
FAIR Vocabularies for Population Research

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Abstract

The FAIR Vocabularies for Population Research is a joint initiative between the International Union for the Scientific Study of Population (IUSSP) and CODATA, the Committee on Data of the International Science Council. Population research is an empirically focused field with a long tradition of widely shared, easily accessible data collections. The FAIR Principles point to ways that this tradition can be enhanced by taking advantage of emerging standards and technologies. The Working Group is focused on the development of FAIR vocabularies, guided by "Ten Simple Rules for making a vocabulary FAIR" developed by CODATA's FAIR Vocabularies Group.

We are developing recommendations in three areas. First, what actions can IUSSP take to encourage FAIR data? For example, IUSSP can leverage existing resources (such as the online thesaurus Demopaedia) to assure that demographic terminology is accurately represented in FAIR thesauri and ontologies. Resources like the European Languages Social Science Thesaurus (ELSST) become more important in a world where data are linked through persistent identifiers.

Second, we will make recommendations to the national and international statistical agencies relying on the Statistical Data and Metadata eXchange (SDMX) metadata standard to make their data more FAIR. SDMX developed to standardize exchanges between data producers and organizations like the UN, ILO, OECD, and World Bank. However, less consideration has been given to data dissemination. FAIR vocabularies will improve the harmonization and interoperability of data for researchers who need to combine data from multiple SDMX-based sources.

Third, the Working Group is looking at recommendations for individual-level data described with DDI metadata. This world is much more decentralized than the official statistics community. Nevertheless, we believe development of FAIR vocabularies will lead to new uses of DDI metadata for data discovery, harmonization, and interoperability.

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