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Role of Organizational Values/Culture in Sustainable Environmental and Social Practices:
Evidences from Indian Small and Medium Enterprises

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Role of Organizational Values/Culture in Sustainable Environmental and Social Practices:

more than willing to include social and environmental goals into their sustainability agenda (Lawrence et al., 2006; Williams and Schaefer, 2013; Rojas and Lorenzo, 2021).

This paper investigates the effect of organizational values and SME owners /managers attitude and ethical orientation on firms sustainable environmental and social practices in the context of Indian SMEs. It is mentioned in the literature that for small firms, owners /managers attitude reflects the organization, values and beliefs. A positive attitude of owners/managers towards the natural environment shapes the environmental orientation of the firm. While formulating the environmental strategy of the firm, the top management should consider the motivations and intentions of owners/managers for pursuing pro-environmental strategies. Managerial characteristics such as beliefs, values and attitudes influence the strategic choices and thus the behavior.

1.1 Family vs. nonfamily SMEs

In this study, we also examine the moderating role of family influence on the hypothesized relationships, i.e. whether the relationships are stronger (or weaker) for family SMEs than for nonfamily SMEs. In the literature, family firms have been defined in various ways in terms of family ownership, control, management and operations, governance and influence (See, for example, Sharma and Sharma, 2011; Lopez-Perez et al., 2018; Mamede and Allouche, 2018; Carado and Mota, 2021; Kariyapperuma and Collins, 2021). Traditionally, firms may be classified into four types based on family involvement: family-owned and managed, family-managed but ownership may be dispersed, family-owned but managed by a family member under family influence, and family noninvolvement. For this research, the definition of family firms encompasses the first three classification types where the underlying families exercise significant control and influence on the management, operations and governance of the firm, irrespective of the ownership structure.

Although family businesses account for almost 90% of the global GDP, more complex issues than nonfamily businesses (Lopez-Perez et al., 2018), 7% of Fortune 500 companies are family controlled and more than 75% of the global workforce is employed by family businesses (Kariyapperuma and Collins, 2021). Maheswari et al. (2016) note that the issue of sustainability in family firms has drawn inadequate attention from academicians and researchers. Lorenzo (2021) also notes that although in recent years, more attention has been paid to studying and environmental sustainability in SMEs, the analysis of family influence has remained understudied. The literature highlights the need for a comparison of family and nonfamily businesses in terms of their sustainability behaviour (Mamede and Allouche, 2018).

emotional well-being, and would pursue social and emotional goals more than pure economic goals. Mamede and Allouche (2018) note that family SMEs have more close and consistent links with their surrounding communities than non-family SMEs. Based on the RBV, the authors argue that family SMEs possess unique resources, i.e. their family, which are inimitable and non-substitutable, and provide greater competitive advantages compared to non-family SMEs. The authors also mention that the stewardship theory provides support for family SMEs' greater focus on social performance and -social- emotional wealth generation for family shareholders and stakeholders.

Maheswari et al. (2018), based on the legitimacy theory and social capital theory, argue that firms need to obtain the society's approval in order to survive, and hence must engage in local community development to improve their brand image and reputation. The authors refer to the organizational identity theory that explains the choice of financial goals by family firms motivated by the identity fit, i.e. the inseparable ties between the family and the firm. They also mention that the stewardship theory suggests owners/managers of family SMEs will invest in social initiatives to maximize utility not only for themselves but also for the benefit of all stakeholders. According to the authors, family firms are more likely to engage in sustainable social practices than non-family firms.

Curado and Mota (2021) refer to the social wealth theory to explain why family firms focus not only on the economic goals but also on the environmental and social goals in order to build and maintain stakeholder relationships and a good reputation, and pass on the social and emotional wealth to future generations. The authors also note that for family firms, family values, family involvement, relationships among family members and a flexible organizational structure are intangible resources, and because they are difficult to imitate or replace, they may be considered as a source of competitive advantage. The authors also mention the relevance of the stewardship theory in the context of family firms which proposes that individuals are motivated to make decisions for the benefit of others. The authors note that

their personal goals, to promote sustainable practices that explain the competitive advantage firms enjoy over non-family firms (Rojas and Lorenzo (2021)). It is noted that for family SMEs, family values and organizational values become inseparable. Family SMEs that pursue social and environmental goals, may not realize improved financial results in the short term; however, they would still divert resources from economic to economic goals to fulfil their societal obligations and increase their emotional wealth for future generations.

1.2 Contributions

Following are the contributions of the present study:

- (a) To the best of the author's knowledge, research on sustainability in Indian SMEs has been rather limited. Mittal et al. (2012), Nair and Sodhi (2012) (2014) and Singh et al. (2015) identify the major drivers, barriers, sustainable practices and performance measures for Indian SMEs. Thanki et al. (2016) develop an integrated framework for lean implementation practices in SMEs using the analytical hierarchy process (AHP) approach. Gandhi et al. (2018) use the TOPSIS method to rank the drivers of integrated lean manufacturing in SMEs. Sashi et al. (2018) examine the effect of sustainability orientation and supply chain integration on sustainable procurement and product and process development and the effect thereof on SMEs' environmental and cost performance. Ghosh et al. (2019) identify the determinants that strengthen the integration of sustainability with innovation and Sajan and Shalij (2021) investigate the effect of lean implementation practices on sustainability performance in manufacturing SMEs. Singh et al. (2021) have developed an SME sustainability disclosure index for stock exchange manufacturing SMEs. Nudurupati et al. (2022), based on case studies of manufacturing SMEs, discuss the drivers, barriers and benefits of the adoption of circular economy (CE), and Sahoo (2022) studies the effects of lean practices and organizational culture on the operational performance of manufacturing SMEs. However, none of these papers specifically investigates the effect of organizational values/culture and owners/managers' positive attitude and ethical orientation on firms' adoption of sustainable environmental and social practices in Indian SMEs. The present study intends to fill this gap. Moreover, the role of family influence has not been studied in the context of sustainable practices in Indian SMEs so far. The present

study examines the moderating effect of family influence on the hypothesized relationships to distinguish between family and non-family Indian SMEs.

(b) The measurement scale for the study has been developed based on the extant literature and inputs received from practitioners during the pilot study. The scale consists of 4 items.

Constructs and items for the study have been developed based on the relevant literature and feedback received during data collection. As mentioned, scales used for other countries modified to suit the Indian context. Since in this paper examining the effect of organizational values/culture and owners /managers positive attitude and ethical orientation on the implementation of sustainable environmental and social practices in Indian SMEs, following 5 constructs have been taken into consideration:

- (a) Organizational values/culture and owners /managers approach towards sustainability
- (b) Sustainable product and process design
- (c) Sustainable waste disposal management
- (d) Sustainable human resource management
- (e) Local community development

While constructs (b) and (c) represent the sustainable environmental practices, constructs (d) and (e) represent the sustainable social practices of Indian SMEs in this study. Table 1 shows the constructs and their associated items. Table A1 in Appendix I lists the references from where the items have been gleaned.

Insert Table 1 about here

3. Conceptual framework and hypotheses

In this section, we develop a conceptual framework and hypotheses for the study based on a detailed review of the relevant literature.

3.1 Organizational values/culture and owners /managers approach towards sustainability, sustainable product and process design, and s

business activities, also note that the literature reports mixed results, including no relationship between owners /managers positive environmental attitudes and positive environmental outcomes. The authors, in their study of Australian SMEs, do not find support for the hypothesis that owners/managers with positive environmental attitudes are more likely to engage in a relatively higher level of environmental conservation practices.

On the other hand, Cordano et al. (2010), study of SMEs in the US wine industry, observe that owners /managers attitudes, norms and ethical intentions strongly influence the adoption of environmental management programmes such as energy conservation and recycling practices. Roxas and Coetzer (2012) note that while some authors have reported strong positive associations between owners /managers norms, values, beliefs and attitudes, and firms environmental sustainability orientation, other authors have commented that the associations may not be straightforward, and there may be other confounding variables that explain how managers attitudes translate to actual environmental management practices. The authors, however, in their study of SMEs in the

behaviour and the adoption of environmental practices such as product life cycle analysis, and/or energy conservation, clean production technology and sorting of wastes.

Therefore, we posit the following hypotheses

Hypothesis 1 (H1): Organizational values/culture and owners'/managers' approach towards sustainability are positively associated with sustainable product and process design in SMEs.

Hypothesis 2 (H2): Organizational values/culture and owners'/managers' approach towards sustainability are positively associated with sustainable waste disposal management in SMEs.

3.2 Organizational values/culture and owners /managers approach towards sustainability, sustainable human resource management, and local community development

Hypothesis 3 (H3)

and participation are key success factors for implementing sustainable environmental practices in SMEs.

Wu et al. (2015) based on a case study of Chinese SMEs, strong positive relationship between employee-related social practices and environmental practices.

Fernandez and Camacho (2016) note that an improvement in the working environment at workplace facilitates the institution of a culture in the firm. The authors, based on the interviews of their study of Spanish SMEs also note that employee involvement and participation in the decision-making process not only boost employee morale and motivation, but also help the firm pursue sustainable environmental and social practices.

According to Courrent et al. (2018) practices in the workplace have a positive effect on the human capital, promoting a culture of continuous learning and the involvement of employees, with their knowledge and skills, contribute to the implementation of sustainable practices. Chik and Courrent (2018) note that workplace practices improve employee motivation, which in turn may facilitate firms' engagement in sustainable environmental and community practices.

Eweje (2020), based on a case study of Japanese SMEs finds that the CEO/owner's decision-making process, motivation, philosophy and determination to adopt sustainability practices play a major role in garnering employee support for the firm's sustainability initiatives. The author notes that employees of an SME that pursues sustainability strategies will demonstrate loyalty and dedication, which in turn will have a positive impact on the firm's adoption of sustainable environmental and social practices. The author also notes that employee satisfaction is a significant performance indicator for a sustainable firm and employee involvement in the decision-making process is a key to the firm's engagement in sustainability initiatives and practices.

Sendhofer (2020) observes that there is a lack of research on employee involvement in sustainable practices in SMEs. The author, based on a case study of a Swedish SME, finds that employee motivation coupled with their moral and ethical responsibilities supports sustainable practices in SMEs. The author also notes that in SMEs, besides owners'/managers' ethical orientation, the ethical behaviour of employees reflects firm's responsibility towards sustainable practices.

Based on the above discussions, we posit the following hypotheses:

Mamede and Allouche (2018) have conducted a study of Portuguese SMEs that governance and leadership abilities of owners/managers of family SMEs directly influence social orientation and choices through own vision and values.

Ahmad et al. (2020) comment that a firm must act in accordance with the expectations of society, and actively participate in social causes, human development

the definition of SMEs given by the Ministry of Micro, Small and Medium Enterprises (MSME) of the Government of India (GoI), which is based on the investment in plant machinery/equipment and annual turnover. However, we selected SMEs with less than or equal to 250 employees based on the definition of the European Union (EU), to compare the results of our

5. Results

In this section, we present the results of exploratory/confirmatory factor analysis and structural equation modelling. We have followed Hair et al. (2007) for data analysis.

5.1 Factor analysis

For factor analysis, normality, linearity, homoscedasticity and homogeneity of the sample have been assumed. The sample size of 126 exceeds the suggested sample size of 50. The ratio of the sample size (126) to the number of variables (22) exceeds the minimum suggestion of 5:1. Significant correlations have been found among many of the variables and partial correlations among most of

5.3 Structural equation modelling

For structural equation modelling (SEM), maximum likelihood estimation (MLE) has been used. The overall model fit statistics for SEM are as follows: $\chi^2(165.35)$ = 165.35 (degrees of freedom $df = 9$, relative chi-square $\chi^2/df = 1.705$ < 3 recommended for a good fit), GFI = 0.863, AGFI = 0.808, CFI = 0.948, RMSEA = 0.075 (RMSEA: 0.075 < 0.08), which, again, indicate a reasonably good fit. Figure 1 shows the path diagram along with the standardized path estimates. Table 5 summarizes the results of hypothesis testing.

Insert Fig. 1 and Table 5 about here

5.4 Family vs nonfamily SMEs

To ascertain the effect of ownership and management of the firm on the structural relationships, a multigroup SEM approach has been followed with two groups: family SMEs and nonfamily SMEs. The same structural model is tested for the two groups to check for any significant difference between the groups with respect to each of the structural relationships. If the path estimates of each structural relationship for the groups are constrained to be equal at a time, to see if the difference in the statistics is statistically significant. Only those structural relationships for which at least one of the groups has a significant path estimate have been considered. Table 6 shows the results of the SEM multigroup analysis for the two groups.

Insert Table 6 about here

statistically significant. On the other hand, it is found that for two of the structural relationships nonfamily SMEs have higher unconstrained standardized path estimates than family SMEs at a significance level of 0.05. Therefore, it cannot be claimed that family influence always positively moderates the relationships hypothesized and *H10* can at best be said that *H10* is partially supported.

6. Discussions and implications

The results of the study indicate that organizational values/culture, managers' positive attitude and ethical orientation generally lead to a higher level of sustainable environmental and social practices in SMEs. No direct relationship is between the constructs, *Org_Val* and *Pro_Des*. Roxas and Coetzer (2012) note from the literature that there may not be a direct relationship between owners /managers' attitude and the environmental behaviour of small firms as owners/managers may find it difficult to translate their internal strategies into the actual behaviour of firms. Moreover, there could be other confounding variables, such as regulations, stakeholder expectations, collaboration with suppliers, and customer and competitor pressure, which might explain how managerial attitudes translate into actual environmental management practices. Hussey and Eagan (2007) and Gadenne et al. (2009) also do not support for the hypothesis that owners /managers' positive environmental attitude lead to a higher level of environmental practices.

We do not find a direct relationship between the constructs *Org_Val* and *Com_Dev*. Gadenne et al. (2009) also do not find any direct relationship between owners /managers' environmental attitudes and community-based environmental support practices. However, we do find an indirect positive effect of *Org_Val* on *Com_Dev* through the mediating roles of the constructs, *Sus_HRM* and *Wst_Dis*. In fact, from Figure 1, it can be easily ascertained that the indirect effect of *Org_Val* on *Com_Dev* is 0.363, which is significant. Therefore, it can be said that the constructs, *Sus_HRM* and *Wst_Dis* mediate the relationship between *Org_Val* and *Com_Dev*.

We have tested the relationships between the constructs, *Wst_Dis* and *Pro_Des*, and also between the constructs, *Wst_Dis* and *Com_Dev*, which have not been specifically tested in the literature so far. A positive relationship between the constructs, *Pro_Des* and *Wst_Dis* indicates that environmentally friendly product and process design does lead to sustainable waste disposal.

recycling activities. Similarly, a positive relationship between the constructs, *Com_Dev* indicates that ecofriendly waste disposal and recycling help in improving health, hygiene and the quality of life of the local community.

In the literature, there is also a dearth of research examining the relationship of social practices in firms' adoption of sustainable environmental practices and community-related social practices (Sendlhofer, 2020). In this study, it is found that the association between the constructs *Org_Val* and *Sus_HRM* is the strongest (standardized path estimate: 0.62), and the construct *Sus_HRM* either fully or partially mediates the relationships between the construct, *Org_Val* and all other constructs related to sustainable environmental practices and community-related social practices. This is a significant observation and has an implication for owners/managers of SMEs. Torugsa et al. (2013), Hu et al. (2015), Courrent et al. (2018), Chasse and Courrent (2018), and Eweje (2020) also note that a safe and healthy working environment, and employee training and involvement in the decision-making process not only boost employee morale and loyalty, but also garner employee support in firms' pursuit of sustainable environmental and community-related social practices.

For owners/managers of SMEs, it is apparent that besides maintaining a positive attitude towards the natural environment and an ethical orientation towards employees and the society, focus should be on elevating the level of engagement in environmental practices, and employee community-related social practices, especially in employee-related social practices since the same have been found in the study to mediate the relationships between organizational values/culture and owners'/managers' positive attitude and ethical orientation, and firms' environmental and community-related social practices. As far as the environmental practices concerned, from Table 2, we observe that for the items *Design-for-Environment (DfE) tools* and *Increased recycling of waste*, the mean ratings are less than 4, which indicate that there is scope for improvement in product and process design and recycling activities. For example, if products and packaging are designed with materials that have low environmental impacts, and are recyclable and biodegradable, and processes are designed in such a manner that they lead to lower water emissions and effluents, there will be a reduced requirement of waste management activities will also pick up. From Table 2, we also find that although the average ratings for items related to employee-related social practices are above 4, the ratings for all the items

related to community-related social practices are well being, indicating that currently Indian SMEs do not focus as much on community development as their own employees. However, it is argued that although investing in and engaging with the local community may not bring in immediate economic benefits, given that most of the SMEs are embedded in their local communities, the same is expected to build the image and reputation, and thereby attain competitiveness and better financial results in the long run.

As far as the family influence is concerned, it is found that the same at best partially moderates the hypothesized relationships. From Table 6, it may be observed that for family SMEs, five of the relationships are stronger than for non-family SMEs while two of the relationships are stronger for non-

family SMEs need to step up their level of engagement with the local community as the same has a long-term effect on their brand image and reputation.

7. Conclusions, limitations and directions for future research

In this paper, we have studied the effect of organizational values/culture, and owners /managers' positive attitude and ethical orientations on the adoption of sustainable environmental and social practices in Indian SMEs. For environmental practices, we have considered product and process design, and waste disposal and recycling.

service sector. However, a study of SMEs belonging to the service sector would enable compare the results for these two sectors. The present study is cross-sectional and data were collected in the pre-early COVID-19 period. Therefore, a future longitudinal study would help us compare the results for pre and post COVID-19 periods.

In this study, we have not considered the impact of external factors such as regulations, supplier collaboration, and pressure exerted by customers, competitors and other stakeholders. Future studies addressing these factors would probably reveal new insights and implications for owners/managers. Also, we have not considered the impact of environmental and social practices on firms' financial and non-financial performance. It is largely perceived that many SMEs voluntarily adopt sustainable practices without any regard to their performance since they believe that adopting sustainable practices is an ethical thing to do and they must do it. Moreover, benefits, if any, of adopting sustainable practices will not be realized immediately and will materialize only in the long term. Nonetheless, a longitudinal study to assess the impact of sustainable environmental and social practices on firms' financial/non

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Tables

Table 1: Constructs and items for the study

Construct	Item
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Construct	Item
	(ii) Improving sanitation and sewage facilities in the local community
	(iii) Maintaining hygiene and cleanliness the local community
	(iv) Providing healthcare facilities to the community
	(v) Services rendered towards area development

Item	Item Mean	Item Std. Dev.	Factor				
			Organizational values/culture and owners /managers approach towards sustainability	Sustainable product and process design	Sustainable waste disposal management	Sustainable human resource management	Local community development
Training and development of employees	4.13	0.966				0.689	
Improving sanitation and sewage facilities in the local community	3.32	1.093					0.851
Providing healthcare facilities to the local community	3.60	1.021					0.835
Services rendered towards local area development	3.37	1.049					0.802
Maintaining hygiene and cleanliness in the local community	3.37	0.953					0.800
Education and training the local community	3.29	1.118					0.755
Cronbach's Alpha			0.911	0.787	0.878	0.917	0.903

Table 3 Results of confirmatory factor analysis

Construct	Construct Acronym	Item	Std. Loading Estimate	Critical Ratio	AVE	CR
		Owners /managers leadership approach	0.913	13.827		
Organizational values/culture and owners /managers approach towards sustainability	Org_Val	Owners /managers ethical orientation	0.870	12.765	0.73	0.98
		Organizational vision, values and beliefs	0.859	---		
		Owners /managers motivation and commitment	0.766	10.320		
		Using Design				
Sustainable product and process design	Pro_Des					

Construct	Construct Acronym	Item	Std. Loading Estimate	Critical Ratio	AVE	CR
		Maintaining hygiene and cleanliness in the local community	0.871	9.942		
		Improving sanitation and sewage facilities in the local community	0.731	---		

Note: * indicates the items for which the factor loading estimates were calculated by the application package (SPSS AMOS)

Table 4: Construct Correlation Matrix

Construct	Org_Val	Pro_Des	Wst_Dis	Sus_HRM	Com_Dev
Org_Val	1				
Pro_Des	<i>ns</i>	1			
Wst_Dis	0.496 ⁺	0.396 ⁺	1		
Sus_HRM	0.622 ⁺	0.249	0.552 ⁺	1	
Com_Dev	0.381 ⁺	0.276 ⁺	0.463 ⁺	0.476 ⁺	1

Note: Superscript (++) represents significance at 0.01 level, superscript (+) represents significance at 0.05 level and *ns* represents non-significance

Table 5: Results of hypothesis testing

Hypothesis	Description	Result
H1	<i>Organizational values/culture and owners'/managers' approach towards sustainability are positively associated with sustainable product and process design in SMEs</i>	Not supported
H2	<i>Organizational values/culture and owners'/managers' approach towards sustainability are positively associated with sustainable waste disposal management in SMEs</i>	Supported
H3	<i>Organizational values/culture and owners'/managers' approach towards sustainability are positively associated with sustainable human resource management in SMEs</i>	Supported
H4	<i>Organizational values/culture and owners'/managers' approach towards sustainability are positively associated with local community development in SMEs</i>	Not supported
H5	<i>Sustainable product and process design is positively associated with sustainable waste disposal management in SMEs</i>	Supported
H6	<i>Sustainable waste disposal management is positively associated with local community development in SMEs</i>	Supported
H7	<i>Sustainable human resource management is positively associated with sustainable product and process design in SMEs</i>	Supported
H8	<i>Sustainable human resource management is positively associated with sustainable s</i>	

H9 Sustainable human resource management is positively supported associated with local community development in SMEs

Figure

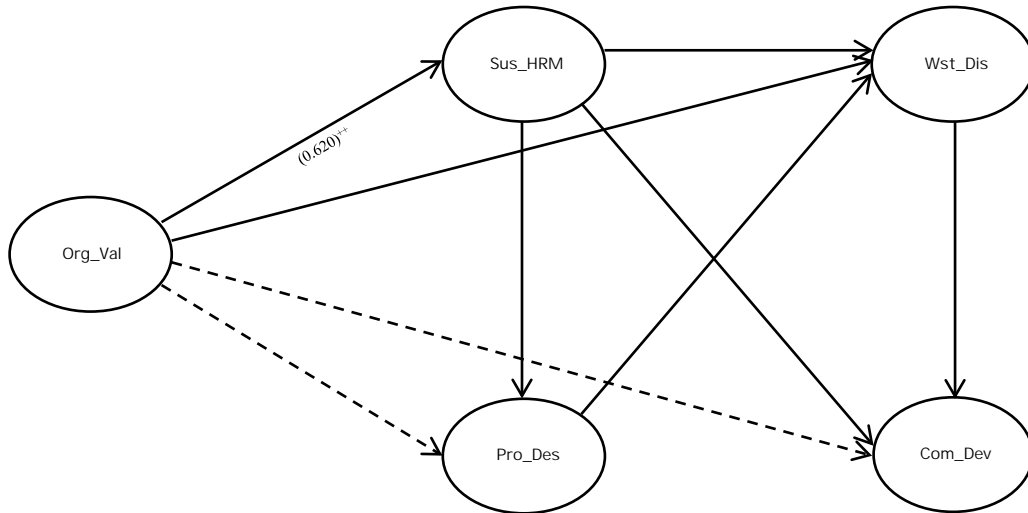


Fig. 1: Path diagram along with the standardized path estimates

Note: Solid lines represent the hypotheses that are supported. Dashed lines represent the hypotheses that are not supported. Figures within brackets represent the standardized estimates. Superscripts (+) and (++) represent significance at 0.05 and 0.01 level respectively.

Appendix A

Table A1: Constructs, items and references

Construct	Item	Reference
	(i) Organizational vision, values and beliefs	Lee and Klasse (2008); Sharma and Sharma (2011); Nair and Sodhi (2012); Roxas and Coetzer (2012); Torugsa et al. (2012, 2013); Uhlaner et al. (2012); Singh et al. (2015); Dekker and Hasso (2016); Fernandez and Camacho (2016); Witjes et al. (2017); Chasse and Courrent (2018); Gandhi et al. (2018); Lopez et al. (2018); Mamede and Allouche, 2018; Ahmad et al. (2020); Eweje (2020); Prashar and Sunder (2020); Kariyapperuma and Collins
(a) Organizational values/culture and owners /managers approach towards sustainability		

Construct	Item	Reference
		Caldera et al. (2018); Courrent et al. (2018); Gandhi et al. (2018); Ahmad et al. (2020); Sendlhofer (2020)
	(v) Encouraging creativity and innovation	Fernandez and Camacho (2016); Witjes et al. (2017); Caldera et al. (2018)
(e) Local community development	(i) Education and training the local community	Nair and Sodhi (2012); Courrent et al. (2018); Eweje (2020)
	(ii) Improving sanitation and sewage facilities in the local community	Nair and Sodhi (2012); Caldera et al. (2018); Eweje (2020)
	(iii) Maintaining hygiene and cleanliness in the local community	Caldera et al. (2018); Eweje (2020)
	(iv) Providing healthcare facilities to the local community	Nair and Sodhi (2012); Caldera et al. (2018); Eweje (2020)
	(v) Services rendered towards local area development	Gadenne et al. (2009); Nair and Sodhi (2012); Torugsa et al. (2012, 2013); Uhlener et al. (2012); Wu et al. (2015); Fernandez and Camacho (2016); Caldera et al. (2018); Chasse and Courrent (2018); Courrent et al. (2018); Ahmad et al. (2020); Eweje (2020); Rojas and Lorenzo (2021)