#### **RESEARCH ARTICLE**



# The ISO 26000's labor environmental issues during COVID-19: does corporate social responsibility help? Evidence from the Egyptian small and medium enterprises

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#### **Abstract**

Based on both the "stakeholder" and "cognitive" theories, this study shed light on the optimistic side of the COVID-19 pandemic, as it also brings the concepts of corporate social responsibility (CSR) and sustainability back into the light, which helps in solving the labor environmental issues. Our research aims to profoundly investigate the correlation between CSR and labor environmental issues based on the International Organization for Standardization's standard 26,000 (ISO 26000) during COVID-19 and to also examine how CSR practices help solve labor environmental issues in the Egyptian small and medium enterprises (SMEs). Partial least squares structural equation modeling (PLS-SEM) was adopted, for data analysis and hypotheses testing, on a sample of 307 manager-level employees in the Egyptian SMEs. Results indicate that CSR positively impacts labor practices dimensions (employment relationships, human development and training, social dialog, and health and safety at work). However, CSR has an insignificant effect on social protection and work conditions. This study is scientifically valuable since it helps better understand the pandemic's effects on environmental labor issues in the Egyptian SMEs and shows how CSR helps solve those issues. Also, it discussed the theoretical contributions and practical implications and showed the limitations and future research for this study area

 $\textbf{Keywords} \ \ COVID\text{-}19 \cdot Labor \ environmental \ issues \cdot Corporate \ social \ responsibility \cdot Employment \ relationships \cdot Social \ dialog \cdot Occupational \ health \ and \ safety$ 

#### Introduction

COVID-19, or the "black swan event" as described by He and Harris (2020), is one of the most shocking events that changed the whole globe and affected its economic growth (gerdAccording to Aguinis et al. (2020), this circumstance

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encourages businesses to embrace CSR strategies to address economic, social, and environmental challenges that affect various stakeholders, including employees. Moreover, based on the OECD (2020) report and Wang and Su (2020) study, the pandemic created environmental issues among emerging markets' SME employees, defined by the ISO 26000; these issues are related to employment relationships, human development and training, social dialog, occupational health and safety at work, and social protection and work conditions.

Based on the social cognitive theory (Beck et al. 1979), recent studies like Ahorsu et al. (2020) and Qiu et al. (2020) showed that people could change or modify their attitudes and norms to deal with the concerns of environmental or natural disasters. Thus, during the current crisis, both managers and employees tend to reconsider the social practices and taking advantage of opportunities in the current situation to improve SMEs' CSR practices (Channa et al. 2021; Jian et al. 2020). Moreover, based on the stakeholders' theory (Freeman 1984), Channa et al. (2021) stated that labor is considered an essential partner in society that requires



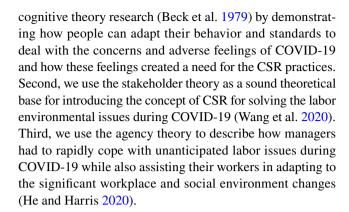
special attention. Recent studies like Breisinger et al. (2020), Koo and Ki (2020), and Spurk and Straub (2020) showed that substantial investment in CSR practices toward solving labor environmental issues strengthens the relationship between the firm and its employees during the pandemic.

Furthermore, based on the agency theory (Eisenhardt 1989), He and Harris (2020), Abdulmuhsin et al. (2021), and Wang and Zhang (2021) argued that COVID-19 created a challenging environment where managers must quickly deal with unaccustomed problems while helping their employees adapt to the significant changes in the working and social environment. For instance, some studies like Kramer and Kramer (2020) argued that employees who used to work entirely within their organization's actual physical confines now must adapt quickly to distant work environments. This situation, according to Yin et al. (2021), caused a slight separation between work and private life, which led to more significant problems in "unplugging" from work requirements (Chawla et al. 2020).

Much research has been conducted to explore the pandemic's negative impact on the economy (Grida et al. 2020; Wang and Zhang, 2021). However, few highlighted the optimistic side of the COVID-19 pandemic, as it brings the concepts of social responsibility, sustainability, and green practices back into the light (Jian et al. 2020). This paper explicitly aims to profoundly investigate the correlation between CSR and labor environmental issues based on the ISO 26000 during COVID-19 and to answer the question related to how CSR helps overcome labor issues during COVID-19.

The significance of this study stems from two key factors. First, SMEs are a general driving force for long-term economic growth and job creation (Mousiolis et al. 2015), as well as an essential source of income for Egypt's vast and rising population (El-Said et al. 2014), where more than 6.3 million people are employed, accounting for almost 70% of the labor force (Aboelmaged et al. 2018). As a result, it is critical to research the impact of COVID-19 on labor practices and how CSR influences this relationship. Second, previous literature is limited to some favorite aspects. Researchers focused only on one of the two-dimensional problems (Filimonau et al. 2020; Sun et al. 2021). Some researchers studied the effect of CSR on labor practices (Mujtaba et al. 2005; Saprina Chiang 2010; Jun and Seng 2016), ignoring the environmental issues facing those employees during the pandemic. In contrast, others studied the expected effect of the labor environmental issues during the pandemic without showing the role of CSR to overcome those issues (Filimonau et al. 2020; Sun et al. 2021). Thus, there is always a missing dimension between COVID-19, CSR practices, and labor environmental issues.

Moreover, this research will contribute to the existing literature in three theoretical aspects; first, we add to the social



# **Background and hypotheses development**

# CSR and SMEs' labor issues during COVID-19

Sheehy (2014) and Sharma (2019) defined CSR as a type of international private business self-regulation that contributes to humanitarian, activist, or philanthropic social goals by engaging in or promoting volunteerism or ethically-oriented behaviors. Moreover, the outbreak of COVID-19 forced countries to take strict measures to limit the spread of the virus (Lu et al. 2020; Krishnamoorthy and Keating, 2021). This situation leads to addressing some labor environmental issues for SMEs recognized by researchers like Chesbrough (2020) and Wolor et al. (2020). The ISO 26000 (2010) defined labor environmental issues as the issues affecting the employees and workers during performing their work and related to five main groups "employment relationship, human development and training, social dialogue, occupational health and safety at work, and social protection and work conditions."

## **Employment relationship**

Bennett (1991) and the ISO 26000 (2010) defined the employment relationship as the relationship in which both employers and employees have rights and obligations in the organization's and society's best interests. Previous studies like Venturelli et al. (2018) argued that CSR practices strongly affect employment relationship issues, which shape the relationship between the employer and his workforce. According to Breisinger et al. (2020), since most of the jobs and employees in the Egyptian SMEs are in a flexible employment relationship where the labor force is informal, self-employed, and irregular wages workers, CSR will help solve the employment relationships issues during the pandemic. Furthermore, Aguinis et al. (2020) stated that CSR practices could play a vital role in overcoming workers' uncertainty and fear toward the pandemic by encouraging managers to build a cooperative rather than competitive



relationship with the employees. So, we propose the following hypothesis.

H1: There is a significant positive relationship between CSR practices and employment relationships in the Egyptian SMEs during the COVID-19 period.

#### **Human development and training**

Nguyen Ngoc (2012) defined human development as an effort to enhance human resources' quality or capability through the planning process of training, education, and human resource management for the employees to achieve optimal results. According to Lompo and Trani (2013), CSR practices significantly affect developing countries' human development and training. Previous studies like Anstätt and Volkert (2016) and Sukserm and Takahashi (2012) examined the relationship between CSR and human development. They showed how CSR affects human development by evolving an ethical mindset for employees regarding trust, honesty, and social and environmental values.

Moreover, recent studies examined the relationship between CSR and human development during the COVID-19. Breisinger et al. (2020) argued that CSR would solve the human development issues by strengthening business performance and improve internal stakeholders' welfare during a crisis which positively affects human development and training practices. Based on the previous, we propose the following hypothesis:

H2: There is a significant positive relationship between CSR practices and human development and training in Egyptian SMEs during COVID-19.

#### Social dialogue

Golob and Podnar (2014) and Bordogna (2018) defined social dialog as the dialog that covers all the forms of negotiation, consulting, and exchanging of information between the tri-party partners in society (the government representatives, employers, and employees) on issues concerning social and economic matters.

According to Hao et al. (2020) and Hamouche (2021), during COVID-19, CSR practices can help overcome labor issues related to social dialog. It facilitates and creates new opportunities for effective communication between different social parties. The ILO (2020) stated that the current lockdown situation and the new working from home environment affect the social conversation, leaving it unable to cover all the social partners. Thus, according to Aguinis et al. (2020) and Spurk and Straub (2020), CSR practices will be critical during COVID-19. It will positively affect social dialog and enhance the communication between employers and employees. From this perspective, the researchers propose the following hypothesis:

H3: There is a significant positive relationship between CSR practices and social dialog in the Egyptian SMEs during the COVID-19 period.

#### Occupational health and safety at work

Montero et al. (2009) and Koskela (2014) defined occupational health and safety as "the state that involves maintaining and keeping the highest level of mental, social, and physical welfare of employees and avoiding any health damage or injury due to the working conditions." Moreover, Kim (2020) argued that during the COVID-19 outbreak, CSR could affect employees' health and safety in two critical areas. First, workers play a crucial role as internal stakeholders; therefore, companies need to invest in CSR activities to maintain their health and safety and positively affect their morale and well-being (Koo and Ki 2020). Second, Lin-Hi and Blumberg (2018) stated that workplace infections and injuries negatively impact the company's reputation. Spurk and Straub (2020) stated that organizations prioritizing CSR policies seek to reduce workplace infections and accidents to avoid reputational damage. In other words, CSR procedures are seen as a strategy to keep a company's good reputation. (Wang et al., 2020). Based on the previous literature, we propose the following hypothesis.

H4: There is a significant positive relationship between CSR practices and health and safety at work in the Egyptian SMEs during the COVID-19 period.

#### Social protection and work condition

The ISO 26000 (2010) defined the working conditions as the conditions that include salary and other compensation forms, working hours, breaks, vacations, discharging and disciplinary practices, and other welfare issues like safe drinking water, sanitation, cafeterias, and access to healthcare services. In the context of CSR, Haddad and Hellyer (2019) argued that CSR has a positive impact on social protection, which in turn foster productivity by ensuring that women and men can enjoy a safe working environment, adequate leisure and rest, access to adequate health care, proper compensation of loss or reduction of income, and respecting family and social values.

Moreover, according to Carnevale and Hatak (2020), COVID-19 created a challenging environment where employees quickly engage with unfamiliar situations. For instance, Kramer and Kramer (2020) argued that employees who used to work entirely within their organization's actual physical borders must adapt quickly to distant work environments. Furthermore, He and Harris (2020) and Spurk and Straub (2020) argue that CSR practices can help overcome social protection and work conditions issues during COVID-19 by helping workers adapt to the new work environment.



Based on the previous literature, we propose the following hypothesis.

H5: There is a significant positive relationship between CSR practices and social protection and work conditions in Egyptian SMEs during the COVID-19 period.

Thus, Fig. 1 shows the relationship between CSR practices as an independent variable and its effect on five dependent variables related to the labor environmental issues under the COVID-19 pandemic.

# Methodology

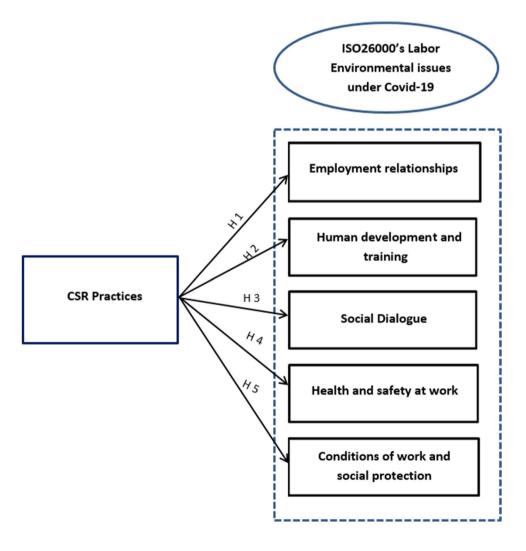
This study methodology differs from the previous studies in this area. It uses PLS-SEM, a causal-predictive approach to SEM that focuses on prediction when forecasting statistical models of structures designed to provide a causal explanation (Hair et al. 2019). The bootstrapping method, with 5000 replications, estimates the population's sampling distribution's spread, shape, and bias (Chin 1998). Because the study's goal is to develop and test a theoretical model,

we chose PLS. PLS is superior to covariance-based SEM (CBSEM) for estimating our model because PLS can successfully avoid the limitations on multivariate normality, measurement level, sample size, model complexity, and factor ambiguity (Hair et al. 2013).

#### The sample of the questionnaire and procedures

This research uses the survey research method and the questionnaire tool to conduct this study. The Egyptian SME population comes from the Central Agency for Public Mobilization and Statistics (CAPMAS). The sample was taken from SMEs in Alexandria, Giza, and Cairo, representing 38% of the SME workforce in Egypt (CAPMAS 2013) and ensures a wide range of industries. We randomly selected 315 SMEs representing a sample of different sizes and manufacturing sectors, including machinery and repairs, furniture, primary metal products, optics, electronics, food and beverages, fabrics, leather, plastics and rubber, paper and printing, chemicals, essential medical products, building materials, and wood and furniture. The data were obtained

**Fig. 1** The relationship between CSR practices and labor practice issues





between January 2020 and March 2021. Before carrying out the survey, the questionnaire was subjected to a pretest from 9 academics and 7 supply chain practitioners who first tested the survey to guarantee that all measurement scales were comprehended and clear. Besides, these participants were evaluated as a focus group, which allowed us to get more indepth feedback based on the items asked in the one-on-one interaction (e.g., comprehension of questions and terms, fluency, clarity of instructions and questions, provided/absent choices, and period). Vague phrases and items were modified, represented to those respondents, and then included in the final survey version. Respondents were employees and managers (top-level managers, middle-level managers, and low-level managers). A total of 568 questionnaires were distributed over personnel. In total, 307 completed questionnaires were returned, resulting in an over 54% response rate. Moreover, they are used for further analysis in this study. More detailed demographic information about the sample is illustrated in Table 1.

# Measurement and variables' explanation

This section shows how we measured dependent and independent variables. The independent variable includes CSR practices. CSR practices constructs were measured by grouping nine statements on social and environmental issues modified from the previous literature scales (Glavas and Kelley, 2014). We asked questions about the extent to which the company is socially responsible, committed to increasing society's well-being, and respectful to the environment during the pandemic. To test the reliability of the resulting scale, we used Cronbach's alpha, resulting in a value of 0.889.

We measured the dependent variables by aggregating 20 statements about the labor practices in the Egyptian SMEs at the COVID-19 pandemic. We made various modifications to reflect the Egyptians' conditions and to reflect two main points of consideration. First is the effect of the

 Table 1
 Demographic of respondents

Particulars	Description	Values	%	
Total received responses	Small enterprise	198	64.50%	
	Medium enterprise	109	35.50%	
Gender	Male	201	65.47%	
	Female	106	34.53%	
Industry type	Manufacturing	216	70.36%	
	Services	91	29.64%	
Job position	Lower management and employees	228	74.27%	
	Middle management	53	17.26%	
	Upper management	26	8.47%	

COVID-19 outbreak on labor practices. Second, the questions reflect the set of measures and actions stated by the ISO 26000. Based on these two points, the researchers presented the scale of the dependent variables in five groups concerning the labor environmental issues, as follows:

The employment relationships group consists of 4 statements modified from (Wang et al. 2003). On these statements, we asked the respondents questions about how their employers/employees meet several work expectations related to guaranteeing equal chances for all workers and not discriminating directly or indirectly in any employment practice during the COVID-19 outbreak. We confirmed the reliability as Cronbach's alpha coefficient is 0.704.

The human development and training group consist of 4 statements modified from (Nguyen Ngoc 2012; Lu et al., 2019a, b). We asked questions about the extent to which the company provides employees—at all levels of work experience—with equal and nondiscriminatory access to skills development, education and training for the new safety and infection prevention procedures, opportunities for career development and self-improvement, and setting up collaborative labor-management programs that promote health and safety training during the COVID-19 outbreak period. Cronbach's alpha coefficient was measured to confirm the reliability and was 0.845.

The social dialog group consists of 3 statements describing employees' level of awareness and interaction between the employer and employees, modified from (Mercer-Mapstone et al. 2018). The respondents' answers gave an idea about how the dialog with the employer/employees is beneficial and produces acceptable outcomes. They were given the support or information they needed to go through a successful dialog and how it helped them understand their employer/employee. For measuring reliability, Cronbach's alpha value was 0.709.

Health and safety at work consist of 4 statements modified from (Weel and Fortuin 1998). The researchers asked the respondents questions about workplace conditions, physical, and psychological stress to reflect the issues related to health and safety at work during the pandemic. Cronbach's alpha coefficient was measured to confirm the reliability of the measure and was 0.91.

The social protection and work conditions consist of 5 statements modified from (Akma et al. 2017). The respondents were asked to evaluate the extent to which their work conditions during the COVID-19 pandemic period comply with the safety regulations and precautions; to what extent the work conditions are consistent with the applicable international labor and safety standards; and to what extent the company provides safe work conditions concerning safety and protection measures, working hours, and maternity protection. Moreover, respondents also evaluated the



availability to combine family responsibilities with work. Reliability is measured as the value of Cronbach's alpha was 0.827.

The researchers used a 5-point Likert scale level to measure the independent variables. A 5-point Likert scale was used; 1 = never, 2 = rarely, 3 = sometimes, 4 = very often, and 5 = always.

#### Results

This study uses PLS-SEM for data analysis and hypotheses testing. We adopted a three-step method. The first step is the method bias assessment; the second step is model assessment and confirmatory factor analysis, which allows the researcher to confirm the reliability and validity of the data. The third step is hypotheses testing.

#### **Step 1: Method bias**

#### Nonresponse bias

According to Kock (2015), nonresponse bias is a problem that can lead to an incorrect appraisal of the measured construct factors. The *T*-test was utilized to see if the mean scores on the variables differ substantially between the first and last respondents. The lack of significant differences led to the belief that there was no nonresponse bias in this study.

#### Common method bias

The researchers used Harman's single-factor analysis to detect common method bias (CMB) to reduce the biased approach (Podsakoff et al. 2012). As a result, all survey items were subjected to Harman's single-factor analysis. After limiting the number of factors to one, the researchers examined factor loadings explanation. This study revealed no evidence of a single factor responsible for most of the variance, implying that the data are free of common biases. Moreover, we performed a full collinearity test as a comprehensive procedure for testing the CMB.

# Step 2: Model assessment and the confirmatory factor analysis

This research used SmartPLS 3.0 program for the model assessment and hypothesis testing. The model assessment and confirmatory factor analysis consists of two phases: phase 1, reliability, and scale assessment. Phase 2, discriminant validity assessment.



#### Reliability and scale assessment

As shown in Table 2, the reliability and validity test has been checked and reported. We assessed the scales' convergent validity based on three criteria for the model assessment and factor analysis. The first stage considers the formative indicator's absolute contribution to its construct, determined by the indicators' outer loadings greater than 0.60, as Kock (2015) proposed. Loadings above 0.60 indicate that the construct explains over 50% of the indicator's variance, thus providing acceptable item reliability.

The second stage is to evaluate internal reliability, which is usually done using composite reliability (CR) score. Higher values indicate higher levels of reliability. For instance, in exploratory research, reliability levels between 0.60 and 0.70 are regarded as "acceptable," while values between 0.70 and 0.90 range from "adequate to good." The composite reliability (CR) is measured; all indicators' values are larger than 0.7, indicating internal consistency (Hair et al. 2019). As in Table 2, for the "CSR practices" indicator, the CR equals 0.91, indicating good internal consistency. For the "employment relationships" indicator, the CR equals 0.818, indicating internal consistency. For the "human development and training" indicator, the CR equals 0.896. The "social dialog" indicator has CR equals 0.837, indicating good internal consistency. As for the "health and safety at work," CR equals 0.937, indicating adequate internal consistency. Finally, the "social protection and work conditions" the CS equals 0.878, showing good internal consistency.

Also, the researchers used Cronbach's alpha as another measure of internal consistency reliability that uses the same criteria as composite reliability but yields lower results. As in Table 2, Cronbach's alpha resulting values were greater than 0.7, indicating acceptable indicator reliability for the indicators measurement scales (Hair et al. 2013). Because the items are unweighted, Cronbach's alpha provides a less exact indicator of reliability. Instead, the researchers utilized rho A as a close approximation of construct reliability, which falls somewhere between Cronbach's alpha and composite reliability. As a result, if one accepts that the factor model is valid, rho A may be a good compromise. As in Table 2, CSR practices construct has rho A value equals 0.891; for the "employment relationships" equals 0.704; as for the "human development and training" it equals 0.845; while for "social dialog" indicator, it has a rho A value equals to 0.709; for the "health and safety at work," it equals to 0.911; finally, the "social protection and work conditions" has value equals to 0.831.

The third stage evaluates the convergent validity of each construct measure by evaluating the average variance extracted (AVE) for each latent variable; The AVE is computed by squaring the loading of each indicator on a construct and computing the mean value. A value of 0.50

Table 2 Measurement model

	Items	Loadings	AVE	CR	Rho_A	Cronbach's alpha
CSRpractices	CSRP 1	0.707	0.531	0.91	0.891	0.889
	CSRP 2	0.761				
	CSRP 3	0.724				
	CSRP 4	0.721				
	CSRP 5	0.689				
	CSRP 6	0.705				
	CSRP 7	0.721				
	CSRP 8	0.729				
	CSRP 9	0.794				
Employment relationships	ER 1	0.712	0.529	0.818	0.704	0.704
	ER 2	0.738				
	ER 3	0.72				
	ER 4	0.738				
Human development and training	HDT 1	0.814	0.682	0.896	0.845	0.845
	HDT 2	0.855				
	HDT 3	0.824				
	HDT 4	0.81				
Social dialogue	SD1	0.797	0.632	0.837	0.709	0.709
	SD2	0.816				
	SD3	0.77				
Health and safety at work	HSW 1	0.87	0.788	0.937	0.911	0.91
	HSW 2	0.892				
	HSW 3	0.902				
	HSW 4	0.885				
Social protection and work conditions	SPWC 1	0.746	0.591	0.878	0.831	0.827
	SPWC 2	0.814				
	SPWC 3	0.733				
	SPWC 4	0.78				
	SPWC 5	0.768				

a. All item loadings > 0.6 indicates indicator reliability (Hair et al. 2012; Kock 2015)

or higher indicates that the concept explains at least 50% of the variance among its elements (Fornell and David F. Larcker 1981; Sarstedt et al. 2014). The researchers found that all the AVE values were acceptable and greater than 0.5, as shown in Table 2. CSR practices construct has an AVE value equals 0.531; For the "employment relationships" equals 0.529; as for the "human development and training" it equals 0.682; while for "social dialog" indicator, it has an AVE value equals to 0.632; for the "health and safety at work" it equals to 0.788; Finally,

the "social protection and work conditions" has a value equals to 0.591.

#### Discriminant validity assessment

Discriminant validity determines the extent to which a concept is empirically unique from other constructs in the path model, both in terms of how strongly it correlates with other constructs and how clearly the indicators represent only this single construct. To determine the discriminant validity, first, the Fornell and Larcker (1981) criterion is



b. All average variance extracted (AVE)>0.5 as indicates convergent reliability (Fornell and David F. Larcker 1981; Gye-soo 2016)

c. All composite reliability (CR) > 07 indicates internal consistency (Hair et al. 2019)

d. All Cronbach's alpha >0.7 indicates indicator reliability (Nunnally 1978) (Hair et al. 2013)

Table 3 Indicator items cross-loading

	CSR practices Employment Human development Socia relationships and training		Social dialogue	Health and safety at work	Social protection and work condi- tions	
CSRP 1	0.707	0.319	0.265	0.202	0.557	-0.083
CSRP 2	0.761	0.395	0.296	0.294	0.496	-0.076
CSRP 3	0.724	0.37	0.225	0.256	0.432	-0.071
CSRP 4	0.721	0.384	0.274	0.256	0.454	-0.038
CSRP 5	0.689	0.344	0.229	0.169	0.386	-0.099
CSRP 6	0.705	0.248	0.284	0.234	0.559	-0.076
CSRP 7	0.721	0.378	0.185	0.233	0.473	-0.012
CSRP 8	0.729	0.337	0.279	0.216	0.496	-0.053
CSRP 9	0.794	0.356	0.279	0.272	0.481	-0.072
ER 1	0.37	0.712	0.283	0.307	0.208	-0.079
ER 2	0.287	0.738	0.255	0.344	0.166	-0.046
ER 3	0.344	0.72	0.235	0.367	0.213	-0.11
ER 4	0.372	0.738	0.208	0.251	0.17	-0.005
HDT 1	0.287	0.259	0.814	0.267	0.147	0.069
HDT 2	0.295	0.305	0.855	0.422	0.25	-0.033
HDT 3	0.28	0.279	0.824	0.355	0.174	0.013
HDT 4	0.308	0.269	0.81	0.355	0.227	0.074
SD1	0.278	0.321	0.352	0.797	0.255	-0.027
SD2	0.239	0.32	0.382	0.816	0.234	0.037
SD3	0.26	0.389	0.28	0.77	0.194	0.04
HSW 1	0.567	0.256	0.183	0.24	0.87	-0.173
HSW 2	0.616	0.23	0.229	0.251	0.892	-0.185
HSW 3	0.591	0.24	0.233	0.243	0.902	-0.178
HSW 4	0.581	0.205	0.216	0.285	0.885	-0.204
SPWC1	-0.068	-0.083	-0.026	0.003	-0.182	0.746
SPWC2	-0.066	-0.102	-0.017	-0.018	-0.14	0.814
SPWC3	-0.059	-0.066	0.053	0.028	-0.174	0.733
SPWC4	-0.079	-0.045	0.112	0.037	-0.154	0.78
SPWC5	-0.065	-0.024	0.011	0.02	-0.153	0.768

CSRP, corporate social responsibility practices measurement item; ER, employment relationships measurement item; HDT, human development and training measurement item; SD, social dialog measurement item; HSW, health and safety at work measurement item; SPWC, social protection and work conditions measurement item

Table 4 Discriminant validity (Fornell and Larcker criteria)

	CSR practices	Employment relationships	Human develop- ment and training	Social dialogue	Health and safety at work	Social protection and work condi- tions
CSR practices	0.729	,				,
Employment relationships	0.477	0.727				
Human development and training	0.355	0.337	0.826			
Social dialogue	0.327	0.433	0.424	0.795		
Health and safety at work	0.664	0.262	0.243	0.287	0.887	
Social protection and work conditions	-0.088	-0.082	0.038	0.019	-0.208	0.769

<sup>\*</sup>The diagonal is the square root of the AVE of the latent variables and indicates the highest in any column or row. (Fornell and David F. Larcker 1981)



the most conservative criterion for evaluating discriminant validity. This method compares the AVE value of each construct to its squared inter-construct correlation (a measure of shared variance) with all other constructs in the structural model, shown in Table 4. The recommended guideline is that a construct should not exhibit shared variance with any other construct greater than its AVE value. Second, examining the items' cross-loadings is a less rigorous method of determining discriminant validity. According to Hair et al. (2013), the recommended guideline for this method is that an indicator variable should have a higher loading on its construct than any other construct in the structural model, the recommended guideline for this method. The construct has discriminant validity if the loadings of the indicators are consistently highest on the construct with which they are related. The indicator items' cross-loadings are developed in Table 3. Finally, as a criterion, the heterotrait-monotrait (HTMT) ratio needs to be lower than the conservative threshold of 0.85 for conceptually different constructs, while less than the conservative threshold of 0.90 for conceptually similar constructs (Hair et al. 2019), which we show in Table 5.

# **Step 3: Testing hypothesis**

This study uses PLS-SEM, a causal-predictive approach to SEM that focuses on prediction when forecasting statistical

models of structures designed to provide a causal explanation (Hair et al. 2019). The PLS program uses a method known as bootstrapping, which provides *T*-statistics for significance testing of both the inner and outer models. In this approach, many subsamples (e.g. 5000) are extracted from the original sample and replaced to give bootstrap standard errors, yielding approximate *T*-values for structural path significance testing. The bootstrap result is a good approximation of data normality. Moreover, the bootstrapping method estimates the population's sampling distribution's spread, shape, and bias (Chin 1998). Table 6 summarizes the results, which are also illustrated in Fig. 2.

For testing the first hypothesis, the *T*-statistics value was 8.961, larger than the threshold of 1.96, showing a significant positive relationship; therefore, the first hypothesis is supported. This means a significant positive relationship between CSR practices and employment relationships in Egyptian SMEs during the COVID-19 period. As for testing the second hypothesis, the *T*-statistics value was 6.687, indicating a significant positive relationship. Thus, the second hypothesis is supported. This means a significant positive relationship between CSR practices and human development and training in Egyptian SMEs during COVID-19. The third hypothesis, the *T*-statistics value, was 5.979, reflecting a significant positive relationship; therefore, the third hypothesis is also supported. This means a significant positive

Table 5 Discriminant validity (HTMT)

	CSR practices	Employment relationships	Human develop- ment and training	Social dialogue	Health and safety at work	Social protection and work condi- tions
CSR practices	1					
Employment relationships	0.596	1				
Human development and training	0.407	0.437	1			
Social dialogue	0.408	0.616	0.548	1		
Health and safety at work	0.734	0.325	0.275	0.357	1	
Social protection and work conditions	0.107	0.126	0.092	0.075	0.241	1

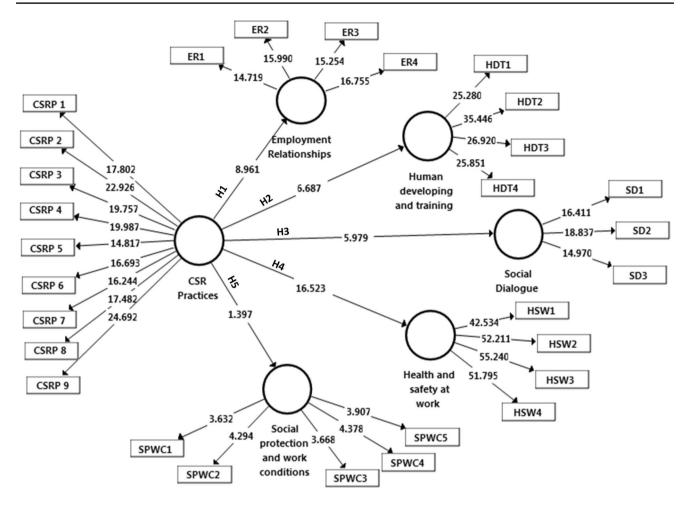
For conceptually similar constructs: HTMT <0.90; for conceptually different constructs: HTMT <0.85 (Hair et al. 2019)

Table 6 Direct relationship hypothesis testing

Hypothesis	Relationship	Std. beta	Std. error	<b>t</b> -value ∧	Decision	95% CI LL	95% CI UL
H1	CSR practices -> employment relationships	0.486	0.053	8.961***	Supported	0.396	0.571
H2	CSR practices -> human development and training	0.36	0.053	6.687***	Supported	0.263	0.443
Н3	CSR practices -> social dialog	0.338	0.055	5.979***	Supported	0.25	0.427
H4	CSR practices -> health and safety at work	0.665	0.04	16.523***	Supported	0.602	0.732
Н5	CSR practices -> social protection and work conditions	-0.112	0.063	1.397***	Not supported	-0.191	0.055

<sup>\*\*\*</sup>p<0.01





**Fig. 2** Hypothesis testing and the bootstrapping direct effect results: the figure shows the *T*-statistics values of the direct relationship hypotheses between the independent and dependent variables for

H1=8.961, H2=6.687, H3=5.979, H4=16.523, and H5=1.397, indicating the acceptance of the first four hypotheses and the rejection of the fifth hypothesis as the T-statistics value  $\leq 1.96$ 

relationship between CSR practices and social dialog in the Egyptian SMEs during the COVID-19 period.

The fourth hypothesis had a *T*-statistics value of 16.523, which indicates a significant positive relationship; therefore, the fourth hypothesis is supported. This means a significant positive relationship between CSR practices and health and safety at work in the Egyptian SMEs during the COVID-19 period. For the fifth and final hypothesis, the *T*-statistics value was 1.397, demonstrating an insignificant relationship. Thus, the fifth hypothesis is not supported. This means that there is no significant relationship between CSR practices and social protection and work conditions in Egyptian SMEs during the COVID-19 period.

#### **Discussion and conclusion**

Our research differs from the previous studies as it is the first to develop and empirically test a model that reflects the association CSR practices and labor environmental issues based on ISO 26000 (health and safety at work, human development and training, employment relationships, social protection, work conditions, and social dialog). Based on a sample of 307 manager-level employees, our results show a significant relationship for the first four hypotheses and an insignificant relationship regarding the fifth hypothesis. Our results reveal that CSR positively impacts labors' practices (employment relationships, human development and training, social dialog, and health and safety at work). These findings are in line with Breisinger et al. (2020), Kim (2020), and Spurk and Straub (2020). Similarly, according to Aguinis et al. (2020) and He and Harris (2020), COVID-19 directs the firms' focus toward adopting CSR practices to



overcome economic, social, and environmental issues facing multiple stakeholders, especially the employees.

However, our results show that CSR has an insignificant effect on the employees' social protection and work conditions. In other words, the Egyptian SMEs' CSR practices do not significantly affect the social and work conditions. These results are in line with the results of Assaad and Kraff (2013), Kayaly (2014), and Séhier (2019), which stated that the SMEs in Egypt are required to consider the CSR initiatives that focus more on the labor work conditions, as most of them lack a CSR vision and lack a CSR cooperative model with SMEs, where CSR is mainly used as an instrument for marketing public relations (Kayaly 2014; Mousiolis et al. 2015).

Besides, there are three critical explanations for this insignificant relationship. First, according to Assaad and Kraff (2013), the SMEs' operating environment in Egypt leads CSR activities to have a limited impact on job conditions, where the essence of Egypt's industries is laborintensive, where the labor force consists mainly of informal, irregular-level jobs. Séhier (2019) states that labor-intensive factories in developing countries failed to comply with the work condition code of conduct.

Second, according to Carnevale and Hatak (2020), the lack of knowledge among employees of the labor conditions' code of ethics creates a disparity between CSR activities during the outbreak of COVID-19 and its effects on workers' conditions. The study of Séhier (2019) and Genda et al. (2019) attributed the insignificant relationship to the gap between the codes of conduct and the actual situation in the field; since this gap can be a source of conflicts in implementing the code of conduct.

Third, Chawla et al. (2020) mentioned that the government's sanctions and lockdown had triggered a significant shock to many economic sectors and businesses in Egypt, leaving CSR activities unable to boost SMEs' social and working standards. For instance, Carnevale and Hatak (2020) and Giurge and Bohns (2020) argued that the night-time curfew, prohibition on meetings, closing of schools and religious establishments, and operating from home created a small gap between work and private life. According to Yin et al. (2021), this contributes to further severe issues of "unplugging" work requirements, leaving the employees with no choice except to neglect both their own and their friends' and families' lives to survive the situation (Chawla et al. 2020).

In addition to the previous discussion, our results provide several insights for theory and practice.

#### **Theoretical contribution**

The following are the theoretical contribution of this study. This study is academically relevant since it investigates the labor-environment issues that SMEs' employees faced during the COVID-19 pandemic. This study focused on SMEs, which were one of COVID-19's most damaged sectors in Egypt. Moreover, this study investigated the organic causal links between CSR practices and labor environmental issues in Egyptian SMEs during COVID-19. Earlier studies of the correlations mentioned above (Spurk and Straub 2020; Kramer and Kramer 2020). However, the previous literature is limited to some aspects. Researchers focused only on one side of the multidimensional problem; the first group of researchers, Filimonau et al. (2020), Hao et al. (2020), and Sun et al. (2021), focused on the impact of the pandemic crisis on worker difficulties without demonstrating how CSR can affect these issues. Alternatively, the other group, for example, Mujtaba et al. (2005), Saprina Chiang (2010), and Jun and Seng (2016) examined the impact of CSR on labor practices such as employee job satisfaction and retention without taking into account the challenges that these labor practices face, as well as the impact of the COVID-19. Thus, this study links the multiple dimensions by considering all the dimensions of the problem (CSR practices, COVID-19, and the labor environmental issues).

Moreover, this study contributes to the existing theories as follows. First, this study adds to the social cognitive theory (Beck et al. 1979) by bringing new visions to show how people can adapt their behavior and standards to deal with the issues caused by COVID-19. This research adds to Grida et al. (2020) by showing how these feelings will affect CSR practices. Unlike the previous studies that show the negative impact of COVID-19 over the SCs, our research pointed out the positive side of the COVID-19 pandemic as it brings back the concepts of sustainability and green practices into the spotlight. Our study contributed to Grida et al. (2020) and Jian et al. (2020) by showing how the adverse feelings toward the pandemic lead to rethinking about social practices toward SMEs and capture the current situation's opportunities to enhance the CSR practices.

Second, this study adds to the stakeholder theory by bringing new perceptions to SMEs' CSR practices. Earlier studies like Wolf (2014), Mousiolis et al. (2015), and Zaid et al. (2018) presented different theoretical approaches to examine and explain CSR practices, such as using the resource-based theory. However, these previous studies focus only on submissive replies to the stakeholder's requirements. According to Turker (2009), the stakeholders' concept offers new understandings of effectively adopting CSR to meet consumers' demands. In the same context, this research brings stakeholder theory into the CSR research area, showing newly discovered findings of how CSR can mediate labor practices during the pandemic. It also adds to the study of Wang et al. (2020) by explaining that CSR provides a way for identifying the requirement of stakeholders,



especially employees, which provides an instrument for SMEs to adopt social practices toward their labor force and address the labor environmental issues of the pandemic.

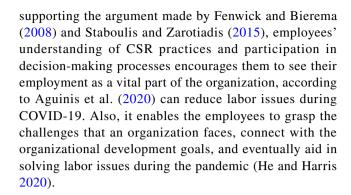
Finally, this research adds to the agency theory as managers have to rapidly cope with unanticipated labor issues during COVID-19 while also assisting their workers in adapting to significant changes in the workplace and social environment. Based on the mutual gain perspective, this research contributes to the study of He and Harris (2020) by showing how managers should consider employees' issues while trying to attain their benefits, especially during the pandemic.

#### **Practical implications**

This research has various managerial and practical implications. The research's results, for instance, comes consistent with Channa et al. (2021) and He and Harris's (2020) argument, which shows that managers should devote significant time and effort to establish a consistent approach for implementing CSR practices to address and solve labor issues, particularly during the pandemic. Supported by Elsafty and Ragheb's (2020) argument, during this time, Egypt tended to control the economic and social repercussions of the outbreak while also attempting to resolve labor issues. Complying with Klimkiewicz and Oltra (2017), managers should provide precise information. They should focus not only on the positive words but also on the steps they took to protect their employees during COVID-19 and strengthen the consistency of CSR and HR policies.

Moreover, managers should ensure that all employees have equal chances and that no discrimination is made in the workplace, either directly or indirectly. Additionally, providing posters, clips, and digital bulletin boards to raise COVID-19 awareness among workers. Also, ensure safe individual practices in the workplace by providing exceptional training on proper hygiene and cleaning procedures and workers' precautions.

Moreover, supporting the study of Quaedackers et al. (2020), managers should implement employee-friendly techniques in the workplace to lessen the outbreak's adverse effects and boost employee satisfaction and productivity. Similarly, according to Gourinchas et al. (2020), similar to large multinational organizations, SMEs have been severely affected during the recent pandemic since many are unemployed. Thus, in Egypt, it is the role of the government and employers to develop CSR practices and tactics to address current concerns and difficulties (Bar-Haim and Karassin 2018; Elsafty and Ragheb 2020). Furthermore, managers should recognize the environmental issues and support employees in addressing them while building solid relationships with them to avoid feelings of ignorance and avoidance of their serious concerns. Also,



#### Limitations and future research

Our research has some limitations that can drive future research opportunities. First, while this paper focused on the labor issues in the Egyptian SMEs during the pandemic, this research did not consider the other stakeholders' perspectives. Further studies could focus on different stakeholders' concerns mentioned in ISO 26000, such as customers. Second, this study focused on SMEs in Egypt, considered a developing country; thus, other researchers could study CSR practices in MNCs and the impact on developed countries during the outbreak. Third, this research neglected the industry's and market's influence on how CSR activities would continue to address labor problems. Other studies can compare CSR activities' impact across various industries, showing how CSR policies can affect the labor force problem in different sectors.

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**Data availability** Datasets are available from the corresponding author on request.

Author contribution Mr. Moustafa Mohamed Nazief Haggag Kotb Kholaif: conceptualization, methodology, data curation, writing-original draft preparation, and visualization; Professor Xiao Ming: visualization, investigation, and supervision; Miss Anitha Moosa: reviewing and editing; Mr. Kashosi Gad David; reviewing and editing. All authors read and approved the final manuscript.

#### **Declarations**

**Ethics approval and consent to participate** Not applicable.

Consent for publication Not applicable.

**Competing interests** The authors declare no competing interests.



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