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Article

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The impact of task interruptions on audit quality: Experimental design in the Tunisian audit context

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Abstract

Research Question: This study explores the impact of task interruptions on audit quality in Tunisia. Our research aimed to find out how Tunisian auditors felt about task interruptions and how they affected the quality of their assessment.

Motivation: Our research question aims to clarify the perception of Tunisian auditors about interruptions and their impact on their judgments. This research highlights the position of Tunisian auditors on task interruptions and their impact on their quality of judgment.

Idea: Its goal is to present several solutions for the auditors by creating a system where the bad interruptions are blocked to limit their impacts.

Data: A triangulated study design was incorporated. Experimental and qualitative methods were used.

Tools: We choose experimentation as a method of data collection to undertake hypothesis testing causal relationships.

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Findings: The results revealed that the interruptions of tasks do not affect the quality of judgment of the auditors in the Tunisian context. Furthermore, just the gender and length of work experience were included when evaluating the influence of various conditions.

Contribution: Thus, this paper contributes to Tunisian audit research. Indeed, this study examines auditors' perceptions of task interruptions and their impact on their judgment quality. In addition, to attain the research's goal, this study relies on an experimental investigation and a qualitative confirmatory survey.

Keywords: Task interruptions -audit quality-Experimental design-Tunisian context.

JEL codes: M41

1. Introduction

The changing global environment around the COVID-19 epidemic has an impact on auditors' work (Albitar *et al.*, 2020). The audited companies provided the data digitally to work remotely and enable audit in virtual mode. Companies have exchanged data with us in a digital format during this pandemic (Goodell, 2020). As a result, auditors have increased the quality of audits and revolutionized the secure use of digital data. Indeed, the technology's efficiency and speed in processing vast volumes of data enable auditors to increase audit quality.

With the rapid evolution of communication, and technologies making people available virtually all the time, issues of interruption and multitasking have attracted the attention of the scientific community and the press. Previously, Time magazine and the New York Times mentioned interruptions and multitasking and how they affect performance. Given the importance of the number of ways in which interrupts can occur, the cost of managing these interruptions is likely to be more significant. Studies have examined the effect of interruptions on workers' precision of judgment in the context of general knowledge. These studies have shown that workers' performance is negatively affected by interruptions (Speier *et al.*, 1999, 2003). Memory for goals theory claims that intrusions negatively affect memory because they inhibit our ability to remember our goals and strategies for achieving them (Altmann & Trafton, 2002). In other words, they inhibit our capacity to remember what we should do and how we should do it. So the question always arises as to the effect of interruptions on the auditors. Through this study, we seek to highlight the importance of an essential factor of the audit mission, namely the quality of judgment, but also to promote the awareness of a significant factor that is always present in the professional environment of auditors and that can be of extreme importance when it comes to audit quality.

The choice of this subject is motivated by its importance in the current circumstances and the lack of research carried out in both the international and Tunisian contexts (Kim *et al.*, 2017). The researchers worked only on short interruptions and used an experimental method on auditors who work only for the BIG four in Australia. The interruption took the form of an e-mail containing a demographic quiz. The findings from this paper make several contributions to the existing literature. First, we are interested in these exceptions better to understand auditors' response to the task interruptions. Moreover, the confirmatory qualitative survey allows advancing recommendations and contributions to accounting practice in the audit working process. Thus, the finding of this study permitted financial statement users to analyze the impact of task interruptions on audit quality in Tunisia. Such findings encourage regulators to focus on promoting rules and laws to frame audit working process.

In the first section, we introduce what we found in the literature concerning the interruptions of tasks, their stakes, and their impact on the quality of judgment. In the second section, we present the empirical foundation for research. We introduce our methodological approach by showing the research hypotheses, the general framework of the research, the experimentation procedure, the population, the variables, and the statistical tools used to confirm or invalidate the hypotheses and the statistical results of this survey. For the third section, we will present the approach for the confirmatory qualitative survey, the population that will participate, and the results of this survey.

2. Task interruptions and audit judgment quality: A literature review

Griffin and Ricchiute (2011) show that interruptions are a common feature of the audit-working environment. Auditors work in an open and interactive environment (Miledi & Pigé, 2013). They are coping with the complex nature of auditing, where one individual's work can affect other individuals' work. This can be proof that the other team members constantly interrupt auditors when carrying out their work (Oulasvirtaa & Saariluoma, 2006).

In addition, the changing nature of audit missions coordination (for example, the work that can be dispersed geographically nowadays as in the case of large audit firms) and using electronic communication methods in the audit domain (instant messaging, video conferencing) indicate that will become more and more frequent. Given the pervasive nature of audit interruptions, Speier *et al.* (2003) have demonstrated the negative effect of interruptions on auditor performance.

Speier *et al.* (1999) mentioned that interruptions increase the time required to complete a task and reduce performance. Other research has also pointed out that interruptions hurt performance measured over time; according to Gillie (1989), the

quality of work, the ability of individuals to connect and synthesize information (Foroughi et al (2015), global accuracy, errors after completion of a task (Ratwani & Trafton, 2008) and work continuity (Wiegman *et al.* (2007). However, there is a lack of information currently about the negative effect of interruptions on the auditors' memory and the quality of judgment.

The work of the auditors requires a high level of concentration. It needs them to be attentive to avoid making mistakes during the anomalies' analysis and adequately give a judgment. Griffin and Ricchiute (2011) and Long *et al.* (2014) have attempted to examine the effect of the prolonged focus of attention that requires significant cognitive effort and found that frequent redirection of attention can alter and affect the judgment regarding the main task performed. Griffin and Ricchiute (2011) examined whether the increased cognitive load associated with attention redirection affects how auditors evaluate the evidence related to the problem they were focused on. They find that even though processing information is not affected by single interruptions, it is affected by horizons.

Long *et al.* (2014) examined the effect of interruptions that require significant cognitive effort on audit and efficiency in two tasks, namely, the evaluation of the internal control system and the analysis of ratios. The latter played the role of the task that will interrupt the first task. The researchers found that the performance of those who were interrupted during their task was low compared to those who weren't interrupted.

Finally, Kim *et al.* (2017) conducted research to identify the impact of short interruptions on auditors' quality of judgment. They found that auditors assess the risk of material misstatements less efficiently and are likely to have more problems when they try to remember the data needed for their assignments following the occurrence of an expected interruption with the moment of its occurrence unknown. These researchers also mentioned that the immediate transition to the interrupting task before completing the main task could cause memory loss and delay the main task's recovery.

3. The impact of task interruptions on audit quality: an experimental approach in the Tunisian context

Data collection through experimentation

The occurrence of an interruption will affect the level of attention (Altmann & Trafton, 2002; Gregory-Trafton & Christopher, 2007; Griffin & Ricchiute, 2011; Krediet *et al.*, 1994; Quintus & Jennifer, 2003; Raimbault-Chupin *et al.*, 2011). Kim *et al.* (2017) found that auditors assess the risk of significant anomalies less effectively and may have more problems remembering the data needed for their

missions following an interruption. This has affected the quality of their judgment (Miledi & Pigé, 2013). This is proven by the expected short interruptions; however, nobody has tested the impact of unexpected and short interruptions on the judgment quality of the auditors. Consequently, the purpose of this research is to complete this work and further appreciate the latter's impact on the quality of judgment.

H1: Task Interruptions such as short intrusions affect audit quality.

Task Interruptions affect the auditors' judgment since they could not recall the data needed to assess the risk and detect anomalies (Gregory-Trafton & Christopher, 2007; Griffin & Ricchiute, 2011; Krediet *et al.*, 1994; Miledi & Pigé, 2013; Quintus & Jennifer, 2003; Raimbault-Chupin *et al.* 2011); this is true in the Australian context since our research will be carried out in the Tunisian context. We want to test this type of interruption and identify how auditors perceive the impact of such interruptions on their quality of judgment (Griffin & Ricchiute, 2011; Krediet *et al.*, 1994; Maureen, *et al.*, 2010; Mark *et al.*, 1998). This is done to know if we can generalize the results found by Kim *et al.* (2017) in the Tunisian context. For this, we have put two different hypotheses since we will designate two different types of short but planned interruptions, namely a planned meeting and a break (Eyrolle & Cellier, 2000; Griffin & Ricchiute, 2011; Krediet *et al.*, 1994; Maureen, *et al.*, 2010; Mark *et al.*, 1998).

H2: Task interruptions such as short scheduled meetings alter the quality of the audit.

H3: Task interruptions such as breaks alter audit quality.

Finally, the last type that was not tested before, and we need to add it, is distraction. We recall that interruptions in the form of distractions are the psychological reactions triggered by external stimuli or secondary activities that interrupt concentration on a primary task (Griffin & Ricchiute, 2011; Krediet *et al.*, 1994; Maureen *et al.*, 2010; Mark *et al.*, 1998). Distractions are usually prompted by activities or environmental stimuli that are useless to the primary task. They affect a person's cognitive processes by diverting the attention that might otherwise have been directed to that task. Because of this, it is important to introduce this type of interrupt since it is among the most important and recurrent types.

H4: Task interruptions such as distractions alter audit quality.

In our research, we will choose experimentation as a method of data collection. We will test hypotheses of causality, and experimentation is the only type of research that has the power to respond to this need. This emphasizes the nature of our explanatory variable, namely: interruptions of short tasks during the performance of an audit assignment, which is considered easy to handle. Indeed, we will choose a single group to assess the perception of a set of interruptions of short stains. We have chosen breaks, intrusions, and distractions as the interruptions around which the four situations will be formed (Griffin & Ricchiute, 2011; Krediet *et al.*, 1994; Maureen, *et al.* 2010; Mark *et al.*, 1998; Raimbault-Chupin *et al.*, 2011). These situations

illustrate the day-to-day lives of accountants who are constantly interrupted either expectedly or unexpectedly.

Our experimental plan corresponds to that of "repeated measurement plans" or "the intra- subjects". We speak of the intra-subjects when all the subjects pass by all the experimental conditions. The comparison is made on the same group of participants who lend themselves to all the modalities of the independent variable, namely the interruption of the task in our research.

The main interest of repeated action plans is that they control a large number of external inter-individual variables. For example, we contacted 490 accountants listed in the Order of Tunisian auditors. A portion of them was contacted directly and the rest received an e-mail containing our quiz. However, only 40 auditors responded to our efforts, representing a response rate of 8%.

Data analysis and statistical results

The majority of respondents are men, representing 60% of the sample against 40% of women. Our sample is varied by age. Most respondents are experienced professionals with at least two years of experience representing 70% of the sample, with 17.5% between 6 months and 2 years, and less than 6 months with 12.5%.

Regarding the number of interruptions, most responses are between 1 to 10 interruptions with a rate of 70%, followed by 22.5% for responses exceeding 10 interruptions, and finally 0 interruptions with a rate of 7.5% response.

In order to validate the hypotheses of our study, we checked whether the auditors' judgment differs from one situation to another. To do this, we used a test of equality of means, an ANOVA test. This test has a Fisher value of 4.3 and a significance level of 0.006 below the critical level of 5%, which allows us to conclude that the perception of auditors differs from one situation to another at the order of 5%.

Table 1. Test of equality of means

	Some of the squares	FD	mean square	F	Sig.
Intergroups	12.525	3	4.175		**0.006
Intra-groups	151.450	156	0.971		
	163.975	159			

The sample interviewed is more confused by distractions, then unplanned meetings, scheduled meetings, and finally breaks.

**The impact of task interruptions on audit quality: experimental design
in the Tunisian audit context**

Task interruptions such as short intrusions and audit quality

The average response for this situation does not exceed the middle of the scale, a 5-points scale with an average of 2.10. Auditors perceive the first situation as an unplanned meeting as a situation that does not alter their judgment quality.

Table 2. The effect of short intrusions on the quality of the auditor's judgment

	N	Mean	Standard deviation	Mean standard error
Situation 1	40	2.10	1.008	0.159

Hypothesis H1 is invalidated.

Task interruptions such as short scheduled meetings and audit quality

The average response for this situation does not exceed the middle of the scale, a 5-point scale with an average of 1.65. Auditors perceive the second situation as a situation that is not expected to be a nuisance and does not affect their quality of judgment.

Table 3. The effect of short scheduled meetings

	N	Mean	Standard deviation	Mean standard error
Situation 2	40	1.65	0.770	0.122

Hypothesis H2 is invalidated.

Task interruptions such as breaks and audit judgment quality

The average response for this situation does not exceed the middle of the scale, a 5-points scale with an average of 1.58, which is the lowest value. The auditors perceive the interruption in situation 3 as a situation, which does not affect their quality of judgment (Eyrolle & Cellier, 2000; Mark *et al.*, 1998).

Table 4. The effects of task interruptions such as breaks

	N	Mean	Ecart type	Mean standard error
Situation 3	40	1.58	0.874	0.138

Hypothesis H3 is invalidated.

Task interruptions such as distraction alter audit judgment quality

However, the average response for this situation does not exceed the middle of the 5-point scale with an average of 2.23 but is considered the highest four situations. Therefore, the auditors perceive the interruption in situation 5, as a distraction, as a situation that does not affect their quality of judgment (Sykes, 2011).

Table 5. The effect of interruptions such as distraction

	N	Mean	Standard deviation	Mean standard error
Situation 4	40	2.23	1.230	0.194

Hypothesis H4 is invalidated

This leads us to conclude that the situations do not significantly impact, but we have reached a classification already mentioned. The question at this level is, does the sociodemographic variables, namely age, gender, and duration of work experience, and the variable "number of interruptions per day", impact the perception of auditors regarding task interruptions and their impact on the quality of judgment? Even though the interruptions presented in the four situations do not affect the quality of judgment of the auditors, we wanted to detect the effects of sociodemographic variables and the variable "number of task interruptions per day" on the perception of the auditors. We achieved this through a set of cross between these variables and the situations mentioned previously.

The ANOVA test displays levels of significance that exceed 10% for the four situations. This leads us to conclude that the auditor's perception regarding task interruptions and their impact on judgment quality does not depend on age. The duration of the professional experience significantly impacts the auditors' perception of the third situation with a significance of 10%. However, the duration of the professional experience has no impact on the perception of the auditors concerning the other situations. We note that the majority of respondents in these situations have experience that exceeds 2 years. Thus, it can be concluded that those who are most experienced are the least affected by the interruption introduced in the third situation. Gender has a significant impact on the perception of auditors regarding the first situation and the fourth situation (Gold *et al.*, 2009; Steven *et al.* 2009; Kamla, 2012).

The impact is significant at 10% for the first situation and 5% for the fourth situation. In addition, we analyzed is to check if it is somewhat related to women or men. We note that the average of women's responses is closer to the middle of the scale than the average of men moving away from the middle of the scale. We can say that, even if the two situations do not affect the quality of judgment of auditors, women are more distracted by distractions and unexpected meetings than men. This may be related to the character of the woman who prefers to be more concentrated on her work and who's easily disturbed, especially by the presence of distractions such as discussions between colleagues. Also, this can be related to the woman's desire to plan everything and avoid the unexpected. Finally, the ANOVA test displays levels of significance that exceed 10% for the four situations. This leads us to conclude that the auditors' perception regarding task interruptions and their impact on the quality of judgment does not depend on the number of task interruptions per day.

The results of the quantitative study have just shown that the interruptions do not have an effect on the quality of judgment of the Tunisian auditors. A confirmatory qualitative study will be essential in order to confirm the results found in the quantitative part. It will be useful to identify the reasons why our assumptions were invalidated, as well as to identify the solutions used by the auditors to minimize the impact of the interruption. In addition, this survey will help us identify their perceptions of a work environment where bad interruptions are blocked and good ones are tolerated. Finally, we will understand if this environment will have an impact on their quality of judgment or not.

4. How to create a system where good interruptions are allowed and bad interruptions are blocked: a confirmatory qualitative study

The quantitative study results show that interruptions do not affect the quality of judgment of the Tunisian auditor. However, a confirmatory qualitative study will be essential to confirm the results found in the quantitative part. The semi-directive interview makes it possible to center the discourse of the interviewees around different themes previously defined and recorded in an interview guide (Gavard-Perret *et al.*, 2008). The latter was developed based on the results of the quantitative survey. The degree of formalization of the guide depends on the object of our study, the use of the survey (confirmatory) and the type of analysis planned (Blanchet & Gotman, 1992). We chose the semi-directive interview given that we do not have enough information on the area studied (confirmatory survey) and that the literature dealing with this subject is limited. Indeed, five themes stand out: (1) the reasons why interruptions have no effect on the quality of judgment. ; (2) strategies deemed useful for avoiding interruptions; (3) solutions that aid in resuming a task after the occurrence of interruptions; (4) the auditors' perception of a work environment where bad interruptions are blocked and good ones are tolerated; (5) the impact of such an environment on the quality of judgment of auditors.

We pre-tested the guide's sub-themes to check whether they are understandable and appropriate to the purpose of the study. The pre-test led us to make some changes to the interview guide. Moreover, if the themes of the guide were not addressed spontaneously, certain instructions were provided. Once the interviews were transcribed, the analysis of the set of speeches produced was carried out using the method of content analysis. Blanchet and Gotman (1992) stipulate that the technique requires selecting and extracting data likely to produce results that meet the research objectives. This analysis must be able to return almost all of the corpus (extension principles), be faithful (multicoding) and self-sufficient (without necessary return to the corpus) (Blanchet & Gotman, 1992). We contented ourselves with carrying out only a calculation of the horizontal frequency, and this always taking into account the confirmatory nature of our research, and the diversity and richness of the content

obtained. The analysis of the data collected at the end of these interviews is carried out by identifying the most frequently mentioned statements. The frequency of occurrence is calculated by dividing, for each significance unit, the number of interviews in which the unit is present at least once, by the total number of interviews carried out.

4.1 The reasons why interruptions do not affect your auditor's judgment quality

The results show that the main reason why auditors consider that interruptions do not influence their quality of judgment in the presence of due diligence (Sykes, 2011). Indeed, 5 auditors (83.30%) mentioned that they are limited by diligence to reach a good judgment, a correct opinion. According to these auditors, due diligence makes it possible to limit the effect of interruptions on the quality of judgment since, each time an interruption occurs, they are required to check them to form a judgment based on these procedures (Griffin & Ricchiute, 2011; Krediet *et al.*, 1994; Maureen, *et al.*, 2010; Mark *et al.*, 1998; Raimbault-Chupin *et al.*, 2011).

Three auditors (50%) mentioned that the documentation prevents interruptions from impacting the quality of judgment because each detail is noted, and each step is documented, which is a significant element that facilitates work. In addition, other auditors (33.33%) specify that being experienced is an essential element when dealing with interruptions and preventing this phenomenon from impacting the quality of judgment.

Nevertheless, 16.33% of the auditors mentioned the importance of teamwork and the decentralization of the work as a reason why the quality of judgment is not affected. Indeed, teamwork helps to reduce the impact of interruptions, and this is when several individuals unite to deliver a complete work record that allows auditors to reach a proper judgment.

In addition, two auditors (33.33%) referred to the work program as a reason that cancels out the impact of interruptions on the quality of judgment. Indeed, these auditors stipulate a work program that can guide them to reach a good judgment. This work program contains audit questionnaires and checklists to complete. Therefore, the Works program is not influenced by task interruptions.

4.2 Valuable strategies to avoid task interruptions

The results showed that two auditors (33.33%) think it is impossible to avoid interruptions and that there are no fundamental strategies to cope with them. Three auditors (50%) mentioned that their strategy is to learn how to deal with it. They tend to accept interruption as an element that is always present in their daily lives, and

they have to get used to working in the presence of these interruptions and not avoid them (Griffin & Ricchiute, 2011; Krediet *et al.*, 1994; Maureen *et al.*, 2010; Mark *et al.*, 1998; Raimbault-Chupin *et al.*, 2011).

Nevertheless, the results show that the auditors adopt other strategies to avoid interruptions. Indeed, they aim through these strategies to be unreachable by turning off their phones (16.66%), and closing their office doors (16.66%). Two auditors (33.33%) mentioned that they try to transfer the calls to the secretary and delegate some tasks to other team members to avoid interruptions. These auditors emphasized the importance of avoiding interruptions in certain situations, such as, for example, a meeting attended by senior management in the case of the BIGs. One of these two auditors mentioned that transferring all calls to the secretary is a strong tradition. In addition, an auditor (16.66%) mentioned preparing schedules as an effective strategy to deal with interruptions. The schedules present a way to organize themselves and make it possible to avoid the chances of interruption. The solutions auditors adopt to take over a task.

The results mentioned documentation as the most remarkable solution. Indeed, 5 auditors (83.33%) agreed that documentation is a significant element in taking over a task. The auditors mentioned that they try to document everything to review what they have done previously and thus carry out the due diligence to make a correct judgment. These auditors mentioned that the documentation is done using paper or magnetic media and even on platforms. An auditor said that there is a company that handles the documentation on paper called Archidoc. The results also mentioned that auditors try to take notes, putting markers to remember work done after the interruption. 4 auditors (66.66%) mentioned that markers are made through the use of post-its which facilitate the task given their practicality. In addition, 3 auditors (50%) mentioned the use of auditing software. Indeed, these same auditors mentioned that this software is referenced automatically and they facilitate the work as they guide them in carrying out the necessary verification. The most important thing for these auditors to resume their work after an interruption is a power to introduce comments and observations. This software allows auditors to remember what they were doing and their logic when verifying or justifying anomalies.

4.3 A work environment where good interruptions are allowed and bad ones are blocked

The results showed that the 6 auditors interviewed (100%) considered such an environment as impossible to find. An auditor tells us: “[...] it is unreachable, an impossible world that to find, there are always phone calls, meetings [...]”. On the other hand, 3 auditors (50%) used other terms to characterize this work environment by describing it as non-existent, and unreachable. Indeed, this is because interruptions will always be present in the work environment of the auditors and will

always remain an element that characterizes their reality. However, the results also showed that 3 auditors (50%) consider ideal work environments. An auditor says: “[...] an environment that I find ideal ... it's true that we can say that it's the ideal environment [...]”.

Nevertheless, an auditor (16.66%) considers that the working environment depends mainly on the nature of the client. According to him, a client can both increase the occurrence of interruptions but also can limit their presence and thus help you approach the ideal work environment.

4.4 The impact of such a working environment on the quality of Judgment of Tunisian auditors

The results showed that the majority of the auditors think that such an environment does not impact their quality of judgment (5 auditors 83.33%) since they are always required to carry out due diligence to make a good judgment. So we can say that their quality of judgment is related to how the diligence was carried out. An auditor tells us:

“Even if this work environment does exist, it will have no impact on my quality of judgment. As I told you earlier, there are very specific diligences that need to be carried out”.

One of these auditors added that it depends on the adopted working method (16.66%) and not on the environment. He says:

“No, it does not affect my quality of judgment. It depends on the working method, after all. It needs to be organized. Otherwise, the auditor will have difficulty remembering because, honestly, we cannot memorize everything”.

However, an auditor (16.66%) mentioned that such an environment would have an impact on its quality of judgment and so it will improve it. Another (16.66%) added that it does not impact his quality of judgment but can cause an improvement of 2 to 3%.

Nevertheless, 4 auditors (66.66%) say that such an environment will give them the advantage of saving time and feeling comfortable (3 auditors or 50%). An auditor states:

“It would be better to work more comfortably and I will also save time for us, but it does not affect my quality of judgment ... I think I'll be more comfortable doing my work, and I will gain even more time to complete the mission”.

Tunisian external auditors perceive task interruptions as being an element that characterizes their daily lives and not a key factor having the power to influence their quality of judgment. This is inconsistent with the findings from the base article. Contrary to Kim *et al.* (2017), who mentioned that short and planned task

interruptions have a significant impact on the quality of judgment, our results prove that this is not the case in the Tunisian context. Indeed this is justified by several reasons; the main reason is that the quality of judgment of Tunisian auditors is directly influenced by the performance of the due diligence which will ultimately lead to the formulation of an adequate opinion, once properly carried out. Another reason that is important is the fact of documenting as well as teamwork, panoply of reasons that makes the effect of interruptions very minimal or non-existent.

Furthermore, auditors claim that avoiding task interruptions is almost impossible and that they have to get used to working in the presence of these nuisances or else try to isolate themselves and be unreachable when carrying out their work and even delegate telephone calls to the secretary, this obviously depends on the size of the firm and the culture established in the latter. Some structures do not have the power to recruit secretaries, which pushes the auditor to confront task interruptions directly. Once interrupted, auditors rely on panoply of solutions to resume their task in an efficient manner. Some try to set boundaries and cues to remember what they were up to before the hiatus and this is usually done through notes written on post-its. This is consistent with the work of Altmann and Trafton (2002) who suggest that the use of cues greatly helps auditors to remember work done before the occurrence of interruptions and probably improve the quality of the interrupt. Information that is not found in the literature is that other auditors have emphasized the use of assisted audit software that is organized and automatically referenced, as well as having the ability to guide the auditor in his work and above all they offer the possibility of introducing observations and comments in order to help the auditor to remember the logic he followed when carrying out the various procedures and by subsequently anticipate the occurrence of interruptions.

Tunisian auditors consider the existence of a working environment where bad interruptions are blocked and good ones are tolerated as impossible, an unfeasible working environment and this given the importance of their work for users of financial information. However, an auditor thinks that it is possible to get closer to this ideal environment but it always remains linked to the nature of the client who can either help to reach a work environment where the majority of interruptions are blocked, or act as a catalyst that reinforces the increase in the number of these interruptions.

However, the majority of auditors agreed that even with the existence of such an environment, it will not impact their quality of judgment since it is always linked to the way in which the due diligence was carried out, but rather it will give them a feeling of comfort and the possibility of saving even more time to complete their work.

5. Conclusion

The objective of our study was to determine the perception of Tunisian auditors regarding task interruptions and their impact on the quality of judgment. We started first by exploiting the academic literature that constitutes the theoretical framework of this subject. Then, we highlighted the theoretical and empirical works which treat this subject. Indeed, our research hypotheses came from the theoretical and empirical developments of studies that seek to show the negative impact of task interruptions on the quality of auditors' judgment. To meet our objective, we opted, first of all, for an experimental method. The sample chosen for the study is made up of 40 Tunisian auditors. This experiment was based on a self-administered quiz that contains situations presenting different types of interruptions. Data analysis is performed with SPSS software. We used the ANOVA analysis method of variance to test our research hypotheses, and. To detect whether sociodemographic characteristics and the number of interruptions per day played a role in assessing the impact of different situations on the auditors' quality of judgment.

The results we found are not in line with our expectations. They mention that the interruptions of tasks do not affect the quality of judgment of the auditors in the Tunisian context. In addition, only gender (Gold *et al.*, 2009; Steven *et al.*, 2009; Kamla, 2012) and the duration of work experience played a role in assessing the impact of different situations. The experiment is followed by a confirmatory qualitative study with six auditors who were part of the experiment to confirm the results we found and understand why interruptions didn't impact Tunisian auditors' judgment quality. An interview guide has been developed around five themes. The first theme show the reasons is why a task interruption does not affect the quality of judgment of Tunisian auditors. The second concerns the strategies considered useful to avoid interruptions. The third presents the solutions for resuming a task after the occurrence of an interruption. The fourth is based on their opinions regarding a work environment where bad interruptions are blocked and good ones and the last, presents the impact of such an environment on their quality of judgment.

The findings from this paper make several contributions to the existing literature. First, we are interested in these exceptions better to understand the auditors' perception regarding task interruptions and their impact on the auditor's quality of judgment. This study contributes to the academic field. Moreover, this research allows advancing recommendations and contributions to accounting practice and theory in the audit working process. Thus, the finding of this study permitted financial statement users to analyze the auditors' perception regarding task interruptions and their impact on the auditor's quality of judgment. Furthermore, the data analysis allowed us to list some instructions for the audit working process during the task interruptions. Hence, this research is significant when the study is early. In

addition, this study is based on an experimental investigation and a qualitative confirmatory survey to achieve the objective of this research.

Indeed, our work contains limits, like any research. The small size of our sample may be a limitation of this study. We consider that a larger sample would have been better. However, according to our statistical results, the sample size cannot be a problem. To ensure the development of our study, we propose new lines of research. It is interesting to measure the impact of task interruptions on the quality of judgment by observing the behavior of the auditors during the mission to ensure more relevant and accurate results. In addition, in this study, lengthy task interruptions were not considered due to the absence of studies in the literature, so we find it interesting to test, in future research, the impact of lengthy interruptions on the quality of judgment. Finally, we tend to bring attention to an important subject, which is the awareness of task interruptions and the importance of operating in a work environment where the effect of interruptions is minimized to guarantee a feeling of comfort and reduce the pressure induced by the nature of auditors' work.

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