Triple Bottom Line Corporate Sustainability and Organizational Performance: The Mediation of Employees Work Engagement

Fizza Kanwal[1], Umer Ayub[2*], and Kashif Rathore[3]

[1]Lahore Business School, The University of Lahore, Pakistan
[2]Dr. Hasan Murad School of Management, University of Management and Technology, Lahore, Pakistan
[3]Institute of Administrative Sciences, University of the Punjab, Lahore, Pakistan

Abstract

Management scholars are currently focusing on designing research that could cater the big issues of 21st-century organizations including sustainability. The current research aims to use Triple Bottom Line (TBL) perspective that conceptualizes sustainability as a comprehending framework which consist of three key dimensions; economic, social, and environmental. Though most of the previous researches have focused on sustainability as a consequence of innovation and quality, the present research contributes to the literature by studying corporate sustainability as an antecedent of quality performance and innovation performance. Employees' work engagement has also been incorporated into the framework as a potential mediator. To test the conceptual framework, a positivist research philosophy was utilized with a cross-sectional design and a quantitative approach via structured questionnaires. Data was collected from the iron and steel industry of Pakistan, which had the second highest growth rate for the year 2017-18. The responses were gathered from 216 iron mills. Structural equation modelling was used to validate the constructs through the measurement model to test the hypotheses by employing a structural model. The results revealed that corporate sustainability (economic, social, and environmental) positively influence organizational performance (quality and innovation performance) and employees' work engagement, which partially mediates this relationship. In Pakistan, the GDP and the cost of environmental degradation are increasing simultaneously. This study offers a solution to this problem by suggesting that adopting sustainable practices can help to resolve the country's environmental issues without taking a toll on organizational performance. Moreover, it was concluded that corporate sustainability leads to

* Corresponding Author: umer.ayub@umt.edu.pk

organizational performance through employees' work engagement, thus providing an effective way to enhance employees' work engagement.

***Keywords*:** innovation performance, quality performance, sustainability, triple bottom line, work engagement

Introduction

Management scholars around the world have been rethinking/ reconsidering management research to resolve the emerging issues of organizational sustainability in the 21st century (Phan et al., 2016). The recent agenda of researchers is to focus on future research to link the societal sustainability and organizational innovation with the role of organizations in economic development to tackle poverty, unemployment, inequality, environmental degradation, and child labour (Mayer et al., 2017). Additionally, climate change due to greenhouse gases and harmful industrial emissions is now seen as a major concern for organizations (Wright & Nyberg, 2017). Thereby, contemporary organizations are focusing on environmental friendly activities, but they want to pursue those actions that do not take a toll on the profitability. Accordingly, in current organizational context, a holistic approach towards corporate sustainability comprising environmental, social, and economic perspectives are considered more appropriate (Elkington & Rowlands, 1999).

Though organizational scholars have studied the effect of corporate sustainability on organizational performance, a plethora of research has measured the performance in only financial terms (Gao & Bansal, 2013; Orlitzky et al., 2003; Salzmann et al., 2005; Siegel, 2009; Wagner, 2010). Other facets of organizational performance such as quality and innovation performance have widely been overlooked (Maletič et al., 2016). The current research is significant as it theoretically contributes to the literature of corporate sustainability by addressing this research gap and studying quality and innovation performance as potential outcomes of Triple Bottom Line corporate sustainability.

The significance of current research also stems from its effort to introduce employees' work engagement as a mediator in the framework for explaining the mechanism through which corporate sustainability improves organizations' performance. This research employs the social identity theory to understand the role of employees' engagement in the proposed model. In organizations that give due importance to environmental, social,

and economic sustainability employees develop a sense of purpose and meaningfulness for their jobs (Carnahan et al., 2017; Casey & Sieber, 2016) and identify themselves with their organizations (Cantor et al., 2012). As a result, employees perform their best to help organizations achieve their sustainable objectives by engaging themselves in their work (Glavas, 2016). Employees, when get engaged meaningfully, they come up with ground-breaking exceptional ideas and techniques that improve innovation performance and quality performance of the organizations as a whole (Agarwal et al., 2012; Wickramasinghe & Perera, 2014).

Private organizations work on the principle of profit maximization. They are unsure whether their performance would improve due to introduction of sustainable practices. These practices are not very common, particularly, in Pakistan as it stands at 146th position in the world for HDI (Saeed et al., 2019) and faces a toll of Rs 1 billion per day due to environmental degradation (Khan, 2016). Therefore, there is a dire need to set a trend of sustainable practices in Pakistani organizations. This study contributes practically as it quantifies some of the advantages of corporate sustainability and encourages corporations to adopt sustainable practices.

Previous research has found that economic dimension influences other sustainability dimensions in organizations (Armindo et al., 2019a, 2019b). As economically stable organizations are in a better position to focus on social and environmental sustainability, the current research was conducted on iron and steel industry which had highest economic growth in Pakistan in 2017-18 (Government of Pakistan, 2018). The literature review revealed that Pakistan's iron and steel industry has not been studied in terms of sustainability. Therefore, this research also contributes to the body of literature through addressing this research gap.

This study focuses on two objectives. First, to study the effect of corporate sustainability on organizational performance (innovation performance and quality performance). Second, to understand the role of employees' engagement at work as a potential mediator between corporate sustainability and organizational performance. This paper is divided into four subsequent sections; first section provides a review of the previous literature about the theoretical links of variables involved in this study. The second section covers the details of research design, suggested methodology, population, sample, and sampling technique, employed in the current research. The third section provides a critical analysis of data and

results. Lastly, the fourth section discusses the findings of the current study and concludes this study.

Literature Review

Corporate Sustainability and Organizational Performance

Extant research has found that environmental impacts of nations are linked with the economic development and international trade (Jorgenson & Clark, 2011). Thus, to mitigate the negative effects of businesses on environment, organizations have shifted their focus towards sustainable actions and initiatives in recent years (Delai & Takahashi, 2013). Sustainable practices are viewed as a way to manage risks, make changes in organizational structure and culture, reduce costs, and create new products (Azapagic, 2003). Triple Bottom Line (TBL) perspective was introduced to understand sustainability from economic, social, and environmental perspectives (Hart & Milstein, 2003). Hart (1995) is among the early advocates of sustainability as a competitive advantage for the organizations. However, in Asian context, much importance has been given to economic sustainability as compared to social or environmental sustainability (Ralston et al., 2015). In addition, family ventures are found to have higher CSR performance than non-family ventures in Asia (Yu et al., 2015).

Various studies have been conducted to understand the impact of sustainable developments on organizations' financial performance (Lau, 2019; Zhu et al., 2014; Siegel, 2009; Salzmann et al., 2005). Corporate sustainability was found to enhance economic performance (Orlitzky et al., 2003; Wagner, 2010). In Asian context, environmental CSR of organizations is found to have a stronger impact on business performance as compared to social CSR. CSR has stronger positive effect on operational performance than financial performance (Hou, 2016). However, the focus of prior studies was on economic performance which has over-shadowed the contribution of sustainability and other aspects of organizational performance (Gao & Bansal, 2013). Alongside economic performance, Maletič et al. (2016) have also conceptualized quality and innovation as major indicators of organizational performance. Very few studies have focused on quality and innovation performance as possible outcomes of sustainable practices. The current research addresses this gap in the

literature as the prime indicators of organizational performance germane to this research are quality and innovation.

Innovation performance is defined as "generation, promotion, and realization of innovation prospects to benefit individual, group or organization at large" (Janssen, 2000). Regarding/ Concerning the relationship of sustainability and innovation performance, the recent researches have generally focused on sustainability as a consequence of innovation in organizations (Gliedt et al., 2017; Hofstad & Torfing, 2015; Kennedy et al., 2016; Läpple & Thorne, 2018; Lee & Kim, 2017; Li et al., 2018; Moyano-Fuentes et al., 2018; Shan & Khan, 2016; Singh & Khan, 2014). Nonetheless, a contrasting stream of literature considered sustainability as "a mother lode of innovations" (Nidumolu et al., 2009). A global research was conducted based on the views of 2600 managers and executives, and it was found/identified that sustainable practices lead to innovation in business model (Kiron et al., 2013). These innovations may be in the form of a shift from non-degradable resources to renewable resources (Nidumolu et al., 2015), or developing procedures that produce minimum amount of waste (Kiron et al., 2013). Lean manufacturing practice is the example of innovation to reduce waste materials (Bai et al., 2018). Providing environment related training to employees was found to tackle innovation problems in Asian context (Ganapathy et al., 2014).

Similarly, the relationship of sustainability and innovation performance, have contrasting streams of literature about the relationship of sustainable practices and quality performance. On one hand, a fusion of the concepts of total quality management and sustainable development have been found as antecedents of economic surplus and low wastage leading to high quality products (Isaksson, 2005). On the other hand, Meng et al. (2017) found that quality significantly impacts 3 Ps of sustainability, where higher quality leads to higher sustainability. Sustainable production techniques are found to have positive effects on product quality, which are higher performance and energy saving (Banerjee, 2017). Customers' satisfaction towards the quality enhanced as a result, when they were well aware of company's environment friendly products and processes (Manrai et al., 1997). Quality is also conceptualized as an important aspect of organizations' operational performance (Agus, 2011). Environmental management practices have been found to improve the actual and perceived quality of products (Taylor & Vachon, 2018). Additionally, sustainable practices including TQM for

reduced waste, defects, and rework lower the cost of manufacturing (Yaqiong et al., 2011) and improved the volume and quality of production (Boer & Blaga, 2012).

Many high-tech innovative companies known for their high quality products like Samsung and Foxconn (Apple's key manufacturing partner) have been accused of poor environmental record (Kim et al., 2018). Thus, it became clear that high innovation and quality products may not necessarily lead to sustainable developments and there is a need to study innovation and quality as a consequence of sustainable development rather than as an antecedent. Accordingly, this study presents the following hypothesis.

Hypothesis 1: Corporate sustainability leads to enhanced organizational performance.

The literature about the conceptual link of employees' work engagement with corporate sustainability on one hand, and with organizational performance on other, has been reviewed and reported in the preceding section.

Corporate Sustainability and Employees' Work Engagement

Employee engagement is defined as "the harnessing of organizational members' selves to their work roles; in engagement, people employ and express themselves physically, cognitively, and emotionally during role performances" (Kahn, 1990). According to a study conducted by Casey and Sieber (2016), when individuals serve a company that focuses on sustainability in terms of economic, social, and environmental aspects, they perceive their jobs as more meaningful/ they consider their jobs more significant. As a result, their work engagement improves. Organizations need to tie sustainability goals to strategic planning at upper as well as lower management levels to achieve a sustainable environment (Caiado, 2018). Knight & Rosa (2011) conceptualized environmental sustainability in relation to social well-being and found that when societies focus on improvement in quality of life, it leads to higher levels of individual's happiness and well-being. They also found that ecological footprint per capita has a positive effect on the average life satisfaction.

Organizational scholars have used social identity theory (Garavan & McGuire, 2010) and organizational support theory (Cantor et al., 2012) to explain the link between the corporate sustainability with employee

engagement. When a company's activities are perceived as positive, employees own these activities, which are identified with the organization, and try to reciprocate positive behaviours (Rupp et al., 2013). Therefore, the employees try to help organizations to achieve their sustainability objectives in which there is a chance that employees' engagement would significantly enhance (Glavas, 2016). Employees' values, beliefs and ethos, and feelings of contentment about their role in the organization are found to be stimuli of green behaviours (Lasrado, & Zakaria, 2019). Ajmal et al. (2018) have identified employees' work engagement as a component of social sustainability that is driven together with environmental and economic sustainability.

Several previous studies have advocated that the organizations which aspire to be sustainable economically, socially, and environmentally fulfill employees' yearning for meaningfulness and moral identity at work, leading to enhanced employee engagement (Casey & Sieber, 2016; Glavas, 2012, 2016; Rosso et al. 2010; Rupp et al., 2013). Based upon the above mentioned studies and theories, it is evident that corporate sustainability in terms of economic, social, and environmental aspects may enhance employees' work engagement.

Employees' Work Engagement and Organizational Performance

Engaged workers are very optimistic about their job, full of life, and go extra mile to perform well (Leiter, 2005). Their excitement about their work is contagious which leads to higher satisfaction level of customers, thus, direct relationship between employee engagement and organizational performance is expected (Singhal et al., 2018). "When people are engaged, they are not just connected with their work; instead, they express a continuous investment of their physical and psychological energies towards organizational tasks in order to result in maximum performance outcomes" (Hoque et al., 2017). Engaged employees are dedicated and resilient because they perform their best at work to improve organizational performance (Rich et al., 2010). Employee engagement yields dynamic competitive factors that help to achieve performance targets and develop competitive advantages (Ahmed et al., 2018).

There is a wide array of empirical research in the management domain which has studied the relationship of employees' work engagement with various aspects of organizational performance (Demerouti & Cropanzano,

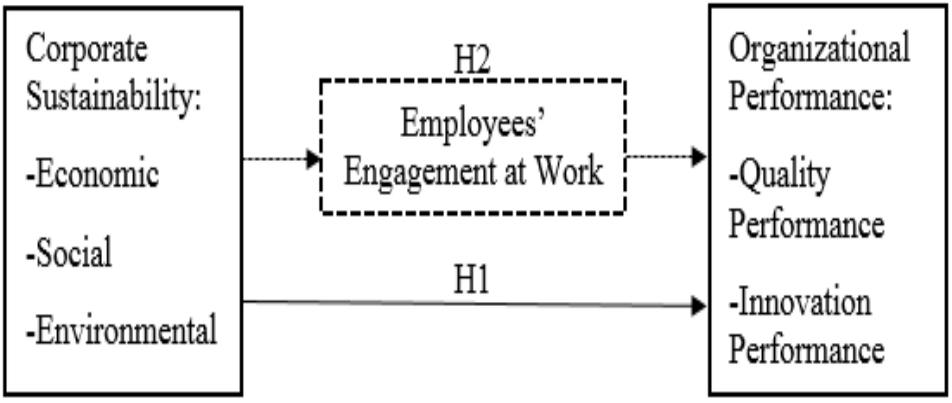
2010). On a large scale research conducted in 8000 business units of 36 companies, it was found/deduced that employee engagement has a positive relationship with organizational performance because an engaged employee would perform beyond expectations (Harter et al., 2002). Schaufeli and Bakker (2004) have found that engagement is positively related to various variables that directly relate to job performance including extra-role behaviour and organizational commitment. Extant literature also pointed out the link between employee engagement and innovation performance (Agarwal et al., 2012). Additionally, Wickramasinghe and Perera (2014) have found a positive effect of employee engagement on quality performance mediated by organizational citizenship behaviour.

Based on the current literature explaining the link between employee engagement with corporate sustainability and organizational performance, this study presents the following hypothesis.

Hypothesis 2: Employee engagement mediates the relationship between corporate sustainability and organizational performance.

Figure 1

Conceptual Framework



Note. Thick black line portrays the relationship of corporate sustainability with organizational performance hypothesized as H1. Dotted black line shows the mediation of employees' engagement at work hypothesized as H2.

Methodology

Research Design and Method

To test the conceptual framework developed in the present research, the current study is based upon extant literature, a positivist research philosophy which was utilized with cross-sectional design, and quantitative approach was used via structured questionnaire to conduct the research (Blaikie, 2009). Following validated research questionnaires were used to measure variables which are involved in the study:

1. Corporate sustainability scale that measures economic, social, and environmental sustainability of organizations (Khan & Quaddus, 2015)
2. Employee engagement at work scale (Harter et al., 2013)
3. Organizational performance scale (the items measuring innovation and quality performance were included) (Maletič et al., 2016)

Research Population

Triple Bottom Line sustainability concept is based on 3 Ps, namely profit (economic sustainability), people (social sustainability), and planet (environmental sustainability). Previous research has indicated that social and environmental sustainability of organizations are primarily, dependent upon their economic sustainability (Curran, 2003; Slacket et al., 2006). The influence exerted by the economic dimension on the other sustainability dimensions is perceived as dominant, particularly in metal industry (Armindo et al., 2019a, 2019b). Management scholars have explained that organizations are in a better position to provide social benefits to stakeholders and to take steps to prevent environmental degradation when they are economically strong. To establish this argument, the current research is based upon 3 Ps of corporate sustainability, we identified the industries in Pakistan that had the highest economic growth. The industry specific data from Pakistan economic Survey 2017-18 (Government of Pakistan, 2018) showed that iron and steel products recorded second highest growth of 30.85% (14.7% more than previous year). Additionally, private sector's capability of sustainable practices is found to exceed that of government organizations (Robins, 2005). However, extensive literature review revealed that iron and steel industry has not been studied in terms of sustainability, specifically in Pakistan's context. Therefore, the current

study identified the iron and steel companies as population for conducting this research.

Research Sample, Sampling Technique, and Response Rate

The sampling frame for the current research comprises of seventeen iron and steel companies registered with Pakistan Stock Exchange Limited (PSX), previously known as Karachi Stock Exchange (KSE) (Karachi Stock Exchange, 2018). The sampling technique used in the current research is systematic random sampling for which, companies were alphabetically arranged and every 2nd company was considered as a sample (Bryman, 2016). The final sample comprised of nine companies (Table 1). Employees of selected organizations were identified and contacted through LinkedIn (https://www.linkedin.com/). We shared the link of questionnaire (https://goo.gl/forms/gqOaHHaQuSbCkCQe2) with employees and requested them to fill the anonymous questionnaire after taking their consent. We reminded them weekly over a span of two months to respond /For this purpose a weekly reminder was given to the employees constantly, for two months. As a result, 216 responses were received and a sample of 200 or above was deemed adequate for SEM model having less than five constructs (Hair et al., 2006). The list of companies, number of employees contacted, and response rate for each company is reported in Table 1 given below.

Table 1

Research Sample and Response Rate

Sr. No.	Listed Companies	Questionnaires sent	Response received	Response rate
1	"Ados Pakistan Limited**"	100	18	18%
2	"Aisha Steel Mills Limited"	--	--	--
3	"Amreli Steels Ltd.**"	100	33	33%
4	"Bolan Casting Limited"	--	--	--
5	"Crescent Steel & Allied Products Limited**"	100	22	22%

Sr. No.	Listed Companies	Questionnaires sent	Response received	Response rate
6	"Dadex Eternit Limited"	--	--	--
7	"Dost Steels Limited**"	100	24	24%
8	"Drekkar Kingsway Limited"	--	--	--
9	"Huffaz Seamless Pipe Industries Limited**"	100	16	16%
10	"International Industries Limited"	--	--	--
11	"International Steels Limited**"	100	24	24%
12	"Ittefaq Iron Industries Limited"	--	--	--
13	"K.S.B. Pumps Co. Limited**"	100	29	29%
14	"Metropolitan Steel Corporation Limited"	--	--	--
15	"Mughal Iron and Steel Industries Limited**"	100	32	32%
16	"Pakistan Engineering Company Limited"	--	--	--
17	"Quality Steel Works Limited**"	100	18	18%
	Total Companies selected = 9	Total Questionnaires sent = 900	Total responses received = 216	Aggregate Response rate = 24%

Note. **Company selected as research sample based upon systematic sampling

Common Method Variance

The use of self-report measures to collect the data for all constructs may lead to common method variance, thus affecting the results. Therefore, two

methods were used in this research to assess common method bias (Soto-Acosta et al., 2018). First method is "unmeasured latent factor method" (Podsakoff et al., 2003), in which an additional unmeasured latent factor is added to the measurement model during CFA which includes all indicators from all other latent factors. Indicator loadings on this common latent factor are constrained to be equal that leads to equal unstandardized loadings for all indicators on the common latent factor (.338 in case of the current research). The square of unstandardized loading provides the % of common variance across all indicators in the model (0.114). Unmeasured latent factor method showed that only 11.42% variance might be due to common method bias. Secondly, common method bias was more likely when correlations among variables are above 0.90 (Bagozzi et al., 1991). However, the highest value for correlation in our data set was 0.56 between sustainability and organizational performance. As a result of these two statistical methods, it has been found that the relationships among variables involved in the current research would not rise due to common method bias.

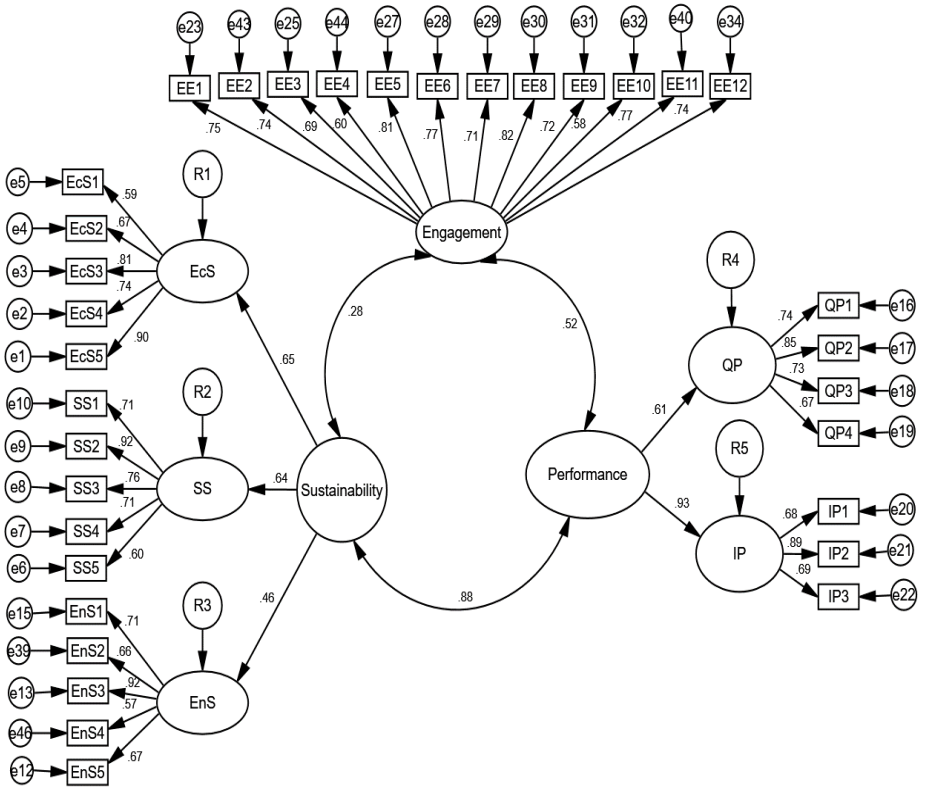
Data Analysis and Hypotheses Testing

The analysis for the current research is based on structural equation modeling, using AMOS v. 22, as it takes into account the measurement properties of multi-item constructs, while estimating the relationship. Guidelines for conducting two step structural equation modeling outlined by Hair et al. (2006) and Bryne (2001) are followed in this research.

Step 1: Confirmatory Factor Analysis (CFA) of Measurement Model

Measurement model shows the relationship of measured variables with their respective latent variables (Figure 2). CFA provides a confirmatory test of the measurement model by using independence technique where endogenous and exogenous variables are not yet distinguished because measurement model consists of correlational relationships between all latent variables (Hair et al., 2006).

Figure 2
Measurement Model



Note. EcS = Economic Sustainability, SS = Social Sustainability, EnS = Environmental Sustainability, EE = Employee Engagement, QP = Quality Performance, IP – Innovation Performance.

As SEM is sensitive to kurtosis, it was made sure that each item had kurtosis under |3|. Goodness-of-fit, construct validity, and reliability assessment are required for validation of measurement model. CFA of measurement model showed that the fit indices were SRMR= .071, CMIN/DF= 1.73, CFI=0.903, RMSEA= 0.058. As these indices met the specified thresholds summarized by Bryne (2001), the measurement model fitted the data really well.

Construct validity means that the indicators actually represent the latent factor which they are supposed to measure. Convergent validity and

discriminant validity are further types of construct validity that were assessed in the next section.

Convergent Validity

The standardized loadings of measured variables on their respective constructs in Table 2 above 0.5 and the absence of significant cross loadings were pointed towards the convergent validity of the constructs and unidimensionality of measurement model. Additionally, average variance extracted (AVE) above 0.5, composite reliability above 0.6, and internal consistency (Cronbach's Alpha) above 0.7 also provided evidence of convergent validity (Hair et al., 2006; Nunnally, 1994).

Table 2

Assessment of Convergent Validity

Items	Standardized loadings	Composite reliability	Cronbach's Alpha	AVE
Corporate Sustainability	--	0.94	0.85	0.55
Economic sustainability		0.88	0.85	0.56
EcS1	0.59			
EcS2	0.67			
EcS3	0.81			
EcS4	0.74			
EcS5	0.90			
Social Sustainability		0.84	0.85	0.56
SS1	0.72			
SS2	0.91			
SS3	0.76			
SS4	0.71			
SS5	0.60			
Environmental Sustainability		0.82	0.82	0.51
EnS1	0.71			
EnS2	0.66			
EnS3	0.92			
EnS4	0.57			

Items	Standardized loadings	Composite reliability	Cronbach's Alpha	AVE
EnS5	0.67			
Employee Engagement		0.92	0.93	0.53
EE1	0.75			
EE2	0.74			
EE3	0.69			
EE4	0.60			
EE5	0.81			
EE6	0.77			
EE7	0.72			
EE8	0.82			
EE9	0.72			
EE10	0.59			
EE11	0.77			
EE12	0.74			
Organizational Performance		0.86	0.83	0.57
Quality Performance		0.82	0.83	0.56
QP1	0.74			
QP2	0.85			
QP3	0.73			
QP4	0.67			
Innovation Performance		0.68	0.79	0.58
IP1	0.68			
IP2	0.89			
IP3	0.70			

Note. All loadings were significant at $p < 0.05$

Discriminant Validity

Fornell and Larcker criterion was used to assess discriminant validity (Fornell & Larcker, 1981). To meet this criterion, the correlation of a construct with each of the other constructs must be smaller than square root of AVE for each construct. The comparison of correlations and square root

of AVE reported in Table 3 confirms the discriminant validity of the constructs.

Table 3
Assessment of Discriminant Validity

	Corporate Sustainability	Employee Engagement	Organizational Performance	Square root of AVE
Corporate Sustainability	1	--	--	0.74
Employee Engagement	0.21*	1	--	0.73
Organizational Performance	0.56*	0.33*	1	0.75

Note. *Correlations are significant at $p < 0.01$

Step 2. Assessment of Structural Model for Hypotheses Testing

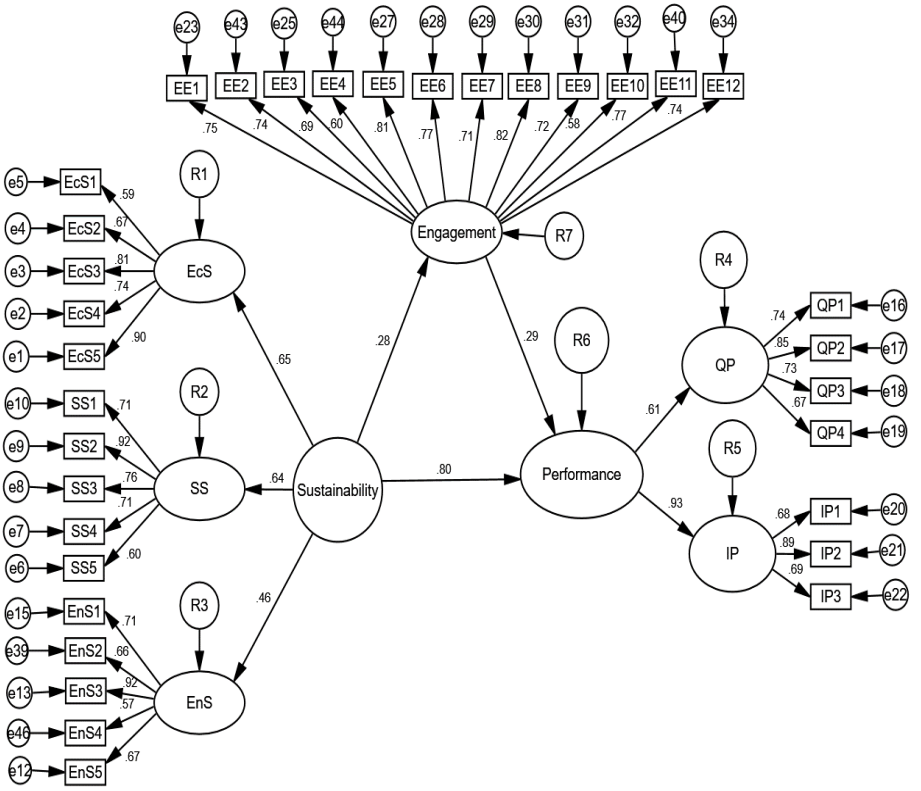
As CFA confirmed validity and reliability of the measurement model, structural model was constructed to test the hypotheses based on the theorized relationships between the constructs.

Structural model is evaluated on the basis of model fit, the significance, and the direction of hypothesized relationships. The model fit for the full structural model also met the acceptable threshold: SRMR= = .071, CMIN/DF= 1.73, CFI=0.903, and RMSEA= 0.05. The regression path from corporate sustainability to organizational performance showed a significant positive effect (B =1.32, $\rho < 0.001$), providing support to Hypothesis 1.

Mediation Analysis

To test Hypothesis 2, the mediator was added to the model (Figure 3), and bootstrap analysis was conducted through AMOS with 2000 bootstrap samples and 95% confidence intervals, which revealed the following results (See Table 4).

Figure 3
Structural Model



Note. EcS = Economic Sustainability, SS = Social Sustainability, EnS = Environmental Sustainability, EE = Employee Engagement, QP = Quality Performance, IP – Innovation Performance. Standardized loadings have been shown in this figure. Direct, indirect and total effects have been reported in Table 4.

Table 4
Total, Direct and Indirect Effects

	B	*ρ*-value
Total Effect	1.306	0.001
Direct Effect	1.185	0.001
Indirect Effect	0.121	0.005

The indirect effect of corporate sustainability on organizational performance through employee engagement at work has been found to be significantly positive (B = 0.121, ρ<0.01). As the direct effect is also significant after the addition of a mediator in the model, therefore, partial mediation of employee engagement at work is evident (Baron & Kenny, 1986). These results provided support for Hypothesis 2, which postulates that employee engagement mediates the relationship between corporate sustainability and organizational performance.

Discussion

It is advocated that businesses should be guided by a sustainable strategy that inculcates a balance among economic, environmental and social goals (Elkington & Rowlands, 1999). According to Hofer et al. (2012), organizational activities with regard to environmental sustainability develop a competitive advantage against competitors that increases the company's value. It is further elaborated that the emergence of sustainability as an important organizational practice is evident from the fact that managers are now analyzing competitors', environmental actions, and their marketing and financial activities. Organizations may take initiatives for sustainability based on various factors including consumer concerns, legislation, and employee interest (Streimikiene et al., 2016). In the current scenario, businesses are directly influenced by sustainability (Berns et al., 2009). Though employees are well aware of the importance of corporate responsibility, they do not have the adequate power in the Asian context to pressurize organizations into performing CSR (Utama, 2011).

The current literature studied sustainability from various angles and indicated a wide array of antecedents and consequences of corporate sustainability. Banerjee (2017) found that some of the benefits that organizations may reap due to sustainable practices include higher performance, energy saving, and safe usage. Most of the research conducted on sustainability and employee's organizational performance focused on financial performance of organizations. It was found that strategic management doesn't contribute to the cost reduction factor until and unless sustainable green practices are adopted (Taylor & Vachon, 2018). Similarly, Mitra and Datta (2014) found that the use of environmentally sustainable logistics and product design are positively related to firm's economic performance. An important takeaway for the organizations for the efficient economic performance of firms which deteriorates when market pressure is

the reason to adopt green practices (Zhu & Sarkis, 2007). This is because the decision of material usage is based on prioritization of either sustainability or durability. Therefore, incorporating other measures of organizational performance is critical to truly reflect the benefits of sustainability for organizations. In this regard, the current research incorporated innovation performance and quality performance as two major outcomes of corporate sustainability practices.

Current research started off to pursue two main objectives i.e., to study the effect of corporate sustainability on organizational performance, and to understand the role of employees' engagement at work as a potential mediator between corporate sustainability and organizational performance. The first finding of the current research revealed that corporate sustainability has a positive effect on organizational performance which is conceptualized as innovation and quality. This finding is consistent with previous studies which found that organizations' orientation towards sustainability pushed them to introduce innovative concepts, products, and service that help them to achieve sustainable objectives (Metz et al., 2016). As a result, organizations' innovation performance improves. For example, organizations have adopted lean practices to reduce waste (Kiron et al., 2013). Other organizations have come up with certain innovative ideas to promote the welfare of employees and society at large (Griessler & Littig, 2005). Thus, the process of quantifying sustainability drives innovation at the local and global levels (Dieterich, 2018). Though sustainable practices improve innovation performance, different organizations may have different ways to innovate as a result of sustainable practices (Metz et al., 2016). For some organizations, sustainability-driven innovations may be incremental, while for others, these may be volatile in the form of new-to-market products (Bos-Brouwers, 2010).

Additionally, to enhance innovation performance, extant literature found a positive impact of green organizational practices on the quality performance (Hollos et al., 2012). King and Lenox (2001) argued that companies focus on waste reduction as a tool to enhance quality by adopting ISO 9000 quality standards or ISO 14001 environmental standards. Lean, Agile, Resilient, and Green (LARG) paradigms also have significant effects on quality, inventory level and customer satisfaction (Azevedoet al., 2016; Ciccullo et al., 2017). According to Isaksson (2005), sustainable organizations may adopt total quality management to reduce the waste in

the form of scrap, failed products, and rework. As a result, the quality of processes, products, and services enhanced and the cost of poor quality significantly reduced. Additionally, sustainable process design, resource reduction, training and education, recycling, and sustainable product design lead to decreased cost and time, increased sales and revenues, and increased quality performance (Rusinko et al., 2005).

This study also found partial mediation of work engagement between corporate sustainability and organizational performance. Triple Bottom Line sustainability also includes the social dimension that includes workers' well-being, food safety, security, and the adoption of tight protocols (Golini et al., 2017). However, social sustainability in general remains under-researched (Dou & Sarkis, 2010). A socially sustainable organization looks into employees' issues and tends to resolve them (Khan and Quaddus, 2015). When organizations ensure basic needs of employees and their families and socially empower them, employees tend to completely engage in work (Green et al., 2017). As employees are a core component of organizations' operations, highly engaged employees help organizations to achieve high performance (Bilal et al., 2015; Kapil & Rastogi, 2017; Malhotra, 2012; Smith & Bititci, 2017), particularly in terms of quality (Wickramasinghe & Perera, 2014) and innovation performance (Gupta et al., 2017).

The mediation of employees' work engagement can also be understood in the light of social identity theory (Hogg et al., 2004). Social identity theory implies that the more an organization ensures sustainability, the more employees are identify with the organization and develop a positive feeling towards organization (Rupp et al., 2013). Consequently, they perform their best to reciprocate organizations' actions and benefit the organizations by putting their best efforts to support sustainability (Cantor et al., 2012). These efforts may materialize in the form of presenting innovative ideas and enhancement of quality to develop organizations' competitive advantage (Kodama & Branscomb, 1995; Ross & Klatt, 1986).

Conclusion

Contrary to the popular belief that innovation and quality facilitate sustainable development in an organization, this study found that organizational efforts can bring sustainability to enhance innovation and quality performance. Thus, organizations must develop sustainable goals

from economic, social, and environmental perspectives, without fearing deterioration of performance. Doing so would not only boost organizations' performance, but it would also benefit society by promoting social sustainability goals and environment based sustainability goals. This study also found that corporate sustainability influences the prime entities in organizations, for instance, employees who, when engaged, help organizations to improve their innovation and quality performance.

Practical Implications

In Pakistan, although the GDP growth rate is 5.8% (Government of Pakistan, 2018) but it faces a toll of Rs. 1 billion per day due to environmental degradation (Khan, 2016) with 0.647% loss of GDP, amounting to a total loss of $3,823.17m. A major cause of these environmental problems is the non-treated waste emitted by industries (Rehman, 2018). These facts showed that in Pakistan, the focus is mainly on economic side of sustainability. Therefore, there is a serious need to create awareness about the balanced approach towards sustainability that also caters its social and environmental aspects, in addition to economic aspects.

In this regard, the current research has several practical implications. It is an effort to quantify some of the short term benefits that organizations can have in the form of innovation and quality performance through implementing 3 Ps of sustainability. Consequently, it encourages organizations to adopt social, environmental, and economic perspective of sustainability to help Pakistan to cater its societal and environmental issues. As organizations' main aim is to earn profits, and in current market competition, these profits are largely dependent upon the quality and innovativeness which they offer. Therefore, this research provides evidence to the organizations that 3 Ps of sustainability would ultimately benefit them by improving their quality and innovative performance. As a result, the economic growth of Pakistan would also be able to achieve societal and environmental sustainability.

In addition, across 142 countries worldwide, only 13% of employees have been found to actually engage with their work according to a report by the Gallup Institute (2013). Current research tends to resolve this issue by testing a framework that has found corporate sustainability also leads to higher levels of employee engagement. Therefore, in addition to other

benefits that corporate sustainability has, enhancing employee engagement is another one.

Theoretical Implications

The current research offers several theoretical implications. First, it identifies the need to conduct research that caters big issues of 21st century which organizations face, including social and environmental problems (Mayer et al., 2017). Second, it uses the perspective of Triple Bottom Line sustainability and extends it to explain that quality performance and innovation performance are also among the outcomes of corporate sustainability. Third, the current research expands the understanding of sustainability-performance relationship by incorporating employees' work engagement as a mediator in the proposed framework.

Using the theory of social identity, it this study explains that employees not only get engaged in their work due to the social benefits they get from the organization (as a part of organizations' social sustainability efforts), but they also identify the sustainable organization's goals and mission. Hence, this study aims to extend the selected theory by explaining that organizations' quality performance and innovation performance also improve when the employees are identified with the organizations that incorporate Triple Bottom Line sustainability perspective.

Limitations

According to Pakistan's economic survey 2017-18 (Government of Pakistan, 2018), electronics industry had the highest growth rate of 38.79%, as compared to 30.85% rate of the iron and steel industry which ranked as the second highest. Due to unavailability of sampling frame of electronic companies, the researcher selected iron and steel industry as a research sample for which the sample frame was obtained from KSE. Future research can obtain sampling frame of electronics industry from some other source, and test the framework proposed by this research in electronics industry.

Future Recommendations

Future research may explore other factors by adopting a qualitative research which can explain the relationship of corporate sustainability with quality and innovative performance. Researchers may also further explore the Triple Bottom Line (TBL) perspective on sustainability by developing

and testing frameworks that propose outcomes of corporate sustainability other than organizational performance. They can also utilize the current study for conducting future research by thoroughly understanding the contribution of this study in extending further the scope of TBL.

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