

Deployment of Sustainable Development Framework in Export Manufacturing Firms for the Common Good

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Deployment of Sustainable Development Framework in Export Manufacturing Firms for the Common Good



Usama Awan, Mohammed Khurrum S. Bhutta, Janne Huiskonen, and Andrzej Kraslawski

1 Introduction

United Nations reports on SDGs suggest that the developing world is meeting the challenges of sustainable development by pursuing programs designed to promote the well-being and good health, decent work, economic growth, and encouraging 3 equal opportunities as well as reducing inequalities (United Nations 2016). Many of today's industrial, environmental, and social issues have had an impact on the natural environment. Since 2015, sustainable development provides a case for the development of human well-being and natural environment while less attention has been given to social sustainability issues in inner-firm relationships (Awan et al. 2018a). Rapid changes in the global economic environment have made industries much more aware of the importance of sustainable development (Li et al. 2014). 10 The most serious challenges facing the developing countries include the reduction of health and safety risks to workers in the working environment resulting from 12 poor quality of energy management systems which results in catastrophic accidents 13 inside premises often caused by electric installations as well as ensuring equality in the workplace and solving wage-related issues. The management of health and 15 safety issues, workplace infrastructure, equal opportunities, and child labour add on 16 to the challenge of sustainable development. Besides, developing countries should focus on the development of socially sustainable policies, promoting health and 18 safety, developing and maintaining energy management systems, and promoting 19 equal opportunities in all spheres and social growth to ensure long-term sustainability.

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U. Awan et al.

As a result, much of the manufacturing sector has emphasized inter-firm relationship along with an intensified focus on coordination and cooperation to demonstrate more performance outcomes (Gimenez et al. 2012).

Ivery (2010) stresses that a leader's behaviour has got a significant impact on achieving performance outcomes. The reason is that leaders are expected to motivate others to work together and, most importantly, they manage the transition in the organisation. So far, most previous studies on transformational leadership focused on establishing conducive supply chain environment, transformational leadership and its positive influences innovation and performance (Aragón-Correa et al. 2007), supply chain (SC) leadership for environmental sustainability (Clifford Defee et al. 2009), transformational leaders and their understanding of supply chain relationships (Clifford Defee et al. 2010), improving the supply chain performance (Birasnav et al. 2015), but they did not explore the transactional leadership interaction in the supply chain relationship context. Transformational leadership affects organization-focused idea generation by employees because both can inspire followers to pursue collective values and make commitments (Deichmann and Stam 2015). Transactional leaders are defined as "the exchange relationship between superior and subordinate, and its purpose is to meet the expectations and gratify the interests of each party" (Bass and Avolio 1994). To maintain the effectiveness of inter-firm relationship management, supply chain leader behaviour is considered a key source of achieving desired outcomes (Gosling et al. 2017). Thus, the effectiveness of inter-firm governance mechanism seems to be a challenge and relatively little research has been devoted to the identification of the factor that explains influences on different types of governance mechanism in supply chain relationship (Awan et al. 2018a). To date, there is limited evidence on how transactional leadership style effectively translated into aligning inter-firm relationship.

Recently, (Birasnav et al. 2015) have explained the importance of the leadership style of operations managers for effective performance management. Kurucz et al. (2017) found that leadership positively relates to sustainability. Jang et al. (2017) also noted that leadership style is positively related to the performance. Leadership is viewed as being capable to facilitate coordination and expand activities to provide a valued relationship and facilitate complex inter-firm relationships. There is evidence in the literature that manufacturing industries have a prominent role in perpetuating unsustainable patterns of environmental degradation. To change the situation, they need to apply sustainability principles to address global environmental challenges (Bamgbade et al. 2017). Recent studies have traditionally focused on the impact of leadership style on corporate social responsibility (CSR) (Du et al. 2013), no previous research has examined how different leadership styles influence the effectiveness of inter-firm relationship for corporate sustainability.

Hence, while the inter-firm relationship comprises an important part for the management of sustainability issues, most research studies on leadership have stayed away from taking into account the transactional leadership style. This study addresses these gaps by investigating how transactional leadership can significantly moderate the relationship between inter-firm governance mechanism and the firm's social

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performance. This study takes into account behavioural characteristics of a transactional leader (TRN) such as being task-oriented, relational oriented, change and passive oriented that built upon the recent trait—behavioural conceptualisation of leadership proposed by Derue et al. (2011). Our theorizing suggests that transactional style leaders respond to problems as they arise.

2 Differentiating/Distinguishing Between Sustainability and Corporate Social Responsibility

It is worth mentioning that corporate responsibility concept emerged in the 1950s while sustainability emerged in the early 1980s. Corporate responsibility and sustainability might shift strategic orientation towards the accomplishment of the greater common good (Bansal and Song 2017). "Corporate social responsibility (CSR) and corporate sustainability (CS) aim to balance economic prosperity, social integrity, and environmental responsibility, regardless of whether they conceptualise environmental issues as a subset of social issues or as the third element of sustainability" (Montiel 2008) (p. 260). Corporate sustainability emphasises the role of the firm's processes and procedures, such as overall beliefs, long term product solutions and strategic planning (Jansson et al. 2017). The term corporate responsibility compromises any kind of a supportive organization (Marcus et al. 2011), corporate reputation, image, stakeholder relationships (Du et al. 2010), and risk reduction (Godfrey et al. 2009). In contrast to this, sustainability focuses on rewarding companies who reduce environmental damages, engage into stakeholder relationships (Donaldson and Preston 1995), make corporate social commitments (Bansal et al. 2014; Awan et al. 2018a), and develop ecological foundations and resilience (Whiteman et al. 2013).

Corporate responsibility (CR) is defined as "attenuated business attentiveness and can impart to the utilization of indigenous people" (Banerjee 2008). Subjectmatter literature describes CSR as "commitments to both social and environmental practices." (Bansal et al. 2014) (p. 950). In the sustainability literature, (Montiel 2008) (p. 259) argues that "CS (corporate sustainability) scholars tend to argue that the economic, social, and environmental pillars are interconnected." (Montiel 2008) (p. 259). The social dimension must be strategically aligned with the overall sustainability performance and corporate goals and strategy (Awan 2019). Generally, the conceptualization of responsibility and sustainability presented them as relatively distinct (Bansal and Song 2017). According to Dieterich (2018), sustainability is the key to future economic growth. However, despite the promises of innovative practices, social performance being the next step of corporate sustainability (Schaltegger et al. 2012). Social sustainability for manufacturing firms rests on broader organisational practices (Awan 2019). Socially sustainable performance is a bottomup practice that helps in understanding sustainable development system, a powerful tool for analysing the complex system of sustainability performance (Awan et al.

U. Awan et al.

2018b). Sustainability in corporate responsibility is being recognized as a double-edged sword to spur sustainable development in the global world. It has also been argued that sustainability might create better opportunities for future generations by minimizing harms inflicted by the economic development of the natural system (Bansal and Song 2017). The literature provides evidence supporting the idea that corporate sustainability practices (CS) overlap with corporate responsibility (CR). Corporate responsibility may include or exclude sustainability philosophy. Given the importance of the social issues in literature, the most important dimensions related to them include: workplace accidents (employee absenteeism), fair work practices (number of new jobs created by the adoption of new technology) and community development. Socially sustainable development is an important factor concerning not only sustainable development but also the issues related to human development in all facets of life and development of a socially sustainable system.

3 Literature Review and Hypothesis Formulation

The debate over the socially sustainable development issues has been inextricably associated with the wide-ranging discussion about the type of governance suitable for firms. Manufacturing firms face these challenges in both domestic and international arenas for growth that is as socially, and environmentally friendly as possible and respective harnessing of opportunities offered by the governance mechanisms. Governance mechanism ensures that firms can cope with social sustainability supply chain issues (Gimenez et al. 2012). Previous research explored the relationship between contractual and relational governance in governing business transactions and reducing conflicts or opportunism (Jap and Anderson 2003; Poppo et al. 2008; Huang et al. 2014); relationship effectiveness (Wagner 2011; Cao and Lumineau 2015) and commitment (Sancha et al. 2016; Awan et al. 2018b). In relational governance (RG), the inter-firm relationship is largely regulated by the division of tasks, social norms and ties (Poppo et al. 2008; Zhou and Xu 2012). The contractual (transactional) governance means governing transactions through contractual safeguards (Ferguson et al. 2005). The governance context, in turn, is concerned with the characteristics of specific knowledge and exchange of information with other supply chain partners used to improve the firm's performance. For instance, (Formentini and Taticchi 2016) underscored the importance of linkages between the governance mechanism and corporate sustainability approaches for the improvement of sustainability initiatives.

Athaide and Klink (2009) governance approaches facilitate the exchange of information and build relationship bonds. Recently, (Formentini and Taticchi 2016) documented that both governance mechanism [transactional governance (TG) and relational governance (RG)] are important to control and implement sustainability initiatives with a view to improving sustainability performance. Existing inter-firm relationship literature suggests that, in order to achieve social performance, firms need to enact contractual governance (Awan and Kraslawski 2017). Previous empirical studies demonstrated a significant positive link between contractual and formal

governance and performance outcomes (Ivens et al. 2009; Venus Lun et al. 2015). Relational mechanism encourages collaboration, nurtures the pooling and utilisation of resources to achieve an advantageous position (Liu et al. 2009). Transactional governance means governing transactions through contractual safeguards. The concept of social sustainability is now garnering greater attention because we have realized that both internal and external supply chain practices need to be managed jointly. Social performance is defined as an "ethical code of conduct for human survival and outgrowth that needs to be accomplished in a mutually inclusive and prudent way" (Lafferty and Langhelle 1999; Sharma and Ruud 2003). Social performance requires "coordinated social interaction practices for the management" and development of a social and ethical code of conduct to meet existing and future generation needs (Awan et al. 2018b). As pointed out by Formentini and Taticchi (2016), formal mode of governance is usually adopted by those with limited resources operating in an uncertain environment to increase supplier compliance with the buyer's.

Hypothesis 1. Transactional governance is positively associated with social performance (H1a) and societal performance (H1b).

Hypothesis 2. Relational governance is positively associated with social performance (H2b) and societal performance (H2b).

Leadership in production firms explores the growing use of existing capabilities and maintaining a stable relationship with their varied customers. Governance mechanism is an important factor in the enhancement of the firm performance (Poppo and Zhou 2014; Cao and Lumineau 2015). Transactional leadership is particularly salient in the supply chain process (Hult et al. 2000). Moreover, several scholars have emphasized that research into the significance of leadership style in supply chain research is still at an early stage (Birasnav et al. 2015; Gosling et al. 2017). Transactional leadership inspires suppliers and focuses on learning sustainable practices to solve problems (Gosling et al. 2014). Clifford Defee et al. (2009) maybe the first to distinguish transactional supply chain leadership and define it as creative, able to influence the organisation and establish a relationship with other supply chain organisations. According to Deichmann and Stam (2015), transactional leadership strives to elicit organization-focused ideas. Transactional leadership style facilitates the organization of uniform supply chain process and procedure based on formal written agreements outlining social issues and reflects a better understanding about customer needs. Further, (Ewen et al. 2013) proposed that transactional leadership has got social astuteness and behaviour flexibility needed to respond to the needs of others and contributes to developing more trust. Therefore, it is clear that transactional leadership style may postpone certain operational activities in an uncertain environment in order to fulfil the contract (Birasnav et al. 2015) and focus on the implementation of sustainability initiatives.

Hypothesis 3. Transactional leadership moderates the relationship between transactional governance and firm social performance.

U. Awan et al.

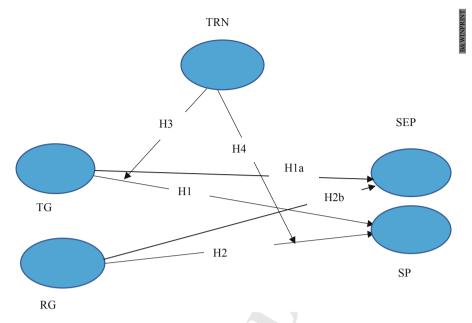


Fig. 1 Conceptual framework

Hypothesis 4. Transactional leadership moderates the relationship between relational governance and firm social performance.

Our conceptual framework (Fig. 1) depicts the relationship between the governance mechanism and transactional leadership.

4 Methodology and Data Analysis

A 7-item transactional leadership constructed by Hult et al. (2000) was employed to measure the leadership style on a seven-point Likert scale ranging from 1 'completely disagree' to 7 'completely agree'. Translational governance was assessed using the measure constructed by Heide and Stump (1995), Ferguson (2005) and relational governance (Lusch and Brown 1996). The overall social performance was assessed on a five-item measure adopted by Kleindorfer et al. (2005), Awaysheh and Klassen (2010) and societal performance items adopted by Lai et al. (2012). The survey items are presented in Appendix 1.

Of the 224 responses, 42% were given by general managers and 40% by managers and others. The distribution of the number of years of experience was evenly spread with 20 p.c. experienced between 2 and 5 years, 25.3% between 5 and 10 years, and 38 p.c. between 10 and 15 years. The common method bias has an important implication in data analysis that might lead to unreliable interpretation. The procedure of Podsakoff et al. (2003) was adopted to minimise the biases and independent and

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dependent variables were put in random order and presented on the different pages of a questionnaire to ensure internal consistency. Hence, in addition to this, the anonymity of the respondents and firms was also given consideration. Table 1 shows the evaluation of the model while Table 2 shows the means, standard deviation, and correlations among the constructs.

SPSS version 23.0 and AMOS version 24.0 were used for data analysis. Kolmogorov-Smirnov (KS) test was used to check the normality of the data. All the variables of the data were normally distributed; the value of Z-test was within the range of -2.56 to 2.56.

The results of the structural model also show that 36% of the variance of leadership and 62% of the variance of social performance are explained by the independent variables, which suggests the model satisfactorily fits the path model. Common

Table 1 Evaluation of model

Items	Factor loadings	t-value	Items	Factor loadings	t-value
Transactional governance (TG) AVE:0.706, CR:0.905 CR:0.872			Societal performance AVE:0.771, CR:0.881, CR:0.824		
TG1	0.793	9.44	SEP1	0.886	8.49
TG2	0.766	9.67	SEP 2	e0.534	_
TG3	0.915	12.55	SEP 3	0.802	10.77
TG4	0.879	11.30	SEP 4	0.942	13.34
Relational governance (RG) AVE:0.578, CR:0.845, CR:0.795			Translational leadership (TRN) AVE:0.761, CR:0.927, CR:0.912		
RG1	0.682	6.15	TRN1	0.946	10.80
RG2	0.776	8.27	TRN2	0.804	11.73
RG3	0.822	10.88	TRN3	0.811	12.67
RG4	0.754	8.36	TRN4	0.920	13.26
Social performance (SP) AVE:0.594, CR:0.854,CR:0.853	37				
SP	0.729	9.04			
SP	0.754	9.54			
SP	0.739	9.33			
SP	0.681	6.55			

^{*}AVE average variance extract, **CR composite reliability, ***CA Cronbach's alpha, eItem deleted during confirmatory factor analysis due to low loading

8 U. Awan et al.

Table 2 Mean, standard deviation and correlations

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Factors	Mean	S.D	SP	TG	SEP	RG	TRN	FS	FA
SP	4.62	1.22	0.770						
SEP	4.35	1.24	0.39**	0.878					
TG	5.11	1.34	0.43**	- 0.37**	0.840				
RG	4.85	1.26	0.29**	0.14*	0.24**	0.760			
TRN	4.76	1.44	0.36**	- 0.21**	- 0.13*	0.32**	0.872		
^a FS	2.18	0.83	0.07	0.04	0.053	0.16*	0.04	1	
^b FA	19.26	8.01	0.05	0.12*	0.021	-0.11*	0.09	0.35**	1

SD standard deviation, TG transactional governance, RG relational governance, SP social performance, SEP societal performance, TRN transactional leadership, FS firm size, FA firm age **Correlation is significant at the p < 0.01 level

method variance was tested using Harmons's (Podsakoff and Organ 1986) singlefactor analysis; the results reveal that single factor explained 29.4% of explained variance suggest common method variance was not an issue for data analysis. Multigroup analysis (MGA) and moderated regression analysis (MRA) methods are most commonly used to test the effects of moderators. MRA is widely used, but this study chose MGA since the relationship among several measures, and latent construct is analyzed (Baumgartner and Homburg 1996). The structured equation modelling (SEM) approach was used to estimate the parameter of the path analytic model. The fit statistics of measurement model are (χ 2/df ratio = 1.64, p < 0.01; "goodness-offit index" [GFI] = 0.945, "comparative fit index" [CFI] = 0.952, "incremental fit index" [IFI] = 0.949; root mean square error of approximation [RMSEA] = 0.061). In order to avoid potential multicollinearity issue, "variance inflation factors" (VIFs) associated with each of the predictors' range from 1.03 to 1.94, with a mean of 1.36, well below the cut off value, which indicates no multicollinearity issue to this data set. Adopting (Preacher and Hayes 2008), we examined the moderation analysis using PROCESS MACRO. To test the moderating effects of organisational learning, we used process macro developed by Preacher and Hayes (2008) based on a multiple regression analysis used with bootstrapping, following the guidelines of Hayes and Preacher (2013). We performed a moderation analysis corresponding to model 2 of Preacher and Hayes (2007). The moderating effect was tested with 5000 bootstrap samples with 95% bias-corrected confidence interval (CI) (Hayes and Preacher 2013).

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^{*}Correlation is significant at the p < 0.05 level, a logarithm of all employees and number of years in business

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5 **Results and Discussion**

The structural model depicted in Fig. 1 was tested using SEM and the standardized path coefficient β was obtained. The results reveal that TG impacts social performance $(\beta = 0.34, p < 0.05, t = 5.27)$, whereas TG has got a negative but significant impact on societal performance (SEP) ($\beta = -0.19$, p < 0.01). RG positively associated with SP $(\beta = 0.22, P < 0.05, t = 3.534)$ and SEP $(\beta = 0.30, p < 0.05)$ respectively. As shown in Table 3, the interaction effect between TG and TRN was positive and significant SP ($\beta = 0.12$, p < 0.05). TG based governance has a strong positive effect on SP when leadership impact is high. Transactional leadership impact is positively related to social performance ($\beta = 0.19$, p < 0.01). This demonstrates that transactional leadership moderated the relationship between contractual governance and social performance.

The results show that the interaction between TG and TRN ($\beta = -0.17$, p < 0.01) is significant and negatively associated (affects) with SEP. Transactional leadership impact is negatively related to societal performance (SEP) ($\beta = -0.11, p < 0.01$). This reveals that the association between contractual governance and societal performance is negatively moderated by transactional leadership style. Findings also showed that TG had a significant negative effect on SEP when transactional leadership effect is high ($\beta = -0.55$, p < 0.01) but its effect was non-significant when leadership style impact was low ($\beta = -0.08$, p > 0.01). A negative association between contractual governance and societal performance diminished with the increase of transactional leadership. The results suggest that social performance outcomes in South Asia are more strongly related to transactional governance than relational governance. Firms may feel more secure when a relationship is governed by the transactional approach. However, findings show that transactional leadership is directly related to enhancing social sustainability. The task-oriented nature of transactional leadership makes it important to understand that managers of the firms should lead the relationship with the partner with clear punishment and incentive system to foster the performance (Locke et al. 2009). The results also illustrate that the role of the transactional leadership in improving the social performance increases in importance as high level

Table 3 Relationships between variables (direct effect and interaction effect)

Structural path	Coef. (<i>β</i>)	Level of significance	Conclusion
$TG \rightarrow SP$	0.34	p < 0.05	Supported
$TG \rightarrow SEP$	-0.19	p < 0.01	Not supported
$RG \rightarrow SP$	0.22	p < 0.05	Supported
$RG \rightarrow SEP$	0.30	p < 0.05	Supported
Interaction TRN $x TG \rightarrow SP$	0.19	p < 0.01	Supported
Interaction TRN $x RG \rightarrow SP$	-0.13	p < 0.05	Not supported

10 U. Awan et al.

of social performance can only be achieved when transactional leadership is not involved in the relational governance.

The interaction between RG and TNL is negatively related to the social performance ($\beta = -0.13$, p < 0.05), but not significantly related to the societal performance ($\beta = -0.04$, p > 0.05). The results show that relational governance contributes to social performance when transactional leadership is weak, while no such improvement in the social performance occurs when transactional leadership style is strong. The reason is that the transactional leader increasingly engages in task activities and control of the defined operation and remains active in routine and traditional works. The findings confirm that managers should consider the style of the leader in governing the supply chain relationship when deciding which governance mechanism should be used to manage social sustainability. Furthermore, before implementing the contract, the decision-maker must be aware of the leadership style (Blome et al. 2017).

6 Conclusion

The findings of this chapter conclude that translational leadership (TRN) is essential to improve overall social performance. This study contributes to the accomplishment of UN sustainable development goal No. 17 by indicating that to advance performance in sustainability, more efforts on inter-firm engagement are needed and cross border partnerships are required. Previous studies typically focused on leadership style and its effects on corporate social responsibility; this study differs from other studies as it explores the impact of transactional leadership style on sustainability performance. It suggests that transactional leadership style should be taken into account in the overall corporate sustainability strategy of a company. Therefore, the study argues that a relational view of governance is not relevant to manufacturersexporters, because transactional leadership style among the key decision-makers may not play a key role in expected performance outcomes. Finally, it is concluded that transactional leadership attempts to balance stakeholder interests and relationships but also seeks to reach agreements with long term focus on reducing environmental damages with improving processes and procedures. However, a broadened social sustainability vision of transactional leadership may allow the organisation to more effectively align with the changing demands of partners on social issues and capitalise on integrated practices for achieving sustainable development goals.

Our results highlight the importance of roles that transactional leadership plays in the improvement of corporate social performance. This study has contributed to much needed empirical evidence concerning the role of leadership styles in corporate sustainability. Within firms, transactional leadership delivers/ensures/guarantees high corporate responsibility and acting to achieve the greatest benefits for the organization and use supply chain process knowledge to act in the interest of key organisational stakeholders as well as enhance organizational social performance. This study advances the understanding and bridges leadership literature with corporate

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sustainability to provide empirical evidence on the transactional leadership effect on the relationship contract governance and sustainability performance. The results support the view that transactional leader is likely to exhibit sustainable leadership by, among others, promoting social performance with contract governance that advances the well-being of an individual and society and decreases environmental damage. Thus, the transactional leader is better placed to carry on bargaining and framing the terms of social initiatives in a way that improves the inter-firm relationship, influencing such behaviours would probably increase social performance outcomes. It argues that transactional leadership style is an integral part for improving social sustainability performance. Our findings reaffirm previous findings that transactional leadership (TRN) style is important in realising effective partnership among different actors in cross border-relationships. Transactional leadership styles are important in improving and promoting social sustainability. This research provides new insights concerning transactional leadership behaviours in a supply chain process through which it impacts sustainability outcomes.

Implications and Future Research Direction

The study contributes to theory and research in leadership by arguing that transactional leadership behaviour is effective because it helps in selecting adequate active and passive behaviours that appropriately address the needs of the supply chain partners. First, we address calls for more research intended to find out whether a focal company leadership drives changes in supplier development (Morali and Searcy 2013). Our theorising suggests that transactional style leaders respond to problems as they arise and management by exception serves as a critical tool for inter-firm governance mechanism (RG). That, in turn, allows encouraging suppliers to achieve standards and implement sustainability practices. Second, transactional leadership should involve the effectiveness of inter-firm governance. The export-manufacturing firms in developing countries, who are interested in improving social sustainability performance, should use a moderate level of transactional governance and rely heavily on transactional leadership to manage and control the supply chain relationship. When both foreign partners/managers do not know each other well, transactional governance can be advantageous for achieving positive social sustainability outcomes.

The findings of the study enforced the need to achieve SDGs in the context of export manufacturing firms by using the flair contract governance and transactional leadership style. The following are policy implications in achieving SDGs in the context of export manufacturing firms, that is, the manufacturing industry in Pakistan severely affected by a lack of trust from the buyers. Realizing the importance of inter-firm relationship, export manufacturers should work hard to combat contract ineffectiveness by using transactional leadership behaviours and promoting contract governance. It is evident that a buyer-supplier relationship improves social performance. Hence it is imperative to promote transactional leadership behaviour that improves the buyer-supplier relationship and helps in improving health, safety and labor standards in a way to sustain social performance. Thus, the executive needs

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12 U. Awan et al.

to provide training and development opportunities to their managerial staff in developing transactional leadership behaviours and sustainability orientations. Managers should explicitly model the relationship and consider their interdependency to gain the full picture of how they both work together. The findings of the study can also provide benefits to manufacturers and owners who wish to sustain their social performance and should further develop training programs to foster the effectiveness of leadership style in their firms.

The findings also indicate that the customer must be aware of the mindsets and practices of the South Asian exporting firms and incorporate and adapt social issues that reflect local institutional environment into their contracts. They also offer implications for the policymakers and institutional officials. Policymakers should endeavour to build a legal system on social issues to support manufacturing industries in these countries in collaboration with international institutions. However, managers should be aware that transactional and relational governance have their roles in enhancing sustainability outcomes. Managers could rely more on transactional leader's styles/in transactional governance. Eventually, foreign managers may be able to safeguard the relationship. When both foreign partners/managers do not know each other well, transactional governance can be good in South Asia for achieving positive social sustainability outcomes.

Further research is needed to identify the characteristics of leadership style that enhance social performance. Another potential future research area is the use of attention-based view on human resource management and relationship marketing domain. Accordingly, when top management signals their attention to relational activities in inter-firm governance mechanism, they highlight the importance of these activities and shape organisational goals. The sample size is small as data were collected from single respondents, future studies might find it beneficial to seek a response from multiple respondents per firm. A future research study that includes data collection from both sides would enable cross-validation of the effects of governance mechanism. Thus future research might consider replicating this study in other Asian countries. This comparison would facilitate understanding the ways in which leadership impacts social sustainability performance in various cultural contexts and identifying ways in which specific country culture influences governance mechanism and leadership behavioural emotions and intentions.

388 Appendix 1

389 Constructs and measures

Construct	Items	Measures
		(continued)

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Construct	Items	Measures	
Transactional governance (TG)	"To what degree do you agree or disagree with the following statements (1—Strongly disagree, 2—disagree, 3—Somewhat disagree, 4—Neither agree nor disagree, 5—Somewhat agree, 6—Agree, 7—Strongly agree)"		
	TG1 TG2 TG3 TG4	"We have formal written agreements outlining social issues" "We have formal written agreements outlining how to Handel technical requirements" "We have formal written agreements that detail the right and obligations of both parties" "We have formal written agreements that precisely state the legal remedies for failure to perform"	
Relational governance (RG)	"To what degree do you agree or disagree with the following statements (1—Strongly disagree, 2—Disagree, 3—Somewhat disagree, 4—Neither agree nor disagree, 5—Somewhat agree, 6—Agree, 7—Strongly agree)"		
	RG1 RG2 RG3 RG4	"Our customer is involved early in the development of social initiatives" "Our firm has a mutual understanding of how to carry out solutions for failure in the protection of social issues" "Our firm has a mutual understanding of how to settle down issues with our customer on the social protection of our workers" "Our firm has a mutual understanding with customers the actions to be carried out when there are accidents at worker place"	
Social performance (SP)	Please use the following scale to statement listed below (circle an all, 2—a limited extent, 3—sligh moderate extent, 6—a great extent	answer for each item) 1—not at tly improve 4—Neutral, 5—a	

(continued)

14 U. Awan et al.

(continued)

Construct	Items	Measures
	SP1 SP2 SP3 SP4	"We have Improved safety and health of existing employees" "We Improved the quality of life and basic health of the local community" "We have improved the employee level of satisfaction with policies" "We have improved employee occupational health, safety and labour conditions"
Transactional leadership (TRN)	Please use the following scale to statement listed below (circle an a disagree, 2—Disagree, 3—Someword disagree Agree 5—Somewhat agree"	answer for each item) 1—Strongly what disagree, 4—Neither agree
	TRN1 TRN2 TRN3 TRN4	"They let us know what is expected of us in the supply chain process" "They encourage the use of uniform procedures in the supply chain process" "They decide what shall be done and how it will be done in the supply chain process" "They maintain definite standards of performance in the supply chain process"
Social performance (STP)	Please use the following scale to record an answer for each statement listed below (circle an answer for each item) 1—not at all, 2—a limited extent, 3—slightly improve 4—Neutral, 5—a moderate extent, 6—a great extent, 7—a very great extent"	

(continued)

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Construct	Items	Measures
	STP1	"The provision of employment
	STP2	opportunities by our company
	STP3	has been continuously increasing
	STP4	in the past three years"
		"The expansion of the
		product/market of our company
		has been continuously increasing
		over the past three years"
		"The level of recognition of the
		need to protect the environment
		in "our company has been
		continuously increasing in the
		past three years"
		"The level of employee rights of
		our company has been
		continuously increasing in the
		past three years"

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