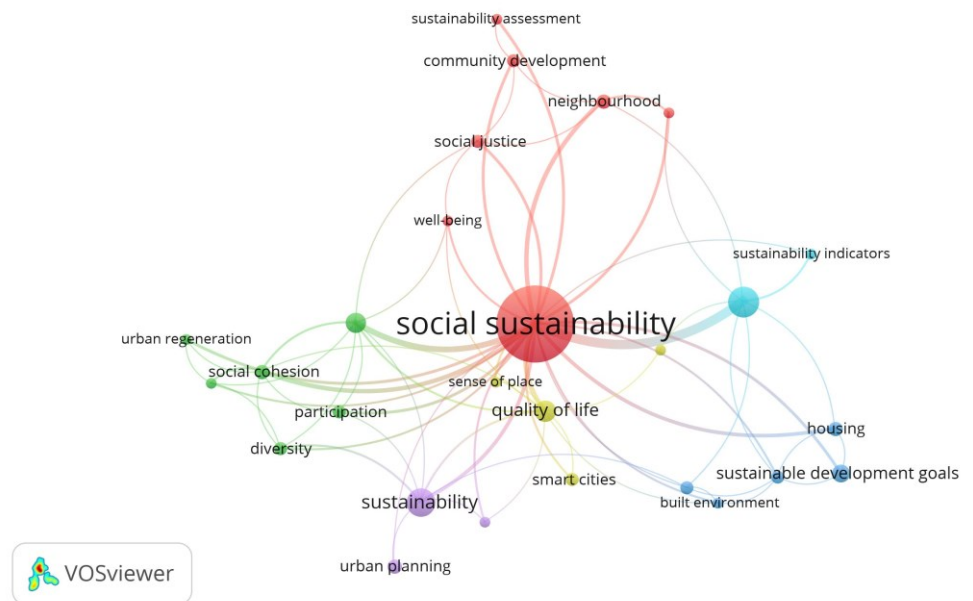


3.1. The Intellectual Structure of the Field: A Bibliometric Map

A term-cooccurrence analysis was performed on the bibliographic data of the 132 selected papers to elucidate the conceptual framework and pinpoint thematic emphasis points within the social sustainability literature. Figure 2 shows the map that was made with the VOSviewer program. This map shows the intellectual structure of the field by showing the size of the nodes (which shows how often they appear) and the thickness of the links (which shows how strong they are). Figure 2 indicates that the "social sustainability" node is centrally located in the network, highlighting its significance within this discourse.

The cluster analysis found five different thematic groups, each of which represents a part of this complicated area:



[Figure 2: Outcomes of the Term Co-occurrence Analysis]

- Cluster 1 (Red-Central): Justice, Development, and Spatial Experience. This category of ideas forms the normative and practical core of the field. It shows that ideas like social justice and well-being are considered important aims of social sustainability. Its close ties to community development and neighborhoods also show that these goals are mostly pursued at the local level.

- Cluster 2, represented by the green color on the left, focuses on unity, involvement, and the revitalization of cities. This group is all about social and interactive processes. In this case, social cohesiveness and participation are important ways to handle diversity and promote urban regeneration.

- Cluster 3 (blue-right): policy, measurement, and the physical environment. This group addresses how social sustainability works in practice and in institutions. The presence of sustainability indicators and sustainable development goals

signifies the effort to transform abstract concepts into measurable metrics and global policy objectives.

- Cluster 4 (Yellow - Bottom): Smart Cities and Quality of Life. This group focuses on how technology and data-driven solutions may work together to improve city living. Cities may use innovation to solve problems like housing, transportation, and environmental sustainability by concentrating on ways to improve people's quality of life. This group connects subjective results like quality of life with new technology developments like smart cities, which indicates that there is a new area of research to explore.

- Cluster 5 (purple, bottom-left): Urban Planning and Macro-Sustainability. This smaller but important group shows how urban planning, the main tool for putting the idea of sustainability into action, is related to the bigger idea of sustainability.