



Mindfulness and Social Sustainability: An Integrative Review

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Abstract

The purpose of this review paper is to present a holistic conceptualization by synthesizing mindfulness and social sustainability literature and introducing an integrative mindfulness-social sustainability framework. To this end, we conducted an extensive review of the mindfulness and social sustainability literature. The findings revealed that there is a paucity of research that has examined the relationship between mindfulness and social sustainability. While some recent studies have begun to explore the role of mindfulness in ecological sustainability, the link between mindfulness and social sustainability has remained under-researched. This paper introduces an integrative mindfulness-social sustainability framework that explicates how mindfulness practice can be employed in the workplace context to achieve social sustainability outcomes. In this regard, we first discuss how mindfulness is related to social sustainability at the individual (e.g., employee health and well-being) and organizational (e.g., ethical behavior, employee performance, workplace spirituality) levels. Next, we examine how individual and organizational social sustainability might relate to some wider societal sustainability outcomes (e.g., social justice, collective social capital). We argue that this is one of the few early theoretical papers that has investigated the potential connections between two important, albeit fragmented disciplines—mindfulness and social sustainability. This paper suggests potential courses of action to address social sustainability challenges by integrating mindfulness and social sustainability.

Keywords Mindfulness · Mindfulness-based training programs · Social sustainability · Human sustainability · Societal development · Systems theory

1 Introduction

The concept of mindfulness has recently attracted considerable attention in the business context. In particular, mindfulness-based training programs are increasingly embraced by organizations in varied work settings. For instance, over 22% of Fortune 500 companies had implemented workplace mindfulness initiatives in 2016 (Wolever et al. 2018).

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Similarly, Olano et al. (2015) reported that 13% of U.S. workers engaged in mindfulness-based training programs. One of the central reasons for rising interest in mindfulness originates from the premise that it influences a range of workplace outcomes including improved organizational productivity, creativity, and employee health and well-being (Wolever et al. 2018; Zivnuska et al. 2016). With these goals in mind, organizations such as Google, Target, Dow Chemical, Intel, Goldman Sachs, Aetna, and the U.S. Army have successfully adopted mindfulness-based training initiatives (Eby et al. 2019; Good et al. 2016; Jha et al. 2015; Penman 2015).

At the same time, however, sustainability has become an imperative for academic, business, governments and international organizations. Scholars, scientists, and practitioners are continually searching for new ways to address complex and interrelated sustainability issues. Sustainability in the business context refers to the integration of social, economic and environmental dimensions of sustainable development into business strategies (Elkington 1998). In particular, organizations are under pressure to explore novel sustainable approaches to address wicked social and environmental problems and mindfulness can be considered one of the key potential strategies for addressing global sustainability issues. Prior literature suggests that the concept of mindfulness is mostly considered in terms of facilitating insights (classical view), helping people deal with physical and psychological problems (secular therapeutic), and helping people become more effective in their roles and work assignments (secular instrumental) (Duerr 2015). Nonetheless, without a foundation of ethics, spirituality, and morality (a socially transformative approach that facilitates social and economic justice, peace, and equality), mindfulness is often reduced to an ordinary therapeutic self-help technique. In addition, Wamsler et al. (2018) argued, “mindfulness can contribute to understanding and facilitating sustainability, not only at the individual level, but sustainability at all scales [including local, national, and global], and should, thus, become a core concept in sustainability science, practice, and teaching”.

While the concept of mindfulness is increasingly receiving recognition in the sustainability literature, the majority of early studies either attempted to connect mindfulness to some broad and fragmented sustainability issues or focused exclusively on exploring the relationship between mindfulness and environmental sustainability. Such studies primarily examined the relationship between mindfulness and pro-environmental behavior (Amel et al. 2009; Ericson et al. 2014; Panno et al. 2017; Pfattheicher et al. 2016), connectedness with the natural environment (Barbaro and Pickett 2016), as well as environmental performance (Umar and Chunwe 2019). That said, the relationship between mindfulness and social sustainability aspects is under-researched (Wamsler 2018; Wamsler et al. 2018). However, mindfulness can be considered an important concept for addressing social sustainability issues. For example, scholars have argued that mindfulness-based training can be used to address key social issues including human health and well-being, pro-social behavior, workplace spirituality, human rights, citizenship behavior, and social justice (Cameron and Fredrickson 2015; Cheung 2016; Doetsch-Kidder 2012; Hick and Furlotte 2009; Leiberg et al. 2011; Pandey et al. 2018; Ruedy and Schweitzer 2010). In addition, although a few recent studies have explored some linkages between mindfulness and social sustainability at the individual and organizational levels, the relationship between mindfulness and social sustainability at the societal level has been particularly under-researched. Thus, the objective of this paper is to bridge these gaps in the extant literature by identifying some relevant linkages between mindfulness and social sustainability.

Drawing insights from the systems theory perspective, we critically examine, interpret, and explicate the role of mindfulness in fostering social sustainability at three specific levels: individual, organizational and societal. In particular, we argue that mainstream

mindfulness research and practice need to move beyond narrow application of mindfulness-based training to individual health and well-being towards understanding of more holistic and collective social sustainability consequences to the organizational and societal domains including employee citizenship behavior, pro-social behavior, as well as social justice and equity. To this end, systems theory can be considered as one of the most promising conceptual frameworks to understand the interconnections between mindfulness and social sustainability concepts.

The key concepts of systems theory are introduced by seminal thinkers such as Gregory Bateson (1971), Boulding (1956), and Ludwig von Bertalanffy (1956, 1972). Von Bertalanffy (1972) defined a system as “a set of elements standing in interrelation among themselves and with environment”. According to Von Bertalanffy (1972), systems theory is the study of the nature of complex systems or ‘organized wholes’. Systems theory has been adopted in the field of organization and management theory as a general framework for conceptualizing organizations as complex and dynamic entities containing interdependent and interactive subsystems (Wilkinson 2011). Systems theorist argued that the individual parts of a system can best be understood in the context of the relationships with each other and with other systems in a holistic manner, rather than in isolation (Wilkinson 2011). According to Bateson (1971), “the mental characteristics of the system are immanent, not in some part, but in the system as a whole”. Thus, systems theory supports the ideas of holistic view (Bateson 1971; Schwarz 1997) and open-system thinking (Kartz and Kahn 1978; Kast and Rosenzweig 1972), which are critical to understand complex, interrelated, and dynamic sustainability issues (Bai and Henesey 2012; Starik and Rands 1995).

Systems thinking relates to the application of synergetic analytic skills used to identify, describe, predict and better understand the relationships between a complex set of interacting factors to achieve desired outcomes (Arnold and Wade 2015; Collins et al. 2011). Senge (1990) defined system thinking as “a discipline for seeing wholes and a framework for seeing interrelationships rather than things, for seeing patterns of change rather than static snapshots”. We utilized systems thinking perspective as it provides a sound theoretical basis to assess how mindfulness influences social sustainability at the individual level, which in turn translates into a range of social sustainability outcomes at the organizational and societal levels. As these domains are intrinsically interconnected to each other, systems thinking is a central way to envisage salient interactive processes and potential linkages between mindfulness and social sustainability, as well as pathways through which individual-level social sustainability benefits are transformed into organizational and societal-level social sustainability outcomes. Accordingly, an organized understanding of a system-wide change to improve social sustainability aspects requires systems thinking by which complex and subtle interrelationships between sub-systems are explored and understood in a holistic manner (Clayton and Radcliff 2018; Starik and Rands 1995; Williams et al. 2017).

This paper contributes to the present literature and corporate practice in three ways. First, it is argued that this is one of the first inter-disciplinary studies that synthesizes mindfulness and social sustainability literature. The majority of prior literature focused on the relationship between mindfulness and environmental sustainability, while this paper presents an alternate viewpoint that expands the academic scholarship and dialogue on how mindfulness-based training programs can be utilized to address social sustainability issues at the individual, organizational and societal levels. Second, the integrative mindfulness-social sustainability framework introduced in this paper sheds light on interrelationships between mindfulness and social sustainability. In particular, drawing insights from the systems theory perspective, the framework illustrates how mindfulness practice fosters social sustainability at the individual level, which may subsequently translate into developing

positive social outcomes at organizational and societal levels. Third, this paper is timely, as practitioners and policy makers could benefit from understanding the significance of mindfulness practice for addressing social sustainability issues. Fourth, we provide some future research directions that could help to expand the interdisciplinary academic scholarship linking mindfulness and social sustainability.

The remainder of the paper is structured as follows: First, an overview of mindfulness and social sustainability concepts is presented. Then, drawing on the literature review on mindfulness and social sustainability an integrative mindfulness-social sustainability framework is introduced. This framework highlights the connections between mindfulness practices and social sustainability in a holistic manner. The paper ends with a conclusion, implications and future research directions.

2 Mindfulness

2.1 Conceptualizing Mindfulness

Mindfulness is conceptualized in varied ways and there is a lack of consensus among scholars regarding its definition (Baer et al. 2009; Cigolla and Brown 2011). According to Dimidjian and Linehan (2003), “the lack of a clear operational definition of mindfulness has given rise to considerable and unfortunate ambiguity in the field”. Mindfulness is broadly defined as “being attentive to and aware of what is taking place in the present” (Brown and Ryan 2003). While mindfulness is commonly viewed as a state, the propensity to be mindful varies between individuals depending on their mindfulness capacity, which demonstrates trait-like attributes. In addition, mindfulness can be nurtured through mindfulness practices such as meditation and yoga, as well as by introducing structured mindfulness-based training programs designed to enhance individuals’ mindfulness capability (Brown and Ryan 2003; Jamieson and Tuckey 2017). Mindfulness training within the employment context is defined as “planned interventions offered to employees over some period of time (several hours to months) that is designed to teach mindfulness skills” (Eby et al. 2019).

2.2 Perspectives on Mindfulness

The mindfulness literature suggests two dominant perspectives on mindfulness—meditative mindfulness and socio-cognitive mindfulness (Lynn et al. 2017). The key elements of these perspectives are summarized in Table 1.

Table 1 Mindfulness perspectives

Mindfulness	Meditative mindfulness	Socio-cognitive mindfulness
Focus	Awareness (Kabat-Zinn 2003)	Novel distinction (Langer and Moldoveanu 2000)
Scope		
Individual	Physical and psychological health (Kabat-Zinn 2003)	Self-acceptance (Carson and Langer 2006)
Organizational	Performance, relationship, and well-being (Good et al. 2016)	Innovation (Langer and Moldoveanu 2000) Safety (reliability, accidents and error reduction) (Sutcliffe et al. 2016; Weick et al. 2008)

2.2.1 Meditative Mindfulness Perspective

Kabat-Zinn et al. (1985) and Kabat-Zinn (1990) introduced the concept of ‘meditative mindfulness’ in the mainstream health sciences for the treatment of patients with physical and psychological disorders. This perspective is built on the premise that mindfulness is a skill or technique which can be used to improve the physical and psychological health of an individual. According to Kabat-Zinn (2003), mindfulness is “the awareness that emerges through paying attention on purpose, in the present moment, and non-judgmentally to the unfolding of experience moment by moment”. This exposition demonstrates two central aspects of mindfulness: (1) consciousness of current events and experiences in terms of emotions, cognition, and attention (Brown and Ryan 2003), and (2) a non-judgmental stance towards reality and to consider experiences as experiences rather than reality (Baer 2010). Kabat-Zinn argued that non-judgmental aspects of mindfulness reduce emotional reactivity and enhance tolerance that might lead to improving the physical and psychological well-being of the individual (Brown et al. 2007; Lutz et al. 2013).

Awareness of the present moment can be a potential source of self-regulation. Vago and David (2012) proposed a framework that explains the mechanism through which mindfulness leads to self-regulated behavior. The framework illustrates that mindfulness helps to cultivate awareness about biased thoughts (self-awareness), regulate behavior by controlling these biased thoughts (self-regulation), and improve relationships with others (self-transcendence) (Brown et al. 2007). Mindfulness can also facilitate relaxation and relief from pain due to attentional control in painful and uncomfortable situations (Brown et al. 2007). Brown and Ryan (2003) showed that mindfulness can be a source of self-regulation as it promotes psychological well-being by reducing mood disturbance and stress.

Kabat-Zinn introduced a mindfulness-based stress reduction program (MBSR) in clinical psychology for treatment of patients with psychological, emotional and behavioral disorders. MBSR is one of the most widely used therapies in the clinical setting (Bishop et al. 2004). The MBSR program is based on 8 weekly sessions of mindfulness exercises including Eastern meditation exercises such as body scanning, breathing, sitting, walking, and eating meditation, yoga, and Western exercises, such as psycho-education, group discussion, and individual support (Khoury et al. 2017). These exercises mainly help individuals to develop their capacity to remain in the present moment, live each moment fully and in a non-judgmental way (Glomb et al. 2011; Kabat-Zinn 2005).

2.2.2 Socio-Cognitive Mindfulness Perspective

Ellen Langer proposed a ‘socio-cognitive perspective’, which conceives mindfulness as “the process of drawing novel distinctions” (Langer and Moldoveanu 2000). It is a state of being present, remaining sensitive to the context or perspective, and not being governed by rules and routine (Langer 2014). In contrast, mindlessness observes rigid rules where information is acquired from a single perspective, without knowing that additional information can be gained through experiences, and thus automatic action occurs. This suggests that the conceptual processing of the mind, which is repetitive and automatic in nature, is the state of mindlessness whereas context dependent and experience-based processing of mind is the state of mindfulness (Good et al. 2016).

Ellen Langer’s socio-cognitive view of mindfulness is mainly studied at the organizational level. Mindfulness at the organizational level refers to an organizational ability to observe and respond to emerging unexpected events (Vogus and Sutcliffe 2012). It involves

the organizational capacity to remain sensitive to the context, open to new information and emerging trends, and respond to any unexpected threat (Valorinta 2009). Mindfulness at organizational level is mainly used to explain the functioning of high-reliability organizations such as nuclear power plants, nuclear aircraft carriers, and air traffic control (Weick and Roberts 1993; Weick et al. 2008). These organizations perform in a highly reliable way in order to avoid mistakes and remain sensitive to emerging threats (Sutcliffe et al. 2016). However, ordinary organizations can also operate in a mindful way and look for reliability (Becke 2014) by adopting mindfulness-based training programs.

In this paper, we mainly focus on the meditative mindfulness perspective. Meditative mindfulness is often studied as a state or trait like human capacity relating to attention and awareness of the present moment, formal and informal individual practice (e.g., paying attention to body scanning, breathing, and walking), and mindfulness training (e.g., MBSR) (Jamieson and Tuckey 2017). Thus, we use mindfulness as a broader term that includes human natural capacity, practice, and training intervention of mindfulness.

3 Social Sustainability

3.1 Origins and Conceptual Framing of the Social Sustainability Concept

The sustainability notion originates from the concept of sustainable development (Mebratu 1998). The World Commission on Environment and Development (WCED) defined sustainable development as “the development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED 1987). Sustainable development is a holistic concept that entails continuous improvements without constraining the future in three independent but intertwined dimensions—economic development, social equity, and environmental conservation (Hitchcock and Willard 2006; Elkington 1998). Although the Commission recognizes ‘social sustainability’ as one of the central pillars of sustainable development, it is often neglected by scientists, decision makers, scholars, and businesses (Pfeffer 2010; Omann and Spangenberg 2002).

Missimer et al. (2017) argued that inadequate attention to social sustainability can be attributed to various practical and theoretical challenges such as ambiguity and lack of actionable approaches, as well as debate over varied sets of values. Bebbington and Dillard (2008) suggested four key reasons for the relative neglect of social aspects of sustainable development in the business literature: (1) the goals of business organizations (e.g., profit maximization) mean they are not always cognizant of the wide-ranging social impacts of their behavior, (2) the origin of sustainable development in the environmental sustainability movement, (3) the core issues of social sustainability often fall within the control and concern of the state and civil society organizations, and (4) the social sustainability concept presents more critical issues related to measurement, understanding, and communication than environmental sustainability, which has a relatively scientific basis for measurement and analysis. Accordingly, a large majority of sustainability literature addresses the environmental dimension and research that explores social sustainability remains lacking (Colantonio 2007). However, it can be argued that strengthening the well-being, health, and welfare of society is equally important to sustainable development. As Gladwin et al. (1995) noted, true sustainability stresses the need for carefully addressing critical social problems including poverty, sexism, unemployment, human rights violations, and social inequality on a large scale.

3.2 Classifying Social Sustainability at the Organizational Level

The terms social and human sustainability are often used interchangeably in the current literature. However, based on scope, context, and focus, scholars have defined these concepts in varied ways. Dunphy et al. (2000) conceptualized social sustainability at the business level as “building human capability and skills for sustainable high-level organizational performance and for the community and societal well-being”. This definition identifies both internal and external dimensions of social sustainability. Conversely, Polese and Stren (2000) described social sustainability more broadly as “development (and/or growth) that is compatible with harmonious evolution of civil society, fostering an environment conducive to the compatible cohabitation of culturally and socially diverse groups while at the same time encouraging social integration, with improvements in the quality of life for all segments of the population” such that the ability of future generations is not compromised.

In this paper, however, we have adopted a more specific classification for social sustainability provided by Dyllick and Hockerts (2002). They suggested that the concept of social sustainability originates from the idea of ‘social capital’, which has two key dimensions: human capital and societal capital. First, the concept of human capital is limited to the organization-employee relationship. Accordingly, an organization has an important role in developing human capital through improving the human resource base and capability of employees, which is central to achieving social sustainability (Becke 2014). The prior literature identified several key issues regarding the development and protection of human capital. This includes workers’ motivation, occupational health and safety, distribution of living wages, human rights protection, freedom of association, collective bargaining, and career development opportunities (i.e., skills and knowledge enhancement) for employees (Adler and Kwon 2002; Dempsey et al. 2011; Dierynck et al. 2017; Hutchins and Sutherland 2008).

Second, societal capital (or collective social capital) relates to “the development and reengineering of social resources (e.g., social trust, reciprocity, and organizational commitment” (Becke 2014). Societal capital is a central element for achieving collective social sustainability and it involves an organization’s willingness to address a broad set of local community and societal issues where it has influence (Lawrence and Weber 2017; Habisch and Moon 2006). Societal capital in the business context refers to any organized program, practice, or policy initiated by a company to benefit society (Brønn and Vidaver-Cohen 2009). These social practices focus on resolving issues such as poverty, equity, employment creation, livelihood, access to education, public health facilities, youth behavioral problems, diversity, inclusion, human well-being, quality of life, social security, and social justice (Hutchins and Sutherland 2008; Dempsey et al. 2011; Hess et al. 2002; Thin 2002; Colantonio 2007).

The societal sustainability issues are addressed through organized community initiatives and community relations activities (Hess et al. 2002). The essential reason for this organization-community engagement is that it enables an organization to earn social legitimacy, improve its social license to operate and establish trust-based stakeholder relationships (Lawrence and Weber 2017; Werther Jr. and Chandler 2010; Brønn and Vidaver-Cohen 2009; Habisch and Moon 2006; Bebbington and Dillard 2008), which are essential elements that determine an organization’s long-term viability. As Werther and Chandler (2010) noted, “the loss of societal legitimacy can lead to the countervailing power of social activism, restrictive legislation, or other constraints on the firm’s freedom to pursue its economic and other interests”. Key elements of social sustainability are indicated in Table 2.

Table 2 Key elements of social sustainability *Source:* This table is developed by referring to Axelsson et al. (2013), Bebbington and Dillard (2008), Bramley et al. (2006), Colantonio (2007), Hess et al. (2002), McKenzie (2004) and Thin (2002)

Social sustainability	Human sustainability	Societal sustainability
Scope	Internal domain (organization-employee relationship)	External domain (organization-community relationship)
Focus	Narrow	Broad
Selected issues	Training and development Job security Occupational health and safety Employees well-being Human rights Labor practices Collective bargaining Freedom of association Living wage Diversity Equal employment opportunities Women empowerment Consumer/product responsibility Work-family conflicts Provision of health insurance	Community development Welfare, housing and environment Poverty reduction Equity Employment Livelihood Social cohesion Education and skills Public health Youth behavioral problems Corruption Social security Social justice Well-being, happiness and quality of life

4 Integrating Mindfulness and Social Sustainability

This section draws links between the mindfulness and social sustainability concepts and introduces an integrative mindfulness-social sustainability framework (Fig. 1). The framework demonstrates a nested hierarchy of relationships between mindfulness and social sustainability in three specific domains: (1) individual-level linkages between mindfulness and social sustainability, (2) organizational-level linkages between mindfulness and social sustainability, and (3) societal-level linkages between mindfulness and social sustainability (Table 3). We argue that the systems thinking perspective is one of the relevant approaches to understand multi-level, complex and dynamic relationships between mindfulness and social sustainability (Starik and Rands 1995).

4.1 Individual-Level Linkages Between Mindfulness and Social Sustainability

From an individual perspective, the prior research revealed that mindfulness is associated with the physical, psychological, and mental health of individuals (Good et al. 2016; Jamieson and Tuckey 2017). According to Good et al. (2016), mindfulness practices influence human functioning mainly through improving attentional capability and reducing mind wandering, which then positively influence other aspects of human functioning including cognition, emotion, behavior, and physiology.

Prior research has indicated that mindfulness-based training increases individuals' cognitive capacity and flexibility, which in turn enable individuals' ability to learn and process new information by assessing patterns and relationships, enhancing their creativity performance and problem-solving abilities (Byrne and Thatchenkery 2018; Colzato et al. 2012). Moreover, mindfulness-based training supports the ability to manage negative

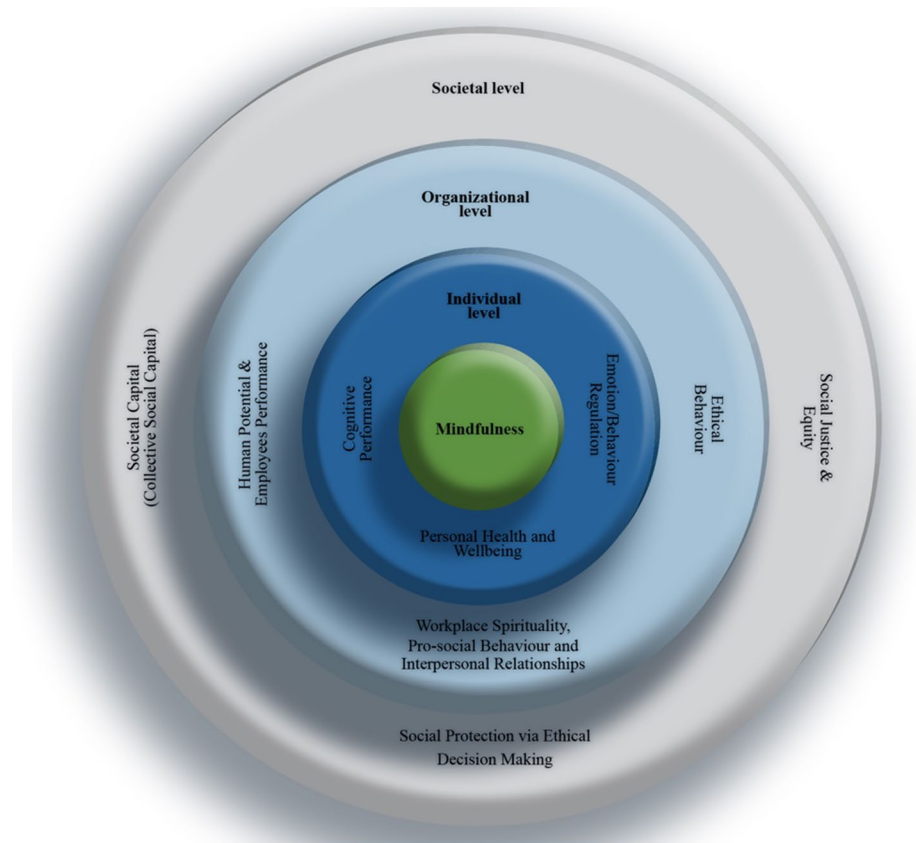


Fig. 1 Integrative mindfulness-social sustainability framework

emotions (e.g., distress, anxiety, fear, worry, and anger) and emotional reactivity, while at the same time it stimulates positive emotions (Eberth and Sedlmeier 2012; Malinowski and Lim 2015). Additionally, several studies reported that mindfulness contributes to effective behavioral regulation (Vago and David 2012; Glomb et al. 2011). Roemer et al. (2015) suggested that mindfulness practice enhances self-regulation. Thus, those who practice mindfulness are less susceptible to negative emotions, which enables goal-directed behavior.

Other than cognition, emotion, and self-regulation of behavior, prior research has indicated that mindfulness is strongly associated with physical and mental health, as well as physiological well-being (Aikens et al. 2014; Christopher et al. 2016; Luken and Sammons 2016; Mulla et al. 2017). A recent systematic review of the impacts of mindfulness on well-being of employees has shown that mindfulness-based training has a positive impact on employees' well-being (Lomas et al. 2017). According to Hülshager et al. (2013) and Shonin et al. (2014), mindful employees (i.e., employees with better ability to be mindful) tend to be less emotionally exhausted and more satisfied with their job than others. In another study, Hülshager et al. (2014) examined the role of mindfulness at work in relation to employees' physical and psychological condition. The results suggested that employees' mindfulness is associated with sleep quality and psychological detachment at work such that those with higher levels of mindfulness tend to sleep better and can detach themselves

Table 3 Mindfulness and social sustainability linkages *Source:* Authors

Scope	Implications	Dimensions
Individual level	Mindfulness practice may enhance human potential (e.g., cognition, emotion, attitude, and behavior) and well-being and quality of life (e.g., physical, emotional and psychological)	Cognitive capacity and flexibility (Good et al. 2016), positive emotions (Eberth and Sedmeier 2012; Malinowski and Lim 2015), self-regulation (Vago and David 2012; Glomb et al. 2011), self-compassion (Beshai et al. 2016; Flook et al. 2013), relationship quality (Good et al. 2016; Brown et al. 2007; Quaglia et al. 2015), reduce psychological distress (Virgili 2015), empathy (Dekeyser et al. 2008; Krasner et al. 2009), personal health and well-being (Brown et al. 2007; Burton et al. 2017; Petchsawang and McLean 2017; Wolever et al. 2018; Zivnuska et al. 2016), resilience, emotional intelligence, mental and physical health (Christopher et al. 2016), stress and burnout reduction (Hodgson et al. 2018; Luken and Sammons 2016; Roeser et al. 2013; Creswell and Lindsay 2014), self-compassion, control blood pressure, and control blood cortisol level (Mulla et al. 2017), work-life-balance (Reb et al. 2014a, b; Zivnuska et al. 2016), quality of life (Goyal et al. 2014), job satisfaction (Reb et al. 2014a, b; Shorin et al. 2014; West et al. 2014), resilience (Penman 2015; Aikens et al. 2014)
Organizational level	Mindfulness practice may increase human capability (e.g., human capital), and citizenship behavior (e.g., moral/ethical reasoning capacity), and overall employee performance	ethical consciousness (Cheung 2016; Wolever et al. 2018; Dhandra and Park 2018), moral reasoning capacity (Pandey et al. 2018), citizenship behavior (Reb et al. 2014a, b), sustainable behavior (Amel et al. 2009; Ericson et al. 2014), pro-social behavior (Fischer et al. 2017; Leiberger et al. 2011; Lim et al. 2015), goal-oriented behavior (Roemer et al. 2015), workplace spirituality (Petchsawang and McLean 2017), occupational health and safety at work (Good et al. 2016; Hülshöger et al. 2015), work engagement (Allen et al. 2015; Aikens et al. 2014), creativity (Ostafin and Kassman 2012; Colzato et al. 2012)
Societal level	Mindfulness practice may improve collective action for public (common) good and healthy societies (e.g., community welfare and development through health and human services, education, collaborative community partnerships, and other civil and community activities)	Collective ethical actions (Cheung 2016), social justice and equity (Hick and Furlotte 2009; Hick and Furlotte 2010; Magnuson 2011), social activism (Brown et al. 2007; Doetsch-Kidder 2012), social cohesion (Byron et al. 2015), compassion for community (Wämstler and Brink 2018; Eby et al. 2017; Tirsch 2010), human rights protection (Cheung 2016), collective social resources (Becke 2014)

from worrying about the future and the past better than employees with lower levels of mindfulness. Roeser et al. (2013) and Luken and Sammons (2016) reported that mindfulness training initiatives reduce occupational stress and symptoms of burnout. Fredrickson et al. (2008) indicated that loving-kindness meditation enhances the spiritual (capacity/health) well-being of employees in terms of life satisfaction and fulfillment. In the same vein, several other studies reported that mindfulness practices improve spiritual well-being in terms of compassion for oneself and others (Beshai et al. 2016; Condon et al. 2013; Frank et al. 2015; Taylor et al. 2016; Tirch 2010), quality of life of employees (Goyal et al. 2014), and work-life balance (Allen and Kiburz 2012; Reb et al. 2014a, b; Zivnuska et al. 2016).

While mindfulness practice delivers cognitive, emotional, behavioral, physiological, and other health and well-being-related benefits, the systems thinking provides a useful pathway to realize how these benefits can be transformed into collective social sustainability outcomes. This suggests that the systems theory provides a useful framework to identify, understand, and systematically connect various parts of the social system and their associated relationships to achieve wider sustainability outcomes.

4.2 Organizational-Level Linkages Between Mindfulness and Social Sustainability

The extant review of literature further suggests that mindfulness practices promote social sustainability at the organizational level in three specific areas: (1) ethical behavior, (2) human capital and employee performance, and (3) workplace spirituality and interpersonal relationships. First, some scholars examined the role of mindfulness in improving employees' ethical behavior such that mindful individuals tend to be self-aware and non-judgmental in their daily life and less likely to involve in an unethical behavior such as cheating (Dhanda and Park 2018). Wolever et al. (2018) argued that business success is more closely related to ethical organizational practices including human rights, social justice, and value-based leadership. These ethical organizational practices may be promoted through mindfulness interventions. Vu (2018) considered the linkages between Buddhist principles, social responsibility, and skill mindfulness. The author suggested that Buddhist principles including mindfulness can be applied to complex and diverse corporate contexts to promote sustainability practices. Similarly, Pandey et al. (2018) studied the relationship between mindfulness practice and moral reasoning. The findings revealed that mindfulness-focused training enhanced moral reasoning capacity within business contexts.

Second, several researchers have discussed the association of mindfulness with human capital and performance. For instance, Ostafin and Kassman (2012) examined the relationship between mindfulness and problem-solving ability of individuals. They found that mindful individuals are superior in solving complex problems that require creative and non-habitual responses as compared to others. This is because mindfulness as a function of non-judgmental awareness of the present moment reduces preoccupied thoughts and automatic behavior, and in this way, mindful individuals act according to the present situation and can solve problems that involve creativity. Similarly, other studies also discussed the association of mindfulness with sustainability-oriented innovations (Siqueira and Pitassi 2016), occupational health and safety performance (Dierynck et al. 2017; Hülshager et al. 2015), work engagement (Allen et al. 2015), and employees' creativity (Byrne and Thatchenkery 2018). Some of these aspects can be directly related to social sustainability, while others indirectly contribute to human sustainability, ethical behavior, and social capital development at the organizational level.

Third, mindfulness can be considered as a key source for creating and nurturing interpersonal relationships (Pratscher et al. 2018), organizational citizenship behavior (Reb et al. 2014a, b), pro-social behavior (Donald et al. 2019; Fischer et al. 2017), and workplace spirituality (Petchsawang and McLean 2017). According to Wolever et al. (2018), “the cognitive and emotion regulation benefits of mindfulness training enhance interpersonal realms important for success at work: an ability to work well in teams, effectively communicate and resolve conflicts”. Along similar lines, Good et al. (2016) and Brown et al. (2007) have argued that being mindful towards specific experiences improves interpersonal behavior and cooperative workgroup relationships, which are key elements for creating stress-free and supportive organizational culture. In addition, mindfulness promotes organizational citizenship behavior which is defined as “voluntary behavior not specified in official job descriptions that, through the combined efforts of individual employees, help to make the organization and/or society more sustainable” (Lamm et al. 2013). Thus, it can be argued that mindful employees go beyond fulfilling their traditional responsibilities by actively engaging in social welfare activities that benefit society.

Prior research has further shown that mindfulness-based training may foster pro-social, helping behavior (Cameron and Fredrickson 2015). Pro-social behavior is described as “voluntary behavior intended to benefit another” (Eisenberg et al. 2006). Pro-social behavior may be driven by altruism (normative values) to benefit others without any expectation of personal reward or benefits to be attained from engaging in such behavior. Conversely, the motivation for pro-social behavior may also originate from instrumental reasons such as conforming to social norms or enhancing self-reputation or social status (Eisenberg et al. 2006). However, regardless of underlying motivations for pro-social behavior, a mindful person is more inclined to consider the needs of other employees and would exhibit caring behavior to support other people at work. Along similar lines, Fischer et al. (2017) argued that mindfulness fosters pro-social behavior and mindful individuals are more attentive observers of unethical activities.

Furthermore, Dhiman and Marques (2016) suggested that successful transition to sustainability involves a shift from materialistic to spiritual values. In this regard, many studies revealed that mindfulness-based training can be employed to cultivate workplace spirituality, thus promoting a sense of unity, connectedness and compassion among employees. Workplace spirituality is defined as “feelings connected with and having compassion towards others, experiencing a mindful inner consciousness in the pursuit of meaningful work, and that enables transcendence” (Petchsawang and Duchon 2009). According to Cheung (2016) mindfulness meditation bridges the inner self and an outer world that deepens human connectedness. Zsolnai (2015) argued that the dominant business models are primarily based on egoism, self-enhancement, and materialistic values, which are often detrimental to the well-being of the community and undermine an organization’s efforts to reach desired sustainability goals. However, workplace spirituality can be considered as one of the potential channels to rectify and mitigate apparent shortcomings of the prevailing business models and transform the employees’ materialistic orientation into self-transcendence, compassion, and pro-social behavior.

4.3 Societal-Level Linkages Between Mindfulness and Social Sustainability

While the above discussion demonstrated that mindfulness provides several health, well-being, relational, performance, and other social sustainability benefits at the individual and organizational levels, such benefits are not confined to those domains. As individuals are

nested within organizations, which are in turn nested within larger social structures, we argue that individual and organizational-related social sustainability benefits could generate positive spillover effects on collective social sustainability (Wamsler 2018), which in turn could help to build a more sustainable society. However, the scope of such impacts may vary and depends upon to what extent mindfulness practicing individuals (both at personal and organizational levels) observe, interact, engage, relate, and support others in the society. In addition, individuals' engagement in collective social issues also depends on to what degree they embrace systems thinking (to underhand complex interrelationships between diverse systems) and draw connections between personal issues and wider social problems.

Our analysis further indicated that mindfulness-based training could foster social sustainability at the broader societal level in three specific ways: promoting social justice and equity, building collective social capital, and safeguarding the social, economic, and environmental interests of society. First, the issues of social justice and equity are considered an ethical imperative for developing a socially sustainable society (Cuthill 2010). Social justice is defined as “the fundamental valuing of fairness and equity in resources, rights, and treatment for marginalized individuals and groups of people who do not share equal power in society” (Constantine et al. 2007). This definition suggests that while social justice and equity is relevant to the whole population, there is a pressing need to address the needs of vulnerable and disadvantaged segments of society. For instance, issues such as poverty, inequality, human rights abuse, access to economic resources, fairness in distribution of resources, and social protection are mostly considered as developing countries' issues; it can be argued that some segments of the population residing in the developed world are confronted with a similar set of issues. Prior research suggested that mindfulness stimulates ethical consciousness, moral decency, and compassion for others (Pandey et al. 2018; Ruedy and Schweitzer 2010; Tirch 2010), as well as potential for engagement in social activism (Doetsch-Kidder 2012). Taken together, these values are instrumental for generating individuals' awareness of and response to critical social concerns, which is not confined to the close social circle of the mindful individual as such awareness translates into understanding of broader social issues including social justice and equity. Accordingly, “this compassion awareness and consciousness brings about collective ethical actions” (Cheung 2016). Thus, mindfulness-based training can be considered as a key approach to address social justice and equity issues, particularly in meeting the needs of marginalized, vulnerable, neglected and less fortunate people in society (i.e., people at the bottom of the pyramid), who continually struggle to meet their basic needs. Magnuson (2011) asserted that embracing the ‘rightness’ principles of the Buddhist path fosters beneficial, healthy and wholesome lifestyles, which contribute to social sustainability issues including social justice, equity, and democracy.

Second, organizations are considered as essential contributors to the development of societal capital (or collective social capital) including social resources and trust, cohesion, reciprocity, as well as health and well-being of communities. While mindfulness practice is instrumental in nurturing human capital and citizenship behavior, as well as cultivating employee potential and pro-social behavior both at individual and organizational levels, such transformation could generate spillover effects beyond organizational boundaries and positively influence the development of collective social capital. Becke (2014) asserted that “mindfulness being closely connected with sustainability and social responsibility can facilitate the reflective development of [mutual] trust” between organizations and society. Furthermore, Becke (2014) suggested that mindfulness practice cultivates and supports the development of social resources which is critical to social sustainability

and continued existence of an organization. Consequently, mindfulness practice can play a mediating role in bridging the gap between an organization's perceived contributions and community expectations, as well as improving the organization-community relationship by organizational voluntary involvement in community social services, development of social resources, community involvement, and other trust-building measures including support for education, public health services, youth behavioral problems, and health and well-being of the community.

Third, there is an emerging recognition that unethical decisions often stem from a lack of awareness and shortfall of personal integrity, which produce devastating economic, social, and environmental impacts on the well-being of society. In particular, the evidence suggests lack of ethical values and moral codes can lead to organizational failure, which not only produces substantial negative impacts on concerned organizational stakeholders, but also society as a whole suffers from a shortfall of ethical commitment. For instance, widely publicized corporate scandals such as Enron, WorldCom, Lehman Brothers, and Merrill Lynch clearly highlight that there is a significant need to promote ethical values and moral standards in the contemporary world (Mewafarosh and Naeem 2016). To this end, our analysis revealed that mindfulness practice enhances individuals' moral reasoning capacity and ethical decision making. Further, mindfulness-based training at the organizational level helps to develop employees' awareness of ethical issues and improve ethical behavior, as well as promoting non-materialistic values and workplace spirituality, which could enable addressing broader social issues such as poverty, discrimination, inequality, health, safety and well-being of the community, and protection of human rights (Vu 2018). Waddock (2016) stated:

Mindful managers, aware of the connections that are important to sustain the diversity of life, community, and healthy societies, might focus on broader goals than short-term profit maximization and growth. They might be better able to engage with stakeholders even in potentially conflicting situations and be better able to hold and honor the personal, organizational, and societal values that are meaningful to them, even when under pressures to do otherwise.

In summary, our analysis has shown that the adoption of central philosophies of mindfulness including 'awareness' and 'new ways of thinking' at the organizational level initiates social sustainability improvements at the individual and organizational levels, which subsequently may be helpful in supporting a transition towards a more sustainable society. As Wamsler (2018) noted, "mindfulness may increase action-taking for the common good, both individually and collectively". However, it is important to note that such a transition cannot take place solely by adopting mindfulness practice. The mindfulness practice must be accompanied by systems thinking which provides the opportunity to give a mindful person the rationale, motivation, and a clear purpose to actively participate in the social change process.

5 Conclusion, Implications and Future Research Directions

To conclude, in this paper we critically examined the connections between mindfulness and social sustainability. The purpose of this paper was to provide a critical review of the extant literature that connects the mindfulness and social sustainability concepts and introduce an integrative mindfulness-social sustainability framework. By building on the extant

literature, we identified some novel linkages between mindfulness and social sustainability. In particular, the present review suggested that the relationship between mindfulness and social sustainability concepts is under-researched. While some recent conceptual studies examined the association between mindfulness and sustainability, such studies mainly focused on integrating mindfulness and environmental sustainability. Accordingly, this paper, as one of the first conceptual analyses of the relationship between mindfulness and social sustainability, addresses the knowledge gap by providing some potential implications of mindfulness practice in terms of achieving social sustainability. Guided by the systems thinking perspective, this paper demonstrated how mindfulness practice could enhance social sustainability in the individual, organizational and societal domains. The integrative mindfulness-social sustainability framework proposed in this paper showed the inter-relationships between mindfulness and social sustainability. In particular, it is suggested that mindfulness practice enables social sustainability at the individual and organizational levels, which may contribute to societal sustainability outcomes.

6 Theoretical Implications

This paper contributed to the literature in two ways. First, although past literature looked at the relationship between mindfulness and environmental sustainability issues, it failed to connect mindfulness to social sustainability aspects. Accordingly, we argued that this is one of the first studies to provide a holistic conceptualization of mindfulness and social sustainability literature. In this regard, the present paper extended the academic scholarship on how mindfulness practice can be utilized to address social sustainability at the individual, organizational and societal levels.

Second, drawing insights from the systems theory perspective the mindfulness and social sustainability literature was synthesized into an integrative mindfulness-social sustainability framework. The framework proposed a new way of thinking for academic scholarship on how mindfulness practice could be employed to address social sustainability challenges including poverty, inequality, fairness, livelihood, social inclusion, education, social justice, and community development.

6.1 Practical Implications

This paper contributed to managerial practice in two ways. First, our paper suggested that mindfulness can provide varied health and well-being-related benefits to employees. For instance, employees in contemporary organizations are facing multiple challenges such as long working hours, multitasking, and heavy workloads. Such workplace challenges can affect health and well-being of the employees in terms of stress, exhaustion, and burnout (Burton et al. 2017; Flook et al. 2013; Mack et al. 2015; Reb and Choi 2014a, b). This article proposed that mindfulness practices in the organization can promote individual health and well-being in multiple ways. In this way, organizations can incorporate mindfulness in the workplace to help employees address the critical challenges of the workplace by using mindfulness practice.

Second, our review suggested that mindfulness can promote multiple organizational outcomes including ethical decision making, human capital, employee performance, workplace spirituality and interpersonal relationships. Organizational leaders wanting to obtain these benefits can consider incorporation of mindfulness in the workplace. For instance,

organizations are under pressure to address stakeholder expectations to improve business ethics and embrace citizenship behavior. To this end, mindfulness can be considered a valuable approach that could help organizations to build human and societal capital, as well as improving their legitimacy and social license to operate in a competitive and dynamic business environment.

6.2 Societal Implications

Our review has shown that mindfulness is being used as a secular technique in the workplace to improve workplace functioning such as employees' performance, stress reduction, and concentration (e.g., Purser and Loy 2013). However, the implications of mindfulness may go beyond the boundaries of individual and organizational domains. In continuation of this understanding, this paper pointed out some potential societal benefits of incorporating mindfulness practice such as social justice and equity, well-being of the community and a more sustainable and ethical society.

6.3 Future Research Directions

There is a wide range of opportunities for future research in this area, of which we believe three are particularly important to the advancement of sustainability-mindfulness literature. First, we suggest that the relationship between mindfulness and human sustainability needs empirical validation. Although the literature identified some areas where mindfulness could be helpful in addressing social sustainability issues, the empirical evidence to support this assertion is mostly lacking. In this regard, future studies could investigate empirically how mindfulness practice could help in building human capital, supporting an ethical climate in the workplace, improving corporate citizenship behavior and developing an occupational health and safety culture. Second, it is critical to examine the role of mindfulness in addressing societal sustainability issues. While some studies identified fragmented linkages between mindfulness and societal sustainability, systematic analyses could foster a clearer understanding of how mindfulness can contribute to addressing community well-being, human rights, social justice, and other pertinent societal issues. Importantly, this link is poorly understood and hardly investigated in the current body of knowledge. Thus, we strongly encourage both theoretical and empirical inquiries in this research domain.

Third, our analysis indicated that research on mindfulness has mainly focused on a one-way relationship—mindfulness-based training leading to individual and organizational outcomes. However, based on the systems thinking perspective we suggest that the relationship between mindfulness and social sustainability is not linear (Bateson 1971; Von Bertalanffy 1972), but a complex reciprocal process such that external forces of change including organizational characteristics (e.g., culture), social norms and expectations, and other environmental factors might foster or hinder employees' mindful experiences. For example, a study found that the workload can hinder the mindful experiences of employees in the workplace (Hülsheger et al. 2018). Therefore, future research efforts could be directed to examine the dual and reciprocal relationships between mindfulness and associated factors at organizational and societal levels. It might be possible that an employee tends to be more mindful in a caring society (with high values of social justice and equity). In contrast, a negative perception about the societal values might hinder the mindfulness experiences of employees.

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