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The link between OHSAS 18001 certification and social performance

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Abstract:
The objective of this research is to assess the impact of certification according to OHSAS 18001 on social performance. We adopted a qualitative approach by studying multiple cases. Our study carried out on four certified companies shows the existence of a positive impact of certification on accidents at work, occupational diseases and compliance with legislation and regulations in terms of labor law. On the other hand, our results indicate the absence of impacts on the equality component of treatment.
Keywords: OHSAS 18001 certification; Social performance; SMEs.

Introduction:
There is growing interest today in the social dimension within companies. Consequently, companies are increasingly resorting to OHSAS 18001 certification, which concerns the occupational health and safety management system.
Studies investigating the relationship between OHSAS 18001 certification and social performance show similarities and differences in results.
This research aims to analyze the impact of OHSAS 18001 certification on social performance in the Tunisian context.
This research is divided into four parts. The first focuses on the presentation of the standard and its contributions identified in the literature. It presents also the components of social performance. The second part is dedicated to the presentation of the research methodology. The analysis of the results is carried out in the third part while the discussion of the results appears in the fourth part.

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1. Literature review:

1.1. OHSAS 18001 and its contributions:

The Occupational Health and Safety Management System (OHSMS) also called Safety Management System (SMS) aims to ensure the health and safety of employees within the company.

The OHSAS 18001 standard relating to OHS management was created in 1999 by the BSI (British Standard Institution) and was revised in 2007 in order to reinforce its compatibility with the ISO 9001 and ISO14001 standards. In this context, the ISO has just developed the ISO 45001 standard in 2018 to facilitate the process of integrating managerial systems.

The fundamental objective of this standard is to support and promote good practices in the field of OHS through systematic and structured management. Certification also has implications for strategy and competitiveness as it helps assure stakeholders of an adequate occupational health and safety management system (Fernandez-Muniz et al. 2012). The literature review demonstrated a lack of research on the implications of OHSAS 18001 certification at company levels. Abad et al. (2013) examined the link between the adoption of the standard and performance working on a sample of 149 Spanish companies for the period 2006-2009. The results highlighted improvements in performance.

Lo et al. (2014), using a sample of 111 companies listed in the United States and certified according to OHSAS 18001, showed that certification led to a significant increase in performance compared to expected levels, expressed in terms of profitability and growth of sale. The results of the study by Yang and Maresova (2020) empirically show that the adoption of an OHSAS standard contributes to a better financial performance of Chinese pharmaceutical companies. However, leaders must be aware of the increased costs associated with recertification and auditing in subsequent periods to achieve a win-win situation between OHSMS implementation and financial benefit.

Pagell et al. (2014) also highlighted significant increases in productivity and profitability. Results from Metin (2020) showed that OHSAS 18001 certification does not influence employee productivity improvement. On the other hand, it has a significant impact on training and motivation in terms of OHS. The study by McCaughey et al. (2015) supports the claim that increasing the number of OHS trainings following certification causes a decrease in the accident rate.

Karamik et al. (2015) add that in companies where people feel physically and psychologically safe, especially in OHSAS 18001 certified companies, absenteeism due to illness and accidents decreases. This standard is applicable to any organization that wishes to implement a formal procedure to eliminate or reduce risks to employees and any interested parties (Vinodkumar and Bhasi, 2011). With this in mind, Chang and Liang (2009) found that OHSAS 18001 reduces the risk of accidents and interruptions in the production process and improves the firm's compliance with its legal obligations. Companies with a weaker safety system are more likely to have higher accident rates, which increases the economic cost of accidents related either to the number of lost working days or to compensation for partial or total incapacity (Jallon et al, 2011). Fernandez-Muniz et al (2012) carried out an empirical study on a sample of 131 OHSAS 18001 certified companies located in Spain. And in the light of this study, they found a positive effect of certification on employee satisfaction in organizations. Chen et al. (2009) concluded that the implementation of this standard was mainly conditioned by customer requirements and by management decisions relating to the improvement of the brand image. On the contrary, the reduction of work accidents and increases in productivity were not the influential factors explaining the adoption of the standard.

In scenarios where adoption of the standard comes down to external factors, managers try to use it as a business tool. This leads to the lack of alignment between the company's objectives

ISSN: 2356-5608

and the underlying intention to implement it, therefore minimizing the potentially positive effects of OHSAS 18001 on OHS.

From an organizational point of view, OHSAS 18001 impacts various performance dimensions. First, prioritizing safety practices creates a safer work environment that meets workers' safety needs and enables them to pursue operational goals. The standard can also contribute to reducing operating costs thanks to documentation relating to OHS and the implementation of corrective actions each time an accident occurs. Increased security checks could reduce operational losses related to poor working conditions. Reducing unplanned interruptions in production processes, absenteeism and staff turnover has implications for economic performance (Abad and Lafuente, 2018).

According to Choudhry (2014), the benefits of OHSMS are weaker in companies with unsystematic operational conditions. The internal factors motivating the adoption of the standard relate to the introduction of a secure framework which, through the prevention and control of occupational risks, contributes to reducing the number of accidents at work and the economic costs (Zeng et al. 2008). Other internal motivations are related to the objective of reducing material losses and interruptions in the production process (Jallon et al. 2011).

The main objective of the standard is to reduce occupational health and safety risks and ensure the protection of human resources (De Oliveria, 2013). Achieving this objective depends on implementing and maintaining the requirements of the standard in the workplace (Ghahramani and Salminen, 2019).

Several studies have identified the factors for the successful implementation and maintenance of OHSAS 18001. These factors include management commitment, communication, employee involvement, training, organizational characteristics and the complexity of the procedures (O'Toole, 2002; Lamontagne, 2004; Robson et al. 2007; Zanko and Dawsen, 2012; Ghahramani, 2016).

Ghahramani and Salminen (2019) evaluated the effectiveness of the Safety performance standard by studying its impact on the Work Injury Rate (WIR), the safety climate and OHS practices. The safety climate is defined, according to these authors, by the following components: safety commitment and communication, safety involvement and training, positive safety practices, safety skills, accessibility and responsibility, safety procedures and the favorable environment.

In this context, Bashi and Vinodkumar (2011) defined six OHS management practices: Management commitment, safety training, worker involvement in safety, safety rules and procedures, common health and safety promotion policy and feedback. This is part of research that has shown that OHSAS 18001 reduces workplace accidents and improves productivity and employee health and safety.

The results of the study by Ghahramani and Salminen (2019) indicated that the standard did not improve the safety climate four to nine years after certification. These researchers concluded that having OHSAS 18001 certification cannot guarantee good safety performance. However, they noted that certification leads to better OHS activity rates. They also noticed that the way of implementing and maintaining the requirements of the repository is a decisive factor for its effectiveness.

According to Abad et al (2013), there is a lack of research on the impact of OHASAS 18001 on occupational health and safety. Most studies have analyzed the integration of this standard with others, notably ISO 9001 and ISO 14001.

1.2. Social performance:

In 1996, Louart warned of the possibility of merging the two terms *"performance*" and *"social"*. According to him *"the first refers rather to an idea of measurement, quantification or evaluation, while the second refers rather to man and his complexity"*.

ISSN: 2356-5608

Social performance is defined as *"the positive or negative result of the interactions of the employees of an organization, in the achievement of its objectives"* (Sutter, 2011).
Lachman et al. (2010) have pointed out that the terms *"social performance*", "*quality of life at work", "well-being*" and "*social climate"* are terms that focus on *the "experience of the individual at work"*.
On his part (Brun, 2008) considered that Social Performance (SP) work refers to well-being at work. Knowing well that this concept still remains a vague and non-consensual concept.
According to the ILO (International Labor Organization*), "well-being at work relates to all aspects of life at work, the quality and safety of the working environment, the work climate, and the organization of work"* (Bernard, 2019).
The APA (American Psychological Association) defines well-being at work as the interaction between six elements: Work-life balance, health and safety, involvement, development and recognition towards employees.
This well-being is considered by the WHO (World Health Organization) as being *"a dynamic state of mind characterized by a satisfactory harmony between the skills, needs and aspirations of the worker, on the one hand, and the constraints and opportunities of the workplace, on the other hand"* (Squalli, 2018).
By browsing the research on well-being at work, we found some definitions: For Bradburn (1969), well-being at work is achieved when the positive impacts of employment exceed the negative ones. For Menard and Brunet (2012), well-being corresponds to the coherence between the individual and his work. As for Richard (2012), well-being at work is *"a two-dimensional construct: an emotional or affective dimension linked to pleasure and all the positive effects and a cognitive dimension linked to the awareness of the meaning that work for the person".*
However, well-being at work is defined via four dimensions according to Abord de Chatillon and Richard (2015): Activity, the meaning given to this activity, the social bond and the comfort that corresponds to the work environment.
In dissecting the components of overall performance, Reynaud (2003) mentioned good working conditions, equal treatment and respect for human rights as dimensions of social performance.
According to the ILO working conditions *"cover a wide range of topics and issues, from working time (hours worked, rest periods and working hours) to remuneration, including physical conditions and psychological demands in the workplace"* (ILO, 2018). On their part, Abord de Chatillon et al. (2006) add that *"The concept of working conditions refers us to diverse realities in time and space: those of today are not those of tomorrow; those elsewhere are very different from ours. Beyond this situational diversity, the mechanisms of construction of this reality show that these conditions are the result of a greater or lesser social acceptance of suffering at work".*
Gollac et al. (2014), argue that these conditions *"manifest themselves through their consequences".* Ghram (2016) notes that working conditions are strongly associated with physical working conditions. In the same logic, Guillot-Soulez (2017) emphasize that good working conditions are a favorable environment that protects the employee from Work Accidents (WA) and Occupational Diseases (OD). The assessment of working conditions is closely linked to the fact that the risks become "*objectified, that is to say made explicit"* (Paillé and Mucchielli, 2012).
According to the ILO, equal treatment, also called "*non-discrimination*" is established when *"All workers and job seekers have the right to be treated equally, regardless of any attribute other than their ability. to perform the work requested. Discrimination can occur "during recruitment, during employment or upon termination of employment"* (O'Reilly, 2007).

ISSN: 2356-5608

The ILO (2007) set out in its global report at the 96th International Labor Conference, the evolution of the observed forms of discrimination at work: First, there is discrimination which "*has been denounced for a long time"* such as than those based on sex, race, religion and social origin. In second position, we find the *"most recently observed"* forms such as those based on age, sexual orientation and state of health (the exclusion of the disabled and people living with AIDS). And thirdly, there are *"new manifestations of discrimination"* such as genetic and lifestyle discrimination.

Inequalities in treatment can appear essentially at the level of two points: the first concerns access to work during the recruitment phase where differences can arise on the basis of sex, origin, etc. (Amadieu, 2004; Petit et al. 2011; Ene Jones, 2012, Bonato et al. 2015; Foroni et al., 2016). The second inequality manifests itself at the level of remuneration, where wage discrimination can occur, particularly between men and women (Chamki, 2015; Berger et al., 2017; Gueye, 2018; Leythienne and Ronkowsky, 2018). Inequality at work can also occur during work, particularly at the level of promotions (Jugnot, 2019).

According to the dictionary of economics and social sciences, the right is defined as "*the set of rules imposed on the members of a society so that their social relations escape the arbitrariness and violence of individuals and conform to dominant ethic"* (Capul and Garnier 2015). According to the United Nations Global Compact (2000), respect for human rights at work corresponds to the protection of human rights within the company's sphere of influence.

So respect for human rights at work means respecting the regulations relating to the rights of individuals in a company.

By referring to the logic of Reynaud, we have grasped equal treatment, good working conditions and compliance with labor legislation and regulations as components of social performance. Knowing that for the working condition dimension, we started from the definition adopted by Guillot-Soulez (2017) emphasizing that good working conditions are a favorable environment that protects the employee from accidents at work and occupational diseases .So to better understand the concept, we deployed the working condition component in work accidents and occupational diseases, to finally obtain four components of social performance.

2. Research methodology:

We adopted a qualitative approach by studying multiple cases which allowed us to analyze the impact of OHSAS 18001 certification on social performance.

Besides the exploratory nature of the qualitative approach, several characteristics led us to this choice, of which we cite the small size of the sample, the subjectivity of the researcher, the qualitative aspect of the data collected and the depth of the study. which is essentially based on understanding (Evrard et al., 1997).

In the context of exploratory research, the case method seems the most appropriate. This method, which studies a contemporary phenomenon in depth in its real context, is strongly recommended when it comes to a new area of research with the limits of available knowledge (Yin, 1989; Wacheux, 1996).

Yin (2003) emphasizes that the case method is the strategy compatible with research questions of the “how” and “why” types, and this to identify the limits between the phenomenon studied and its context.

Data collection was carried out with four Tunisian OHSAS-certified SMEs. To conduct this collection, we used semi-structured interviews and documentation. These data were then processed by a thematic analysis of intra- and inter-case content. This analysis was facilitated by the use of NVIVO software in its 12th version. The following table presents the four cases studied.

ISSN: 2356-5608

Table1 : The Cases studied

Case	Sector	Total staff
Case A	Chemical industry	36
Case B	Furniture industry	104
Case C	Chemical industry	232
Case D	Chemical industry (pharmaceutical)	180

3. Analysis of results:

The analysis of the results is generally carried out in two stages. The first is an intra-case analysis which seeks to present the results by case studied. The second step, called the inter-case analysis, will identify the similarities and differences between the cases studied (Hlady-Rispal, 2002).

3.1. Intra-cases analysis:

Case A:

This company has been OHSAS 18001 certified since 2013.To identify the impact of OHSAS 18001 certification on social performance, we spoke to QSE managers and HR managers to discuss these impacts on work accidents, occupational diseases, compliance with regulations on the right to work and equal treatment.

According to the QSE manager, the effects on accidents at work and occupational diseases come under the OHSAS 18001 standard.

Thanks to OHSAS 18001, there was a decrease in the absenteeism rate from 4.62% in 2013 to 1.8% in 2017, a reduction in the frequency rate from 14% in 2013 to 9% in 2017 and an increase in the rate employee satisfaction from 52% in 2013 to 67% in 2017.

According to the QSE manager, the reduction in absenteeism is only an indication of the reduction in the rate of occupational diseases and the improvement in employee satisfaction is only a result of the improvement in working conditions: *"QSE certification has acted on accidents at work and occupational diseases thanks to the contributions of the OHSAS 18001 standard. Regarding the first point, the frequency rate decreased from 14% in 2013 to 9% in 2017. For occupational diseases , we have used the absenteeism rate as an indicator that reflects the evolution of occupational illnesses in our company. We noted a decrease from 4.62% in 2013 to 1.8 in 2017%. On top of that, the increase in employee satisfaction from 52% in 2013 to 67% in 2017 can only prove the improvement in working conditions*". (Verbatim QSE manager) .

To understand the contributions of OHSAS 18001 resulting in the reduction of work accidents and occupational diseases, the QSE manager underlines: *"The wearing of PPE (Personal Protective Equipment), the regulatory control of risk devices (scaffolding, boiler , compressor, forklift, electrical installations, etc.), the regular calibration of measuring devices which avoids measurement errors which can be fatal, the development of means of prevention suitable for each risk and the awareness of personnel to the risks and to their socio-economic impacts are the contributions of OHSAS 18001 which have ensured a reduction in accidents at work and occupational diseases. ".*

ISSN: 2356-5608

Regarding the impact of QSE certification on compliance with legislation in terms of the right to work, we can say that it helps to optimize this point. Indeed, OHSAS 18001 requires the establishment of legal monitoring procedures in terms of health and safety at work: *"All companies must comply with the regulations imposed on them: international conventions, laws, decrees, etc. And therefore, these requirements must be in force through the maintenance of a legal watch required by OHSAS 18001. This watch is maintained by procedures which identify and update the health and safety requirements applicable in our company"* (Verbatim QSE manager).

For equal treatment, the QSE manager and the HR manager informed us that QSE certification has no particular contribution on this subject: "*After QSE certification, there is an evolution in the HR process marked by appearance of new indicators. But these indicators do not include some relating to equal treatment"* (Verbatim HR manager).

Case B:

This company has been OHSAS 18001 certified since 2011. After certification, company B's QSE dashboard marked a reduction in the severity rate from 0.53 in 2014 to 0.27 in 2018, a reduction in the frequency rate of 20 % in 2014 to 13% in 2018 and a reduction in the absenteeism rate following an occupational disease from 2.3% in 2018 to 1.5% in 2018.

The QSE manager attributes this improvement to new measures emerging following QSE certification, in particular OHSAS 18001. Among these measures, our actor notes the increase in the number of OHS training sessions. Before certification, these trainings were around 3 to 4 annual trainings to become 22 trainings in 2014 and stagnate around 10 annual trainings after 2014.

"Before certification, the number of OHS training sessions was on average 3/4 training sessions per year. In 2014, after certification, this number increased to 22 training sessions before stagnating at around 10 annual training sessions". (Verbatim QSE Manager).

This lowering is explained by the QSE manager as follows: *"Training is planned according to needs and this explains the decrease in their number in the years following 2014".*

Our interlocutor continues his explanations and mentions that the use of weekly rounds for the entire site is a new measure which allowed immediate awareness, or corrective actions and sometimes sanctions in the event of non-wearing of PPE (Personal Protective Equipment.

These practices are aligned with the normative requirements of OHSAS 18001 corresponding to the setting of OHS objectives and the awareness and training of personnel.

"The awareness and training of personnel with the setting of OHS objectives are two major lines of OHSAS 18001. The response to these two axes has led us to new measures such as increasing the number of OHS training sessions and the use of weekly rounds for the whole site which were used for immediate sensitization, or corrective actions. Failure to wear PPE detected during these rounds generates sanctions which can go to a layoff of 3 days. The measures relating to employee awareness and training have led to the achievement of the OHS objectives set, reflected by the indicators mentioned in the QSE dashboard: Severity rate, frequency rate, absenteeism rate following an occupational disease". (Verbatim QSE manager).

The documentary research also shows that the percentage of legal and regulatory compliance with OHS has been maintained at 100% since 2014. This compliance is required by the OHSAS 18001 standard.

"In its article 4.3.2, OHSAS 18001 requires the updating of any legal and regulatory requirements in OHS, with which the organization must comply." (Verbatim QSE manager).

The human resources manager and the QSE manager deny the presence of a relationship between QSE certification and equal treatment.

"We did not discuss equal treatment after certification". (Verbatim HR manager)

ISSN: 2356-5608

"For the moment, we have not considered equal treatment as an area of interest that already goes beyond the interests of OHASA 18001 and OHS regulations." (Verbatim QSE manager)

Case C:

Company C has been OHSAS 18001 certified since 2016. After certification, there was a slight decrease in Frequency Rate (FR), Severity Rate (SR), number of days off work by accident and absenteeism rate for occupational disease. According to the QSE manager, these impacts come down to the normative contributions of OHSAS 18001, which requires staff awareness on the one hand and the strengthening of the health and safety management system at work through management based on safety and security performance indicators SST on the other hand.

"*Our company has always ensured compliance with OHS regulations and before OHSAS 18001 certification. But this standard required us to raise awareness among our staff and above all to strengthen our OHS management system through management by OHS performance indicators*". (Verbatim QSE manager)

The auditor verifies compliance with the requirements relating to staff awareness and the setting of OHS performance indicators through the appropriate records.

"*The auditor consulted the records which justify our response to raising staff awareness and setting OHS performance indicators: The minutes, the training materials (in relation to OHS) with the list of persons concerned, the reports awareness campaigns, instructions, emergency plans and dashboards grouping OHS performance indicators"*. (Verbatim QSE manager)

As for equal treatment, the human resources manager informed us that certification has no effect on this point.

"With the certification, we did not discuss a subject related to equal treatment during meetings, nor during audits for example. However, the subject of training is strongly addressed after the commitment to the certification project." (Verbatim human resources manager)

For his part, the QSE manager affirms the words of the human resources manager. But, he mentioned that ISO 9001 V 2015 contains in article 7.1.4 a note relating to non-discriminatory social aspects.

"None of the three standards addresses the point of equal treatment. But in ISO 9001 V 2015, there is a note in clause 7.1.4 which deals with certain aspects related to the environment for the implementation of the processes such as social aspects such as discrimination. A note is an area for improvement, but a requirement must be met." (Verbatim QSE manager).

The QSE manager adds that the point of equal treatment is elaborated in the SA 8000 and ISO 26001 standards.

"Equal treatment is part of the interests of the SA 8000 and ISO 26001 standards." (Verbatim QSE manager)For compliance with legislation in terms of the right to work, the OHSAS 18001 standard requires compliance with legal and regulatory requirements in relation to OHS, but it does not cover other legal aspects of the right to work.

"To respond to article 4.3.2 of OHSAS 18001, we define a legal and regulatory watch that includes legislative texts related to OHS only." (Verbatim QSE manager).

Case D:

Company D has been OHSAS 18001 certified since 2009. With regard to the impacts of QSE certification on work accidents and occupational diseases, the QSE manager points out that after certification in particular according to OHSAS 18001, there were positive effects on these two axes. Indeed, the standard requires the identification of risks related to hazards, the assessment of these risks and the planning of audits in the face of these risks. In addition, the standard requires compliance with legal and regulatory OHS requirements. OHSAS 18001 requires staff awareness and training in OHS. Among the key requirements of the standard is

ISSN: 2356-5608

the regular performance of internal audits. The setting of OHS objectives and the processing of documentation are also part of the normative requirements.

According to the QSE manager, the application of the points mentioned have had a positive impact on work accidents and occupational diseases. Indeed, there was a decrease in the frequency rate and the severity rate. For occupational diseases, there was a decrease in the average duration of temporary incapacity following an occupational disease.

"After QSE certification, there was a decrease in frequency rate, severity rate and average duration of temporary incapacity following an occupational disease. These positive effects relate to the OHSAS 18001 standard which requires the identification of risks related to hazards, the assessment of these risks and the planning of actions vis-à-vis these risks. In addition, it requires compliance with legal and regulatory requirements in OHS, the performance of internal audits at regular intervals, the setting of OHS objectives, the processing of documentation and the awareness and training of personnel in OHS, etc. In any case, these are the flagship requirements of the standard". (Verbatim QSE manager).

Our actor further clarifies the impact felt by saying: *"Thanks to OHSAS 18001, responsiveness has become very fast with regard to everything that comes alongside OHS and awareness on this subject has become very high both among directors and among operational staff."*

QSE certification has no direct effects on compliance with legislation in terms of the right to work, nor on equal treatment.

"Our company respects the labor code and all regulations affecting employees. Therefore, there will be no discriminatory forms. (Verbatim HR director)

"I agree with my colleague's opinion. Indeed, this is not a direct result of good QSE practices. I see that the indicators of equal treatment and respect for the right to work are indicators of corporate social responsibility, which is dealt with in the ISO 26000 standard. The latter includes requirements corresponding to OHS, but above all requirements leading to responsible management of workers." (Verbatim QSE manager).

3.2. Inter-cases analysis:

Of the four case studies, there was consensus on the presence of positive impacts on occupational diseases and accidents at work. At the level of labor law, there was an agreement on the impacted point of this component. And for equal treatment, there was also consensus on the lack of appropriate implications.

Faced with these consensual opinions regarding the impacts, there is a divergence which manifests itself at the level of the root causes of these effects explained by the actors.

At the case A, there was a decrease in the absenteeism rate and frequency rate and an increase in the employee satisfaction rate.

These impacts relate to the contributions of OHSAS 18001, which are: The wearing of PPE, the regulatory control of risky devices, the regular calibration of measuring devices, the development of adequate means of prevention for each risk and the awareness of the personnel to risks and their socio-economic impacts.

Concerning case B, there was a reduction in the frequency rate, the absenteeism rate following an occupational disease and the severity rate. These impacts relate to the measures emerging following QSE certification, in particular according to OHASAS 18001. For these measures, our actor cited the increase in the number of OHS training and the use of weekly rounds for the entire site which allowed immediate awareness corrective actions and sometimes sanctions in the event of non-wearing of PPE. These measures met the normative requirements of OHSAS 18001 corresponding to the setting of OHS objectives, awareness and training of personnel in OHS.

For case C, there was a reduction in the frequency rate, the severity rate, the number of days lost for work-related accidents and the absenteeism rate for an occupational disease. According to our actor, these impacts relate to the OHSAS 18001 standard, which requires

ISSN: 2356-5608

staff awareness and reinforcement of the OSHMS through the use of management based on OHSAS performance indicators.
In case D, there was a reduction in the frequency rate, the severity rate and the average duration of temporary incapacity following an occupational disease.
These positive impacts relate, according to our interviewee, to the requirements of the OHSAS 18001 standard such as the identification of risks related to hazards, the assessment of these risks and the planning of audits in the face of these risks, compliance with legal and regulatory requirements. in OHS, staff awareness and training in OHS, regular internal audits, setting of OHS objectives and processing of documentation.
Regarding the impact of QSE certification on compliance with legislation and regulations in terms of labor rights, there was consensus that OHSAS 18001 requires updating and compliance with legal requirements and regulations in relation to OHS without targeting other aspects of labor law.

4. Discussion of results:

The positive impact of OHSAS 18001 certification on work accidents is a result consistent with the work of Zeng et al. (2008), Chang and Liang (2009), Bashi and Vinodkumar (2011) and Jallon et al. (2011) and a contradictory result with the work of Ghahramani and Salminen (2019).
When we noted the mention of accidents at work in the literature, we noted the absence of mention of occupational diseases in the studies relating to the contributions of OHSAS 18001. Our results also corroborate those of Jallon et al. (2011) in terms of impacts related to compliance with OSH legislation and regulations.
With regard to the equal treatment component, which has never been mentioned in the literature on the contributions of OHSAS 18001, our results point to the absence of the appropriate impacts.
Our empirical study reveals that OHSAS 18001 had a positive effect on work accidents and occupational diseases. Indeed, we have understood that the wearing of PPE, the regular control of risk devices, the regular calibration of measuring devices, the development of adequate means of prevention for each risk, the awareness of personnel, the increase in number of OHS training and the use of weekly rounds, which essentially allowed awareness raising and corrective actions, are the practices that resulted in positive impacts on the WA and OD.
We also understood that certification according to OHSAS 18001 encouraged the company to set OHS objectives and reinforced the OHSMS thanks to the use of management based on OHS performance indicators.
The positive impacts also relate to the identification and assessment of risks, compliance with legal and regulatory OHS requirements, the regular performance of internal audits and the processing of documentation.
The contributions drawn from the results of our field study intersect with certain results from the literature. Let us cite the example of Chang and Liang (2009) who pointed out that OHSAS 18001 improved the firm's compliance with its legal obligations. The results of Abad and Lafuente (2018) mentioned the management of OHS documentation, the implementation of corrective actions and the prioritization of safety practices as contributions of OHSAS 18001. The mention of prevention and occupational risk control was also cited by Zeng et al. (2008) and De Oliveria (2013). Finally, the rest of the results drawn from our empirical study corroborate that of Gharamani and Salminen (2019) who summarized all the practices provided by the standard according to the Deming wheel.

Conclusion:

ISSN: 2356-5608

The results of the study carried out on four Tunisian companies certified OHSAS 18001 show that the standard had a positive effect on accidents at work, occupational diseases and compliance with legislation and regulations in terms of labor law.
With respect to the equal treatment component, our results point to the absence of appropriate impacts.
Regarding the components of social performance, referring to the logic of Reynaud, we have grasped equal treatment, good working conditions and compliance with labor legislation and regulations as components of social performance. Knowing that for the working condition dimension, we started from the definition adopted by Guillot-Soulez (2017) emphasizing that good working conditions are a favorable environment that protects the employee from accidents at work and occupational diseases . So to better understand the concept, we deployed the working condition component in work accidents and occupational diseases, to finally obtain four components of social performance: Work accidents, occupational diseases, compliance with legislation in terms of labor law and equal treatment.
Like any research, our study is not exempt from certain limitations. By identifying them, we reassure ourselves that our results are not called into question on the one hand and we draw the attention of researchers to areas for improvement on the other.
On a theoretical level, the impacts of OHSAS 18001 certification on social performance are not limited to those identified in this research. Indeed, it is difficult to capture them all in a single study.
On the methodological level, the limits are at the level of data collection. Indeed, we sensed a reservation among some players, either regarding certain figures or regarding the documents to be consulted. But this did not call into question the relevance of our results since several actors intervened on the one hand and saw that the qualitative data may be sufficient for our research on the other hand.
Our research is qualitative, so we are faced with a problem of generalizing the results.

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