

A Quasi-Systematic Review on Effectiveness of Social and Cultural Sustainability Practices in Built Environment

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Abstract : With the advancement of knowledge about the utility and impact of sustainability, its feasibility has been explored into different walks of life. Scientists, however; have established their knowledge in four areas viz environmental, economic, social and cultural, popularly termed as four pillars of sustainability. Aspects of environmental and economic sustainability have been rigorously researched and practiced and huge volume of strong evidence of effectiveness has been founded for these two sub-areas. For the social and cultural aspects of sustainability, dependable evidence of effectiveness is still to be instituted as the researchers and practitioners are developing and experimenting methods across the globe. Therefore, the present research aimed to identify globally used practices of social and cultural sustainability and through evidence synthesis assess their outcomes to determine the effectiveness of those practices. A PICO format steered the methodology which included all populations, popular sustainability practices including walkability/cycle tracks, social/recreational spaces, privacy, health & human services and barrier free built environment, comparators included 'Before' and 'After', 'With' and 'Without', 'More' and 'Less' and outcomes included Social well-being, cultural co-existence, quality of life, ethics and morality, social capital, sense of place, education, health, recreation and leisure, and holistic development. Search of literature included major electronic databases, search websites, organizational resources, directory of open access journals and subscribed journals. Grey literature, however, was not included. Inclusion criteria filtered studies on the basis of research designs such as total randomization, quasi-randomization, cluster randomization, observational or single studies and certain types of analysis. Studies with combined outcomes were considered but studies focusing only on environmental and/or economic outcomes were rejected. Data extraction, critical appraisal and evidence synthesis was carried out using customized tabulation, reference manager and CASP tool. Partial meta-analysis was carried out and calculation of pooled effects and forest plotting were done. As many as 13 studies finally included for final synthesis explained the impact of targeted practices on health, behavioural and social dimensions. Objectivity in the measurement of health outcomes facilitated quantitative synthesis of studies which highlighted the impact of sustainability methods on physical activity, Body Mass Index, perinatal outcomes and child health. Studies synthesized qualitatively (and also quantitatively) showed outcomes such as routines, family relations, citizenship, trust in relationships, social inclusion, neighbourhood social capital, wellbeing, habitability and family's social processes. The synthesized evidence indicates slight effectiveness and efficacy of social and cultural sustainability on the targeted outcomes. Further synthesis revealed that such results of this study are due weak research designs and disintegrated implementations. If architects and other practitioners deliver their interventions in collaboration with research bodies and policy makers, a stronger evidence-base in this area could be generated.

Keywords : built environment, cultural sustainability, social sustainability, sustainable architecture

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