

Self-efficacy and workplace well-being: moderating role of sustainability practices

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Abstract

Purpose – How psychological variables especially self-efficacy plays significant role to attain workplace well-being is yet to be explained. The extant literature calls for further research works in the field of sustainability practices to bridge the gap between self-efficacy and workplace well-being. The purpose of this paper is to extend the literature of workplace well-being while scientifically examining the moderating role of sustainability practices.

Design/methodology/approach – The study collected data from 527 full-time executives of Indian public and private manufacturing industries. The authors performed moderated regression analysis through a series of hierarchical models to test the hypotheses of the study.

Findings – The result indicates positive relationship between self-efficacy and workplace well-being. Furthermore, the result suggests that the relationship between self-efficacy and workplace well-being was stronger among executives with high level of sustainability practices and vice versa.

Research limitations/implications – The cross-sectional sample of executives employed in Indian manufacturing organizations limits the generalizability of the findings.

Practical implications – HR functionaries and senior management may benefit by closely examining their sustainability practices along with their employees perceived ability to address workplace well-being.

Originality/value – The study contributes to extend the literature on self-efficacy and workplace well-being. This research work is one of the first few studies to examine the moderating effect of sustainability practices.

Keywords India, Self-efficacy, Sustainability practices, Workplace well-being, Manufacturing organizations

Paper type Research paper

Introduction

The environmental, social and economic changes of the twenty-first century have impelled organizations to think seriously about their own sustainability and that of the wider world as well. The challenge lies ahead for institutions, leaders and corporations with the reality that the world's natural resources and people are at risk. Hence, a sustainable organization with good human capital is the need of the hour. The most popular definition of "sustainable development" was put forward to the United Nations (1983) by the Brundtland Commission as to "meet the needs of the present and future without compromising the ability of future generations." Due to increased human activity, the earth has destroyed the very existence of species diversity and habitation. Hence, today's organizations are considerably focusing on and practicing long-term sustainable practices that may help to retain well-being in the workplace and to realize the creation of a distinct and successful corporate identity (Tvaronavičienė, 2014).



Various sustainable practices are being implemented by organizations, such as corporate social responsibility (CSR), which implies the ethical behavior and social concern of an organization toward its immediate society. However, this paper focuses on employee-related sustainable HR practices such as improvements in reputation, productivity, talent acquisition, employee retention and engagement, proper reward and recognition, cost effectiveness, risk avoidance/mitigation, innovation, green manufacturing practices (Sangwan and Choudhary, 2018), green policy on sustainable supply chain management (Bhardwaj, 2016; Govindan *et al.*, 2014; Jabbour and Jabbour, 2016) as part of CSR policy, market expansion, eco-efficiency and eco-friendly practices (Rezk *et al.*, 2015). It is presumed that such sustainable practices can only be achieved through the intervention of top leadership strategy, employees' initiatives and organizational values aligned with sustainability and the well-being of an organization as a whole. In Indian the context, for promoting sustainable practices, the Government of India Corporate Affairs Department (2011) released national voluntary guidelines, which were primarily designed to be used by all businesses, irrespective of size, location or sectors. Some of the key principles of the sustainable businesses practices are to promote the well-being of all employees while respecting and promoting human rights in the workplace. Keeping this initiative in perspective, we believe that the drive can be promoted by engaging and retaining talent in an effective manner and, more importantly, through providing them the dignity and reward for their efforts.

In contemporary times, people are spending more time at work than previous generations. To make a healthier workplace, the individual well-being and the mental health of their human resources are paramount for the sustenance of business organizations. Due to globalization and competition, the workplace has become more dynamic and diverse in its functions. In this context, self-efficacy and workplace well-being are becoming key concepts for ensuring the presence of economic sustainable development in today's complex and dynamic business world. It is to iterate the fact that interplay of human resource practices helps economic, social and environmental sustainable developments (Jabbour and Santos, 2008; Jabbour *et al.*, 2010) which are significantly important for the realization of organizational performance (Bileviciene and Bileviciute 2015; Rezk *et al.*, 2015). Organizations need to respond to changing business environment, technological capabilities and customer demand (Baregheh *et al.*, 2009) to meet the goal of sustainable development. In other words, organizations need to be innovative to increase competitiveness and achieve sustainable business performance (Kumar *et al.*, 2012; Pradhan *et al.*, 2017; Lauzikas *et al.*, 2015; Tvaronavičienė, 2014).

Siegel (2009) asserted that transformational leadership plays a vital role in formulating and implementing sustainability initiatives. Wirtenberg *et al.* (2007) in their study argued several key barriers for implementing sustainability practices that include lack of awareness of sustainability trends, ideas for practices among employees and their potential organizational impacts. Taking these points into consideration, we are of the view that organizations that extensively use sustainable practices perform better than their counterparts by improving well-being and positivity in the workplace. Furthermore, it is due to the complex nature of the jobs that employees are likely to experience work pressures that affect their ability to perform prescribed tasks (Bandura, 1997), interact with team members (Bui *et al.*, 2011) and cope with workplace stressors, all of which can impact employees' self-efficacy and commitment (Meyer and Allen, 1991). However, previous studies concerning this topic have sparsely focused on how sustainable practices can impact the well-being (Kaptanoglu and Demir, 2013) of the employees at workplace. We therefore propose that the construct of sustainability practice will moderate the relationship between self-efficacy and workplace well-being.

In summary, the present study is an attempt to investigate the possible relationship between self-efficacy and workplace well-being in Indian manufacturing organizations. More specifically, the study aims to explore the moderating role of sustainability practices between self-efficacy and workplace well-being.

Literature review and hypothesis development

Self-efficacy and workplace well-being

Self-efficacy is what a person feels about him/herself while performing work by utilizing his/her abilities or actions. Bandura (1977) defined self-efficacy as a belief pattern stating it as "people's judgements of their capabilities to organize and execute courses of action required for attaining designated types of performances in an organizational setup." According to Bandura, self-efficacy beliefs are classified into three dimensions: level, strength and generality. The level dimension refers to the performance of difficult tasks and it requires different levels of self-efficacy required to exhibit. The dimension of strength refers to how forceful self-efficacy beliefs are. Especially, beliefs which are low in strength lead to failure and hamper the achievement of desired outcomes. Generality of self-efficacy belief is low if an individual believes him/herself to be capable only in distinct situations and for very few behaviors.

Self-efficacy has long been understood as being either task or domain specific. Individuals were assumed to have more or less firm self-beliefs in different tasks or particular domains and specific situations. Bandura (1977) pointed out that self-efficacy can be developed by taking into consideration four components: mastery, social learning, social persuasion and emotional and physical states. Of the four, the most powerful for producing self-efficacy is mastery, whereas the most powerful for undermining self-efficacy is social persuasion. Employees require mastery experience to develop and maintain high levels of self-efficacy. The concept of well-being is primarily related to experiencing pleasant emotions, having low levels of negative mood with a high amount of life satisfaction. Well-being is not only the lack of disease or illness or the absence of anxiety or depression, but rather it is a state of maintaining complete physical and social health. Well-being can be coined as a person's cognitive effective evaluation of his or her life. These evaluations include emotional reaction to events as well as cognitive judgment of satisfaction and fulfillment. To endorse our supposition, subjective well-being was defined by Diener *et al.* (1999), composing of life satisfaction, the presence of positive affect and the absence of negative affect. Psychological well-being predominantly resides within the experience of the individual (Campbell *et al.*, 1976) and people who are successful at attending frequent positive affect will be happier in the long run (Diener *et al.*, 1989).

Bandura (1986) confirmed through field experiments that self-efficacy has an important role for channelizing one's action and performance. He has mentioned four major sources of information that engage in development of self-efficacy: enactive mastery, vicarious experience, verbal persuasion and psychological arousal. A high degree of self-efficacy promotes the awareness that one is responsible for one's destiny and that one can do what one wants to do (Kuijer and Ridder, 2003). In this context, workplace well-being involves developing an attitude that enables the employee to have self-confidence, self-respect and to be emotionally resilient (Singh, 2009). We argue that self-efficacy helps an individual to gain personal mastery while giving necessary strength to face adverse situations in life (Markman *et al.*, 2002).

Stress management is one of the topmost skills required for managers. Coping with stress requires a cooperative approach. Researchers have mentioned that social support is of high importance and acts as a mediating variable in coping with job-related stress; here social support includes the support extended from one's friends, family, colleagues and professional interventions (Flin *et al.*, 2008). Self-efficacy helps to fight and cope with stressful situations, while motivating the individual to face upcoming challenges in life. Self-efficacy influences personal and professional decision-making processes throughout the course of one's life (Betz and Klein, 1996; Markman *et al.*, 2002). Hence, we can argue that self-efficacy is a key driver of workplace well-being.

Various studies have confirmed that having high self-efficacy drives positive well-being, regulation of stress, higher self-esteem, better physical condition, better adaptation to the environment and an early recovery from ailments (Bandura, 1997; Kuijer and Ridder, 2003;

Bisschop *et al.*, 2004). On the contrary, low self-efficacy is related more to symptoms of anxiety and depression (Shnek *et al.*, 2001; Faure and Loxton, 2003; Kashdan and Roberts, 2004), as well as lower levels of subjective well-being (Barlow *et al.*, 2002; Caprara, 2002). Cakar (2012) in his studies pointed out that individuals with high self-efficacy are more comfortable and productive when faced with tough working conditions as compared to those with low self-efficacy. Hence, high self-efficacy, or an increased belief in one's capacity to control events in one's environment, may tend to increase workplace well-being.

Earlier studies have confirmed "general self-efficacy" as the best single predictor of overall adjustment such as employment status, social integration, physical health and subjective well-being (Schwarzer *et al.*, 1994; Schwarzer and Jerusalem, 1995b). General self-efficacy was defined as a "stable sense to master stressful or challenging situation and is quite relevant for future studies influencing all kinds of behavioral domains" (Schwarzer and Jerusalem, 1995a). It is further understood that people build up self-efficacy beliefs through a series of experiences witnessing over their entire life span (Watt and Martin, 1994). Researchers have indicated that overall employee performance depends not only on how employees behave in the workplace, but also through observing varying levels of commitment toward their job and organization. Therefore, it is warranted that employers should identify both individual and environmental factors that promote employees' commitment toward their job and organization (Al Matrooshi *et al.*, 2016; Bozionelos and Singh, 2017; ElBardissi and Sundt, 2012; Leach *et al.*, 2009; Listyowardojo *et al.*, 2011; Wadhera *et al.*, 2010; Weaver *et al.*, 2010; Wiegmann *et al.*, 2010).

Self-efficacy enhances workplace well-being in many ways. High levels of self-efficacy contribute to high levels of engagement and life satisfaction. Well-being is connoted as a harmonious satisfaction of one's desires and goals. Psychological well-being is the subjective feelings of contentment, satisfaction with life's experiences and one's role in the world of work, sense of achievement and a greater belongingness. Bozoglan *et al.* (2013) examined the relationship between well-being, loneliness, coping, decision styles and life satisfaction. Eroglu (2012) considered well-being as an indicator of life quality, achievement of subjective aims, handling of difficulties of life and leading a pleasurable life. Loeb *et al.* (2011) indicated that there exist relationships between self-efficacy and health behavior, as the combination of both promotes psychological health and well-being.

Diener (2000) suggested that well-being is people's cognitive and affective evaluation of their lives and it comprises people experiencing longer-term pleasant affect, lack of unpleasant affect and satisfaction in life. Well-being is sometimes assessed as "quality of life," and it is expressed as a combination of mutually interconnected factors such as well-being, subjective assessment of one's health condition and life satisfaction. Diener and Diener (1996), in their article "most people are happy," hypothesized that people always try to be motivated to attain positive states while avoiding or reducing unpleasant states and therefore may be likely to use positive coping strategies and, as a result, be mainly happy. Proceeding from the above background literature, it is perceived that self-efficacy plays an important role in life satisfaction and workplace well-being:

H1. Self-efficacy is significantly related to workplace well-being.

Sustainability practices and workplace well-being

Viable human relation practices are the driving force for achieving organizational sustainability. The organization can be more sustainable when the well-being of employees is better taken care of. Ryff and Keyes (1995) described well-being as not as simple as attaining the pleasure, but "the striving for perfection that represents the realization of one's true potential." Well-being is a multi-dimensional approach and is related to six distinct aspects or facets, i.e. autonomy, personal growth, self-acceptance, purpose in life, environmental mastery and positive relations with others. At present, due to the continued pressure and demand of work, employees spend a

large portion of their lives in the workplace. So, providing a healthy and sustainable work environment with good employee-centric human resource practices is expected to help in promoting productivity, while creating a culture of employees that values the well-being of their surroundings. Sustainable human resource practices are long-term-oriented conceptual approaches and are primarily aimed at achieving socially responsible and economically appropriate recruitment and selection, development, deployment and downsizing of employees (Ehnert, 2006). As human capital has been categorized as a very important resource for building sustained competitive advantage (Barney, 1991; Schuler and Jackson, 2005), hence, focusing on sustainable human-related practices is presumed to give competitive advantage over others. Connected with this, Barney (1991) posited that the definition of sustainable competitive advantage should not be oriented toward long-lasting calendar time, but instead to ensure stability of competitive advantage over time and across functional domains of organizations.

Wirtenberg *et al.* (2007) suggested that it is the human resources that play an important part in achieving firms' sustainability. Today's human resource function plays a proactive role in driving initiatives related to sustainability, compared to playing a more consultative or even reactive role. Hence, attention and focus on employee well-being is of paramount importance in the workplace. Sustainable workplace practices go beyond that which is required by law and ensure longevity and overall well-being of the workforce (Willard, 2009). Sustainable employment practices include work/life balance programs such as flexible scheduling, career development programs, initiatives to maintain a motivated and engaged workforce, inclusive leadership and providing strategic training programs. Employers with effective sustainable employment practices are using innovative solutions to help their employees adapt to social and economic change; they are embracing multiculturalism and globalization, and tying employee incentives to business sustainability goals. Keeping with the importance of sustainability practices in achieving workplace well-being, we propose the second hypothesis of our study:

H2. Sustainability practices and workplace well-being are significantly related.

Sustainability practices, self-efficacy and workplace well-being

Present day organizations have changed their stance from short-term profit making motives to long-term successes with all stakeholders. In the last two decades, the concept of sustainability has developed and now has a prominent place in the world of business (Anderson, 1998; Prahalad and Hammond, 2002; Willard, 2009) for deriving long-term success. Sustainability is multi-dimensional in nature (Savitz and Weber, 2006) and good sustainability programs are expected to be embedded in organizational culture (Baumgartner, 2009) for achieving organizational stability and growth.

Sustainability practices primarily advocate eco-efficiency through reduction of waste, emissions and pollutants, while attaining energy conservation. In an organizational context, sustainable practices are in the form of stockholder engagement, sustainability-related product innovation, branding and developing market niche (Willard, 2002). Sustainable HR practices drive change in the workplace and make organizations self-reliant and sustainable, namely, creating good recruitment and retention policy, ensuring work-life balance, improving health and safety, and creating meaningful engagement of employees with their job assignments. We argue that sustainable HR practices create work that engages and motivates employees, as employees derive strong employee motivation toward work (Al Mehrzi and Singh, 2016) when they find it meaningful. Such kinds of subtler HR assistance mechanisms are expected to promote positive behavior among employees and better workplace well-being, while assisting the improvement of the operational efficiency of the organization. Hence, it is assumed that executives perceiving high levels of self-efficacy may demonstrate positive behavior in the workplace.

From the literature, it is seen that a wide variety of sustainability practices are implemented by MNCs, while arguing the importance that such practices can strengthen competitive advantage (Blackburn, 2007; Esty and Winston, 2006; Willard, 2002). Sustainable HR practices create work that engages and motivates employees, as employees derive strong motivation toward work (Al Mehrzi and Singh, 2016) when they find it as meaningful. Hence, employees with higher self-efficacy are more motivated and are expected to make a difference at work. Creating equitable rewards and recognition and compensation is also an important factor to attract and retain employees, as this will make employees self-motivated so as to put extra effort into their work. Sustainability is an issue and it is a win-win proposition for business, as it positively impacts employees and other stakeholders. We propose that employees who drive the sustainability agenda and implement sustainability practices at the ground level. Hence, sustainable practices act as a catalyst for well-being and motivation in a workforce. Therefore, we propose the third hypothesis:

- H3.* Sustainability practices significantly moderate between self-efficacy and workplace well-being.

Research methods

Sampling and data collection

The present study was carried out with full-time executives employed in different levels and technical/non-technical departments of Indian public and private manufacturing industries. The study was carried out over a period of two months during mid-2016. Researchers visited four leading manufacturing industries and approached their HR departments to undertake the survey. Online survey invitations were also made to increase the diversity of our survey. Executives with two or more years of experience in their present organization participated in the survey exercise. To increase the response rate during face-to-face interaction, a small token of appreciation (gift item) was offered for each completed survey instrument. Out of 490 questionnaires distributed during face-to-face interaction, 221 filled-in sheets were obtained at a response rate of 45.1 percent. After rejecting the incomplete questionnaires (18), 203 responses were considered for further analysis. Similarly, we received 306 filled-in complete online responses (mandatory check points were made to ensure participation in all survey statements) and all of them were considered for analysis. The total number of completed sample responses from both sources (online and face-to-face mode) was 527 and these responses were considered for statistical analysis.

Out of 527 respondents, 396 subjects (i.e. 75.14 percent) were male executives and the average age of the total respondents was 32.3 years. In total, 226 executives were employed in public sector manufacturing industries (i.e. 42.88 percent) and the rest were working in reputed private manufacturing units. The number of executives with less than five years' work experience was 133 (i.e. 25.2 percent), while the major chunk of our survey participants had more than five years' experience and were placed in middle and senior levels in both public and private organizations in the manufacturing industry. In all, 261 executives (i.e. 49.52 percent) were graduate degree holders, having BE/BTech/BSc/BBA/BCom or equivalent graduate-level qualifications, whereas 266 executive respondents had post-graduate qualifications in engineering or management. The survey questionnaire was in English and participants were guaranteed confidentiality of their responses.

Measures

Self-efficacy

The general self-efficacy scale developed by Schwarzer and Jerusalem (1995a, b) was used to measure self-efficacy. The ten-item instrument measures the sense of perceived self-efficacy to visualize coping ability and one's adaptability skillset during stressful life events.

The developers of the instrument have validated the scale through confirmatory factor analysis (CFA) and have found the internal reliability (α) between 0.76 and 0.90. Later, empirical studies carried out with different population groups confirmed and validated the scale for use in international contexts (Rimm and Jerusalem, 1999; Schwarzer and Scholz, 2000). Earlier studies have found that the general self-efficacy scale is correlated well with optimism, job satisfaction and emotional intelligence, whereas negative coefficients were observed with burnout-, stress- and anxiety-related behaviors. The original self-efficacy scale was a four-point Likert-type scale; however, we have adopted a five-point Likert-type rating scale with "1 as strongly disagree" and "5 as strongly agree" to make our responses easier. A sample item of the scale includes: "I can remain calm when facing difficulties because I can rely on my coping abilities." The internal consistency (Cronbach's α) for our study was 0.81.

Sustainability practices

For the present study, we used the 15-item instrument developed by Fairfield *et al.* (2011) to measure sustainability practices. There are three dimensions of the scale: integration/alignment, eco-efficiency and employee-centered ethics/practices. It is a self-assessment scale and is measured in a five-point Likert-type format in terms of "to what extent does your company have practices in place to do the following?", having a range from "1 as strongly disagree" to "5 as strongly agree." Authors of the instrument have reported a sufficient internal consistency among its three dimensions: integration/alignment (0.94), eco-efficiency (0.88) and employee-centered ethics/practices (0.79). Sample items of the scale include: "Get groups across your organization that are working on sustainability-related initiatives to work more closely together (integration/alignment)," "Improve energy efficiency" (eco-efficiency) and "Support employees in balancing work and life activities" (employee-centered ethics/practices). The internal consistency (Cronbach's α) for the present study among the dimensions ranged from 0.89 (employee-centered ethics/practices) to 0.79 (eco-efficiency).

Workplace well-being

Parker and Hyett's (2011) Workplace Well-being Questionnaire (WWQ) was used in the present study. The instrument was developed to gauge the well-being of executives who had spent a considerable period of time in their present organization. The scale consists of four dimensions: work satisfaction, organizational respect for the employee, employer care and intrusion of work into private life. The original WWQ was measured through a five-point Likert-type scale (0 = not at all to 4 = extremely); however, for our convenience and ease of response, we have reframed it with the same five-point Likert-type rating scale with "1 as not at all" and "5 as extremely." Sample items of the scale instruct the participant to "choose the option that best represents one's 'current' and most relevant work situation," having: "Does your work increase your sense of self-worth" (work satisfaction), "Do you feel that your employer respects staff" (organizational respect for the employee), "Does your boss treat you as you would like to be treated" (employer care) and "Do you feel stressed in organizing your work time to meet demands" (intrusion of work into private life). Hyett and Parker (2015), in their further examination to report the psychometric properties of the instrument, have reported indicator variable coefficients ranging from 0.49 to 0.85 (for workplace satisfaction), 0.70 to 0.88 (for organizational respect for the employee), 0.71 to 0.91 (for employer care) and 0.56-0.79 (for intrusion of work into private life). The internal consistency (Cronbach's α) for the present study ranged from 0.93 (intrusion of work into private life) to 0.82 (organizational respect for employees).

Analysis and results

At the very beginning, descriptive analysis along with internal consistency and inter-correlations of the variables were computed through SPSS 20.0. Second, one of the simplest and widely used

techniques – Harman's single-factor test (Iverson and Maguire, 2000) – was carried out using analysis of moment structures (AMOS 20.0) to test the bias associated due to common method variance (CMV). A principal limitation of this diagnostic test is that it examines the extent of CMV that is influencing the data set; however, the method is not prescriptive so far as to control the effects statistically. To overcome this limitation, we carried out multiple factor model tests through CFA to check the significant differences associated between the multiple factor test and Harman's single-factor test. For examining our proposed hypotheses, hierarchical regression was carried out to study the extent of incremental variance observed by each predictor variable.

Demographic variables such as age, gender, educational qualification, experience and managerial level were controlled to study the impact. Before analyzing these variables, they were coded as: age (1 = 25–35, 2 = 36–50, 3 = 51 and above); gender (1 = male, 2 = female); educational qualification (1 = graduate degree and below, 2 = post-graduate degree and above); experience in present job (1 = less than 10 years, 2 = 10 years or more); and designation (1 = junior- and middle-level managers, 2 = senior-level executives). As detailed by Aiken and West (1991), after entering the demographic profile of the sample population (age, gender, educational qualification, experience and managerial level), the mean scores of the criterion (self-efficacy), and predictor (workplace well-being) were entered in the data sheet for analysis. Sustainability practice was later introduced to study the interaction among self-efficacy and workplace well-being. The significance of each step was assessed through understanding the R^2 change followed with the evaluation of standardized β significance of each individual parameter. Computation procedures suggested by Hayes and Matthes (2009) for testing the interaction effect on regression analysis were made to test the moderating role of sustainability practices on the relationship between self-efficacy and workplace well-being.

Table I reports the descriptive statistics and inter-correlations among the variables. The Cronbach's α values of variables were within the range of 0.79 to 0.93 and thus meet the prescribed cutoff of 0.70 (Nunnally and Bernstein, 1994). The findings of the correlation analysis were in line with our expected hypotheses, as self-efficacy had a significant relationship with workplace well-being ($r = 0.42$, $p < 0.01$). Workplace sustainability was positively related to self-efficacy ($r = 0.16$, $p < 0.01$) and workplace well-being ($r = 0.27$, $p < 0.01$). Senior executives reported higher workplace well-being than junior- and middle-level executives ($r = 0.18$, $p < 0.01$). Experience in present job position was negatively related to self-efficacy ($r = -0.11$, $p < 0.05$); male executives reported higher scores on their perception toward sustainability practices than their counterparts. Educational qualification was positively related to workplace well-being ($r = 0.46$, $p < 0.01$). Self-efficacy was also positively related to workplace sustainability ($r = 0.21$, $p < 0.01$). Subsequent to

Variable	Mean	SD	1	2	3	4	5	6	7	8
1. Age	32.3	4.82								
2. Gender	1.16	–	–0.18							
3. Educational qualification	1.57	0.38	0.16*	–0.17						
4. Experience in present job	1.01	0.44	–0.03*	0.11**	0.18*					
5. Designation	1.26	0.81	–0.16*	–0.27	0.14**	0.19*				
6. Self-efficacy	3.43	0.66	0.18**	0.06*	0.14**	–0.11*	0.20**			
7. Sustainability practices	3.81	0.41	0.19*	0.11*	0.26**	0.09*	0.21**	0.16**		
8. Workplace well-being	3.95	0.58	0.17**	0.08*	0.46**	0.14*	0.18**	0.42**	0.27**	

Notes: In total, 527 executives from manufacturing industries participated in the survey. Age (1 = 25–35, 2 = 36–50, 3 = 51 and above); gender (1 = male, 2 = female); educational qualification (1 = graduate degree and below, 2 = post-graduate degree and above); experience in present job (1 = less than 10 years, 2 = 10 years or more); designation (1 = junior- and middle-level managers, 2 = senior-level executives). * $p < 0.01$; ** $p < 0.05$

Table I.
Descriptive statistics
and inter-correlations
among variables

inter-correlation among the variables, the findings of hierarchical regression analysis are detailed in Table II.

The variables of the study (self-efficacy, sustainability practices and workplace well-being) resulted from Harman's single-factor test through CFA disclosed poor fit to our data (χ^2 (49) = 1,161.22, RMSEA = 0.12, CFI = 0.78, GFI = 0.71, AGFI = 0.68, IFI = 0.82, AIC = 1,181.17). To overcome the poor findings of our data due to Harman's single-factor test (Podsakoff *et al.*, 2003), the existing results were compared with an alternate model, having multiple latent factor model. This resulted in a good model fit (χ^2 (44) = 282.93, RMSEA = 0.07, CFI = 0.91, GFI = 0.93, AGFI = 0.91, IFI = 0.96, AIC = 211.06). The Harman's single-factor test findings resulted in significantly lower fit of the model compared to the alternate multiple latent factor on our proposed variables ($\Delta\chi^2$ = 878.29, $p < 0.01$). The said finding has proved that one single factor does not influence or cause variance in the data. Therefore, it is deduced that CMV is not a potential problem in this data findings.

Hierarchical regression findings have revealed that the control variables cumulatively explained 21.2 percent of variance in workplace well-being, F change (8, 518) = 34.25, $p < 0.01$. The individual control variable predictions on workplace well-being are as follows: age (β = 0.15, $p < 0.01$), gender (β = -0.16, $p < 0.01$), experience in present job (β = -0.13, $p < 0.01$) and designation (β = 0.24, $p < 0.05$). However, educational qualification did not predict workplace well-being.

Self-efficacy explained 19.4 percent of variance on workplace well-being, which is over and above the control variables considered for the study. Regression equation found that self-efficacy positively predicted the criterion variable (β = 0.36, $p < 0.01$) and hence satisfies the first hypothesis of our study, as self-efficacy is positively related to workplace well-being. Sustainability practices explained 9.4 percent of the variance in the criterion variable and is over and above the control variables and self-efficacy, at F change (10, 516) = 29.57, $p < 0.01$. The said finding is in line with our second hypothesis, proving that sustainability practices are positively related to workplace well-being. The third hypothesis of the study proposed sustainability practices as a significant moderator between self-efficacy and workplace well-being, assuming that executives having a positive view on self-efficacy and sustainability practices will have a higher workplace well-being. Step 4 of Table II shows a statistically significant interaction ($p < 0.01$), supporting that sustainability practices moderated the relationship between self-efficacy and workplace well-being (β = -0.17, $p < 0.01$). The fourth step included the interaction self-efficacy and sustainability practices; the standardized coefficient revealed that the strongest predictor of

Table II.
Results of hierarchical
regression and
moderating role of
sustainability practices

Variables	Steps			
	1	2	3	4
Age	0.15*	-0.03	-0.08	-0.05**
Gender	-0.16*	-0.11*	-0.16*	-0.19
Educational qualification	0.24	0.21**	0.16*	0.11*
Experience in present job	0.13*	-0.14**	0.11**	0.21**
Designation	0.24**	0.33	0.18*	0.36**
Self-efficacy		0.36*	0.29*	0.21*
Sustainability practices			0.19*	0.32*
Self-efficacy $\times$ sustainability practices				-0.17*
R^2	0.21	0.41	0.49	0.52
R^2 change	0.21	0.19	0.09	0.27
F change	F (8, 518) = 34.25* F (9, 517) = 41.69** F (10, 516) = 29.57* F (11, 515) = 44.36*			

Notes: * $p < 0.01$; ** $p < 0.05$

workplace well-being was sustainability practices ($\beta = 0.32$, $p < 0.01$), followed by self-efficacy ($\beta = 0.21$, $p < 0.01$). The following demographic profiles were found to be the strong predictors of workplace well-being: age ($\beta = -0.05$, $p < 0.05$), educational qualification ($\beta = 0.11$, $p < 0.01$), experience in present job ($\beta = 0.21$, $p < 0.05$) and designation ($\beta = 0.36$, $p < 0.05$). However, gender did not predict workplace well-being. The moderating effect of sustainability practices between self-efficacy (IV) and workplace well-being (DV) is illustrated in Figure 1.

Discussion

The present study has tested our assertions through three hypotheses: we empirically examined the relationship between self-efficacy and workplace well-being; we also investigated the association between sustainability practices and workplace well-being; and in addition, the moderating role of sustainability practices was examined between the construct of self-efficacy and workplace well-being. The findings of the study are in line with our predictions. Precisely, the study has revealed a positive relationship of self-efficacy (*H1*) and sustainability practices (*H2*) to workplace well-being. Besides that sustainability practices significantly moderated the relationship between self-efficacy and workplace well-being (*H3*), proving that executives perceiving both self-efficacy and sustainability practices will feel better workplace well-being. Moreover, during times when executives identify poor self-efficacy having a better perception on organizational sustainability practices will demonstrate higher workplace well-being than those executives with a lower perception of sustainability practices.

Implications for theory

The present study aids earlier research by extending the scope that self-efficacy promotes a kind of conviction influencing the intrinsic motivation level of employees and this, in turn, helps toward gaining respect from an employer as a valued contributor, while leading a better work-life balance. For maintaining the intrinsic motivation among executives, a supportive work culture along with sustainable work practices is essential. The findings of the present study fills the void, while confirming that sustainability practices explain 9.4 percent of variance in workplace well-being and hence confirming the second hypothesis that sustainability practices are positively related to workplace well-being. Our findings confirm the earlier research on well-defined work practices as an enabler of psychological well-being in the workplace (Ryan and Deci, 2000). This supports our conceptualization of sustainability practices as an advocate of workplace well-being.

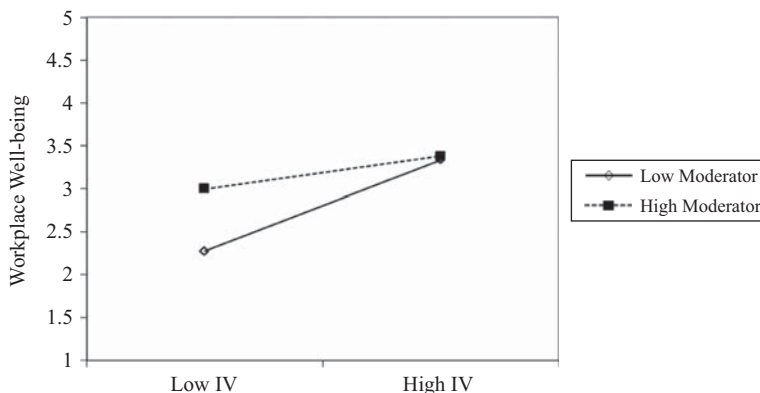


Figure 1.
Moderation effect
of sustainability
practices on
workplace well-being

The moderating role of sustainability practices on the relationship between self-efficacy and workplace well-being is an intriguing result of the study. The hierarchical regression analysis revealed that sustainability practices significantly moderate the relationship between self-efficacy and workplace well-being. The association among self-efficacy and workplace well-being is stronger for those perceiving greater sustainability practices from their organizations. This finding is one of the valuable contributions to extend the literature on self-efficacy and workplace well-being and this is one of the first few studies to examine the moderating effect of sustainability practices between the two.

Several studies on sustainable practices show that organizational efficiency increases with the prevalence of positive work practices or visual work practices (Kattman *et al.*, 2012), absorbing the shocks of the economic downturn (Psychogios *et al.*, 2016) by stimulating employee engagement (Ajayi *et al.*, 2017). The present study has a number of theoretical and practical implications for researchers and practitioners. The link between self-efficacy, sustainable practices and workplace well-being provides ample scope for trainers and OD practitioners to redesign their HR systems to enable their employees to become more efficient, resilient and competent and to sustain these under difficult circumstances. Since people with high self-efficacy are more resilient, they are likely to be more engaged in their work and sustainable practices will reduce disengagement at work (Rastogi *et al.*, 2018). The findings of the paper also theoretically indicate that self-efficacy and sustainable practices not only enhance employee well-being at work, but may also improve employee performance and innovative work behavior and other job-related outcomes (i.e. job performance and contextual performance). Sustainability practices can be used as a benchmarking for manufacturing industries to increase peer performance (Sangwan and Choudhary, 2018). This may distinguish one organization from others in terms of developing sustainable culture, work practices and performance.

Singh (2018) has rightly pointed out that the key to sustainability management of people, process and products in emerging markets is heavily dependent on the sustainable architecture to leverage the best out of “mind-share” and the “market” share philosophy. Such HR policies and systems create a climate of concern about employee development, engagement, self-efficacy and well-being at work. The findings of our study support similar findings conducted across BRIC countries wherein they also found about how human resource practices help organizations take care of economic, social and environmental sustainable developments (Jabbour and Santos, 2008; Jabbour *et al.*, 2010).

Managerial implications

The present empirical study suggests few practical implications for both organizations and individual employees. First, the present study offers a better understanding of sustainable practices by expanding the empirical foundations of self-efficacy and workplace well-being. The study confirms that organizations with extensive sustainable practices bring forth positivity and well-being among employees, leading to better organizational performance. Our sample respondents have suggested the selection of the right people to occupy the roles in the organization for the successful implementation of the sustainability agenda. The onus is on HR managers to ensure person–organization fit and person–role fit while conducting recruitment and selection of personnel. Many organizations adopt TQM practices to create competitive advantage for their organizations (Ferdousi *et al.*, 2018). In this context, the findings of this study may be extended to the achievement of competitive advantage through sustainable practices and enhancing employees’ workplace well-being.

HRD managers carrying talent management portfolios may include some self-efficacy-related questions and case studies in sustainable hiring practices and this may help to know that a candidate with higher self-efficacy will be more motivated and adaptable to

organizational change. Trainers and managers should provide a challenging environment and opportunities for growth; otherwise employees may experience boredom and disengaged. A dynamic environment filled with challenges raises the level of self-efficacy at work. Supervisors and mentors should provide constructive feedback, continuous guidance and support to help employees to be more motivated and show positivity in work settings. Managers should practice recognition and rewarding success at work, as they will promote self-efficacy among employees and propel them toward greater accomplishments. It is suggested that HR departments can play a catalytic role in bringing about change while facilitating the implementation of sustainable business practices in an organization. Finally, organizations must align their leadership to focus on the sustainability agenda. It is the leadership that is responsible for creating a sustainable strategy toward having a motivated and engaged workforce.

Conclusion and Scope for future research

Future research is expected to examine the role and effects of some additional measures. First of all, the sample size taken in the present study is very small, while generalizing the findings this should be kept in the mind. Future research may carry out longitudinal study to understand the trend of relationships examined in the present study over an extended period of time for better results. The results of this study can be taken as a base for further development of theory building and conceptual development within the interdisciplinary field of positive psychology, organization sustainability, innovation and performance. This survey was validated to a great extent with the above study; however, a validation study before the survey may produce a good fit to our hypothesis at the construct level. Future research may be taken in other geographic regions with sufficiently large sample sizes to produce a reliable comparison. Our study suggests that employee-friendly policies and sustainable practices help toward well-being of the employees within the workplace. We are optimistic that future research can extend these findings and provide more meaningful, practical advice to managers on how these sustainable practices support success in business and well-being in the workplace, whereby creating a better living place in this world.

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Further reading

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