

How Data is Documented: An Analysis of Metadata Schemas for Research Data

Tianji Jiang^a

^aUCLA Department of Information Studies, USA

tianji008@ucla.edu

ABSTRACT

The importance of metadata has long been understood by those in the fields of librarianship and research data management. Currently, there are many research data service providers that allow deposit of research data or gather metadata for research data housed elsewhere, following various metadata schemas to describe their collections. These schemas were designed to make their datasets organized, discoverable, and reusable. As data curators initially recognize the need for and begin working on metadata schemas for research data, most previous studies in this field were conducted from their perspectives. However, few of these studies discuss a schema from the perspective of data (re)users. This study aims to take a small step towards filling this gap by evaluating four influential metadata schemas — the NISO Research Data Metadata, the DataCite Metadata Schema, ICPSR Metadata Schema, and the Data Documentation Initiative — in light of researchers' information-seeking behaviors for research data. This study explores the factors that affect researchers' efforts in seeking, understanding, and evaluating (re)usable data, and examines how these factors are represented across various fields in the current metadata schemas for research data.

The methodology for this study consists of three parts: a meta-analysis of relevant research on researcher's seeking behaviors for (re)usable data, a crosswalk of the metadata schemas, and a comparison of findings from the previous stages. The findings from this study will offer insights into the development of research data metadata schema in the future, which will enhance the infrastructure for data sharing, ultimately facilitating more effective (re)use of existing data.

ALISE RESEARCH TAXONOMY TOPICS

Data curation; Metadata; Records and information management

AUTHOR KEYWORDS

Research data management; Metadata; Data discovery; Data reuse.

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