

An Analysis of the Effect of the Critical Competence of the Auditor on Audit Quality in Cameroon

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Abstract Audit quality integrates the dual probability of detection (auditor competence) and revelation (auditor independence). This research focuses on auditor competence, a black box whose exploration is not yet subjected to intense scientific activity. The paper undertakes to identify the overall performance factors capable of predicting auditor competence. The use of a partial least squares' regression technique makes it possible to highlight the functional and behavioral component characteristics as decisive factors determining the prediction of material misstatements detection.

Keywords: Global competence, Detection, Functional competence, behavioural Competence

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1. Introduction

Is it necessary to assess auditor's competence? The highly technical and even elitist nature [1] of the independent audit profession characterises the answer that the accounting literature seems to have given to this question so far. Even though, as in any profession, "incompetence" or "lack of competence" can play a determining role in the assessment of the audited items and factors and significantly increase audit risk, the auditor's ability to detect a material misstatement in the accounts he audits receives only relatively marginal theoretical treatment [2]. The literature essentially focuses on the auditor's independence in response to the global publicity that successive financial scandals have given it. If prior literature considers the dual probability of detection and revelation as determinants of audit quality [3], competence still plays the role of "accompanying", which still makes it a black box in the field of audit quality, reduced for the majority of studies to the analysis of the conditions and determinants of revelation / independence [2].

Two main arguments put forward in the literature explain this choice. First, even if the crucial role that competence plays in the quality of the "audit outcome" is not ignored [3] there is a tendency to automatically assume that the auditor is competent. Several studies, for example, highlight the "great professional" [4], the "great technician" [5,6], the "expert" [7] that is the auditor. The various protocols and training modules that determine access to the profession of auditor, as well as the structural organisation of audit firms, are considered as systemic mechanisms for automating and regulating competence. The studies that address the issue emphasize this

observation by pointing out the role of the technological tool deployed during the audit mission as a decisive factor of competence [8,9]. Consequently, prior literature considers that the difficulty for the auditor lies not in the detection capacity, but above all in the revelation capacity [10]. It is thus implicitly accepted that the auditor is more likely to be influenced by external and internal factors that could compromise his independence than to fail to detect a material error in the accounts he audits.

As relevant as it may be, this concept suffers from a fragmentary and simplistic vision of competence. It is reduced to an attribute included in the interactions between professional requirements and the personal qualifications of auditors [11] (in particular their academic training profile, their experience, or the technological tools used during auditing missions). The competent auditor is considered to be someone who has undergone academic training leading to obtaining a qualification in «*Expert-comptable*» in French-speaking systems, or to qualifications issued by the certified public accountant or the Association of chartered certified accountants in Anglo-Saxon systems. In addition to this training, there are years of experience in the practice of auditing. The main limitation of this concept lies in the standardisation of competence, its reduction to two supposedly acquired factors, and the difficult possibility of calling them into question once they have been acquired. Competence is not a uniform piece of data that can be claimed on the basis of considerations adopted a priori, such as training and experience alone. A qualified/graduated auditor following this approach will always detect material errors. Conversely, an unqualified/graduated auditor will not be able to do so. This conception limits the scope of understanding and exercising of competence [12]. Knowledge is renewed in its design, its acquisition protocol and its dynamics, calling into question its

acquisition once and for all. Also, in addition to technology, the environment can play a decisive role in determining the auditor's level of competence.

This level seems to be assimilated to a combination of factors relating to technical skills, communication skills, leadership assets and learning and motivation assets [13]. The specificity of organisations and their individual or team working methods, as well as the context of the exercise of a profession and the environment [14,15,16] are all factors which remain particularly unexplored in auditing, but which can determine the level of competence of the auditor.

Our research focuses on the assessment of the auditor's overall competence and seeks to explore the factors that determine it. Its originality lies in the broadening of the understanding of the concept of competence and the factors that characterise it in the assessment of audit quality. The study redefines the auditor's competence in its overall form as a complex social factor that includes the classic components of academic training and experience, factors to which are added other factors relating to the circumstances in which the competence is exercised and the environment [12]. This position is specific because by analysing competence from a broader and more dynamic perspective, it allows us to explore new dimensions in auditing, inspired by knowledge in human resources management. It thus considers competence as a black box to be explored, rather than a confirmed acquisition of accounting professionals.

In the first section of the paper, we develop the performance factors inspired by social and human resources management sciences in order to provide a theoretical basis accounting a priori for competent individuals. The synthesis carried out leads to a cross-referencing of all the factors identified with the characteristics, choices and actions of the auditor during his audit engagement. The second section of the article describes the methodological approach used. The third section is dedicated to the presentation and discussion of the results obtained

2. Theoretical Factors of Overall Competence

Competence, understood in its global sense, is one of the most valued resources of the individual [17]. It is a polysemic attribute that characterises the capacity of an individual to act correctly when facing his duties and responsibilities. Reference [18] defines it as the set formed by the knowledge, skills, and faculties of an individual applied to practice. As such, global competence can be considered, in the sense that Reference [19] conceives it, as an attribute presenting a behavioral, functional and social characteristic

2.1. The behavioural Component of Overall Competence

This first component of the concept of overall performance refers to individual traits, particularly cognitive and intellectual, which determine the quality of

the result of an action undertaken by an individual. It can be broken down into two main points: the assets of experience and technical competence [13]

2.1.1. Experience as a Factor of Competence

Daily practice can lead to the long-term mastery of aspects of a profession, due to the similarity of these aspects to past events and the way in which they were handled. Reference [20] considers that experience acquired in work practice is a prerequisite for the construction of skills and the development of know-how. It allows the use of all the acquired knowledge due to the continuous exercise of a profession over a given period of time, to resolve practical problems, or to perform specific tasks at work. This is cumulative learning. In this sense, according to Reference [21], it is understood as situated and accumulated during professional activities, and therefore as an important aspect of competence and its development. Experience thus makes it possible to give meaning to situations encountered in daily life, and particularly in working environments [22] and to use these meanings for the resolution of probable future problems presenting a similarity to the situations experienced, or likely to obey a previously adopted therapy.

Experience also constitutes a factor of competence through its ability to develop in the experienced individual the faculties of reaction and anticipation, the ability to create and maintain working relationships within and outside an organization, the ability to collaborate easily or work in team. According to Reference [13], these qualities can only be acquired through practical contact and experience with similar cases and facts. For Polanyi Reference [23], knowledge acquired through experience, unlike that considered general acquired through school education, is a type of specific knowledge required for employment, sufficiently practical and tacit. This knowledge can validly constitute a bridge between formal knowledge and its practical implementation. Even if it is difficult to determine from how many years of experience one can be considered competent, it remains important to emphasize the importance of tacit and informal learning provided by experience. In addition to the number of years of experience, according to Reference [12], there is physical availability to modulate spaces for the development of reduced working hours and remote working, as well as psychological commitment to work, resulting in a constant desire to optimise one's efforts and the desire to always want to do the best possible.

Finally, it is acknowledged that age [17], and the individual's personal history [24] play an important role in the configuration of skills acquired through experience [17]. They participate in particular in the acquisition of practical skills and knowledge in professions and specific tasks, in the acquisition of knowledge related to the work community and the organisation, and finally in the acquisition of knowledge necessary for self-assessment both in the way of working and in the way of acting.

2.1.2. Competence as Output of Analysis and Intellect

According to Reference [25], competence refers to what an individual knows and can do in ideal circumstances. Knowledge is considered here as a determining cognitive

element of competence. This fundamental modality of competence integrates three fundamental aspects: First, the competent individual must demonstrate strong analytical thinking. He must be able to construct dialectical reasoning on a given question, in order to arrive at a reasoned conclusion, having taken into account the different components and aspects of the question. To this strong analytical thinking, it is appropriate to add conceptual thinking adapted to the circumstance requiring the competence. The competent stakeholder must have theoretical mastery of the concepts surrounding the exercise of the requested competence, and have the qualities required to be able to manipulate these concepts in their abstract form before any immersion in reality. Analytical and conceptual thinking are the first cognitive assets for identifying competence according to reference [19].

Then, Reference [18] considers technical expertise as one of the main cognitive attributes characteristic of competence. The competent individual, as they record in a dictionary of competence, has the technical skills necessary to issue an informed opinion or judgment in a given situation. This technician attribute allows him to propose the optimal solution to a problem posed, but also to manage the steps leading to the full realisation of the proposed solution. Reference [26] considers technical knowledge as a direct and sustainable competitive advantage. It is even considered by Reference [27] as the individual's best resource. Because it can be multifaceted, Reference [13] notes that in a context of a knowledge-based economy, the possession of multidisciplinary cognitive technical knowledge is a major asset for the management of organisational assets.

Behavioral competence attributes finally allow to have the required motivation to accomplish a task, and to renew it each time the accomplishment of the task proves necessary. Motivation in support of cognitive factors. It allows the auditor to keep his knowledge up to date, while remaining willing to learn from his experiences. It also allows to transmit knowledge in the ongoing training of employees. According to Reference [18], this particular characteristic is materialised by the supervision of the professional development of others from a position of power conferred by technical cognitive attributes. Motivation renews knowledge and facilitates its use in the supervision and coordination of work teams and the transmission of leadership.

2.2. The Functional Component of Overall Competence

Competence can also be considered as the result of a social compromise in relation to specific duties [28]. This perspective of study considers competence as an attribute determined dually, by the institutional context and environment, but also by the immediate work environment

2.2.1. Competence as Identity of an Institutional System

Because it defines its rules of governance and institutionalises them, society plays a role in defining and evaluating the individual's competence. According to Reference [19], beyond the fact that individuals do not choose the content and quality of the training they receive

but undergo it, most professions are today supervised by professional orders that define competence, subordinating the entrance into a profession to the fulfillment of the criteria they themselves choose. Competence can be considered here as the ability of stakeholders to negotiate their integration into established professional and institutional orders and associations, and manage the tensions that compliance with the rules can pose in relation to other forms of local, regional or organisational regulations. However, mechanisms must be found to ensure a constant renewal of the knowledge and good practices of the people integrated over time

Competence can therefore be considered as the result of a qualification to be exercised, dated and localised [28]. Reference [29] considers for example the case of teachers belonging to recognised constituted groups called "level groups". According to her, the structuring of these professional groups presents an organisational efficiency, methods of action which have an effect on the concrete tasks of the teacher and his efficiency.

The training context is also a central determining aspect of the acquisition of technical skills. Reference [30] defined the criteria that characterise an ideal technical training context leading to the acquisition of the skill. They identify the availability and fluidity of information for learning combined with computer methods and online training [31], the use of multimedia training tools and recent production of lessons given by experienced people and personalized monitoring of learners.

2.2.2. Competence in Working Situations

Reference [12] identifies six parameters for the understanding of competence in a specific functional situation: "equipment to be used... to transform a material (and/or information)... by operating a local ordering of tasks... in certain working conditions... taking into account performance indicators... and in a given cultural environment". Competence in a work situation is the combined mastery of these different factors. In a specific case, it is a matter of being able to choose the appropriate tool to process it, of adding value to the available and given information, of arranging and sequencing in time the different tasks to be accomplished to process the case according to their homogeneity/heterogeneity, of creating optimal working conditions that allow the case to be processed and the result to be assessed according to the concrete performance criteria previously defined, in a work environment that promotes values. Competence is therefore essentially situational, and can only be observed in the context of a real function during which the actors are generally called upon to interact, or even often to "interdecide". It integrates all of these components and constitutes the final outcome once they have been arranged together by the competent actor.

2.3. Social Competence or Co-competence

Co-competence is understood as a form of collective competence [20-32]. It relates to attitudes and behaviors in a task-related situation, towards oneself and towards teammates. Beyond the combination of individual skills, this vision defends the idea that "since work is generally carried out in a team and the individual carries it out with

collaborators, the result cannot be the result of his or her intervention alone, but the consequence of collective interventions, including those of other actors". Competence is then defined by the level of communication and exchange of information between actors on a given issue, as well as the attitudes and behaviors that characterise collaborative relationships [33]. Even when they undergo the same training and have a homogeneous level of qualification when hired, individuals do not assimilate the reality of work in the same way. The level of coordination that completes communication between actors, allows the identification of specific expertise within a group and ensures their efficient integration. The contributions of each participant in the process of carrying out a task must also be taken into account in the definition of competence, because they are integrated into a form of balance of contributions [34]. Competence includes the ability to work with, in a coordinated set of work schedules and physical, psychological and intellectual contribution. Reference [35] specifies that the participation of each member in the confrontation of ideas and contributions leads to the emergence of new knowledge favorable to individual competence

2.4. The Theoretical Profile of Overall Competent Auditor

From the analysis of stated skill characteristics, it is possible to draw up a profile of a competent auditor. Two major factors emerge: Experience and proven technical training assets, and satisfaction with the requirements set by the environment.

A trained and experienced auditor

The above developments reveal the fundamental idea that a competent auditor is an auditor who has acquired the training and experience required to carry out financial audits. This idea is defended by Reference [36]. Reference [37] emphasizes that a competent auditor must have sufficient knowledge, solid training, the qualification and experience required to conduct a financial audit mission. These characteristics are so important that he calls on the state to promote them. The competent auditor must therefore be able to demonstrate training in accounting and auditing techniques, the acquisition of the knowledge that constitutes the training modules, and have sufficiently tested this knowledge with professional practice in the field. In this sense, he must have participated in audit missions, observed their complexity, and this in several different work situations. According to Reference [13], this knowledge shapes the auditor's mind and gives him a strong capacity to anticipate, identify or detect material errors present in the audited accounts. Reference [38] argue that the auditor's experience level can influence audit quality, and even the cost of capital.

Then, we can associate with Reference [18] technical expertise with experience. It is this expertise that helps to inform the auditor's opinion in determining materiality thresholds, risk analysis, choosing and obtaining audit evidence, analyzing it and using it. A competent auditor therefore has the necessary technical expertise. The aspect of transmission, an integral part of competence, is also highlighted by Reference [18] in what they call

professional development. The auditor must be able to transmit, train the members of his team, and lead them in the action of the audit. The link with experience emerges from this concept. The auditor builds his competence by acquiring it during audit missions, but also by transmitting it to junior members of his audit team.

The definition of a relevant audit programme and compliance to regulations

To be competent, an auditor must be able to be flexible. This constraint involves recognising the specificity of each audit mission, and defining a relevant audit program for each mission. The program must therefore integrate the choice and definition of the equipment necessary for the mission and the methods of their deployment. As such, he must be able to choose the appropriate technological tool, among the existing high-performance tools. The auditor must also plan the tasks to be carried out and sequence them, define performance objectives and mobilise these resources towards achieving set objectives [12].

Membership in the professional order can be understood as a factor of competence, the order itself being considered as an instance where competence is supervised and even stimulated. This membership, generally obligatory to practice, subjects professional accountants to the observance of rules that are combined with other rules, issued by the political regulators of the profession, and even of the organization (audit office) to which they belong. Competence is perceived as the capacity to re (reconcile) all of these rules in each work situation [39]

Building collective competence

Finally, a competent auditor should be co-competent, in the sense of the collective competence of Reference [20]. Audit missions are generally carried out in teams, and the audit outcome cannot be the result of the auditor's individual intervention alone. Competence is reflected here in the way in which the auditor exchanges and communicates on issues relevant to his mission; and the coordination of teams [40], so as to ensure that an acceptable level of homogeneity is maintained in procedures, choices, decisions and conclusions. This homogeneity guarantees the integration of team members and provides them with a certain balance [34].

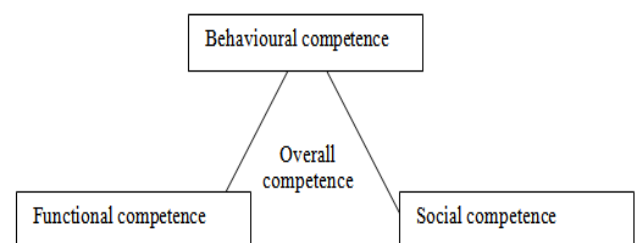


Figure 1. Synthetic diagram of a competent auditor

This portrait can be summarised in three main characteristics, embracing competence in its dynamic and analytical form, which we call overall competence. A cognitive competence due to acquired technical expertise and experience, a social competence due to co-competence and team competence, and finally an institutional competence due to membership and the level of alignment with the regulatory constraints of professional organizations. The figure below, inspired by

the holistic model of competence of Reference [20], provides a synthetic representation of the profile of an auditor with global competence

3. Research Methodology

This section discusses the method adopted to assess the relevance of the theoretical model presented. It is divided into three sections: the proposal of an integrated model for predicting the auditor's overall competence, the choice of actors, the data collected and their analysis technique.

3.1. An Integrated Model Auditor Competence-Audit Quality

To analyse the determining variables of the auditor's competence according to the theoretical factors identified, an analytical framework is proposed. It summarises the different categories of skills discussed. The study aims at explaining and predict the auditor's ability to detect anomalies by three constructs characteristic of overall competence (behavioral, functional and social competence). To these three latent factors, we associate the meta-competence variables [41], which integrate the consideration of uncertainty and the environment by the auditor in the evaluation of the items under audit, errors/frauds and their materiality.

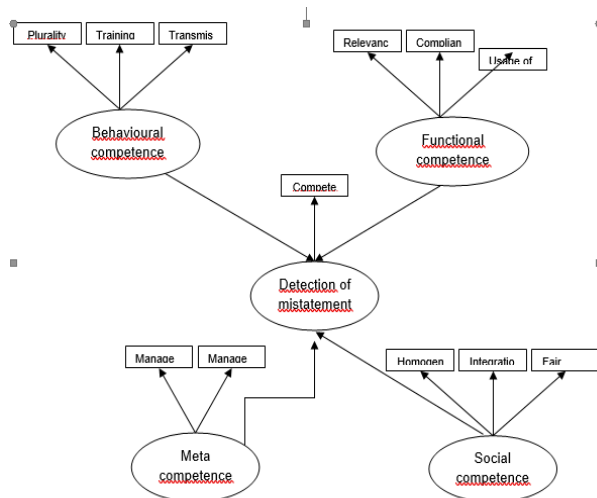


Figure 2. The theoretical model of the study

3.2. Data Collection and Measurement of Variables

To assess the auditor's overall competence based on the theoretical model developed, data were obtained from questionnaires submitted to auditors practicing in Cameroon, and having already detected anomalies in their client's accounts, and issued an unfavorable audit opinion on the basis of these anomalies. This approach aims to isolate the interference of an auditor's independence problem in the assessment of competence. Its relevance of this choice lies in the theory's conception of the auditor's competence, that is his ability to detect anomalies in the accounts [3]. If non-detection cannot be considered an indicator of "incompetence" (the accounts may actually

have no anomalies), detection on the other hand can be considered an indicator of "competence" in the sense of the literature [42]. The sample of our study does not include any female accountants, which faithfully reflects the structure of the total population consisting of more than 200 members, generally male. The sample consists of 80 individuals. This choice is relevant for our study, precisely because of its still partially exploratory nature [43].

The following table summarises the measurement of the variables of the model

Table 1. Measurements of the indicators of the model

Statement content	Indicator observed	Author(s)
Statement 1: My experience as auditor is rich and diverse Statement 2: My status as an auditor refers to the holding of an academic title Statement 3: Audit engagements are a school. My team members always learn a lot	Plurality of experience Training in Accounting Transmission to juniors	[3]
Statement 4: I always define a program for each audit engagement. Generally it is followed to the letter, with few or no modifications Statement 5: My audit engagements reflect the different regulations with which I am in full phase Statement 6: I always equip myself with technological tools during my audit engagements	Relevance of audit programme Conformity to regulations Usage of TIC	[13]
Statement 8: I make sure to have similar profiles in the audit teams Statement 9: New team mates always quickly find their place in the teams I supervise. Statement 10: The working atmosphere is always cordial between members of my team during audit engagements	Homogeneity of teams Integration of members Fair working environment	[12]
Statement 11: I have always known how to manage the occurrence of unforeseen events during the audit Statement 12: Interaction with audit clients often changes the way I see things.	Management of uncertainty Management of influence	[20]
Statement 13: When the accounts I audit contain material errors, I am certain to detect them	Auditor's competence	[3]

The 7-level Likert scale was chosen because of its compatibility with partial linear regression methods using exploratory models [44].

4. Results and Discussion

The proposed analysis model is evaluated through partial least squares regression method, relevant when the relationships between the variables are not yet well established, and the study is still at an exploratory stage [45]. For its validation, the inner and outer models are examined.

4.1. The Validity of the Outer Model

Reference [46] suggests the use of Cronbach's alpha as a tool to measure the composite reliability of the outer

model or measurement model. The estimated model is accepted when this indicator is greater than 0.7 for each of the manifest variables. The following table shows its value for the variables concerned.

Table 2. The reliability test of the outer model

Latent variables	Cronbach alpha	Critical values
Behavioural Competence	0.838 (Rhô = 0.906)	1
Functional competence	0.886 (Rhô = 0.930)	1
Meta competence	0.632 (Rhô = 0.814)	1.5
Audit quality	01 dimension	1

All variables present a sufficient level of reliability, except for the variable "meta competence" which does not satisfy this condition. This trend is confirmed by the analysis of the convergent and discriminant validities which are insufficient for the variable concerned, in the sense of Reference [46].

However, the model shows a satisfactory quality of fit, with a goodness of fit higher than the reference value of 0.5 [43].

Table 3. The goodness of fit of the model

Goodness of fit (Variables manifestes monofactorielles):				
	GoF	GoF (Bootstrap)	Standard error	Critical ratio (CR)
Absolute	0,679	0,682	0,049	13,954
Relative	0,534	0,601	0,430	1,241
Outer Model	0,535	0,528	0,037	14,614
Inner model	0,997	1,137	0,803	1,241

4.2. The Determining Role of Functional Competence

The internal model presents an interesting R² of 0.624, which is a satisfactory level for a partial least square model, as shown in the table below. The model thus allows to explain more than 50 percent of the variance in auditor competence

Table 4. Testing the inner model

R ² (Auditor Competence / 1):			
R ²	F	Pr > F	R ² (Bootstrap)
0,624	99,999	0,000	0,736

The analysis of econometric regressions presents the coefficients associated with the paths (Path) of the internal model. The figure below summarizes all the relationships established between the variables after regressions.

As a reminder, the variable "meta competence" was isolated from the model, due to the insufficient quality of its adjustment to the rest of the model (measurement and structural), and the insufficient internal reliability of its manifest variables. The estimated model that follows clearly shows the isolation of this construct.

Functional competence presents the most important contribution in explaining the auditor's competence (regression coefficient = 0.74). As a reminder, functional competence relates to the factors of defining a good audit plan, observing regulatory requirements, and using

technology in carrying out audit missions. The analysis of the contributions highlights the determining role played by technology. This result is in line with the growing interest that is given by both practitioners and researchers to the technological tool in conducting audit missions [47,48].

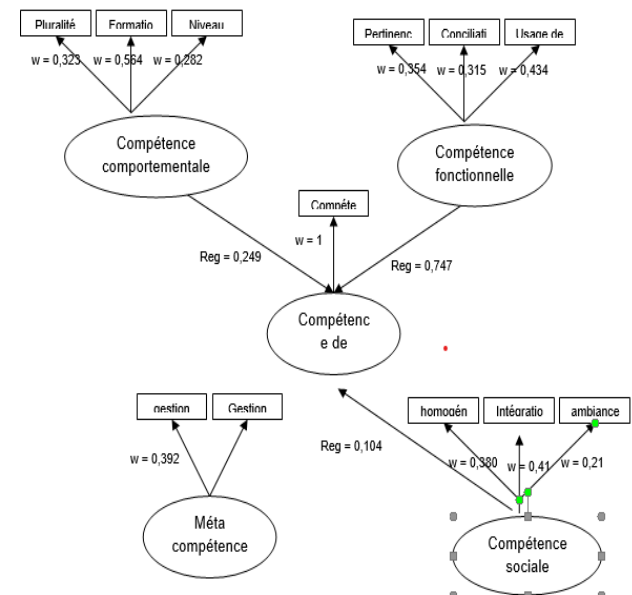


Figure 3. The estimated model

However, the variables "definition of a relevant audit plan" and the regulatory compliance variable also have a significant weight. This can be explained by the decisive nature of planning and compliance with regulations, in an audit environment such as that of Cameroon with characteristics of deviance and compliance [49]. The ability to detect anomalies therefore mainly involves a combination of 3 factors characterising functional competence.

Behavioral competence related to training and experience also makes a significant contribution to the explanation of auditor competence. The significance of this variable is consistent with previous work on that issue [3-13]. The weights of the associated variables are respectively 0.32; 0.54 and 0.28 for the indicators' plurality of experience, training and ability to transmit to juniors.

The two other forms of competence studied contribute to a low level (social competence, correlation coefficient = 0.1) or not at all (meta competence) in the explanation of the auditor's competence. This can perhaps be explained by the non-existence of formal circuits for the development of the factors considered, auditing remaining a developing profession in Cameroon as indicated by the Report of the Order of Auditors/chartered accountants of Cameroon in 2023. A different context could give rise to a different analysis for these variables.

The simplified analysis model, after resampling, takes the following form:

This model simplifies the understanding of the previous model. It clearly highlights the regression coefficients of the two latent variables significant in explaining auditor dependence. The mistatement detection ability is therefore particularly explained by the combination of functional and behavioral skills constructs. Their contribution can be summarized in a bar chart showing the weight of each significant construct.

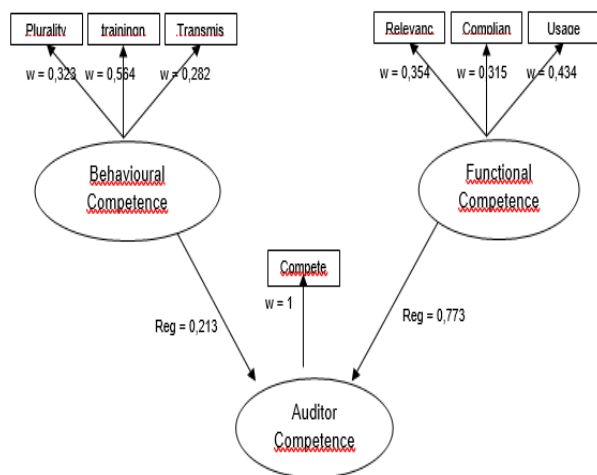


Figure 4. The simplified estimated model

4.3. Implication of Results

The results suggest the decisive role played by functional factors of competence in the ability to detect material errors during an audit engagement. This factor can be modulated at two levels. First at the level of audit offices, the audit market in Cameroon being mainly composed of networked related auditors [50]. The parent representations, already aware of international good practices, can harmonise these practices across the entire network in terms of defining an audit program, and in the technological assistance necessary in conducting the mission. Such an approach would have the merit of raising the level of competence of the auditor. Compliance with a homogeneous audit program modeled on international models coupled with the adoption of the necessary technological tool can, for example, constitute one of the conditions for integration into an auditor network. Recent work has focused more on this technological aspect, with the emergence in the field of auditing of the use of tools such as artificial intelligence [50] or robotics [51,52]

Secondly, the professional order can, through continuing education; training and learning, introduce auditors to good practices in planning, or raise their awareness of the importance and applicability of the technological tool for auditing. The merit of this approach lies in the unifying and regulatory role that the order plays in a legal jurisdiction. The impact would thus have a wider scope. It would be interesting to know in a future research work how the technological tool influences professional organizations as well as their professional and legal deployment.

5. Conclusion

The auditor's overall competence constitutes a black box that this article set out to explore. Based on the principles of competence developed in human sciences, the three components of competence were modeled, and the model estimated using the partial least squares regression method. The results showed that functional competence is the decisive factor explaining the detection of anomalies in audited accounts. The results also, in

accordance with the literature, showed the importance of training and experience in the sense of [37].

Auditor competence remains a major issue, to which particular attention must be paid, as well as auditor independence, to achieve audit quality [2]. With technological advances, interesting aspects deserve to be studied as part of this investment. Recent tools deployed in the audit context such as artificial intelligence or robotics are aspects that can contribute to better penetrating the black box that is auditor competence, and even improve the quality of the audit as a whole.

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