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Method of Selective Literature Review in Defining Social Sustainability of Sustainable Development

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Abstract. The imbalance of attention given in adapting the social principles in the sustainable development agenda is considered as an indisputable issue that has been highlighted in many scholarly literatures. Scholars were in line in arguing that of the three pillars of sustainability associated with sustainable development, namely environment, economy and social, the social pillar is often being overlooked. In relation to that, a study has been conducted to explore in detail the attributes of social sustainability from the sustainable development perspective. The study managed to outline the key principles of social sustainability from the development perspective based on the in-depth review of the previous scholarly literature. This paper highlights the Systematic Literature Review (SLR) methodology adapted in the study. A total of 81 related scholarly literature from year 1991 to year 2020 were reviewed by adapting the SLR method. Two principles of searching techniques, namely advanced searching (screening) and manual searching (eligibility) were utilized to track the relevant literature. The details of the searching techniques for each reviewed scholarly literature published for almost three decades of publication are outlined in this paper.

1. Introduction

The major misconception in defining sustainable development is the imbalanced efforts given in implementing the sustainable development concept. [1-2] suggest that this imbalance is due to a combination of the 1960s "environmental movement" and the 1970s "basic needs approach" to economic development which triggered the advent of sustainable development. Misinterpretation of the sustainability concept which assumes sustainability is interrelated with ecosystems and the environment alone is another factor contributing to the neglect of the social element [3]. This is manifested through the introduction of various approaches, policies and publications that use the term "sustainable" but



solely pin-pointing and highlighting issues related to the environment and not to social and economic. [3] in his second edition publication of the book entitled *Understanding Sustainable Development* added that there are still many people who do not really understand what sustainable development is. [4] critiqued that the conflict of defining sustainability concepts is due to the phenomenon of overlooking social pillars and this ironically causes the complexity in understanding social sustainability. This condition has been addressed earlier by [5] where he concluded that the reason why social sustainability is often left out was due to the complexity in quantifying the social aspect as compared to the environment and economy. This complexity is defined by [6] in their literature that the attributes of the social dimension are viewed as more subjective or abstract as compared to the other two pillars of sustainability. Thus, a study has been conducted to define the principles of social sustainability in the context of sustainable development. This study neither aims to expand nor critique the current perspectives of scholars on social sustainability, but rather to summarize and outline the attributes that have resulted from the exploration of studies related to social sustainability. This study utilizes the Systematic Literature Review (SLR) methodology in order to track the related and relevant literature to be reviewed in order to contribute to a better interpretational perspective of social sustainable. The methodology applied to track the literature for the study is explained in this paper.

2. Systematic Literature Review (SLR)

Literature reviews have been practiced extensively for long time and are regarded as one of the best methods of placing a study within the context of existing knowledge. A Systematic Literature Review (SLR) is another alternative to a review [7]. [7] also added that in comparison to traditional review, SLR has a number of advantages, such as its numerous unique procedures. According to [8], a systematic literature review comprises identifying and synthesizing relevant research effectively and transparently by applying specific and standardized procedures at every step. With the help of predefined search strings, extensive searches, and standard inclusion and exclusion criteria, SLR encourages researchers to look for studies outside their own domains or networks [9]. This type of review emphasizes transparency. All terms in inclusion criteria for example, must be defined and justified while exclusion of articles must be reasoned [10].

3. Methodology – Systematic Literature Review (SLR)

The main interest of the study mentioned is to outline the related derivative of social sustainability in development perspective. SLR method has been adopted in collecting the relevant information related to key principles of social sustainability in development context. The summary of methodology flow of SLR method applied is as shown in Figure 1.

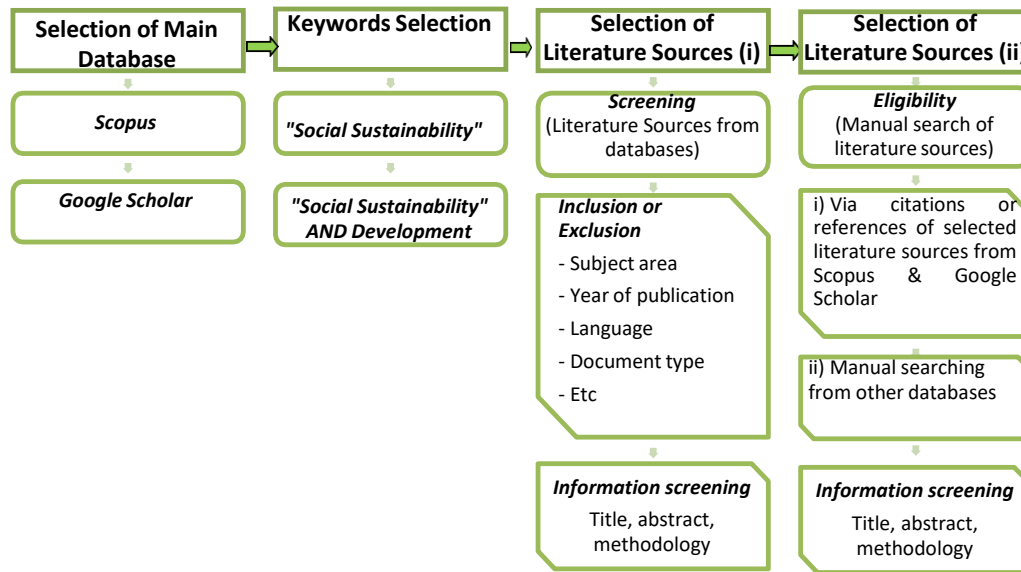


Figure 1. Summary of methodology flow

3.1 Selection of Database

A methodological-based article on systematic literature review (SLR) by [7] in discussing the selection of databases concluded that there is no perfect database [11-12]. Scholars suggested that any comprehensive search should not rely solely on single database searching, but the searching should be diversified into few available databases. This is the basis on the decision of the authors to utilize two main databases which are Scopus and Google Scholars for the advance searching, and other selected databases for the manual searching in this study. This study utilized two principles of searching approach, namely advanced searching (from databases; Scopus and Google Scholar) and manual searching on the selected literature.

3.2 Keywords Selection

The first step in retrieving the information began with the selection of appropriate keywords based on the aim of this study. [13] in an article discussing the keywords selection for the identification of literature review stated that this process should be made by considering the relevance and accuracy of the literatures to be reviewed. The keywords should not be too general, to avoid too many irrelevant literatures, nor is it too specific to avoid the risk of overlooking of the relevant literatures. The authors selected "Social Sustainability", and "Social Sustainability AND Development" as keywords in this study. By entering keywords into the databases search string, a series of literature documents which contain the exact inserted keywords phrase of the literature will be displayed in the databases interface. From this point onwards, the process of information filtering will begin to take place leading to the final selection of literature sources.

3.3 Selection of Literature Sources

3.3.1 Screening

Screening is the second process which involves the “inclusion” or “exclusion” of certain attributes which can be configured in the databases system [7]. This process provides the flexibility for users (researcher) to include or to exclude certain attributes such as *range of publication year, type of publication, language* and *research area* according to their searching requirements and preferences [14]. [15] in discussing screening process stated that the decision for this process is made by assessing whether the options to be considered for “inclusion” and “exclusion” will provide relevant or irrelevant results for the study objectives. Those irrelevant results will be excluded during the screening process. For this study, although it was found that the trend of scholars publication related to social sustainability has shown a drastic increment statistically in a particular year, which this information was retrieved from the databases systems, authors decided not to limit the range of publication year in the databases interface systems as authors tend to presume that, for issues involving the emergence or evolution of a particular theory or philosophy, the trend of changes on the perspective of a particular subject are considered as significant. Authors have also opted to only review the sources that are published in English language, by excluding the sources published in other languages in the selection process. This is parallel with [14] who stated that publication in languages other than that understandable by the reviewer will be time consuming and may lead to confusion.

3.3.2 Information Screening

The screening process started once the keywords selection and keywords search were established. Since this study is likely associated to the social context of sustainable development, the execution of article selection was focusing on the publications that interpreted social sustainability issues intensively. This is achieved by reviewing the title, abstract and if necessary methodology section. This methodology was adopted from [7]. Titles and abstracts of the documents listed in the databases’ results interface were reviewed to determine the relevant literatures to be reviewed. In case that the title and abstract could not provide a clear picture on the level of relevance of a particular literature document, then the methodology of the publication will be examined to obtain certainty.

3.3.3 Eligibility

This process is the continuity of the screening process. The concept is almost similar with screening process, except that the eligibility is the manual version of screening process that has been mentioned in the previous section. The screening process is assisted by a database system, while eligibility is conducted manually by the researcher. The eligibility is considered as an extended process that has been carried out in the screening process. In this study, the eligibility process was conducted by referring to the references and citations from the literature sources that have been selected from the databases. This manual searching technique allows the exploration of relevant literature sources that are not available in the selected databases [15]. The documents that were not available in Scopus and Google Scholar were explored via this manual searching technique.

4. Findings and Discussion

The pie chart in Figure 2 shows the overall distribution of social sustainability themes discussed by the scholars in the 81 reviewed literatures identified from SLR method.

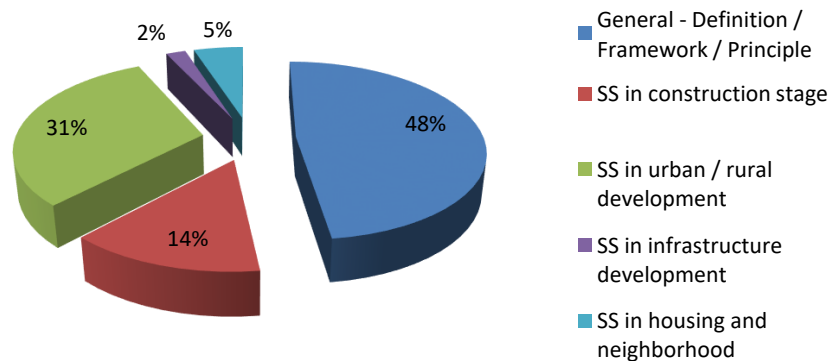


Figure 2. Distribution of social sustainability themes from reviewed literature

The entire pie chart encompasses all of the themes reviewed under the social sustainability topic, and the sectors represent specific themes of the discussions for the reviewed literature. In general, almost every single literature for this particular study was selected from the publications that discuss on the social sustainability in the context of development or built environment. The percentage distributions in the pie chart in Figure 4 are the description of the principal themes discussed in each particular social sustainability literatures. Almost half of the entire literatures reviewed (48%) discussed the principles and fundamental components related to social sustainability in development context. The rest proportions of the reviewed literatures discussed social sustainability in other specific themes such as social sustainability during the construction stage, social sustainability in urban, rural and infrastructure development context, besides few literatures that discussed social sustainability with other sustainability pillars; environment and economy in the sustainability development framework group.

This study managed to track the trend of social sustainability discussions by exploring in depth the key principles or themes associated with sustainable development for almost three decades through the SLR method. As stated earlier, this paper only highlights the methodology used to track the relevant literature on the social principle in sustainable development for the particular study. A total of 10 key principles of social sustainability have been outlined by the study, but the detail description of the analysis and results are not included in this paper due to limitation. The SLR method used to track relevant literature is found applicable and smoothen the information tracking process.

Table 1. Summary of searching techniques and themes of social sustainability from reviewed literature

Publication Year	Author	Searching Technique	Social sustainability review theme				Sustainable Development Framework
			Definition / Framework / Principle	SS in construction activity	SS in urban / rural context	Infrastructure development	
1991	Allen and Sachs	Eligibility	/	/	/		
1992	Chambers and Conway	Eligibility	/	/	/		
1993	Cernea	Screening	/	/	/		
	Yiftachel and Hedgcock	Screening	/	/	/		
1995	Jones and Tonts	Screening	/	/	/		
	Olson	Eligibility	/	/	/		
	Smiles	Screening	/	/	/		
1997	Basiago	Eligibility	/	/	/		
	Hill and Bowen	Eligibility	/	/	/		
1998	Elkington	Eligibility	/	/	/		
	Wilkinson	Eligibility	/	/	/		
1999	O'Hara	Screening	/	/	/		
	Sachs	Eligibility	/	/	/		
2000	GRI	Eligibility	/	/	/		
	Polèse and Stren	Eligibility	/	/	/		
	Scott et al	Screening	/	/	/		
2001	Hans	Eligibility	/	/	/		
2002	Barron and Gauntlet	Screening	/	/	/		
2004	Sinner et al	Eligibility	/	/	/		
	McKenzie	Screening	/	/	/		
2005	Gates and Lee	Eligibility	/	/	/		
	Labuschagne et al	Eligibility	/	/	/		
	Littig and Griesfler	Screening	/	/	/		
	Porta and Renne	Eligibility	/	/	/		
2006	Bramley et al	Screening	/	/	/		
	Spangenberg and Omann	Screening	/	/	/		
2007	Glavic and Lukman	Eligibility	/	/	/		
2008	Chan and Lee	Screening	/	/	/		
	Colantonio	Screening	/	/	/		
2009	Bramley et al	Screening	/	/	/		
	Bramley and Power	Screening	/	/	/		
	Colantonio	Screening	/	/	/		
	Dampsey et al	Eligibility	/	/	/		

Table 1. *Cont.*

Publication Year	Author	Searching Technique	Social sustainability review theme				Sustainable Development Framework
			Definition / Framework / Principle	SS in construction activity	SS in urban / rural context	Infrastructure development	
2009	Davidson	Screening	/				
	Dave	Screening	/	/	/		
	Edum and Price Glasson and Wood	Eligibility Eligibility	/	/	/		
2010	Cuthil	Screening	/		/		
	Davidson	Screening	/		/		
2011	Ahmed	Eligibility	/	/	/		
	Dampsey et al	Screening	/	/	/		
	Karuppannan and Sivam	Screening	/	/	/		
	Landorf	Screening	/	/	/		
	Vallence et al	Screening	/				
	Waas et al	Eligibility	/	/	/		
	Weingaertner and Moberg Woodcraft et al	Eligibility Screening	/	/	/		
2012	Bostrum	Screening	/				
	Chasey and Agrawal	Eligibility	/	/	/		
	Dampsey et al	Screening	/	/	/		
	Magee et al	Screening	/	/	/		
	Zuo et al	Screening	/	/	/		
2013	Ghahramanpouri	Screening	/	/	/		
	Haley and Jones	Screening	/	/	/		
	Toole and Carpenter	Screening	/	/	/		
	Valdes-Vasquez and Klotz	Screening	/	/	/		
	Valentin et al	Screening	/	/	/		
2014	Al-Dahmashawi et al	Screening	/	/	/		
	Davoodi	Screening	/	/	/		
	Reddy et al	Screening	/	/	/		
2015	Woodcraft	Screening	/		/		
	Abdel-Raheem and Ramsbottom	Screening	/		/		
2016	Almahmoud and Doloi	Screening	/	/	/		
	Boyer et al	Screening	/	/	/		
	Cooper et al	Screening	/	/	/		
	Rocal et al	Screening	/	/	/		

Table 1. Cont.

Publication Year	Author	Searching Technique	Social sustainability review theme					Sustainable Development Framework
			Definition / Framework / Principle	SS in construction activity	SS in urban / rural context	Infrastructure development		
2018	Atanda	Screening	/	/				
	Atanda and Ozturk	Eligibility	/					
	Sierra et al	Screening	/					
	Tucunan et al	Screening	/	/				
2019	Islam et al	Screening	/					
	Larimian and Sadeghi	Screening	/					
2020	Gonzalez et al	Screening	/	/	/	/		
	Jaiffar and Harun	Screening	/	/				
	Kamaruddin et al	Screening	/	/				
	Malek et al	Eligibility					/	
	Nareswari and Utari	Screening		/				

Table 1 displays the summarization of the searching techniques and social sustainability themes of discussion reviewed in this study. The searching techniques and themes of the reviewed literatures have been organized according to the year of publication of the literatures. Figure 3 and Figure 4 projected the illustrative summarization of the searching techniques from Table 1. Almost 2/3 of the entire reviewed literatures were found through screening technique, and the rest literatures were found through manual searching (eligibility) of references or citations of the 56 literatures found through screening method

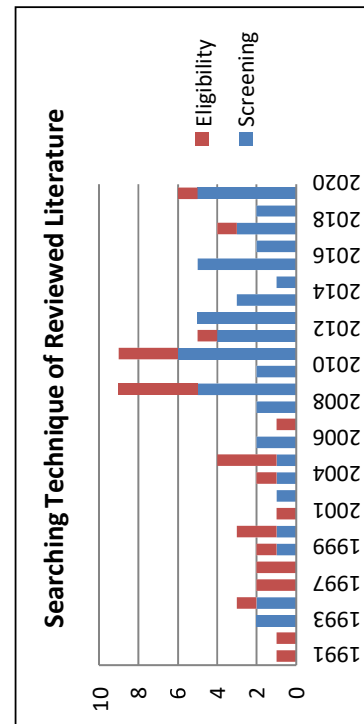


Figure 3. Number of reviewed literatures based on searching techniques of SLR according to publication year

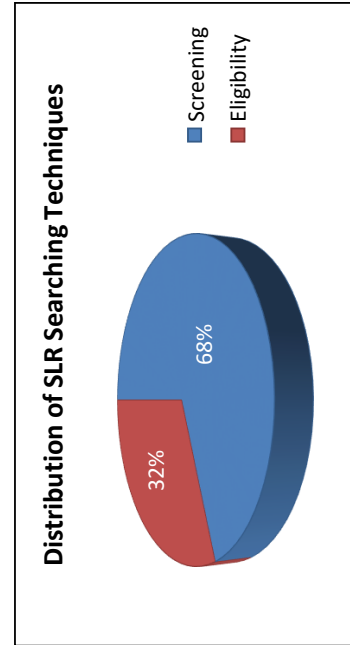


Figure 4. Distribution of SLR searching techniques

5. Conclusion

Overall, the SLR method has successfully facilitated the selection process of the relevant literature for this study. The key fact that is often highlighted in explaining the SLR method is the transparency in the screening and selection process of the literature sources. The “inclusion” and “exclusion” of criteria allow the flexibility in the data selection, exclude the irrelevant data, fit the research requirement and at the same time avoid the bias issue on the literature selection by the researcher. The two main searching techniques utilized in the study which are “screening” (from databases) and “eligibility” (manual searching) have been successfully proven in assisting the authors in tracking the literature that published from year 1991 to year 2020. The SLR method is highly recommended to be utilized in the literature searching, especially for the studies that require the review and exploration of trend or emergence of a particular area of study. Apparently, the adaptation of SLR method in this study, which involves the selection of the three decades of literature publications, is found effective in ensuring that the researchers are on track in the data selection process and the literature sources are well organized.

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