ability to use a crucial skill: "*Phooey! How will I get my job done with this outmoded computer?*" (Eden, 2010, p.689)

The assertion of Eden (2010) is supported by Hannah et al. (2010) who provide an example that confidence in the quality of maintenance and construction of one's parachute should be associated with his/her level of efficacy related to jumping out of an airplane.

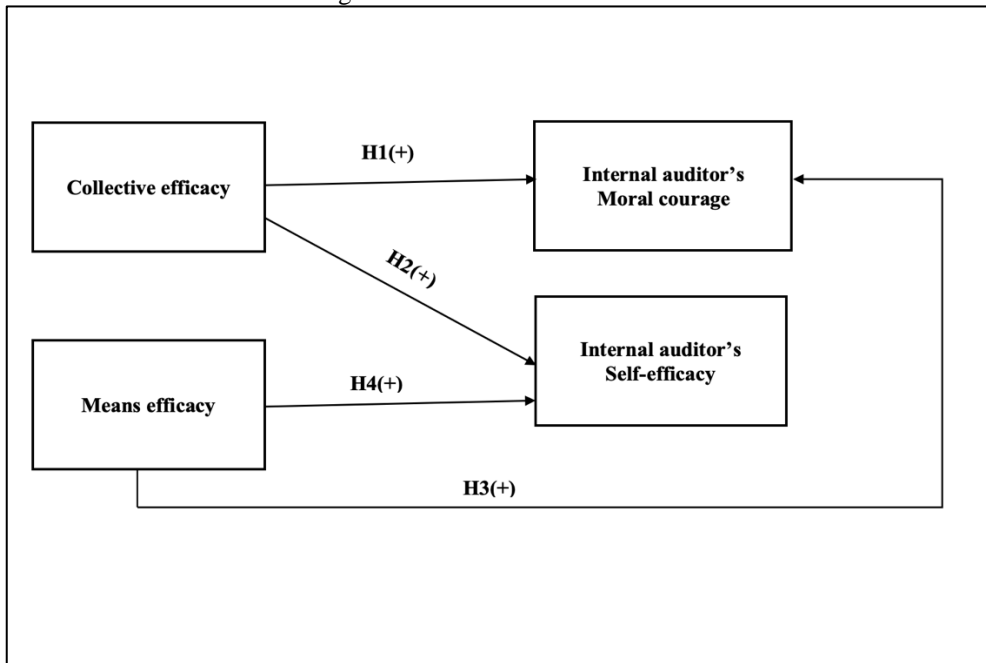
From this, we derive our last two hypotheses:

H.3: The moral courage of the internal auditor is positively related to the perceived means-efficacy available in his/her organization.

H.4: The self-efficacy of the internal auditor is positively related to the perceived means-efficacy available in his/her organization.

Figure 1 furnishes an overview of the suggested theoretical model concerning the effect of external efficacy (collective efficacy and means-efficacy) on the moral courage of internal auditors and their self-efficacy.

Figure 1. General theoretical mode



Source: Prepared by the author (2023)

METHODOLOGY

Sample and Data Collection

The data were gathered from Tunisian firms that have an internal auditing function and where the partners are not applied in the management of the companies (to make the behavior of moral courage more relevant). In this regard, and given that the internal audit department comprises an average of three internal auditors in each target company, three copies of the questionnaire were administered (face-to-face and electronically) to 72 listed firms and six non-listed firms in both financial and non-financial sectors. Accordingly, the final target sample includes 234 potential respondents.

The questionnaire was in two parts. The first part was dedicated to capturing the internal auditor’s basic demographic information including gender, age, training level, work experience, tenure, and professional certifications. The second part is intended to measure the level of internal auditors' moral courage, self-efficacy, collective efficacy, and means efficacy (see Appendix).

Noting that participants use the French language more than the English one, all survey measures were first translated from English into French. Survey measures are then independently back-translated into English by a second translator to determine and discuss divergences (Brislin, 1980).

Following Alzeban & Gwilliam (2014), a two-stage pilot study was led to verify the understandability of the questionnaire and the consistency of the research instrument with our research purposes. Participants in the first stage of the pilot were accounting students based in Tunisian universities (10 in total). Those in the second stage were Tunisian internal auditors (5 in total). The structure and understandability of questionnaires were improved based on suggestions received in both stages of the pilot.

Data collection lasted 10 months. It allowed us to receive 163 usable responses (a usable response rate of 69%) from internal auditors working in financial and nonfinancial companies.

Our final sample consisted of 117 internal auditors working in the financial sector and 46 working in the nonfinancial sector. The respondents include 104 men and 59 women with an average age of 33.17 years. The participants had between 2 and 33 years of professional experience. In addition, more than half of the respondents (61%) had a master's degree in accounting and auditing and approximately 24% of them had a certification related to auditing (CISA, CIA, DPAI, or Tunisian CPA).

Variable Measurement

The moral courage of internal auditors (**COURAGE**) was assessed based on the four-item moral courage scale developed by Hannah and Avolio (2010). Participants rated their levels of moral courage on a Likert scale ranging from 1 (strongly disagree) to 5 (fully agree).

The moral courage measure developed by Hannah and Avolio (2010) has demonstrated high reliability and construct validity in previous studies (Schaubroeck et al., 2012; Hannah et al., 2013; Khelil, 2023).

The self-efficacy of internal auditors (**SE**) was measured with the 10-item self-efficacy scale developed by Parker (1998) building on Bandura (1986). This scale which is the most utilized in organizational literature has demonstrated high reliability and constructed validity in numerous studies (May et al., 2014; Khelil et al., 2018a; Luthans et al., 2008). The participants were asked to rate how confident they would feel if they were demanded to perform each of the 10 tasks using a five-point Likert scale from 1 (not at all confident) to 5 (very confident).

The collective efficacy (**CE**) was measured based on the scale developed by Riggs et al. (1994). This scale has been widely used in previous studies dealing with collective efficacy (Walumbwa et al., 2004). It is composed of 7 items assessing various beliefs regarding group capacities. In the current study, respondents evaluated the efficacy of their respective internal

audit teams using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Means efficacy (**ME**) was measured based on the General Organizational Means-Efficacy Scale (GMES) recently developed by Mark Agars and Kottke (2021). The GMES was combined with several established scales to provide data for validation. Results emerged from Agars and Kottke (2021) demonstrated constructed validity and provided convincing psychometric support for the GMES. Participants were provided with 19 statements about the resources available to them and were demanded to indicate their level of agreement or disagreement (from '1=strongly disagree' to '5=strongly agree') with each statement.

Partial Least Squares Regression

This study used the PLS-SEM to examine the research model and hypotheses.

Partial least squares is a component-based SEM technique that examines the psychometric properties of the scales utilized to measure the constructs (i.e., measurement model) and checks the strength of the relations between the constructs (i.e., structural model) (Chin, 1998).

The use of PLS for this study is motivated by several reasons. Firstly, PLS is appropriate when prior theoretical knowledge is insufficient, and/or when the size of the sample is small (Lisi, 2016; Khelil et al., 2018a). Moreover, it permits the development of minimal data suppositions without the need for multivariate normal data (Lisi, 2016).

Finally, previous studies support that PLS most often produces better results because it utilizes a model for both the predictor and dependent data that accounts appropriately for the correlation structure of the data (Sosik et al., 2009).

RESULTS AND DISCUSSION

Descriptive Statics

Table 1 presents the descriptive statistics. The mean value of moral courage amounts to 4.131. The average of self-efficacy accounts for 4.194. The means of collective efficacy and means efficacy amounts respectively to 3.990 and 4.117.

Table 1. Descriptive statistics

Variables	Observations	Mean	Standard deviation	Minimum	Maximum
COURAGE	163	4.131	1.119	2	5
SE	163	4.194	1.158	1	5
CE	163	3.990	1.031	1	5
ME	163	4.117	1.149	1	5
Sect	163	1.28	0.451	1	2
Exp	163	12.023	6.687	2	33
Cert	163	0.24	0.428	0	1
Train	163	3.230	1.177	1	4
Gend	163	1.37	0.4536	1	2

Notes: MC: moral courage; SE: Self-efficacy; CE: Collective efficacy; ME: Means efficacy; Sect: the activity sector of the organization (dummy variable: 1 if a financial sector and 2 otherwise). Exp: the experience of the internal auditor in the organization; Cert: the certification of the internal auditor (dummy 1 if certified and 0 otherwise); Train: the training level of the internal auditor; Gend: the gender of the internal auditor (dummy variable: 1 if a man and 2 if female).

Source: Prepared by the author based on the outputs of SmartPLS 3^B

Measurement Model Analysis

The measurement model in PLS is assessed in terms of reliability (indicator reliability and internal consistency reliability) and validity (convergent validity and discriminant validity) (Hair et al., 2014; Lisi, 2016).

Indicator reliability was assessed using factor loading. The common rule of thumb dictates that only items with factor loading greater than .70 should be kept in the model to ensure internal consistency reliability (composite reliability $>.70$) and convergent validity (average variance extracted, AVE $>.50$). (Hair et al., 2011; Hajli and Lin, 2016).

Table 2 shows that all the factor loadings, in our model, are greater than .70.

Moreover, the satisfactory reliability of the constructs is proven as all composite reliability exceeds .70 (Lisi, 2016; Hajli and Lin, 2016). By this reasoning, we were not urged to delete any items from our measurement model. The values of Cronbach alpha exceeding .60 confirm the constructs' reliability (Murphy & Davidshofer, 1988).

The convergent validity of constructs which is assessed based on the AVE values, reveals an adequate convergent validity (the AVE for each variable exceeds .50) (Lisi, 2016). (see Table2)

^B Ringle, C. M., Wende, S., and Becker, J.-M. 2015. "SmartPLS 3." Boenningstedt: SmartPLS GmbH, <http://www.smartpls.com>.

Table 2. Item loadings, composite reliability, and AVE statistics for all variables (n = 163)

	Model
Moral courage	
COURAGE 1: I will confront my peers if they commit an unethical act.	0.915
COURAGE 2: I will confront my manager if she/she commits an unethical act.	0.970
COURAGE 3: I will always state my views about ethical issues to my supervisors.	0.971
COURAGE 4: I will go against the group's decision whenever it violates my ethical standards.	0.979
<i>Composite reliability</i>	0.979
<i>Cronbach's alpha</i>	0.971
<i>AVE</i>	0.920
Means efficacy	
ME1: In this organization, up-to-date computer equipment is a rare commodity.	0.985
ME2: Most of the computer software that I use in my job is out of date.	0.979
The tools and technology in this organization are state-of-the-art.	0.986
ME4: Work is often given to me with unreasonably quick deadlines.	0.984
ME5: My supervisor provides me with enough time to complete the tasks I am required to do.	0.984
ME6: I have adequate time to do my job.	0.988
ME7: Current information is often difficult to get at the time I need it to do my job.	0.985
ME8: I frequently find myself without the proper instructions or necessary direction I need to do my job.	0.983
ME9: Supervisors in this organization take the time to let employees know when they are doing a good job.	0.991
ME10: Information about how well I do my job is readily available.	0.976
ME11: I receive informational feedback about my performance.	0.982
ME12: This organization provides adequate training for its employees.	0.978
ME13: This organization has many training opportunities for its employees.	0.976
ME14: I can count on my team members to pull their weight whenever we are working on a team project.	0.979
ME15: My team pulls together.	0.975
ME16: I have confidence in my coworkers' abilities.	0.986
ME17: Managers are accessible when problems arise.	0.980
ME18: My supervisor has an open-door policy and sticks to it.	0.974
ME19: If employees need to report a problem, management is there to listen.	0.916
<i>Composite reliability</i>	0.998
<i>Cronbach's alpha</i>	0.998
<i>AVE</i>	0.957
Self-efficacy	
SE1: Analyzing a long-term problem to find a solution.	0.986
SE2: Representing your work area in meetings with senior management.	0.980
SE3: Designing new procedures for your work area	0.989
SE4: Make suggestions to management about ways to improve the working of your section.	0.988
SE5: Contributing to discussions about the company's strategy.	0.989
SE6: Writing a proposal to spend money in your work area.	0.987
SE7: Helping to set targets/goals in your work area.	0.990
SE8: Contact people outside the company (e.g., suppliers, customers) to discuss problems.	0.987
SE9: Presenting information to a group of colleagues.	0.990
SE10: Visiting people from other departments to suggest doing things differently.	0.979
<i>Composite reliability</i>	0.997
<i>Cronbach's alpha</i>	0.997
<i>AVE</i>	0.974
Collective efficacy	
CE1: The department I work with has above-average ability.	0.929
CE2: This department is poor compared to other departments doing similar work.	0.762
CE3: This department is not able to perform as well as it should.	0.758
CE4: The members of this department have excellent job skills	0.801
CE5: Some members of this department should be fired due to lack of ability.	0.849
CE6: This department is not very effective.	0.859
CE7: Some members of this department cannot do their jobs well.	0.888

Composite reliability	0.942
Cronbach's alpha	0.928
AVE	0.701

Source: Prepared by the author based on the outputs of SmartPLS 3

The last step consists of evaluating the discriminant validity of our measurement model to ensure that the measures of a particular construct differ from other constructs' measures in the same model (Hulland, 1999). By this reasoning, the discriminant validity is fulfilled only when the square roots of AVEs all exceed the respective correlations between constructs (Lisi, 2016; Hajli and Lin, 2016).

The terms of discriminant validity were not satisfied in our model. Consequently, we were urged to eliminate items having an outer variance inflation factor (VIF) value >.50 (Hair et al., 2011).

As a result, and as shown in Table 3, only the following items COURAGE1, SE8, CE2, CE3, CE4, CE5, CE6, GME10, and GME19 were kept to satisfy the terms of the discriminant validity.

Table 3. Inter-construct correlations and square root of AVE statistics* (n = 163)

	CR	CE	COURAGE	ME	SE
CE	0.911	0.820			
COURAGE	1.000	0.791	1.000		
ME	0.966	0.793	0.835	0.967	
SE	1.000	0.805	0.845	0.952	1.000

CE: Collective efficacy; COURAGE: Moral courage; ME: Means efficacy; SE: Self-Efficacy.
CR: Composite reliability.

*Diagonal elements are the square roots of AVEs. Off-diagonal elements are the correlations between constructs.

Source: Prepared by the author based on the outputs of SmartPLS 3

In this manner, we were able to move on to the interpretation of the structural model which is presented in the next section.

Structural Model Analysis: Test of Hypotheses

Table 4. PLS structural model: path coefficients, t-statistics, and R2 (n = 163)

	SPC	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values	Decisions	Hypothesis
CE -> COURAGE	0.348	0.084	4.158	0.000*	Supported	H1
CE -> SE	0.133	0.060	2.213	0.027*	Supported	H2
ME -> COURAGE	0.559	0.092	6.083	0.000*	Supported	H3
ME -> SE	0.847	0.058	14.705	0.000*	Supported	H4
	R Square					
COURAGE	0.742					
SE	0.914					

CE: Collective efficacy; SE: Self-Efficacy; ME: Means efficacy; COURAGE: Moral courage
 SPC: standardized path coefficient.
 *Significance at the level of .05.

Source: Prepared by the author based on the outputs of SmartPLS 3

In this part, we aim to examine the extent to which the collective efficacy and means efficacy influence the moral courage and the self-efficacy of internal auditors.

The key assessment criteria for the structural model are the measures of R² and the level of significance of the path coefficients. Hair et al. (2014) emphasize that given that the objective of the prediction-oriented PLS-SEM approach is to explain the variance of the endogenous latent variables, the main target constructs' level of R² should be high.

Moreover, PLS produces standardized path coefficients (β -statistics) for each path coefficient (Lisi, 2016). Standardized path coefficients, t-statistics, and R² are shown in Table 4 and graphically, in Figure 2.

As reported in Table 4, our model has good predictive capabilities: R² = .742 concerning moral courage and R² = .914 concerning self-efficacy.

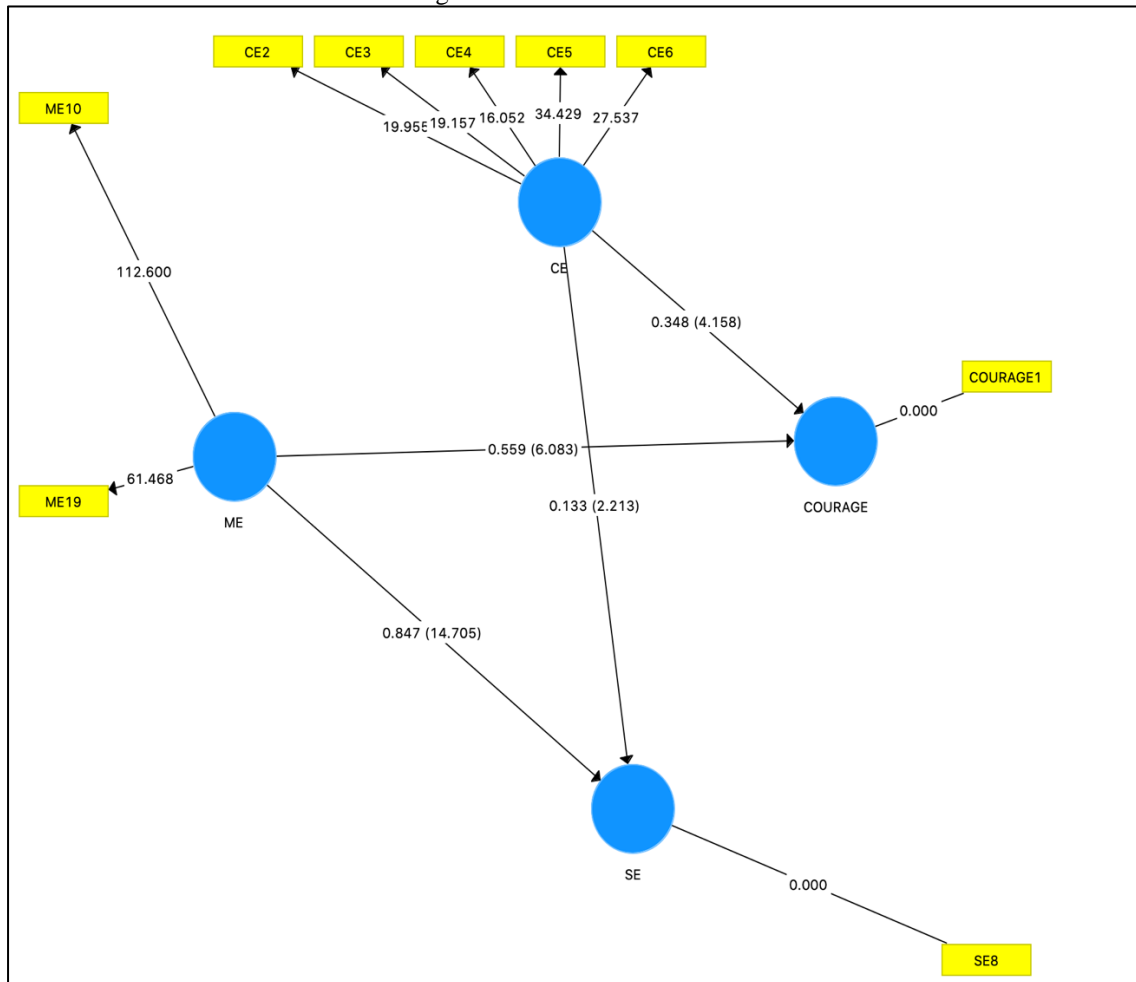
The coefficients for the four hypothesized paths are statistically significant ($p < .05$).

Regarding the effect of collective efficacy on the moral courage of internal auditors and their self-efficacy, the results reported in Table 4 provide strong support to the proposed hypotheses H1 and H2. Indeed, the direct paths between CE and moral courage ($p=.000$) as well as between CE and self-efficacy ($p=.027$) are both positive and significant. These results confirm the proposition of Hannah et al. (2010) who claim that collective efficacy helps to boost an individual's moral courage and also fosters his/her self-efficacy. Similarly, our findings are consistent with those of Khelil et al. (2018b) who, based on the responses of internal auditors interviewed, reveal the perceived collective efficacy as a determinant of internal auditors' moral courage. Collective efficacy was also revealed, in Khelil et al. (2018b) as an enhancer of internal auditors' self-efficacy.

Table 4 also indicates that the means efficacy has a positive significant effect on the moral courage of internal auditors ($p = .000$) and their self-efficacy ($p = .000$).

Such findings furnish strong support for H3 and H4 and confirm the suggestions of Hannah et al. (2010) and Eden (2010), according to whom a high level of perceived means efficacy enhances of employee's self-efficacy. Our results also confirm those of Khelil et al. (2018b) who reveal that the existence of efficacious means promotes moral courage among internal auditors and heightens their self-efficacy.

Figure 2. PLS structural model



Source: Extracted from SmartPLS 3

CONCLUSION

Based on 163 questionnaires collected from internal auditors working in Tunisian companies and using the PLS-SEM, this study offers empirical evidence about the significant effect of external efficacies (means and collective efficacies) on the moral courage and self-efficacy of internal auditors.

This paper makes noteworthy contributions to both internal audit and moral courage literature. It fills one of the major research gaps in these research streams by revealing that the courageous behavior of internal auditors can be fostered by furnishing the necessary tools and implements for the accomplishment of internal auditing tasks. In addition, working with an efficacious team strengthens the self-efficacy and moral courage among internal auditors.

Furthermore, the use of SEM presents a methodological contribution to accounting and audit research. Such a method remains underused in these fields compared with other related

disciplines, such as management, information systems, and psychology (Hampton, 2015; Khelil et al., 2018a).

Given the significant role of moral courage in fostering the ethical behaviors of the internal auditors and based on that an ethical internal auditing function can improve corporate governance, we believe that our findings carry implications for Tunisian companies aiming to promote good corporate governance (Khelil et al. 2018a). Indeed, investigating what encourages internal auditors to break their silence and report financial irregularities permits reducing administrative corruption, deterring employee theft, and increasing firm performance (Asiedu & Deffor, 2017).

Moreover, our study can offer practical solutions to professional institutions and organizations (e.g., the Institute of Internal Auditing) that aim to determine what might encourage internal auditors to tell the truth about management fraud and report corruption. We believe that our findings can make them more aware of the necessity of overseeing the resources and means allocated to the function of internal audit by the audit committee and motivate internal auditors to report every weakness in their materials either to managers or to the board of directors.

A limitation of this study is that the assessment of moral courage and self-efficacy is based on self-report measures that can induce bias. Cautions have been taken to avoid this bias by not informing respondents that we are measuring their moral courage and self-efficacy.

The present study opens the door to further experimental investigations to examine the effect of external and internal efficacies on the effectiveness of internal auditing functions in Tunisia and another different context.

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APPENDIX

Questionnaire n°.....

Date...

As part of the development of a research paper on the activity of internal auditing in Tunisia, we offer you a questionnaire that will be used to collect data to address our study objectives. It should be noted that the information collected will be treated confidentially. We would be grateful for your collaboration and your close involvement in this project. Your answers will be treated confidentially and anonymously.

Company Name...../Sector.....

Part 1: General information about internal auditor

1. Gender	Male		Female		
2. Training level	Level				
	Baccalaureate or equivalent				
	Baccalaureate degree + 2				
	Baccalaureatedegree +3 = license				
	Baccalaureate degree +4				
	Baccalaureate degree +5 or +6				
	DESS, DEA, or equivalent				
	Doctorate and + Other				
3. Number of years of					
4. Age					
5. Certifications	CIA	DPAI	CISA	Tunisian CPA	Other

Source: Prepared by the authors themselves.

Part 2: In the following questions rate your level of agreement with how each statement below applies to your behavior. Use the following scale to indicate your level of agreement or disagreement with each statement.

strongly disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
<i>Statement</i>				<i>Level of agreement (circle one number)</i>
I will confront my peers if they commit an unethical act.				1 2 3 4 5
I will confront my manager if she/she commits an unethical act.				1 2 3 4 5
I will always state my views about ethical issues to my supervisors.				1 2 3 4 5
I will go against the group's decision whenever it violates my ethical standards.				1 2 3 4 5
In this organization, up-to-date computer equipment is a rare commodity.				1 2 3 4 5
Much of the computer software that I use in my job is out of date.				1 2 3 4 5
The tools and technology in this organization are state-of-the-art.				1 2 3 4 5
Work is often given to me with unreasonably quick deadlines.				1 2 3 4 5
My supervisor provides me with enough time to complete the tasks I am required to do.				1 2 3 4 5
I have adequate time to do my job.				1 2 3 4 5
Current information is often difficult to get at the time I need it to do my job.				1 2 3 4 5
I frequently find myself without the proper instructions or necessary direction I need to do my job.				1 2 3 4 5
Supervisors in this organization take the time to let employees know when they are doing a good job.				1 2 3 4 5
Information about how well I do my job is readily available.				1 2 3 4 5

I receive informational feedback about my performance.	1 2 3 4 5
This organization provides adequate training for its employees.	1 2 3 4 5
This organization has many training opportunities for its employees.	1 2 3 4 5
I can count on my team members to pull their weight whenever we are working on a team project.	1 2 3 4 5
My team pulls together.	1 2 3 4 5
I have confidence in my coworkers' abilities.	1 2 3 4 5
Managers are accessible when problems arise.	1 2 3 4 5
My supervisor has an open-door policy and sticks to it.	1 2 3 4 5
If employees need to report a problem, management is there to listen.	1 2 3 4 5
Analyzing a long-term problem to find a solution.	1 2 3 4 5
Representing your work area in meetings with senior management.	1 2 3 4 5
Designing new procedures for your work area	1 2 3 4 5
Making suggestions to management about ways to improve the working of your section.	1 2 3 4 5
Contributing to discussions about the company's strategy.	1 2 3 4 5
Writing a proposal to spend money in your work area.	1 2 3 4 5
Helping to set targets/goals in your work area.	1 2 3 4 5
Contacting people outside the company (e.g., suppliers, customers) to discuss problems.	1 2 3 4 5
Presenting information to a group of colleagues.	1 2 3 4 5
Visiting people from other departments to suggest doing things differently.	1 2 3 4 5
The department I work with has above-average ability.	1 2 3 4 5
This department is poor compared to other departments doing similar work.	1 2 3 4 5
This department is not able to perform as well as it should.	1 2 3 4 5
The members of this department have excellent job skills	1 2 3 4 5
Some members of this department should be fired due to lack of ability.	1 2 3 4 5
This department is not very effective.	1 2 3 4 5
Some members of this department cannot do their jobs well.	1 2 3 4 5

Source: Prepared by the authors themselves.