

## Reviewing the Literature to Examine the Social Sustainability

Sakshi Gahlawat<sup>1</sup> and Prof. (Dr.) Parveen Kumar<sup>2</sup>

<sup>1</sup>Research Scholar, Department of Architecture and Planning, DCRUST Murthal.

<sup>2</sup>Professor, Department of Architecture and Planning, DCRUST Murthal.

### Abstract

This article provides a critical evaluation of the literature on social sustainability in the built environment, highlighting areas of disagreement and agreement, theoretical and conceptual gaps and future research directions for policy implications. It argues that the social component of sustainability is still a crucial and valid aspect of the sustainable development trinity notwithstanding revisionist perspectives that challenge the tripartite framework. Using the qualitative meta-analysis technique for the critical assessment of earlier studies and works on the issue, we identified and critically examined key themes in the concept and practise of social sustainability. Consequently, a few characteristics of sustainable society are presented, along with the implications of these characteristics for future research and policy. The institutional insights made for policymakers in this article will aid them in better addressing the neglected topic of social sustainability in metropolitan settings.

**Key Words:** Social Sustainability, Sustainable development, Built environment, Urban theories and practices.

### Introduction

The World Commission on Climate and Improvement (Brundtland) report named "Our Common Future" in April 1987 denoted the presentation of the expression "Sustainable Development" as a major plan of developed strategy. The Brundtland report by and large presents the defence that ongoing activities shouldn't endanger people in the future. According to the "classic triangle of sustainable development," which is based on this report (Brundtland), sustainability is the moment at which the three key components environment, economy, and social come together. However, there is a strong consensus in the literature that the built environment authorities have paid insufficient attention to the social sustainability (Littig and Griessler, 2005). From certain perspectives, social sustainability is the least adroitly evolved of the three points of support (Weingaertner and Moberg, 2014). As indicated by Colantonio and Dixon, (2011), this notion has not yet been entirely examined. The notion must be additionally grown adroitly on the grounds that it is either under-estimated or as often as possible misrepresented (Colantonio, 2009).

There are two unique ways to calculated deficiency in social supportability: hypothetical ones relating to how it ought to be characterized and perceived, and viable ones relating to how it ought to be operationalized and included into plans and tasks (Boström, 2012). The subsequent weakness calls for additional experimental tasks from which more exact suggestions could be made, while the primary inadequacy calls for additional hypothetical perceptions to lay out sound and requesting contentions whereupon social sustainability can be characterized.

It is time to return to this idea and its legitimacy, dissect its principal enunciations and details, investigate its achievements, and draw down suggestions for future exploration and urban policies. This is on the grounds that social sustainability is apparently the most underestimated and undiscussed part of sustainable development. Three things make such a return to fundamental at this moment. Firstly, it begins by taking a view at the significance, application and capability of the social sustainability factor inside the setting of sustainable development. Second, it analyses the main critical concerns and discussion's significant thoughts as they have developed and changed after some time. Thirdly, it features promising and high-level regions in principle and work on, giving us helpful proposals for deciding future courses. These three squeezing needs are canvassed in this article.

It ought to be noticed that social sustainability is basically a cross-disciplinary idea: it envelops many disciplines including humanities, social science, policy management, political theory, social work, general wellbeing, design, ecological studies, business, financial matters, etc. It likewise covers an expansive scope of information from inherent science to sociology and humanities (Åhman, 2013). Although the studies taken as a whole and the research examined here cover several aspects of the social sustainability of the fabricated environment on manyscale, from neighbourhood to location and beyond, our focus in this article

will be on the manufactured environment in its broader sense. This enables us to focus our investigation, give it specific direction, and create more precise findings and recommendations that are pertinent to the present and future of urban contexts. This is also true given how important the built environment is for social sustainability because it serves as the primary physical and spatial setting for urban social activities.

**Is social sustainability a legitimate pillar in the context of revisionist methodologies?**

Any critical reflection on the philosophy and practise of social sustainability must begin with an examination of the concept's applicability as a crucial element of sustainable development. The "three E's," or ecological, economic, and social (equity) factors, were referenced in the original concept of sustainable development. The "triple-bottom line" approach was developed as an "expedient heuristic that understands sustainability" (Peterson, 2016).

This "traditional formulation" has, however, been met with controversy and criticism. Others, adopting a revisionist stance, provide other frameworks and cast doubt on the validity of the triad structure offered by the mainstream (Barton, 2000; Godschalk, 2004). While agreeing with the triad structure, some academics stress the importance of achieving harmony between the three parts and incorporating them as a prerequisite for sustainability (Peterson, 2016). In this article, we take into account some major critiques that will help us grasp the argument on a deeper level.

In the first part of the argument, it is argued that the three facets of the triangular model are intrinsically linked, and that only a holistic strategy would ensure success in achieving the ambitious targets set for sustainable development. For instance, Peterson (2016) believes that social problems are intrinsically tied to environmental and economic concerns, and therefore, an integrated approach is required for sustainability. Inconsistencies within the three pillars of sustainability are a possible source of tension, as pointed out by Campbell (1996). In his view, "property conflicts" between economic development and equity because of competing claims on property's uses, "resource conflicts" between economic and ecological utility because of the importance placed on natural resources, and "development conflicts" between social equity and environmental preservation because of the tension between increasing working-class living standards and the barriers required for environmental preservation. These disagreements need to be addressed, managed, and resolved if sustainable development is to be achieved.

On the other side, revisionists question the triad framework's veracity and adequacy, and they push for alternative structures to build complete theoretical and practical frameworks. They either suggest alternative ideas or propose a framework with four or more "pillars," each of which adds one or more components to the conventional "triad" of sustainable development.

A multi-pillar system that includes culture, liveability, governance, politics, and ethical principles is proposed by the first perspective as a way to address the "missing pillar" of sustainable development (Burford, 2013). The idea that culture should serve as the fourth pillar is a common one. Hawkes proposes cultural vitality as the fourth pillar of sustainable development, which incorporates well-being, creativity, variety, and innovation in addition to social justice, environmental responsibility, and economic viability. Hawkes lays the groundwork for society by introducing culture as an essential need. Aspirations and ideals are included in his broad notion of culture (Hawkes, 2001). Soini and Birkeland(2014) argue that despite certain scholarly and policy-related initiatives to stress the importance of culture in achieving sustainable growth, it has remained underemphasized and undertheorized. They argue that the growing importance of the world's geographic and cultural diversity, as well as a cultural turn involving language and new roles for culture in society, necessitate the presentation of "cultural sustainability" as the fourth and parallel dimensions to ecological, economic, and social sustainability. Several countries' regional planning agencies have included cultural factors in their sustainability initiatives including Canada, Australia, and New Zealand (Duxbury &Jeannotte, 2010).

It has been proposed that liveability, governance, politics, and ethical principles should also serve as pillars of sustainable development alongside culture. As an exampleGodschalk (2004), argues that community values must be included into land-use planning for the three parts of sustainable development to be effective. To address this deficiency, he proposes a "sustainability/liveability prism" that incorporates principles of equality, economics, ecology, and liveability, with connecting axes illustrating the interplay between these ideals. Sustainable development strategies and efforts rely heavily on strong governance, as stated by (Leal Filho, 2016). They argue that the growth of sustainable societies is threatened by weak local and national leadership practises and call for the inclusion of governance principles into sustainability practises. According to the management viewpoint of Bendell&Kearins (2005), a "political bottom line" is an emerging dimension for companies to manage their political impact for long-term success. In an attempt

to embrace intangible components of sustainable development Burford (2013), proposes "ethical values" as the fourth and final pillar of sustainability.

In other cases, the revisionist approach proposes new pillars for equitable growth and alternative frameworks and structures. Seghezze (2009), for example, argues that the traditional triad regarding sustainability fails to give adequate consideration to key aspects of development because it is essentially anthropocentric, places too much emphasis on the economic dimension, pays too little attention to space and time, and minimises the importance of human relationships. He argues that there is a triangle formed by the three Ps (Place, Permanence, and People). The category "place" deals with the x, y, and z coordinates, "permanence" with time, and "persons" with the human component. His three Ps offer a five-dimensional framework that may aid in analysis and policy formulation. The idea of the social being the third leg of sustainability, according to Psarikidou and Szerszynski (2012), creates an unsatisfactory divide between the three legs and leads to confined, de-socialized perspectives of nature and the economic. As "the economic" is a part of social relationships and "the social" comprises how people interact with the material environment, they propose a socio-material approach to the investigation of sustainability in which the distinctions among the three Es are blurred.

We maintain that both perspectives legitimately recognise social sustainability as a fundamental of sustainable development. Academics that support combining the three tenets of sustainable development agree that the "social dimension" is an important part of the puzzle, but they also note its theoretical and empirical gaps need greater study in this area (Litting & Griessler, 2005, Peterson, 2016).

### **Research Methodology**

To address these two issues, this study makes use of a qualitative meta-analysis approach. This method allows us to combine information, draw conclusions from different research, and spot patterns. To provide insight into the current state of an area of study, identify whether certain themes appear across studies, develop a broad interpretation from the data from multiple investigations, and define how future studies ought to tackle these themes, a systematic review and compilation of the available information and sources is conducted (Noblit & Hare, 1988; Timulak, 2009; Davis, 2014).

In urban planning, a method called meta-analysis has proved useful for compiling the corpus of data on a topic and spotting emergent common patterns (Ewing & Cervero, 2010). It helps the field because we can draw conclusions from a variety of studies at once, assess a method or strategy in its whole, and encourage in-depth research into the connection between certain variables (Littell, Corcoran, & Pillai, 2008).

The concept of social sustainability did not arise until the 1990s, hence there is a dearth of relevant literature. But there is a plethora of resources, ranging from conceptualisations at the theoretical level to global examples. The geographical scopes of the sources chosen range from the neighbourhood or housing complex level to the provincial level. More credibility has been added to the findings by using a wide range of credible sources. In an effort to avoid receiving biased information, we focused on peer-reviewed literature. The evolution of the concept has been traced through time by examining the sources in chronological order. The qualitative descriptive approach used in the study of resources allows for the collection of findings, the provision of interpretative and narrative abstraction of the results, and the drawing of conclusions from a wide variety of sources (Timulak, 2009; Hughes, 2015). Using a meta-analysis, we were able to compile information pertinent to our study's two overarching questions: (a) How has social sustainability been conceptualised and (b) How has it been measured (necessitating two enquiry tracks of understanding and measurement)? To develop a full understanding of the definition and conceptualisation of social sustainability, materials were studied, evaluated, and organised according to method (thematic concentration) and important elements. We classified the information gathered for the evaluation track into the following four groups: perspective (the language to which the research belongs), aim (the study's major objectives), scale (the geographic emphasis of the investigation), and indicators (the quantity and character of the detected indicators).

### **Measurement and conceptualization of social sustainability**

This part contains the results of analysis that analyses how social sustainable has been conceived and measured, setting the stage for in-depth critical thoughts and debates in the next section. Different people "mean various things as they discuss social long-term viability as the concept is conceptualised (Manzi, 2010). The safeguarding of sociocultural traditions and improved environmental ethics are emphasised by some, while tackling "underdevelopment" through meeting fundamental necessities is emphasised by others (Vallance, Perkins, & Dixon, 2011). One of the main obstacles to defining and measuring social sustainability is the fact that it is inherently dynamic and changes over time. This vitality results from

human societies' innate flexibility in the face of shifts in demographics, economics, social norms, and public opinion.

To assist readers, understand the variety, wide theoretical and subject emphasis, and chronological history of contemporary conceptualisations and conceptions of social sustainability, a historical summary derived from a number of publications and research has been offered in Table 1. This table illustrates the many perspectives on and connections between key topics and concepts related to social sustainability. Evaluating the sources' overarching thematic focus (or "approach") allows us to classify these ideas into seven broad categories: cultural growth and diversity; procedural quality; a useful tool for urban policy; physical/non-physical aggregation; well-being; equity and democracy; capacity building.

**Table 1** Conceptualization of social sustainability and important definitional elements

<b>Author</b>	<b>Approach</b>	<b>Important elements</b>
Yiftachel & Hedgcock (1993)	Cultural Development	existence of interpersonal relationships, communication, and cultural growth; vitality, unity, and sense of place among citizens; absence of violent intergroup conflict; absence of geographical segregation; persistent political harmony
Sachs (1999)	Equity and Democracy	Equity and democracy require that all individuals effectively use their political, civil, economic, social, and cultural rights.
Polese & Stren (2000)	Cultural Development	a civic society that values harmony, social integration, and the welfare of all groups within its cultural and racial diversity.
Harris & Goodwin (2001)	Physical/ Non-Physical aggregation	equitable opportunity distribution, adequate social service delivery, notably in the areas of health and education, gender equity, and political responsibility and involvement
Koning (2002)	procedural excellence	Social justice and equality, the absence of social exclusion, a good standard of living for all, emancipation, freedom, and solidarity
McKenzie (2004)	procedural excellence	Equity of access to essential services, equity between generations, successful cross-cultural communication and the defense of cultural norms, extensive civic engagement, and generational knowledge of social sustainability; a sense of duty toward the community; community empowerment; and political advocacy
City of Vancouver (2005)	Urban Policies	equity, social connection, safety, and flexibility
Magis and Shinn (2009)	Equity and Democracy	equity, democratic governance, and democratic civil society are all important.
Larsen (2009)	Equity and Democracy	social inclusion, respect for human dignity, people-centered governance, and fair access to education
Colantonio (2009)	Capacity Building	Equity and health, participation, needs, social capital, capacity building and skill development, happiness, well-being, and quality of life
Manzi (2010)	Physical/ Non-Physical aggregation	equality in the environment, reduced social isolation, community empowerment, equitable social infrastructure, equality in employment, education, and health care, etc.; superior social capital
Bramley & Power (2009)	Physical/ Non-Physical aggregation	access to resources, opportunities, and social connection; engagement; a sense of location; stability in one's home; and security
Dempsey, Brown, & Bramley (2012); Boström, (2012)	procedural quality	basic needs are met, there is equality of rights, access to infrastructure, employment, educational equality, security, civic society and social capital are present, there is health, there is social cohesion, there is cultural diversity there is sense of community there is provision of housing there is quality of life

		there is participation and decision making there is social monitoring
Murphy (2012)	Equity and Democracy	Equity, sustainability awareness, involvement, and social cohesion
Bacon, Cochrane, & Woodcraft (2012)	Well Being	People's quality of life, individual and group health, interdependence and community function, appropriate infrastructure, social and cultural life, resident involvement, and potential for the area and community to develop
Opp (2016)	Equity and Democracy	Basic human necessities, environmental justice, community, and fair access to opportunities are all important.

Social sustainability has been a focal point of metropolitan organization and metropolitan area planning, as confirmed by the Social Improvement Plan accepted by Vancouver's planning experts in 2005. A socially sustainable society, as per this text, "should have the option to save and develop its own assets and have the flexibility to forestall as well as address hardships later on" (City of Vancouver, 2005). It is contended that social sustainability depends on two unique kinds of assets: (a) individual limit, which tends to attributes that people can add to their own as well as local area prosperity, like instruction, abilities, wellbeing, values, and initiative; and (b) local area limit, which encourages connections, organizations, and standards that work with aggregate activities that mean to work on personal satisfaction and guarantee upgrades are supported.

As a physical and non-physical accumulation, social sustainability suggests that it is connected to both social and public infrastructure. While people group foundation manages the actual framework expected for a local area, for example, streets and metropolitan administrations, social foundation manages "both arrangement of local area benefits that answer networks' recognized necessities, and building the 'limit' of residents and local gatherings to cooperate" (Cuthill, 2010). Like this, Jenks and Jones (2010), characterize the key standards of social sustainability as the generally perceived thoughts of "social uniformity" and "local area sustainability." Informal community and collaboration, contribution, sensation of spot, private soundness, and security are parts of local area supportability (Bramley and Power, 2009; Dempsey, Brown, and Bramley, 2012). Social value manages admittance to administrations, offices, and potential open doors. Social value likewise signifies value in the distribution of metropolitan assets, like those connected with wellbeing and training, orientation correspondence, and political obligation and association (Harris and Goodwin, 2001).

As per The Berkeley Gathering, the primary objective of social sustainability is to help the occupants of the local's individual and aggregate prosperity. Social sustainability, in this sense, "is expanded by improvement which gives the legitimate framework to help in strong social life, opportunities for people to reach out, and scope for the local area to change" (Bacon, Cochrane, and Woodcraft, 2012).

A solid meaning of social sustainability should lay on the essential upsides of value and a majority rules system, with the last option being perceived as the powerful assignment by all individuals. Value and a majority rule government are likewise presented as the constituent components of social orders (Sachs, 1999). Notwithstanding the way that value guarantees the fair dispersion of cultural advantages and expenses and underscores that everybody can get to fundamental necessities similarly paying little heed to race, nationality, orientation, or financial status (Opp, 2016), popularity based government offers a way for residents to take part in their administration (Larsen, 2009), guarantees individuals situated administration, and encourages municipal space to develop majority rule rehearses (Magis and Shinn, 2009).

Scientists and scholastics have made working structures and found quantifiable markers for estimating and assessing social sustainability. We broke down this examination (Table 2) in light of four models: point of view, goal, scale, and markers, to gain an exhaustive comprehension from these endeavors. We looked to inspect the talk to which the examination study had a place according to a specific perspective and recorded the primary reason and key examination inquiries under goals. This uncovers assuming that the review will likely break down friendly sustainability all alone or to investigate how it connects with different components of the assembled climate, such metropolitan structure and urban design.

One of the earliest examinations to explore the effect of urban design anticipating the level of urban social sustainability was directed by (Yiftachel and Hedgcock, 1993). They investigated the three factors of value, local area, and urbanity while directing their examination in Perth, Western Australia. They arrived

at the resolution that since the 1960s, Perth's metropolitan region's social worth had not had the option to be supported by the executed plans since assets had been disseminated less decently and the region had become less receptive to the social requirements of the metropolitan and nearby networks. In light of two classes — social arrangement and social sustainability — Barton (2000), made an agenda for surveying a local's supportability. Social sustainability covers things like wellbeing, local area security, value, and decision, while social arrangement includes admittance to conveniences, built space, open space, and foundation. Burton investigated 10 elements, including admittance to grocery stores, admittance to green space, work availability, utilization of public transportation, measure of strolling and cycling, measure of living space, wellbeing, wrongdoing, isolation, and reasonable lodging in 25 English urban areas to look at the job that higher densities play in advancing social value. As per the discoveries, "Social value has a point of failure with minimization; the idea should be dismantled into its constituent components for significant associations with conservativeness to be noticeable" (Burton, 2000b).

Chiu (2003) utilized a structure with two arrangements of factors gathered under liveability and value in lodging conveyance and utilization to assess the social sustainability of lodging improvements in Hong Kong. While value in lodging appropriation and utilization incorporates signs of reasonableness, availability to the real estate market, deficiently housed families, openness to public lodging, and adequacy of government lodging sponsorships, liveability incorporates the two signs of inner lodging conditions and outer private quality. The review's discoveries demonstrated that Hong Kong's lodging framework has worked on regarding liveability (like dwelling size, neighborhood neatness, security, and so on) and value, (for example, house cost to-pay proportion, number of individuals who are destitute, enough government appropriation, and so on.). The lodging framework has not yet accomplished social sustainability, by and by.

Chan and Lee gave an assessment structure that included gathering government assistance necessities, safeguarding assets and the climate, encouraging a quiet living climate, including conveniences that make day to day existence tasks simpler, the kind of improvement, and the accessibility of open spaces as the vital basic elements for upgrading social supportability of neighborhood metropolitan recharging projects in Hong Kong (Chan and Lee, 2007). This system considers the perspectives on different undertaking partners, including draftsmen, organizers, and directors.

Table 2 Social sustainability measured; summary of research studies

S.No	Perspective	Author	Scale	Objective	Indicators
01	Social Sustainability	Yiftachel & Hedgcock (1993)	City	urban planning's impact on the quality of social sustainability in cities	equity; community; urbanity
02	Social Sustainability	Barton (2000)	Neighborhood	a checklist for ensuring neighborhood viability	Infrastructure, community safety, equity, health, community facilities access, built and open space access
03	Social Equity	Burton (2000b)	City	Relation between high density and social equity	Supermarket accessibility, green space accessibility, job accessibility, use of public transportation, quantity of walking and bicycling, amount of living space, health, crime, segregation, and affordable housing.
04	Social	Chiu (2003)	District	investigating how	Inadequately housed

	Sustainability			housing and social sustainability are related	households, access to public housing, internal housing conditions, external residential quality, affordability, and the level of government housing subsidies are all factors.
05	Social Sustainability	Chan & Lee (2007)		Analyzing the social viability of urban revitalization initiatives	fulfillment of social needs, preservation of resources and the environment, construction of a peaceful living environment, inclusion of amenities facilitating day-to-day activities, kind of development, and accessibility to open spaces
06	Social Capital	Knippenberg (2007)	Regional	advancing and sharing information about sustainable development	Facilities for health care, community, safety, cultural diversity, citizenship, the environment where people live, and education and training
07	Social Sustainability	Bramley & Power (2009)	Neighborhood	correlation between social sustainability and residential density	access to services, engagement with neighbors and social networks, involvement in group activities, sense of place, residential stability, and security (lack of crime and disorder)
08	Social Sustainability	Cuthill (2010)	Urban Region	a framework for examining social sustainability	Social infrastructure, social justice, and active governance are examples of social factors.
09	Social cohesion	Raman (2010)	Neighborhood	link between features of social and community life and urban layout and urban design.	Safety; engagement; a sense of belonging and community; friendliness; a sense of community spirit; a social network; and social contact
10	Social Sustainability	Dempsey (2011)	Neighborhood	examining the idea of social sustainability in	social engagement, involvement in group

	y			the context of British cities	activities, community stability, sense of place and pride, safety and security
11	Social Sustainability	Colantonio & Dixon (2011)	Neighborhood	creating a method for evaluating social sustainability	culture, social capital, housing, education, employment, demographics, health and safety, and social mix and cohesiveness
12	Well-being	Karuppanan & Sivam (2011)	Neighborhood	the effect of urban form on neighborhood-level social sustainability	Knowing your neighbors, meeting them frequently, becoming involved in social and community events, having places to meet up informally and formally, taking pride in your neighborhood, and safety concerns; a deep sense of attachment to the house; stop to talk to your neighbors or to say hi; how many neighbors came over; meeting new people
13	Social Sustainability	Dave,(2010); Dave, (2011)	Neighborhood	Relationship between sustainability in emerging nations and social dimensions of density	living space, the number of residents, their health, their sense of community and social engagement, their sense of safety, and their pleasure with their neighborhood
14	Social Sustainability	Bacon, Cochrane, & Woodcraft (2012)	Housing	creating a framework to gauge the social viability of future housing and mixed-use buildings	The provision of community space should include: transportation options; a location with a unique personality; integration with the surrounding neighborhood; an accessible street layout; adaptable physical space for future development; perceptions of



					influence over the local area; willingness to take action to improve area; positive local identity; relationships with neighbors; well-being; feelings of safety; and community facilities.
15	Social Sustainability	Weingaertner & Moberg (2014)		recognising features of social sustainability that are universal	Accessibility, social capital and networks, health and well-being, social cohesion and inclusion, safety and security, fair income and employment distribution, local democracy, participation, and empowerment, cultural heritage, education and training, equal opportunities and equity, housing and community stability, connectivity and movement, social justice, sense of place and belonging, mixed-use and tenure, attractive public realm, local environmental quality, and amenities
16	Social Sustainability	Wang (2015)	Community /Neighborhood	Chinese communities' social sustainability framework: lessons learned from the west	recreation and federal parks, Interaction with others, security, Basic community amenities include social cohesion, community stewardship, community structure, and community regeneration.
17	Social Sustainability	Opp (2016)	City	putting out a methodology for monitoring and grading social sustainability	Environmental justice index by census tract; access to open spaces and recreation; equal

				initiatives American authorities	inside city	access to employment opportunities; accessibility to connectivity and transportation; equal access to and opportunity for education; procedural fairness; health risk and well-being; social capital; social segregation; affordable housing; safety and security; and equitable income distribution
18	Social Sustainability	Hemani, Das, & Chowdhury (2017)	City/Neighborhood	Relationship between social sustainability and urban patterns in Indian cities		access to neighborhood services basic requirements, resources, and opportunities, accessibility to public recreational areas, Sense of belonging to the community, social engagement, social interaction/cultural harmony Continuity/demographic shifts, Trust and security
19	Social Sustainability	Stender & Walter (2018)	Building Level	Social sustainability and buildings evaluations		Social cohesion, participation, and accessibility
20	Social Sustainability	Shirazi & Keivani (2019)	Neighborhood	The three pillars of social sustainability: identifying and evaluating an urban neighborhood's social sustainability		Urban patterns with mixed land uses, connectedness, density, standard of living, building style access to resources, social interaction and networking quality of the residence, security and safety, Participation, quality of the neighborhood, and a sense of attachment

Jenks & Jones (2010), built on the two pillars of social sustainability (social equality and community sustainability) to demonstrate the interconnectedness between urban design and social sustainability.

Greater neighbourhood satisfaction, more neighbourhood challenges, and more readily available services are all associated with denser urban forms. The research also found that belonging to a group had the smallest effect on community sustainability, defined as factors like social cohesion, low turnover, and a lack of lawlessness. On the other hand, social justice, as measured by residents' engagement with community resources, is a positive predictor of densities (Bramley & Power, 2009).

Raman (2010), proposed five indicators—feeling safe, feeling included, feeling a sense of belonging, feeling friendly, feeling a sense of community spirit, having a strong social network, and interacting with others—to assess the social cohesion of a neighborhood's physical environment. Study participants in high-density areas were found to have stronger, more concentrated social networks than those in low-density areas, who were shown to have weaker, more diffuse networks. Public space placement, visibility, type, and the physical appearance of development were shown to have a greater impact on social aspects of the built environment than density alone.

With the goal of identifying and analysing socially sustainable urban regeneration models and best practise measurement systems across European countries, (Colantonio & Dixon, 2011) developed a condensed social sustainability assessment framework based on the literature review, case-study analysis, and European Union sustainable development policy. Accommodation, education, employment, demographics, and health and safety were all major factors. Other major variables were social cohesion, empowerment, and identity.

The Berkley Group developed an approach (Bacon, Cochrane, & Woodcraft, 2012) to evaluate the long-term viability of new residential and mixed-use projects in the United Kingdom from a social perspective. The framework consists of 13 different elements, which may be broken down into the following three groups: political participation, cultural activities, and public services. New housing complexes may swiftly mature into thriving communities with excellent standards of life, contrary to the popular belief that such locations are less social and less appealing. To emphasise the multifaceted and complicated nature of social sustainability, Weingaertner & Moberg (2014) created a comprehensive set of criteria spanning from accessibility to environmental quality. More recently, Opp (2016) identifies equitable access and opportunity, justice for the environment, belonging, and the value of place as the major criteria for studying and analysing social sustainability initiatives within each jurisdiction of American cities. Additional sets of specific factors (12 in total) are added to these dimensions. She describes these indicators in detail and makes useful suggestions for how they may be quantified using existing data or additional fieldwork in the setting of American communities.

### **Discussion: a critical appraisal of the state of the social sustainability discourse**

Our examination explains the conceptualization and estimation status of the social sustainability, offers an establishment for decisive idea, and offers direction on suggestions for next work and urban strategy. Here, we talk about a portion of the significant finishes of our examination basically.

The conceptualization of social sustainability, as summed up in Table 1, gives us a few principal bits of knowledge into the state and status of the social sustainability talk in spite of the murkiness in definition and variety in approaches. An assessment of the advancement of the three parts of supportable improvement in sequential request seems to show that social sustainability has been investigated and conceptualized later than economic and environmental sustainability. The writing and sources that are now accessible appear to zero in on the last part of the 1990s and mid-2000s, less than a decade after supportable improvement acquired boundless acknowledgment.

Table 1 shows that there is a shift from customary subjects like work, destitution, and fundamental requirements to additional subtle and vast subjects like character, feeling of spot, satisfaction, and informal communities. This shift from "hard" subjects to "delicate" ideas should be visible to inspecting the idea of the key angles related with approaches and definitions (Colantonio, 2009). This change proposes an expansion in mindfulness for sustainability. Of reality, this complexity reflects how social necessities change, yet it likewise makes surveying social sustainability a difficult task (Colantonio and Dixon, 2011).

Our review goes against the ordinary thought that social sustainability not well-defined term. Even though social sustainability at first has all the earmarks of being in parts and presents itself as a "idea in disarray" (Vallance, Perkins, and Dixon, 2011), a nearer assessment of the definitions and plans uncovers that specific fundamental elements and qualities have been more than once credited to it. We directed an examination of the fundamental parts to bunch them into various general and far reaching subjects to distinguish these qualities. The result proposes that there are a few central thoughts regarding social supportability that researchers and scientists have stressed. As Table 3 illustrates, the idea of social

sustainability has been created around seven essential principles: Equity; Democracy, participation, and civic society; Social Inclusion and Mix; Social Networking and Interaction; Livelihood and Sense of Place; Safety and Security and Human well-being and quality of life

Table 3 Social sustainability, principles and key aspects.

Principles	Key aspects
Equity	Life quality for all population segments, equitable opportunity distribution, adequate social service delivery, gender equity, social justice, equitable access to essential services, equity between generations, equal learning opportunities, equality in employment, education, and other areas, proportionate social infrastructure, environmental equality, and equal rights.
Democracy, participation, and civic society	A cohesive civil society, political accountability and participation, freedom and solidarity, emancipation, widespread citizen political participation, a sense of civic responsibility, an empowered community, political advocacy, a democratic civil society, people-centered governance, and community empowerment are all necessary for the effective appropriation of all human rights by all people.
Social Inclusion and Mix	the absence of physical segregation, the coexistence of culturally and racially varied populations, social integration, cultural diversity, effective cross-cultural relationships, and protection of cultural values
Social Networking and Interaction	viability of social cohesion, cultural growth, and communication between people
Livelihood and Sense of Place	energy, unity, and a shared feeling of home among citizens, as well as a good standard of living for everyone
Safety and Security	absence of intergroup violence and ongoing political stability
Human well-being and quality of life	Society's dignity, happiness, health, and overall well-being

The most important and often-cited principle is equity, as if the two concepts were interchangeable. The concept of equity has been approached from a variety of angles, including those of gender, age, generation, rights, access to assets, employment, education, health, and many more. Equality, in this perspective, is not just a nice notion; it is the base of a socially viable society since it encompasses all basic human rights. Democracy, involvement, and civic society are ranked second when considering social sustainability. By participating in democratic processes, actively participating in political and community activities via civic society as a whole and so on, we can build a government that is responsive to the needs of the people and a strong, united community. Next, we have social inclusion and social mix, which stand for a culturally and racially diverse yet welcoming community that rejects physical segregation. Participation in the development of social networks increase a society's social capital and contribute to greater social cohesion and connectivity. Quality of life and human well-being make it feasible for people to live long, fulfilling lives. Humans provide colour and life to their surroundings via their livelihoods and their attachment to certain locations. The feeling of safety and security is a major selling point.

Perspective, impartiality, scale, and indicators are the four concept-codes we used to investigate the research that developed helpful frameworks for assessing social sustainability (Table 2). A fresh viewpoint on the topic of social sustainability emerges from a careful examination of the data. The majority of studies use the concept of social sustainability as a jumping off point or framework. However, some research has also taken as its point of departure issues of social equality, social cohesion, and social capital. This proves the validity of two of our prior arguments. Just as sustainability originally emerged as an ideal approach to development on a global scale (Wheeler, 2013), so social sustainability slowly established itself as a mainstream paradigm for addressing the social components of a sustainable future. Second, the term "social sustainability" has become a catchall for a variety of related ideas that were used to deal with the societal implications of the built environment, such as social equity, social influence, social unity, and social justice.

The analysis also shows that the focus of social sustainability research is shifting from the city and region to the community and neighbourhood level. This suggests that these smaller spatial units are becoming the primary focus of this field. This is consistent with Kallus and Law-Yone's (2000), Madanipour and Brenner's (2001), Whitehead and Forrest's (2003), Forrest's (2008), Davoudi and Madsnipour's (2015), and Pagano and colleagues' (2015) calls for neighbourhood-level studies of social sustainability. Despite this general trend, studies have also focused on macroscales such as districts, cities, and regions, demonstrating the significance of social environmental sustainability regardless of location or territory. Many different things are being looked at in these studies, but ultimately researchers are trying to figure out how factors like population density and the layout of cities affect things like social sustainability. By this definition, social sustainability appears to be a broad, interdisciplinary concept with deep ties to other facets of the built environment (Åhman, 2013).

Our research provides some helpful pointers on the topic of indicators. To begin, the metrics used to gauge social sustainability are not all uniformly defined or stated in the same way across studies. Second, problems like employment are more relevant at the city size, while a feeling of place may be addressed at the neighbourhood scale, and so on. This is due to the scalar nature of social factors. Therefore, the scale of measurement is important in deciding how many and what kind of indicators to use. There is a shift from mostly physically to more non-physical elements, or from mainly numeric to substantively qualitative components, as shown by an assessment of the indicators' characteristics throughout time. Rather than focusing on more objective qualitative criteria like economic success or on physical traits like access to facilities and urban amenities, subsequent studies have tended to put more emphasis on markers like sense of place, feeling of safety, social engagement, and wellbeing. The shift from hard to soft indicators forces us to place more focus on the "relational" nature of social sustainability indicators and raises doubts about their transferability across contexts. Non-physical indications are presumably existential and perception-based, making them very context-dependent. For instance, the history and cultural background of a town have a significant role in shaping its members' sense of place, a phenomenological and existential problem. However, the value placed on social interaction and domestic pleasure varies from one culture to the next; what one group considers to be an ideal level of social connection may be seen as demeaning by another. Just as being happy at home may mean various things depending on one's culture, so this too can constitute an acceptable level of living in one society be deemed insufficient in another. As a consequence, results from studies on social sustainability take on an interpersonal tone and call into question the validity of broad generalisations.

### **Conclusion**

By analysing different definitions and applications of "social sustainability," we were able to get a deeper understanding of the evolution of this term and shed light on recent advances in the field. Therefore, we can provide possible guidelines for the future of this conversation based on the ten essential formative qualities presented in Table 4. These could benefit the educational and professional communities by influencing future research and public policy.

The first two characteristics show how unclear and undeveloped social sustainability is, as well as how difficult it is to define. Although there have been concerns raised about the viability of the tripartite structure of sustainability and reformist views have proposed complementary policies to fill the gaps and establish coherent and comprehensive formulations, the social dimension remains a valid pillar, as we have seen. Despite repeated claims to the contrary, social sustainability remains a neglected facet of sustainable development (Yiftachel & Hedgcock 1993; Koning 2002; Bramley & Power 2009; Colantonio & Dixon 2011). An unconnected and even incoherent body of work on social sustainability has resulted from a wide range of authors' viewpoints. We argued that the lack of a common definition and conceptual structure is not a downside, as it accurately represents the multifaceted nature of sustainability's social dimension and frees up scientists to devise formulations that are unique to each situation and place. This implies that social sustainability, and its ties to other aspects of sustainable development, should be the subject of greater in-depth research and study. Such research should account for the many definitions and conceptualisations, and provide site-specific interpretations that are relevant to the socio-spatial specificity of the site, influenced by the primary themes that can be derived from the literature. This may help cities and communities by increasing the need for context-specific studies (Kytta, 2016). Establishing international relationships with other cities, collaborating with research institutions, channelling community concerns and questions into research, and facilitating empirical research at the community level are all important steps towards achieving social sustainability.

The following two characteristics reveal the common ground that may be seen in the midst of competing hypotheses and the evolution of discourse around commonly held beliefs. Although there were some discrepancies in our definitions, we did identify a number of core ideas that have been at the heart of debates about social sustainability. Over time, more qualitative study is warranted as abstract and intangible factors have gradually supplanted numerical and concrete ones. Research should focus on developing key ideas as the main indicators for in-depth investigations, and then questioning and examining their interconnection and interaction. Some scholars have already pointed out (Chiu, 2003) that this endeavour also necessitates the use of qualitative methods in order to shed light on the complexities and hidden logic of the indicators. Citywide urban plans should centre on the key issues of social sustainability, with the improvement of traits connected to these issues serving as the primary targets and goals of urban programming. In addition to technical aims, these courses should also incorporate in-depth consideration of non-physical qualities.

**Table 4** Relevant discussion, research, and policy implications of social sustainability.

Essential formative traits	Explanation	Implications	
		Research implications	Policy implications
Room for additional examination	The section of the sustainable development pillar that focuses on social sustainability is the least developed.	performing additional comparative, international, and interdisciplinary investigations; conducting additional empirical research; motivating place-specific surveys; discussing and elaborating areas of similarity and difference; and doing further empirical research	collaborating with research organisations; incorporating community issues into research; learning from a variety of perspectives; and fostering international discussion with programmes that emphasise social sustainability in metropolitan areas.
Definition of opacity as potentiality	The definition of social sustainability is ambiguous by nature, which allows for flexibility in tailoring it to the particular society in issue.		
Important themes and areas of agreement	Despite differences in how social sustainability is conceptualised, it has been developed around several fundamental ideas like equity, democracy, social inclusion, social interaction, livelihood, safety, and well-being.	investigating the connections and interactions between essential principles, and turning them into primary indicators for in-depth studies. bringing the subtle aspects of social sustainability to the forefront of analyses	establishing major themes as the primary issues of citywide urban policy, emphasising important principles in redevelopment initiatives, establishing programmes to enhance the virtues of each principle, etc. Urban policy is shifting away from a technical ethos and prioritising soft qualities and intangible aspects of the built environment.
Change the subject	Social sustainability is		

from hard to gentle	now conceptualised in terms of softer, intangible concepts rather than hard, quantifiable ones.		
The idea of social sustainability as a whole	In order to examine previously contested social notions like social fairness, social capital, social cohesiveness, and social justice, social sustainability has evolved into an umbrella concept.	utilising the developments of all pertinent social ideas to enhance social sustainability discourse and engaging in constructive debate with concepts that are comparable to find regions of similarity and diversity.	incorporating social sustainability as a crucial element into all urban planning initiatives and development projects
Territorial multiciliary	Social sustainability is applicable on a variety of territorial scales, from the micro (community) to the macro (regional and national).	promoting neighbourhood and community micro-scale surveys and performing thorough multimethod qualitative research	concentrating on neighbourhood-focused urban projects and programmes that advance social sustainability
Move to a smaller size	Despite this multiscale character, social sustainability studies have a scalar shift from the macro scale to the micro scale of the neighbourhood.		
Multidisciplinary enquiry	Social sustainability research promotes an interdisciplinary approach to investigate how social sustainability is connected to physical and non-physical aspects of the built environment.	constructing evaluation frameworks, using bricolage processes, and adopting transdisciplinary approaches examining the type and degree of interconnection between social sustainability's components	
Indicators specific to a goal and scale	The "aim" and "scale" of the investigation are used to determine the social sustainability indicators.		
Results' relational nature	Since non-physical social sustainability indicators are by their very nature "relational" and "place-specific," any generalisation is problematic.	conducting comparison studies to increase the accountability of research outcomes and evaluating the validity of findings	analysing imported urban concepts and programmes from other settings

Prior to the growth and domination of sustainability rhetoric in the 1990s, a number of important ideas in social science research, including social capital, social cohesiveness, and social justice, were established and discussed at length. These ideas also provided a broad theoretical framework to examine and research a wide range of specific social concerns. This is helpful for the discussion of social sustainability since it may make use of the robust evidence supporting these notions and their scientific achievements. In reality, all development rules should factor in social sustainability as an important part of any urban project. There are, however, several major obstacles to this. For starters, urban development planning has not yet adopted any systematic methods for including social sustainability considerations. The second issue is that governments are likely to utilise the language of social sustainability to justify unjust and market-oriented development policies (Lees, 2014). Finally, according to Gressgrd (2015), a collaborative approach is preferable to a top-down one when it comes to incorporating socially sustainable principles into urban policy.

The sixth and seventh fundamental formative qualities are its multidisciplinary application and its emphasis on the macro to micro scale. Because of its multidisciplinary character, which spans from national to the local, social sustainability may be implemented in cities of different sizes. However, recently, local scales such as neighbourhoods and communities have gained prominence. This calls for the encouragement of surveys on a smaller scale, at residential and community levels, and the conduct of comprehensive, multi-method qualitative research, which is especially relevant in densely populated but geographically dispersed metropolitan regions. The need to analyse and assess the social effects of neighbourhood-centric initiatives and projects is in line with the revival of the concept of social sustainability in urban policy that has occurred recently (Gallent & Robinson, 2013). Focusing on the smallest possible scale is important, but so is considering the larger context.

The interdisciplinary area of social sustainability in the built environment examines the interdependencies and linkages between constitutional indicators from other fields, such as the impact of physical repairs or redevelopment plans on neighbourhood social aspects. However, there is no universally applicable grading scheme across all levels of analysis and fields of study. This implies that the indicators and measures used in an assessment framework should be chosen with the study's objective and size in mind, since the former may be more important than the latter. Denzin and Lincoln (2011) argue that interdisciplinary and cross-method studies are necessary for addressing social sustainability. Social sustainability discourse provides both a theoretical framework and a good jumping-off point for examining development programmes and activities. It will be difficult to implement city-wide planning techniques without diluting the social uniqueness of the local experience, thus we need to proceed with care (Woodcraft, 2012).

As was said before, the interplay between social sustainability and the rest of the built environment is an important topic of enquiry. The "degree" and "type" of links are of highest importance when analysing the relationships between different aspects of social sustainability and the built environment. The "type" of interconnectedness elucidates whether the value of the link is good or negative, while the "degree" of interconnectedness investigates the level of correlation between different features. The correlation between social viability and dense urban planning might help illustrate the argument. The literature shows that there is widespread consensus on the interdependence and co-relationship between social sustainability and urban form (Yiftachel & Hedgcock 1993, Burton 2000b, Bramley & Power 2009, Karuppanan & Sivam 2011). However, the main concerns revolve around the "degree" and "type" of this connection. Additional comparative empirical research is required to study the "good or negative impact" of the interconnectedness. There is disagreement because the research disagree on the strength and nature of the links between city planning and long-term social well-being. The physical features of the built environment, as well as the social, economic, and political framework of the studied region, are major contributors to these variations.

Last but not least, it is important to remember that the results of any study on social sustainability are certain to be context and culture dependent. According to Allen and Lloyd-Jones (2010), the idea of social sustainability has to be clarified for each specific territory since its meaning differs based on the neighbourhood. This implies that regulations and suggestions should be reevaluated in light of the context and circumstances under consideration, as well as the reliability and transparency of the results. It is crucial that policymakers learn from and adopt successful strategies used in other areas and regions.

As a conclusion, we provide the following institutional insights to enhance the effectiveness of tackling social sustainability in urban situations. To begin, social sustainability—along with economic and environmental aspects—must be institutionally included into city planning. As was previously said,



programmes aiming to solve social challenges in society have seldom utilised the concept of social sustainability as such as the starting point. Instead, concepts like social capital, social equality, and the like have been employed. Second, urban social sustainability takes on an institutional quality because of the inherent dynamics of civilisations. Lateral and latitudinal information on communities and their changing dynamics is gathered via long-term monitoring projects because of the procedural nature of the issue and the need to develop appropriate responses.

#### References

1. Åhman, H. (2013). Social sustainability – society at the intersection of development and maintenance. *Local Environment* , 1153-1166.
2. Allen, J., & Lloyd-Jones, T. (2010). Neighbourhood asset management: life cycles and learning for social sustainability. In K. L.-J. T. Manzi, *Social sustainability in urban areas. Communities, connectivity and the urban fabric* (pp. 65-68). London: Earthscan.
3. Bacon, N., Cochrane, D., & Woodcraft, S. (2012). *Creating strong communities. How to measure the social sustainability of new housing developments*. London: The Berkeley Group.
4. Barton, H. (2000). *Conflicting perceptions of neighbourhood. In: H. Barton, ed. Sustainable communities, the potential for eco-neighbourhoods*. London: Earthscan.
5. Bendell, J., & Kearins, K. (2005). The political bottom line: the emerging dimension to corporate responsibility for sustainable development. *Business Strategy and the Environment*, 17(1). 21-36.
6. Boström, M. (2012). A missing pillar? Challenges in theorizing and practicing social sustainability: Introduction to the special issue. *Sustainability: Science, Practice, & Policy*, 8(1), 3-14.
7. Bramley, G., & Power, S. (2009). Urban form and social sustainability: the role of density and housing type. *Environment and Planning B: Planning and Design*, 36 (1), 30–48.
8. Brenner, N., & Theodore, N. (2002). *Spaces of neoliberalism: urban restructuring in North America and Western Europe*. Malden: Wiley-Blackwell.
9. Burford, G. (2013). Bringing the “missing pillar” into sustainable development goals: towards intersubjective values based indicators. *Sustainability* , 5(7), 3035-3059.
10. Burton, E. (2000b). The compact city: just or just compact? A preliminary analysis. *Urban Studies*, 37 (11), 1969–2006.
11. Campbell, S. (1996). Green cities, growing cities, just cities? Urban planning and the contradictions of sustainable development. *Journal of the American Planning Association*, 62(3), 296-312.
12. Chan, E., & Lee, G. (2007). Critical factors for improving social sustainability of urban renewal projects. *Social Indicators Research*, 85 (2), 243–256.
13. Chiu, R. (2003). Social sustainability, sustainable development and housing development. In e. R. Forrest and J. Lee, *Housing and social change: east–west perspectives* (pp. 221-239). London: Routledge.
14. City of Vancouver. (2005). Social development. *Vancouver: Director of Social Planning*.
15. Colantonio, A. (2009). Social sustainability: a review and critique of traditional versus emerging themes and assessment methods. *H. Malcolm, et al., eds* (pp. 865-885). Loughborough: Loughborough University.
16. Colantonio, A., & Dixon, T. (2011). Urban regeneration and social sustainability: Best practice from European cities. *Chichester: Wiley-Blackwell*.
17. Cuthill, M. (2010). Strengthening the ‘social’ in sustainable development: developing a conceptual framework for social sustainability in a rapid urban growth region in Australia. *Sustainable Development*, 18 (6), 362–373.
18. Dave, S. (2010). High urban densities in developing countries: a sustainable solution? *Built Environment*, 36 (1), 9–27.
19. Dave, S. (2011). Neighbourhood density and social sustainability in cities of developing countries. *Sustainable Development* , 19 (3), 189–205.
20. Davis, J. e. (2014). Viewing systematic reviews and meta-analysis in social research through different lenses. *SpringerPlus*, 3 (1), 511–525.
21. Davoudi, S., & Madsnipour, A. (2015). *Reconsidering localism*. New York : Routledge.
22. Dempsey, N. (2011). The social dimension of sustainable development: defining urban social sustainability. *Sustainable Development*, 19 (5), 289–300.

23. Dempsey, N., Brown, C., & Bramley, G. (2012). The key to sustainable urban development in UK cities? The influence of density on social sustainability. *Progress in Planning*, 77 (3), 89–141.
24. Denzin, N., & Lincoln, Y. (2011). *The SAGE handbook of qualitative research*. London: Sage.
25. Duxbury, N., & Jeannotte, M. (2010). From the bottom-up: culture in community sustainability planning. *Milan SSRN*, 76 (3), 265–294.
26. Ewing, R., & Cervero, R. (2010). Travel and the built environment: a meta-analysis. *Journal of the American Planning Association*, 76 (3), 265–294.
27. Forrest, R. (2008). Who cares about neighbourhoods? *International Social Science Journal*, 59 (191), 129–141.
28. Gallent, N., & Robinson, S. (2013). *Neighbourhood planning: communities, networks and governance*. Bristol: Policy Press.
29. Godschalk, D. (2004). Land use planning challenges: coping with conflicts in visions of sustainable development and liveable communities. *Journal of the American Planning Association*, 47, 108-120.
30. Godschalk, D. (2004). Land use planning challenges: coping with conflicts in visions of sustainable development and liveable communities. *Journal of the American Planning Association*, 70 (1), 5–13.
31. Gressgård, R. (2015). The power of (re)attachment in urban strategy: interrogating the framing of social sustainability in Malmö. *Environment and Planning A*, 47, 108–120.
32. Hamiduddin, I. (2015). Social sustainability, residential design and demographic balance: neighbourhood planning strategies in Freiburg, Germany. *Town Planning Review*, 86 (1), 29–52.
33. Harris, J., & Goodwin, N. (2001). A survey of sustainable development: social and economic dimensions. In J. Harris, *Volume introduction* (pp. xxvii–xxxvi). Washington, DC: Island Press.
34. Hawkes, J. (2001). The fourth pillar of sustainability. *Cultures essential role in public planning*. Melbourne: Common Ground.
35. Hemani, S., Das, A., & Chowdhury, A. (2017). Influence of urban forms on social sustainability: A case of Guwahati, Assam. *Urban design International*, 22, 168-194.
36. Hughes, S. (2015). A meta-analysis of urban climate change adaptation planning in the U.S. *Urban Climate*, 14, 17-29.
37. Jenks, M., & Jones, C. (2010). *Dimensions of the sustainable city*. Heidelberg: Springer.
38. Kallus, R., & Law-Yone, H. (2000). What is a neighbourhood? The structure and function of an idea. *Environment and Planning B: Planning and Design*, 27 (6), 815–826.
39. Karuppanan, S., & Sivam, A. (2011). Social sustainability and neighbourhood design: an investigation of residents' satisfaction in Delhi. *Local Environment*, 16 (9), 849–870.
40. Knippenberg, L. (2007). Developing tools for the assessment of sustainable development in the province of Brabant, the Netherlands. In B. M. T. Hák, *Sustainability indicators: a scientific assessment* (pp. 309-328). Washington: Island Press.
41. Koning, J. (2002). Social sustainability in a globalizing world: context, theory and methodology explored. In H. v. Rinsum, *More on MOST: proceedings of an expert meeting* (pp. 63-89). Amsterdam: UNESCO Centre.
42. Kyttä, M. (2016). Urban happiness: context-sensitive study of the social sustainability of urban settings. *Environment and Planning B: Planning and Design*, 43 (1), 34–57.
43. Larsen, G. (2009). An inquiry into the theoretical basis of sustainability: ten propositions. In V. D. J. Dillard, *Understanding the social dimension of sustainability* (pp. 45-82). New York: Routledge.
44. Leal Filho, W. (2016). The role of governance in realising the transition towards sustainable societies. *Journal of Cleaner Production*, 113, 755-766.
45. Leal Filho, W. (2016). The role of governance in realising the transition towards sustainable societies. *Journal of Cleaner Production*, 113, 755–766.
46. Lees, L. (2014). The death of sustainable communities in London? In L. L. Imrie, *Sustainable London? The future of a global city* (pp. 149-171). Bristol: The Policy Press.
47. Littell, J., Corcoran, J., & Pillai, V. (2008). Systematic reviews and meta-analysis. *Oxford: Oxford University Press*.
48. Littig, B., & Griessler, E. (2005). Social sustainability: a catchword between political pragmatism and social theory. *International Journal of Sustainable Development*, 65-79.

49. Litting, B., & Griessler, E. (2005). Social sustainability: a catchword between political pragmatism and social theory. *International Journal of Sustainable Development*, 8 (1/2), 65–79 .
50. Madanipour, A. (2001). How relevant is “planning by neighbourhoods” today? *The Town Planning Review*, 72 (2), 171–191.
51. Magis, K., & Shinn, C. (2009). Emergent principles of social sustainability. In V. D. J. Dillard, *Understanding the social dimension of sustainability* (pp. 15-44). New York: Routledge.
52. Manzi, T. (2010). Social sustainability in urban areas: communities, connectivity and the urban fabric. *London:Routledge*.
53. McKenzie, S. (2004). Social sustainability: towards some definitions. *Magill, Hawke Research Institute*.
54. Murphy, K. (2012). The social pillar of sustainable development: a literature review and framework for policy analysis. *Sustainability: Science, Practice, & Policy*, 8 (1), 15–29.
55. Noblit, W. G., & Hare, R. (1988). Meta-ethnography: synthesizing qualitative studies. *Qualitative research Methodology* . Newbury Park : CA: Sage.
56. Opp, S. (2016). The forgotten pillar: a definition for the measurement of social sustainability in American cities. *Local Environment* , 22 (3), 286–305.
57. Pagano, M. (2015). *The return of the neighborhood as an urban strategy*. Chicago: The University of Illinois.
58. Peterson, N. (2016). Introducing to the special issues on social sustainability: integration, context, and governance. *Sustainability: Science, Practice, & Policy*, 12(1).
59. Polese, M., & Stren, R. (2000). *The social sustainability of cities: diversity and the management of change*. Toronto: University of Toronto Press.
60. Psarikidou, K., & Szerszynski, B. (2012). Growing the social: alternative agrofood networks and social sustainability in the urban ethical foodscape. *Sustainability: Science, Practice & Policy*, 8(1), 30-39.
61. Raman, S. (2010). Designing a liveable compact city. Physical forms of city and social life in urban neighbourhoods. *Built Environment* , 36 (1), 63–80.
62. Sachs, I. (1999). Social sustainability and whole development: exploring the dimensions of sustainable development. In E. B. Jahn, *Sustainability and the social sciences*. (pp. 25-36). London: Zed Books.
63. Seghezze, L. (2009 ). Exploring the scientific discourse on cultural sustainability. *Environmental Politics*, 18 (4), 539–556.
64. Shirazi, M., & Keivani, R. (2019). *Urban social sustainability: theory, policy and practice*. New York : Routledge.
65. Soini, K., & Birkeland, L. (2014). Exploring the scientific discourse on cultural sustainability. *Geoforum*, 51, 213–223.
66. Stender, M., & Walter, A. (2018). The role of social sustainability in building assessments. *Building Research and Information* , 47(1):1-13.
67. Timulak, L. (2009). Meta-analysis of qualitative studies: a tool for reviewing qualitative research findings in psychotherapy. *Psychotherapy Research*, 19 (4–5), 591–600.
68. Turner, J. (2012). Urban mass transit, gender planning protocols and social sustainability – the case of Jakarta. *Research in Transportation Economics*, 34 (1), 48–53.
69. Vallance, S., Perkins, H., & Dixon, E. J. (2011). What is social sustainability? A clarification of concepts. *Geoforum*, 342-348.
70. Wang, Y. (2015). *Assessing the Social Sustainability of Chinese urban neighbourhood: A case of Shenzhen* . Department of Geography and Planning, University of Liverpool .
71. Weingaertner, C., & Moberg, A. (2014). Exploring social sustainability: learning from perspectives on urban development and companies and products. *Sustainable Development*, 22(2), 122-133.
72. Wheeler, S. (2013). *Planning for sustainability: creating livable, equitable and ecological communities*. London : Routledge.
73. Whitehead, M. (2003). Love thy neighbourhood – rethinking the politics of scale and Walsall’s struggle for neighbourhood democracy. *Environment and Planning A*, 35 (2), 277–300.
74. Woodcraft, S. (2012). Social sustainability and new communities: moving from concept to practice in the UK. *Social and Behavioral Sciences*, 68, 30-42.

75. Yiftachel, O., & Hedgcock, D. (1993). Urban social sustainability: the planning of an Australian city. *Cities*, 10 (2), 139–157.