

SUSTAINABILITY ORIENTATION AND ENVIRONMENT SUSTAINABLE PERFORMANCE: WHAT IS THE ROLE OF CORPORATE ENVIRONMENTAL RESPONSIBILITY?

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Abstract: Sustainability Orientation (SO) has got more attention the last few years for its role on determining managers' views towards social and environmental challenges, activities and performance. While research suggests a positive relationship between SO and performance, little is known how such association is explained. Besides, research has yet to provide how this relationship could be mediated by other factors such as environmental practices, particularly, across smaller businesses. Further, many of the attempts are carried out in western countries, and developing economies have not been explored deeply. Building on Upper Echelon Theory (UET), it has been assumed that Corporate Environment Responsibility (CER) mediates SO and environmental sustainability performance due to beliefs of the seniors that affect their behavior and consequently, an enterprise's outcomes. Data is collected by a survey that handled owners/managers of small and micro manufacturers in Tunisia by using a simple random probability method. AMOS and SPSS are used to analyze 87 validated questionnaires. It has been found that CER has mediated SO and environmental sustainability performance, and SO, CER affect organizations' outcomes once they have tested their relationships directly. These results enrich sustainability and green activities domains, besides, helping leaders to know the factors that influence their firms' performance, and translate their views toward needed environmental practices across local communities. The findings of the study have thrown light on some directions for future research.

Keywords: Sustainability orientation, corporate environment responsibility, sustainable performance, UET.

Introduction

Sustainability orientation determines managers' views toward ecological and social issues that have arisen (Tata & Prasad, 2015), and they take decisions based on them despite needed information is not available (Galpin *et al.*, 2015). These personal features can affect an organization's culture such as green attitudes, and those positive views often reflect on employees' environmentally behaviour, as a result on firms' sustainable performance (Diehl & Klee, 2015; Gao, 2017). Wiengarten *et al.* (2017) argue that organizations measure their effectiveness through outcomes, but we should understand reasons behind these results like how decisions and activities are impacted by managers' orientations. However, literature has yet to highlight these complex relationships

clearly and deeply although there have been some attempts (e.g., Wynder & Dunbar, 2016).

Environmental sustainability performance has an ability to depict enterprises financial and non-financial situation (Vincenza Ciasullo & Troisi, 2013), and it shows companies' legitimacy. The outcomes could be recognized as efficiency consumption for natural resources over production processes such as recycled and renewable materials as well as reducing utilization of energy (Abdul-Rashid *et al.*, 2017). Kleindorfer *et al.* (2005) believe that enterprises that consume natural resources at the minimum level and generating less emission can be seen as sustainable enterprises. Moreover, it is understood through a firm's encompasses pollution and consumption (Gimenez *et al.*, 2012). In addition, emission, and negative

effects on natural environment are at the lowest level (Zhou *et al.*, 2013; Ball, 2015).

However, CER is suggested to provide further knowledge about sustainability orientation and sustainable performance relationships since it depicts the degree of enterprises' involvement in environmental concerns (Nejati *et al.*, 2017). It focuses on complying with societies' norms, country's regulations and consuming environmentally also practice greenly, which leads to efficient consumption of resources and energy (Maletic *et al.*, 2015) and consequently, cost reduction, better performance, local community development and well-being (Vincenza Ciasullo & Troisi, 2013). Researchers found a positive correlation between environmental practices and enterprises' environmental outcomes since they have reduced costs and minimized risk (see Abdul-Rashid *et al.*, 2017; Golini *et al.*, 2014). Whereas, others did not find such relationships (Morioka & Carvalho, 2016; Jain *et al.*, 2017).

Furthermore, the outcomes are expected to be different due to dissimilar orientations as proposed by UET, different commitment and conditions. Besides that, the degree of reflecting of such beliefs on workers varies (Hambrick & Mason, 1984; Pedersen, 2010). Though research investigated personal factors and sustainable outcomes, the actual association across them remains unclear, and deeper explanation is needed to know how they could be mediated by CER (Asah *et al.*, 2015; Alikaj *et al.*, 2017). Additionally, these attempts are carried out in fragmented efforts like socially responsible practices and sustainable performance (Emeseh & Songi, 2014), strategic and tactical levels (Nejati *et al.*, 2016), but more importantly, smaller enterprises are ignored (Windolph *et al.*, 2014). Thus, the research questioned whether sustainability orientation affect CER, and environmental sustainability performance? Is environmental performance impacted by environmental practices? Further, does CER mediate sustainability orientation and environmental sustainability performance? In other words, could CER provide further

explanation about the nature of such relationship? To answer these questions, the article aims to investigate SO and sustainable performance with a mediating role of CER to address literature gaps. However, it is expected that the research will contribute to sustainable performance literature since it adds CER as a mediator, and to estimate sustainability orientation influence on ecological activities, the paper extends knowledge by applying UET for a comprehensive view as it assumes that managers' backgrounds affect organizations' outcomes.

The research was organized as follows. It highlights variables relationships, and hypotheses development. Then, it shows methods and the instrument that have been used. Next, it illustrates, conclusions, limitations, managerial and literature contributions, and ends by future research.

Sustainability Orientation

Sustainability orientation has been defined as managers' views toward environmental and social challenges (Sung & Park, 2018), and doing business based on them (Roxas & Coetzer, 2012). It affects people's thoughts more than their core values, and beyond them. In other words, orientations are based on values (White, 2006). For example, a person could have some values, but does not have orientations on some arisen issues. But orientations cannot exist without values despite the fact that they could be violated in some cases (White, 2006). Individuals tend to prioritize them though they are changing over time, and dissimilar evaluation of current social and environmental matters across managers due to different personalities and backgrounds (Nejati *et al.*, 2017).

However, predictions of her/his action become easier due to orientations are acting as a governance system of their choices, and they tend to follow them; therefore, we can attribute their environmental practices into their beliefs (Wyer & Albarracin, 2005). Besides, in many cases implementing and concerning about such ecology challenges are a result of their

orientations. Furthermore, these perceptions determine sustainable performance due to several reasons such as green innovation, ethical culture are impacted by leaders' thoughts. Thus, understanding managers' sustainability orientations could facilitate our prediction on their environmental behaviors, and an enterprise's outcomes (Vitell & Paolillo, 2004)

CER

Organizations face several environmental challenges and they have to handle them, and go beyond state laws such as practice to be environmentally responsible despite differences across countries. CER is defined as an enterprise's activities to protect and reduce its negative impacts on natural environment without any economic interest (Turker, 2009). Governments' associations and several stakeholders' groups make a pressure against businesses to be environmentally responsible (Eweje, 2014). Since organizations define themselves as a part of local communities, societies have demanded a positive role from enterprises to protect and enhance the natural environment, and minimize their consumption of natural resources.

However, smaller enterprises are not always considering these issues due to financial conditions and they claim that their negative effects are low; additionally, investing on ecological responsible issues is unjustifiable (Brammer *et al.*, 2012). But multinational and larger firms tend to deal with green enterprises for supplying raw materials (Nair & Sodhi, 2012; Ishak *et al.*, 2017), and shareholders feel is less risky to invest in ecologically responsible organizations (Mahmood & Humphrey, 2013). Moreover, environmental initiatives are often based on managers' orientations, and they are the most crucial motivator to do so since people tend to follow their beliefs (Diehl & Klee, 2015). But, as a result of dissimilar practices there are differences in outcomes across factories. In other words, CER has different standards across societies and local communities, which generate dissimilar performances (Chang *et al.*, 2013).

Environmental Sustainability Performance

Environment sustainability performance is the outputs of an enterprise's inputs and it has been seen as a result of using cleaner materials (Abdul-Rashid *et al.* 2017), and rational consumption of resources (Vachon & Mao, 2008). It is a firm's encompasses pollution and consumption (Gimenez *et al.*, 2012); in other words, its outcomes of reducing any activities that do not contribute on improving ecology situation (Wang *et al.*, 2015). Environmental sustainable performance focuses on reduction of emission, and minimizing environmental accidents (Ball, 2015; Zainul Abidin *et al.*, 2020). Abdul-Rashid *et al.*, (2017) argue that it depends on firms' efficiency consumption for friendly resources over production processes. For instance, the used resources over during production processes have to be recycled.

However, these outcomes can be recognized once we know how leaders hold environmental awareness. Besides, the managers' degree of green orientations affects performance as the level of commitment on sourcing issues is vary. Solovida and Latan, (2017) found that stakeholders have an impact on enterprises to be green; consequently, performance is improved. Further, Mishra and Suar (2013) concluded that CER practices have a significant role on environment outcomes since such activities affect green performance, and found that ecological practices affect financial and environmental performances. Hence, environmental outcomes cannot be understood without knowing the affected variables.

Hypotheses Development

SO and CER Practices

Decisions are impacted by managers' orientations since they reflect their personality and choices (Diehl & Klee, 2015) in spite of taking a longer time to be manifested (Porter & Kramer, 2006). Those beliefs affect workers, which lead them to practice environmentally (Nejati *et al.*, 2016). However, we do not expect similar green activities, nor protection for environment due

to managers having dissimilar beliefs, contexts etc. as highlighted by UET (Pedersen, 2010). Therefore, the theory is expected to explain how leaders respond to environmental challenges, and what they practice based on their personal backgrounds.

One the other hand, managers could have attitudes in a certain issue, but they do something else and sometimes may be seen on the opposition side (Collins *et al.*, 2007). Hence, orientations are not always accurate for prediction since other factors are souring organizations despite what UET has proposed that orientations are crucial for owners' plans (Manner, 2010). Grayson (2004) for example, found an obvious difference across firms regarding environmental responsible practices as a result of different values and attitudes of managers and employees as well. However, Kennedy *et al.* (2009) stated that based on previous literature, personal attitudes never completely explain an individual's action or behavior, and could be violated whereas others are acted upon. Accordingly, it has been assumed that there is a positive impact of sustainability orientation on CER practices.

SO and Environmental Sustainable Performance

Personal factors act as a filter once managers analyze complicated situations which influence performance as a result of their choices (Manner, 2010). Social and green orientations of owners cannot be ignored since these have an impact on outcomes of their enterprises, particularly in manufacturing SMEs, caused by owners modifying some processes to fit their thoughts, which affect performance (Duarte, 2010). Thus, individuals' beliefs facilitate our prediction on an organization's performance (Vitell & Paolillo, 2004). However, UET suggests that backgrounds lead managers to make some decisions, even though there is a lack of data that supports their views. As a result, these decisions are reflected on outcomes, positively or negatively (Ngai *et al.*, 2014).

Several studies found a correlation between seniors' beliefs and performance because it could be a guide once they analyze internal and external competitive environments contributing to economic value (Maletic *et al.*, 2015), firm's reputation, competitive potential (Mahmoud & Hinson, 2012), especially when a manager has more knowledge and attitudes of social and green issues (Wiengarten *et al.*, 2017). In contrast, Kennedy *et al.* (2009) concluded that personal attitudes cannot explain performance mainly because several owners violate them. In spite of these studies and conclusions, leaders' sustainability orientation has yet to be enriched in the business domain (Calic & Mosakowski, 2016), and literature did not provide a clear picture of its role on sustainable performance (Asah *et al.*, 2015). In accordance, the study supposes that there is a positive impact of sustainability orientation on environmental sustainability performance.

CER and Environmental Sustainability Performance

Complying with societies' norms and practicing environmentally are not an option any more. But it can be seen as an investment, which in turn contributes to better performance in enhancing the relationship with different pressure groups and thus as a consequence enhances the firm's reputation (Vincenza Ciasullo & Troisi, 2013). However, smaller enterprises could be proactive towards CER since the stereotype is that green practices are merely for larger companies. Thus, they can have an advantage over their competitors, which leads to better outcomes (Shahedul Quader *et al.*, 2016). UET assumes that practicing ethically and environmentally leads to better results as it takes into consideration the needs, rights of clients which influence the organization's flourish and performance.

Adebambo *et al.* (2015) found that once manufacturers have satisfied sustainable practices, in particular over production stage, sustainable performance is improved. Further, Gadenne *et al.* (2012) noted a strong positive correlation between green practices and outcomes, and ethical practices affect

sustainability positively. Besides, (Weber, 2008; Maletic *et al.*, 2015) have revealed a positive causality relationship between CER and economic performance. In contrast, others concluded that there is no evidence that ethical and green activities necessarily lead to desirable achievement (Du Plessis & Grobler, 2014). Therefore, we need to know more about such relationship; hence, it is assumed that there is a positive impact of CER practices on environmental sustainability performance.

SO and Environmental Sustainability Performance with a Mediating Role of CER

Organizations measure their effectiveness through performance, but we should understand affected reasons like how and why decisions are taken (Wiengarten *et al.*, 2017). Managers' personal features can affect the enterprise's culture such as ethics and green attitudes, and subsequently, employees' beliefs and practices. This green and environmental reflection can be standards for workers and firms during processes and activities. As a result, performance is impacted as proposed by UET (Gao, 2017). Castaldo *et al.* (2009) believe that smaller firm owners who incorporate their own green views into activities and policies of the enterprises, can take an advantage of building confidence with stakeholders, which often impacts an organization's economic and financial outcomes. For example, they deliver their own moral orientation into practices and make assurance that the business activities comply with their own values. Besides, This reflection leads to produce greenly and differently, as a result, contributing to competitive advantage as UET has explained (Wiengarten *et al.*, 2017).

Wiengarten *et al.* (2017) applied UET to investigate personal features, and revealed that there is a relationship between seniors' backgrounds and outcomes, which in turn has a positive impact on financial performance. Marcus *et al.* (2015) found that personal factors usually support individuals to engage in environmental behaviors, and hence performance, despite the outcomes, will vary across countries since managers hold different level of orientations

toward such issues (Sung & Park, 2018). Schaltegger and Burritt (2010) concluded that green policy leads to minimizing the risk, cost reduction, and differentiation. However, we need to understand how those relationships can be explained; thus, it is assumed that SO has a positive impact on environmental performance, once it is mediated by CER.

Methodology

The research adopted the quantitative design, and data has been collected through self-administrated survey. After the evaluation of the survey by experts and a pilot study is conducted, the questionnaire was ready to be distributed (Urbach & Ahlmann, 2010). The study is cross-sectional, and data is collected through personal administrated survey since it saves time, effort etc. (Fowler, 2009). Further, since addresses of manufacturers have not been updated, questionnaires have been handed to owners personally, and an explanation of research objectives was given. However, 87 questionnaires were validated to be analyzed.

Population and Sample

Population is a group of people who share some features (Zikmund, 2013), and the targeted population is small and made up of micro manufacturers in Tunisia. According to the Ministry of Industry, there are 6893 firms operating in the sector (Tunisian Industries, 2014). It has been chosen since a high percentage of SMEs in Tunisia operate in the manufacturing sector. Secondly, this sector is the focus of significant criticisms regarding its negative impact on natural environment, in spite of the significant contribution on the state's GDP and employment (INS, 2017). Besides, manufacturers' operations affect natural environment directly due to the tangible products that they have, unlike the other sectors and they consume raw materials extensively, which affect the ecological system. Hence, small and micro enterprises across the manufacturing sector is an optimal option to examine environmental sustainability performance.

However, since the population is large to be covered, appropriate representatives are chosen, who are owners/managers of small and micro manufacturers in Tunisia since these types of firms represent more than 91% of Tunisian’s manufacturers (INS, 2017). Small and medium manufacturers have been defined as firms employing less than 50 workers (INS, 2017). Simple random probability technique has been used because of each element of the population has an equal chance to be a unit of the sample. Owners/managers of those manufacturers are asked to participate in the study and fill the questionnaires, and the total sample of this research is 87 units.

Measures

The study has used a survey to measure proposed variables, and they have been measured as a first

order. It has been divided into four parts. The first section covers characteristics of owners and enterprises. Additionally, items for the second, third and fourth sections are adopted from previous research and represent the research variables. For example, sustainability orientation is measured by Kuckertz and Wagner, 2010 scale and includes managers’ views toward green challenges, and it has five items. Items (Turker, 2009) to measure CER have been adopted, which include an enterprise’s practices and activities to protect and enhance natural environment, and it has four items. Besides that, (Zhu *et al.*, 2008) measurement for environmental sustainability performance is adopted, which covers the reduction of negative effects on environment like emissions, and wastes, and it has 6 items. The five point Likert- scale is used for all of these measures, and Table 1 presents factors items.

Table 1: Items and constructs

Items and Constructs	Sources
<p><u>Sustainability orientation</u></p> <p>Businesses should take a global role on environmental protection.</p> <p>Environmentally oriented firms have advantages in hiring qualified employees.</p> <p>Corporate environmental responsibility should be a part of the foundations of any firm.</p> <p>Ecology issues are one of the main challenges for the society.</p> <p>Managers should take on a larger role on environmental responsibility.</p>	<p>(Kuckertz & Wagner, 2010)</p>
<p><u>CER</u></p> <p>Our enterprise participates in activities to protect the natural environment.</p> <p>Our enterprise participates in activities to improve the natural environment.</p> <p>We implement programs to minimize the negative impacts on the natural environment.</p> <p>We have a system for recycling.</p>	<p>(Turker, 2009)</p>
<p><u>Environmental sustainable performance</u></p> <p>There is reduction in air emission caused by the enterprise activities.</p> <p>Our firm has reduced waste water.</p> <p>Our firm has reduced solid wastes.</p> <p>There is reduction of hazardous material consumption.</p> <p>The enterprise has decreased environmental accidents.</p> <p>There is an improvement in the enterprise ecology situation.</p>	<p>(Zhu <i>et al.</i>, 2008)</p>

Data Analysis

The analysis unit of this article is organizational level, and the data has been collected from small and micro manufacturers, who are responsible for the policies and plans of these enterprises'. The research has used SPSS and AMOS for analyzing data. For instance, SPSS is used for descriptive analysis, whereas AMOS has been applied for testing hypotheses, in particular, for testing causal relationships between exogenous and endogenous variables (Hair *et al.*, 2012). Besides, AMOS is also used to examine the mediation effects (Hair *et al.*, 2012).

Respondents' Profile

A total of 700 questionnaires were sent out to small and micro manufacturers. However, 87 questionnaires are validated to be analyzed representing 12.4%. The respondents were owners/managers of those enterprises: For instance, 66% of them are managers, but 34% are owners and managers at the same time. From the total 76% were males, 24% of them were females. 35% of them have high school

or lower-level education, with 26% having diploma, 24% with first degree and 15% holding a master degree. Additionally, 57% were micro enterprises, and 43% were small firms. As for the manufacturers, 32% of them operate producing construction materials, 20% textile, 17% wood, 11% in ceramic and glasses, 10% in machines, 7% electronics, and 6% in the food industry. Table 2 shows sample characteristics.

Measurement Model

Reliability and validity have been examined in order to verify the relationships across variables and their indicators. Reliability is examined through Cronbach's' alpha coefficients, and variables coefficients were ranged between .75 to .80, which are acceptable, and reliable (see Nunnally, 1978; Peterson, 1994) as depicted in Table 3.

Average variance extracted (AVE) values were 0.504 (SO), 0.633 (CER) and 0.506 (environmental sustainability performance), which are acceptable (e.g. Hair *et al.*, 2016). Thus, measurement analysis has met, and

Table 2: Respondents' profile

Variable	Category	Frequency	Percentage (%)
Gender	Male	66	76%
	Female	21	24%
Sector	Constructions	25	28%
	Textile	17	20%
	Wood	15	17%
	Ceramic & Glasses	10	11%
	Machines	9	10%
	Electronics	6	7%
	Food	5	6%
Manufacturer's Type	Micro	50	57%
	Small	37	43%
Status	Manager	57	66%
	Owner & Manager	30	34%
Education	High School and Less	30	35%
	Diploma	23	26%
	Degree	21	24%
	Post Graduate	13	15%

satisfied standards to move to the next section, which is hypotheses testing.

Hypotheses Testing

The structural model has shown that the hypotheses are supported despite different R² and path coefficients are generated, and they are illustrated in Table 4.

The first hypothesis assumes a positive relationship between managers’ sustainability orientation and CER, and has been supported due to ($\beta = 0.475$,). Further, R² was .22,6 which explains 22.6% of the variance, which is moderate (Hair *et al.*, 2016). Besides, the result of the analysis illustrates that the sustainability orientation affects environmental sustainability performance ($\beta = 0.331$,), and R² is 11% of the variance, however, it is weak (Hair *et al.*, 2016). It has been found that CER practices influence environmental sustainable performance ($\beta = 0.367$,), and R² is 13.4% of variance, which is considered moderate (Hair *et al.*, 2016). Additionally, CER has mediated the relationship between sustainability orientation and environmental sustainability performance ($\beta = 0.270$,), and R² is weak since the variance is 11% (Hair *et al.*, 2016).

Discussion

Managers’ sustainability orientations are a central cause contributing to enterprises’ ecology performance. For deeper understanding of their association the study has investigated them with a mediating role of environmental practices.

Firstly, to verify variables item consistency, factor analysis has been applied for two different tasks. Those functions are exploratory factor analysis (EFA), and confirmatory factor analysis (CFA). EFA is used once there is doubt about the attribution of some questionnaire questions, whereas CFA is used to confirm that some items belong to a certain variable (Hair *et al.*, 2016). Therefore, to achieve the study objectives CFA is chosen since all items have been adopted from previous research.

However, the first assumption, which is answering the first question, has stated that owners’ sustainability orientation has a positive impact on CER. Given the empirical evidence it can be concluded that the hypothesis is accepted, and it supports UET, which has suggested that seniors’ attitudes and values reflect on choices and decisions (Hambrick & Mason, 1984). The result is in the line with the finding of Nejati *et al.* 2016 who found that managers’ perceptions determine the degree of involvement on green

Table 3: Measurement analysis

Constructs	Cronbach’s Alpha Coefficients	AVE
Sustainability Orientation	.75	0.504
CER	.80	0.633
Environmental Performance	.78	0.506

Table 4: Regression analysis

Relationship	Coefficients	T-Value	P-Value	Decision
SO→CER Supported		.475	5.917	.000
SO→ Environmental performance Supported		.331	3.847	.000
CER→ Environmental performance Supported		.367	4.318	.000
SO→CER→ Environmental performance Supported		.270	2.841	.005

and social activities. Ahmad and Seet, 2009 have provided empirical evidence of how personal backgrounds determine choices due to managers' difficulty to separate their own beliefs and business activities. Additionally, small and micro enterprise managers have more leeway in making decisions, in comparison with larger firms since they do not have boards to control their choices. Further, those orientations are widely impacted by their culture, particularly, the Tunisian government and society are taking green issues seriously; hence, the enterprise's context has a main role producing such result.

The second hypothesis provides an answer to whether owners' sustainability orientation of influences manufacturers' environmental sustainability performance, and this assumption has been supported. UET has suggested that core values affect enterprises' outcomes. Vincenza Ciasullo and Troisi, (2013) concluded that SMEs managers' values determine the outcomes of such enterprises because ethical values open a window of new ideas of operations and competitive advantages, which can be different from the rivals. In this context, owners have gone beyond government's regulations. Hence, these manufacturers have got a better reputation since word of mouth spread quickly across collective societies.

Furthermore, environmental practices have been found to impact environmental sustainability performance as H3 suggested, which answers the third question. And as UET assumes that performances are influenced by varied reasons, and that environmental practices have by far contributed positively to the firms' brand, image etc. Several studies have concluded that green practices lead to ecological outcomes, for example, Sajan *et al.* (2017) revealed that smaller manufacturers' practices affect sustainable performance positively as these types of enterprises have less operations, and any small change of environmentally friendly practices affects the outcomes clearly. Eltayeb *et al.* (2011) concluded also that environmental activities have an influence on intangible performance such as reputation

since clients tend to buy from green companies despite the fact that the price is the main factor for customers. This empirical evidence can be seen as many of the environmental activities like protecting, improving and minimizing negative effects on natural environment have a central role on ecology outcomes such as reduction of wastes and air emissions.

The result of this article supports that owners' sustainability orientation has a positive impact on environmental performance once CER has mediated this relationship, and provides an answer for the main question of the study. The findings are in line with UET since owners' green orientations have an influence on performance through the reflection of their beliefs on employees' practices and manufacturers' operations especially in smaller enterprises. Those managers are often aware of daily bases processes, so, it is expected they make assurance that operations are complying with their core values. Asah *et al.* (2015) and Gao (2017) found relationships across managers' beliefs and outcomes, as green enterprise leaders think differently, which generates new ideas as a result of improved performance. However, owners' sustainability orientation in this context is a result of the ecology culture of the country and society. Thus, they are impacted widely by their own and local community's thoughts and beliefs, which support green and ethical organizations. Therefore, environmental performance is enhanced by sustainability orientation for such views are reflected on environmental practices.

The research has contributed to UET literature by adding CER as a mediator to explain how performance is impacted by managers' sustainability orientation. The theory has proposed several reasons that clarify why outcomes are impacted and the research has provided a new variable (i.e., CER) to extend the theory perspective. Secondly, it extends literature by opening a new window for future research since it has provided an empirical evidence of sustainability orientation and CER domains with their outcomes especially, which

highlighted psychological factor. Such a topic has not been examined deeply. In other words, it has correlated psycho and management variables (Manner, 2010). Thirdly, it shows how CER has been impacted by managers' backgrounds, and therefore, it affects green performance significantly regardless of the country or/and culture and as a result, we cannot ignore leaders' beliefs, and manufacturers' practices when we investigate organizations' outcomes.

It is important that owners have sustainability orientation to develop environmental practices, but they need to take into account that each community has its own view toward ecological protection and enhancement, which contributes positively to sustainable environmental performance as empirical evidence has found. Moreover, managers should revise environmental activities from time to time since needs and priorities are changing over time, and they can share with workers' environmental challenges that have emerged whether locally or/and globally. Besides, smaller manufacturers often have lesser green practices, so, owners have a chance to take advantage over their competitors through practicing environmentally, and enhancing performance. However, they need to balance between their own orientations and needed environmental practices in order to affect environmental sustainability performance positively. Furthermore, policymakers should promote awareness of sustainability challenges to owners, and prioritize the most crucial environmental practices that the state needs, and how personal factors can make a difference on outcomes, mainly, the government usually has more knowledge about environmental issues that have arisen.

Limitations and Future Research

Despite the fact that this research provides some insights of sustainability orientation and sustainable performance, it has several limitations. Firstly, the sample is the manufacturing sector but other sectors like, service and financial, can add on to the knowledge, and can enhance generalizability of the findings. Secondly, it is a

cross-sectional study, while a longitudinal study by far will show deeper results. The findings of our study could be impacted by the economic circumstances that Tunisia faces in this period of time. In other words, answers may be affected by time. Thirdly, the study did not investigate the role of a moderation like culture or innovation, for these suggested variables could illustrate specific evidence, in particular, with the context of sustainability and green issues. Finally, data has been collected from owners/managers of manufacturers; hence, they can be biased toward their enterprises. Future research can examine views of employees, customers etc., toward such challenges.

Conclusion

The study has examined the role of the managers' orientation on sustainability performance amongst small and micro manufacturers, and the role of CER as a mediation, as previous research has not investigated them comprehensively, and did not explain clearly how performance is influenced by leaders' orientations. Besides, civil organizations have demanded bigger roles from such enterprises in protecting natural environment. However, several tests have been used to analyze collected data such as Cronbach alpha, R^2 and t-test. It has been found that owners' sustainability orientation affects CER and environmental outcomes; further, CER influences enterprises' performance positively, and it does mediate the relationship between sustainability orientation and environmental sustainability performance.

The research has contributed to literature and UET by mediating CER between sustainability orientations and environmental performance to provide an explanation of how outcomes are impacted by owners' personal and psychological factors. Adding CER extends UET and literature domains with different cultures and contexts. In terms of managerial practices, owners have to look at their own beliefs regarding natural environment. Ecological practices should be revised from time to time since challenges are changed over time. Besides, policymakers have

to guide owners for needed green activities and promote awareness across the board. However, the study recommends further investigation on these topics, and it suggests some moderations in order to enrich management and psychology domains.

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