The effect of strategic leadership on sustainable development for human resource management: An applied study on Iron and steel Egyptian companies Empirical Study

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Abstract:

The research purpose is to measure the effect of strategic leadership on sustainable development to human resource management in Iron and Steel companies in Egypt. From the analysis that the Iron and Steel Egyptian company reveal some shortages and neglecting the sustainable development for human resource and strategic leadership. The research has two main hypotheses rejected and accept the alternatives.

Introduction:

The issue of strategic leadership become important especially in recent decades for professionals whether they are individuals or companies, where strategic leadership has occupied of all governmental, financial and economic agencies whether they are at the international level or the local level. in last quarter of the twentieth century, companies witnessed many rapid and successive changes in the global economy.

Accordingly, experts in the field of business have paid increasing attention to the size of sustainable development for human resource management as it the first line of defense in the event of companies suffers from losses due to investing in money in operations that are not without risk. Therefore, the sustainable development standards have become a criterion for the safety and companies' stability. the stability of companies has become determined according to the extent of compliance with this standards, so sustainable development requirements in both parts basic and human resources have become comprehensive and sensitive to success

Literature review:

Leadership for sustainability is a relatively new idea that represents "a radically expanded understanding of leadership that is includes an enlarged base of everyday leaders in all work of life who take up power and engage in actions with others to make a sustainable difference in

organizations and communities" (Ferdig, 2007, p. 33). Rather than simply applying a new lens of leadership to business as usual, leaders recognize and critique the root causes of unsustainability, seek to understand the social, cultural, economic, and ecological impacts of their work, and acknowledge and value the ecological and cultural diversity of natural systems (Foundation for deep ecology, 2012). Leadership for sustainability builds on but goes beyond transformational leadership, the dominant leadership model taught in higher education (Shriberg & MacDonald, 2013). Leadership for sustainability is related to other models of leadership such as the Social Change Model of Leadership (Astin & Astin, 1996) and the Relational Model of Leadership (Komives, Lucas, & McMahon, 1998), which highlight collaboration, inclusiveness, relationships, common purpose, and change rooted in values. (Burns, Vaught and Bauman, 2015).

The idea that leadership includes the management of meanings was implied in the work of prominent organization theories such as Weick's (1979) view of managerial work as the management of myths, symbols, and images and Pfeffer's (1981) perspective on management as symbolic action. (Shamir, 2016). Leadership also entails intrapersonal conflicts at various stages of life. Leaders have to manage intrapersonal conflicts with external reali- ties (Bass & Stogdill, 1990). Beyond knowledge, emotional balance and learning, a leader has to be spiritual in mind (Fry, 2003). Having a spir- itual perspective in leadership helps the individual to connect with fol- lowers and others at a sense-making level with meaning (Fry, 2003). It was noted that, in the Indian context, mobility of an individual is essen- tial. Individuals shouldn't root themselves at one geographic location. (D'Mello & Sahay, 2007). If one is mobile, then it is easier to secure new opportunities (Som Sekhar Bhattacharyya and Sumi Jha ,2015*)*

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In spite of the long history of research on leadership, social scientists, primarily organization behavior scholars, have only recently begun to single out strategic leadership as a focus of attention (Boal and Schultz, 2007). In the meanwhile, the practice of "strategic leadership" appears to be animated by persistent myths, sometimes created by the trade press, other times by the personal experience of leaders. These myths' as Hambrick (2005) reminds us poignantly, invite critical scholarly scrutiny. (Narayanan and Zane, 2009). In addition, the concept of leadership is not a new topic of discussion. Ancient Greek philosophers such as Plato, Socrates, Aristotle, Plutarch and Caesar had discussed very much earlier about it (Bass, 1981; Nikezic et al., 2012). However, in today's modern world, leadership concepts are still being vigorously debated by scholars, especially those who are directly connected to school leadership fraternity. Indeed, they also mutually agree that the wisdom and practices of school leadership are vital to the successful functioning of a school (Bush, 2010).

Strategic leadership involves dealing with issues commonly addressed by a firm's top management team. Developing strategic leadership competencies is distinct from developing supervisory skills or developing leaders to lead operations (Stigter and Cooper, 2015, p. 21). While the basic skills of leading people and operations are still important, it is not sufficient for strategic leadership. (Norzailan, Othman and Ishizaki, 2016)

Sustainable Development:

Although many definitions abound, the most often used definition of sustainable development is that proposed by the Brundtland Commission (Cerin, 2006; Dernbach J. C., 1998; Dernbach J. C., 2003; Stoddart, 2011). This broad definition, which will be used in this dissertation, does not limit the scope of sustainability. The explanation does, however, touch on the importance of intergenerational equity. This concept of conserving resources for future generations is one of the major features that distinguish sustainable development policy from traditional

environmental policy, which also seeks to internalize the externalities of environmental degradation. The overall goal of sustainable development (SD) is the long-term stability of the economy and environment; this is only achievable through the integration and acknowledgement of economic, environmental, and social concerns throughout the decision making process. (Emas, 2018).

The concept of sustainable development has undergone various developmental phases since its introduction. The historical development of the concept saw participation of vari- ous organizations and institutions, which nowadays work intensely on the implementation of its principles and objectives. The concept has experienced different critiques and inter- pretations over the time while being accepted in different areas of human activity, and the definition of sustainable development has become one of the most cited definitions in the literature. In its development, the concept has been adapting to the contemporary require- ments of a complex global environment, but the underlying principles and goals, as well as the problems of their implementation, remained almost unchanged. Still, some goals have been updated, and the new goals were set. These goals are united in the framework of the Millennium Development Goals 2015 which outline the challenges that humanity has to fight not only to achieve sustainable development but to survive on Earth as well (**Klarin**, 2018).

The Brundtland Commission's brief definition of sustainable development as the "ability to make development sustain- able—to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs"[12] is surely the standard defi- nition when judged by its widespread use and frequency of citation. The use of this definition has led many to see sustainable development as having a major focus on intergenerational equity. Although the brief definition does not explicitly men- tion the environment or development, the subsequent paragraphs, while rarely quoted, are clear. On development, the report states that human needs are basic and essential;

that economic growth— but also equity to share resources with the poor— is required to sustain them; and that equity is encouraged by effec- tive citizen participation. On the environment, the text is also clear: *The concept of sustainable development does imply limits—not absolute limits but limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities* (parris and Leiserowitz, 2018).

Exploratory study:

The researcher performed exploratory study for Iron and Steel companies in Egypt to know the importance of this discipline and discovering some of positive appearances and negative one which sharing in counting the research problem and research hypotheses and this as follow:

First: secondary data

1- The Iron and Steel consider from the basic branches which support the national production.
2- Consider one of the branches which has employment and capital
3- According to the reports of world organization for Iron and steel:

   a- Real estate section consumes 16% of steel production
   b- 16% of steel production consumed by machines and tools section.
   c- 3% consumed by house tools worldwide.
   d- The production of steel yearly increase 1500 million ton, 85 % of this amount was recycled.
   e- The Iron and Steel company get the 41th level at 2009 with production 319 million ton and has level 24 worldwide at 2009

f- China considers the biggest producer for Iron and Steel in the world with production of 150 million ton at 2010 which share with production of 44.3 % of the world production.

g- The following table clarify the production of Iron and Steel was decreasing at January to February 2017.

h- The growth rate starts to increase in demand of steel in Egypt from 4% to 5% during half of 2018

i- The Iron and Steel share with 20.18 % in the production of industrial production section.

Table: Volume of production and sales for Iron and Steel companies

Second: questionnaire:

The researcher performed some interview with determine questions on the strategic leadership and sustainable development for human resource which was on the Iron and Steel Egyptian company and the researcher choose 30 respondents from the four companies and the result was as follow:

Weapon steel	Jan-feb 2016	Jan – fab 2017	% change percentage
Production	1033.8	1033.8	12.3%
Sales	1314	1314	32.1%
Price average	4518	9767	116.2%

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Table 2: **Results of personal interviews**

Question	Agree		Not agree	
	No.	**%**	**No.**	**%**
1- The company own strategic vision clear	22	73.3	8	26.7
2- The employees share in setting the vision	12	40	18	60
3- Human resource development is a strategic issue for the company	14	46.6	16	43.4
4- The organization leaders focus on supporting the organizational culture	15	50%	15	50
5- The organizational leadership support the ethical practices	13	43.3	17	56.7
6- The work environment is safe and healthy	13	43.3	17	56.7
7- There is training programs for protecting against the work diseases	16	53.3	14	46.7
8- There is an employment satisfaction as result for employment empowerment	8	30	22	70
9- The organization leadership focus on discovering and developing talents	12	40	18	60
10- There is announced strategies for making future leaders	10	33.3	20	66.7

The preceding table clarify some negative points as follow:

1- The employment sharing in vision setting was decreased by 60%
2- The organization leadership don't support the organizational culture with percent 50%.
3- Decreasing of the employment satisfaction as result to administrative empowerment at percent 70%.
4- 60% of employees think that organizational leadership don't focus on discovering and developing human talent.
5- There are no strategies for making future leaders with percent 66.7%.
6- 56.7 % think the working environment not secure and healthy.

Despite that 73.3% think that there is strategic vision clear and 46.3 %from employees think that developing human resource issue is an important issue.

Research problem:

From preceding analysis that the Iron and Steel Egyptian company reveal some shortages and neglecting the sustainable development for human resource and strategic leadership.

3-Research methodology:

First: research design

There are two types of data the researcher depends on primary data and secondary data as follow:

a- Secondary data:

According to the research problem the researcher can identify the data that be used by the researcher as the researcher depend on the books, articles and journals in formulating the literature review and also the researcher depends on some published and in published data which is related to the topic.

b- Primary data:

The researcher collects all the needed data from Egyptian iron and steel companies through the questionnaire and that to get the opinion from the interviewee to test the hypotheses through performing interviews as follows:

- **Questionnaire**: was designed to know the directions of employees in iron and steel companies in Egypt which include all study variables which classified into two parts as follow:

  - **Part 1**: the part which related to strategic leadership indicators and consist of 20 statements
  - **Part 2**: the part which related to sustainable development indicators which consist of 20 statements.

Second: **research population and sample:**

- Research population:

  The population represent all the employees in Iron and Steel companies in Egypt which is 6507 units according to 2019 data record.

- **Research sample:**

  The sample was stratified random sample and that according to the equation of identifying the sample which equal 362.744 respondents.

  Validity and reliability test:

  Reliability test: the test clarifies that reliability factor is greater than .60 and the reliability factor for questionnaire is .951 and by this the questionnaire consider have high reliability factor.

  Table3: Reliability and validity test

No of statements	Reliability	Validity	Indicators
5	.0925	0.855	Strategic direction
5	.834	.913	Strategic focus
5	.781	.884	Strategic culture support
5	.797	.893	Ethical practices support
5	.830	.911	Safety and health requirements
5	.887	.942	Employees empowerment
5	.903	.950	Preparing future leaders
35	.951	.975	Overall questionnaire

Validity test: the test clarifies that validity factor is greater than .60 and for overall questionnaire is .975 and by this the questionnaire specialized by high validity factor.

Third: hypotheses testing:

1- The main hypothesis:

"*There is no significant effect to strategic leadership on sustainable development for human resource*"

This hypothesis classified into the following sub- hypotheses"

a- First sub hypothesis:

"There is no significant effect for strategic direction on secure and healthy requirement for employees"

To test this hypothesis the researcher performs the following testing:

Table 4: Correlation Matrix

Secure and healthy requirement for employees	Strategic direction	Test	Variable
0.380	1	Pearson Correlation	Strategic direction
0.000	0.000	Sig.	

From the preceding table there is relation between two variables by 38% at significant level .05.

1- **Model Summary:**

Table 5

Std. Error of the Estimate	Adjusted R Square	R Square	**Independent variable**
0.668	0.142	0.144	Strategic direction

From the preceding table there is $R^{2.} = .144$ which mean that independent variable explains the change in other variable by 14.4% however the other percent explained by other variables.

2- **ANOVA Test:**

Table 6

Sig.	F	Mean Square	Df	Sum of Squares	**Model**
0.000	53.141	23.713	1	23.713	Regression
		0.446	315	140.56	Residual
			316	164.272	Total

From the preceding table there is positive relation between the two variables at significant level .05 which clarify the correct relation between the two variables.

3- **Regression Analysis:**

Table7

Sig.	T	Standardized Coefficients	Unstandardized Coefficients		**Model**	
		Beta	Std. Error	B		
0.000	15.853		0.176	2.794	Constant	
0.000	7.29	0.380	0.047	0.34	Strategic direction	1

From the previous research value of T apparently clarified for independent variable at significant level .05 and this clarify the strongest regression relation between two variables.

b- Second sub hypothesis:

"There is no significant relation between strategic direction and employment empowerment"

   1- Correlation:

   Table 8

Employment empowerment	Strategic direction	Test	Model
0.501	1	Pearson Correlation	Strategic direction
0.000	0.000	Sig.	

From the preceding table there is relation between two variables by 50% at significant level .05.

   2- Model summary

   Table 9

Std. Error of the Estimate	Adjusted R Square	R Square	Model
0.800	0.249	0.251	Strategic direction

From the preceding table there is $R^{2.} = .251$ which mean that independent variable explains the change in other variable by 25.1% however the other percent explained by other variables.

3- **ANOVA:**

Table 10

Sig.	F	Mean Square	Df	Sum of Squares	**Model**
0.000	105.532	67.476	1	67.476	Regression
		0.639	315	201.408	Residual
			316	268.884	Total

From the preceding table there is positive relation between the two variables at significant level .05 which clarify the correct relation between the two variables.

4- **Regression Coefficient:**

Table 11

Sig.	T	Standardized Coefficients	Unstandardized Coefficients		**Model**	
		Beta	Std. Error	B		
0.000	5.08		0.211	1.072	Constant	1
٠.000	10.273	0.501	0.056	0.574	Strategic direction	

From the previous research value of T apparently clarified for independent variable at significant level .05 and this clarify the strongest regression relation between two variables.

c- **Third sub hypothesis:**

"There is no significant effect for strategic direction and future leaders' formulation"

1- **Correlation**:

Table 12

Future leaders' formulation	Strategic direction	Test	Model
0.434	1	Pearson Correlation	Strategic direction
0.000	0.000	Sig.	

From the preceding table there is relation between two variables by 43.3% at significant level .05.

2- Model Summary:

Table 13

Std. Error of the Estimate	Adjusted R Square	R Square	Model
0.833	0.186	0.188	Strategic direction

From the preceding table there is $R^2 = .188$ which mean that independent variable explains the change in other variable by 18.8% however the other percent explained by other variables.

3- ANOVA test:

Table 14

Sig.	F	Mean Square	Df	Sum of Squares	Model
0.000	73.007	50.642	1	50.642	Regression
		0.694	315	218.505	Residual
			316	269.147	Total

From the preceding table there is positive relation between the two variables at significant level .05 which clarify the correct relation between the two variables.

4- Regression Coefficients:

Table 15

Sig.	t	Standardized Coefficients	Unstandardized Coefficients		Model	
		Beta	Std. Error	B		
0.000	5.721		0.22	1.257	Constant	1
0.000	8.544	0.434	0.058	0.497	Strategic direction	

From the previous research value of T apparently clarified for independent variable at significant level .05 and this clarify the strongest regression relation between two variables.

d- Forth sub hypothesis:

"There is no significant effect to strategic focus on secure and healthy requirement for employees"

1- **Correlation:**

Table16

Secure and healthy requirement for employees	Strategic focus	Test	Model
0.451	1	Pearson Correlation	Strategic focus
0.000	0.000	Sig.	

From the preceding table there is relation between two variables by 45.1% at significant level .05.

2- **Model summary:**

Table 17

Std. Error of the Estimate	Adjusted R Square	R Square	Model
0.645	0.201	0.203	Strategic focus

From the preceding table there is $R^{2.} = .203$ which mean that independent variable explains the change in other variable by 20.3% however the other percent explained by other variables.

3- ANOVA TEST:

Table 18

Sig.	F	Mean Square	Df	Sum of Squares	**Model**
0.000	80.376	33.395	1	33.395	Regression
		0.415	315	130.877	Residual
			316	164.272	Total

From the preceding table there is positive relation between the two variables at significant level .05 which clarify the correct relation between the two variables.

4- Regression Coefficients
Table 19

Sig.	T	Standardized Coefficients	Unstandardized Coefficients		**Model**	
		Beta	Std. Error	B		
0.000	13.385		0.183	2.444	Constant	1
0.000	8.965	0.451	0.049	0.441	Strategic focus	

From the previous research value of T apparently clarified for independent variable at significant level .05 and this clarify the strongest regression relation between two variables.

E- FIFTH sub hypothesis:

"There is no significant effect for strategic focus on employment empowerment"

1- Correlation:

Table 20

Employment empowerment	Strategic focus	Test	Variable
0.535	1	Pearson Correlation	Strategic focus
0.000	0.000	Sig.	

From the preceding table there is relation between two variables by 53.5% at significant level .05.

2- Model Summary:

Table 21

Std. Error of the Estimate	Adjusted R Square	R Square	Independent variable
0.781	0.284	0.286	Strategic focus

From the preceding table there is $R^2 = .286$ which mean that independent variable explains the change in other variable by 28.6% however the other percent explained by other variables.

3- ANOVA TEST:

Table 22

Sig.	F	Mean Square	Df	Sum of Squares	**Model**
0.000	126.178	76.902	1	76.902	Regression
		0.609	315	191.982	Residual
			316	268.884	Total

From the preceding table there is positive relation between the two variables at significant level .05 which clarify the correct relation between the two variables.

4- Regression Coefficients:

Table 23

Sig.	T	Standardized Coefficients	Unstandardized Coefficients		النموذج	
		Beta	Std. Error	B		
0.001	3.409		0.221	0.754	Constant	1
0.000	11.233	0.535	0.06	0.669	١strategic focus	

From the previous research value of T apparently clarified for independent variable at significant level .05 and this clarify the strongest regression relation between two variables.

f-Sixth sub-hypothesis:

"There is no significant effect for strategic focus on future leaders' formulation"

1- Correlation

Table 24

Future leaders' formulation	Strategic focus	Test	Model
0.527	1	Pearson Correlation	Strategic focus
0.000	0.000	Sig.	

From the preceding table there is relation between two variables by 52.7% at significant level .05.

2- Model summary:

Table 25

Std. Error of the Estimate	Adjusted R Square	R Square	Model
0.785	0.276	0.278	Strategic focus

From the preceding table there is $R^{2.} = .278$ which mean that independent variable explains the change in other variable by 27.8% however the other percent explained by other variables.

3- **ANOVA TEST:**

Table 26

Sig.	F	Mean Square	Df	Sum of Squares	**Model**
0.000	121.277	74.818	1	74.818	Regression
		0.617	315	194.329	Residual
			316	269.147	Total

From the preceding table there is positive relation between the two variables at significant level .05 which clarify the correct relation between the two variables**.**

4- **Regression Coefficients:**

Table 27

Sig.	T	Standardized Coefficients	Unstandardized Coefficients		**Model**	
		Beta	Std. Error	B		
0.002	3.098		0.223	0.689	Constant	
·.000	11.013	0.527	0.06	0.66	Strategic focus	1

From the previous research value of T apparently clarified for independent variable at significant level .05 and this clarify the strongest regression relation between two variables.

g- seventh sub hypothesis:

'There is no significant effect between organizational culture support and secure and health requirement for employees'

1- Correlation:

Table 28

secure and health requirement for employees	Organizational culture support	Test	Model
0.379	1	Pearson Correlation	Organizational culture support
0.000	0.000	Sig.	

From the preceding table there is relation between two variables by 37.9% at significant level .05.

2- Model Summary:

Table 29

Std. Error of the Estimate	Adjusted R Square	R Square	Model
0.668	0.141	0.143	Organizational culture support

From the preceding table there is $R^2 = .143$ which mean that independent variable explains the change in other variable by 14.3% however the other percent explained by other variables.

3- ANOVA TEST:

Table 30

Sig.	F	Mean Square	Df	Sum of Squares	**Model**
0.000	52.731	23.556	1	23.556	Regression
		0.447	315	140.717	Residual
			316	164.272	Total

From the preceding table there is positive relation between the two variables at significant level .05 which clarify the correct relation between the two variables.

4- Regression Coefficients:

Table 31

Sig.	T	Standardized Coefficients Beta	Unstandardized Coefficients Std. Error	Unstandardized Coefficients B	**Model**	
0.000	13.279		0.198	2.635	Constant	
٠.000					Organizational culture support	1
	7.262	0.379	0.054	0.39		

From the previous research value of T apparently clarified for independent variable at significant level .05 and this clarify the strongest regression relation between two variables.

h- eighth sub hypothesis:

there is no significant effect for organizational culture support and employment empowerment

1- Correlation:

Table 32

employment empowerment	organizational culture support	Test	Model
0.469	1	Pearson Correlation	**organizational culture support**
0.000	0.000	Sig.	

From the preceding table there is relation between two variables by 46.9% at significant level .05.

2- Model summary:

Table33

Std. Error of the Estimate	Adjusted R Square	R Square	Model
0.816	0.218	0.220	**organizational culture support**

From the preceding table there is $R^{2.} = .220$ which mean that independent variable explains the change in other variable by 22% however the other percent explained by other variables.

3- ANOVA TEST:

Table 34

Sig.	F	Mean Square	Df	Sum of Squares	**Model**
		59.229	1	59.229	Regression
0.000	88.989	0.666	315	209.655	Residual
			319	6480.797	Total

From the preceding table there is positive relation between the two variables at significant level .05 which clarify the correct relation between the two variables.

4- Regression Coefficients

Table 35

Sig.	T	Standardized Coefficients	Unstandardized Coefficients		**Model**	
		Beta	Std. Error	B		
0.000	3.907		0.242	0.946	Constant	
٠.000					Organizational culture support	1
	9.433	0.469	0.066	0.618		

From the previous research value of T apparently clarified for independent variable at significant level .05 and this clarify the strongest regression relation between two variables.

j- **Ninth sub hypothesis:**

"There is no significant effect for organizational culture support and future leaders' formulation"

1- **Correlation:**

Table 36

future leaders formulation.	organizational culture support	Test	Variable
0.440	1	Pearson Correlation	**organizational culture support**
0.000	0.000	Sig.	

From the preceding table there is relation between two variables by 44% at significant level .05.

2- **Model summary:**

Table 37

Std. Error of the Estimate	Adjusted R Square	R Square	**Independent variable**
0.830	0.191	0.193	**organizational culture support**

From the preceding table there is $R^{2.} = .193$ which mean that independent variable explains the change in other variable by 19.3% however the other percent explained by other variables.

3- ANOVA TEST:

Table 38

Sig.	F	Mean Square	Df	Sum of Squares	**Model**
		52.02	1	52.02	Regression
0.000	75.468	0.689	315	217.127	Residual
			316	269.147	Total

From the preceding table there is positive relation between the two variables at significant level .05 which clarify the correct relation between the two variables.

4- Regression Coefficients:

Table 39

Sig.	T	Standardized Coefficients	Unstandardized Coefficients		النموذج	
		Beta	Std. Error	B		
0.000	4.014		0.246	0.989	Constant	
0.000					Organizational culture support	1
	8.687	0.440	0.067	0.579		

From the previous research value of T apparently clarified for independent variable at significant level .05 and this clarify the strongest regression relation between two variables.

j-Tenth sub hypothesis:

"There is no significant effect for ethical practices support on secure and health requirement for employees"

1- Correlation:

Table 40

secure and health requirement for employees.	ethical practices support	Test	Model
0.398	1	Pearson Correlation	**ethical practices support**
0.000	0.000	Sig.	

From the preceding table there is relation between two variables by 39.8% at significant level .05.

2- Model summary:

Table 41

Std. Error of the Estimate	Adjusted R Square	R Square	Model
0.662	0.156	0.159	**ethical practices support**ᵃ

From the preceding table there is $R^{2.} = .159$ which mean that independent variable explains the change in other variable by 15.9% however the other percent explained by other variables.

3- ANOVA TEST:

Table 42

Sig.	F	Mean Square	Df	Sum of Squares	**Model**
		26.04	1	26.04	Regression
0.000	59.339	0.439	315	138.232	Residual
			316	164.272	Total

From the preceding table there is positive relation between the two variables at significant level .05 which clarify the correct relation between the two variables.

4- Regression Coefficients:

Table 43

Sig.	T	Standardized Coefficients	Unstandardized Coefficients		**Model**	
		Beta	Std. Error	B		
0.000	16.303		0.17	2.771	Constant	
0.000	7.703	0.398	0.046	0.353	Ethical practices support	1

From the previous research value of T apparently clarified for independent variable at significant level .05 and this clarify the strongest regression relation between two variables.

k- Eleventh sub hypothesis:

"There is no significant effect for ethical practices support on employment empowerment"

a- Correlation:

Table 44

employment empoerment	ethical practices support	Test	Model
0.503	1	Pearson Correlation	**ethical practices support**
0.000	0.000	Sig.	

From the preceding table there is relation between two variables by 50.3% at significant level .05.

b- Model summary:

Table 45

Std. Error of the Estimate	Adjusted R Square	R Square	Model
0.799	0.25	0.253	**ethical practices support**

From the preceding table there is $R^{2.} = .253$which mean that independent variable explains the change in other variable by 25.3% however the other percent explained by other variables.

c- ANOVA TEST:

Table 46

Sig.	F	Mean Square	Df	Sum of Squares	**Model**
0.000	106.416	67.899	1	67.899	Regression
		0.638	315	200.985	Residual
			316	268.884	Total

From the preceding table there is positive relation between the two variables at significant level .05 which clarify the correct relation between the two variables**.**

5- Regression Coefficients:
Table 47

Sig.	t	Standardized Coefficients Beta	Unstandardized Coefficients Std. Error	B	**Model**	
0.000	5.493		0.205	1.126	Constant	
٠.000					Ethical practices support	1
	10.316	0.503	0.055	0.57		

From the previous research value of T apparently clarified for independent variable at significant level .05 and this clarify the strongest regression relation between two variables.

l- Twelfth sub hypothesis:

"There is no significant effect for ethical practices support on future leader formulation"

a- Correlation:

Table 48

future leader formulation	ethical practices support	Test	Model
0.439	1	Pearson Correlation	**ethical practices support**
0.000	0.000	Sig.	

From the preceding table there is relation between two variables by 43.9% at significant level .05.

b- Model summary:

Table 49

Std. Error of the Estimate	Adjusted R Square	R Square	Model
			thical practices support
0.831	0.19	0.192	

From the preceding table there is $R^{2.} = .192$ which mean that independent variable explains the change in other variable by 19.2% however the other percent explained by other variables.

c- ANOVA TEST:

Table 50

Sig.	F	Mean Square	Df	Sum of Squares	**Model**
0.000	75.019	51.77	1	51.77	Regression
		0.69	315	217.377	Residual
			316	269.147	Total

From the preceding table there is positive relation between the two variables at significant level .05 which clarify the correct relation between the two variables.

4-Regression coefficients
Table 51

Sig.	t	Standardized Coefficients Beta	Unstandardized Coefficients Std. Error	B	**Model**	
0.000	6.051		0.213	1.29	Constant	1
·.000	8.661	0.439	0.057	0.497	Ethical practices support	

From the previous research value of T apparently clarified for independent variable at significant level .05 and this clarify the strongest regression relation between two variables.

From the preceding data and previous tables its clarified that we have to reject the twelfth sub-hypotheses and accept the alternatives of them.

2- **Second main hypothesis:**

"There is no significant differences between sub groups of the study (top management, middle management and line management) on the effect of strategic leadership practices on sustainable development for human resources"

Table 52

Significant	Test value	Averages		Indicators
		Middle and line management	Top management	
0.606	0.266	3.70	3.63	Strategic direction
0.834	0.044	3.64	3.66	Strategic focus
0.739	0.111	3.62	3.66	Organizational culture support
0.239	1.392	3.64	3.49	Ethical practices support
0.576	0.314	4.04	4.10	Secure and health requirements
0.124	2.374	3.16	3.38	Employees empowerment
0.001	10.634	3.02	3.50	Future leaders' formulation

From the previous table it is clarified the value of f accounted different from its tabulated value as the value of variance at significant level .05 which led to that there is no significant difference for the indicators of the study for study categories.

Research findings:

1- There are 12 sub-hypotheses for the study and two main hypotheses the researcher through the preceding analysis the researcher rejects the twelve sub hypotheses and accept the alternatives as follow:

1- There is significant effect for strategic direction and secure and health requirement for organization.
2- There is significant effect for strategic direction and employee's empowerment.
3- There is significant effect for strategic direction and future leaders' formulation.
4- There is significant effect for strategic focus and secure and health requirements for organization.
5- There is significant effect for strategic focus on employee's empowerment.
6- There is significant effect for strategic focus on future leaders' formulation.
7- There is significant effect for organizational culture support on secure and health requirement.
8- There is significant effect for organizational culture support on employee's empowerment.
9- There is significant effect for organizational culture support on future leaders' formulation.
10- There is significant effect for ethical practices support on secure and health requirement.
11- There is significant effect for ethical practices support on employee's empowerment
12- There is significant effect for ethical practices support on future leaders' formulation.

As a result, we reject the first main hypothesis and accept the alternative one *"There significant effect for strategic leadership on sustainable development for human resources"*

2- The researcher rejects the second main hypothesis and accept the alternatives *"There is significant difference between study groups on the effect of strategic leadership on sustainable development for human resources"*.

Most important recommendations:

1- Iron and steel companies must exert more efforts in the coming years by implementing structural reforms in their system and supervisory frameworks and working to keep pace with structural changes in order to enhance the application of strategic leadership.
2- Paying attention to the provision of systems and means to assess and measure sustainable development and the need to the companies to develop their internal systems for measuring strategic leadership.
3- Improving public understanding of strategic leadership and sustainable development.
4- Make a continuous intensive effort to raise the level of competitive advantage through improving strategic leadership and sustainable development to human resource management.

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