Can Google Scholar Replace Your Database?

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This poster presents the results of a study to determine what percentage of the documents researchers cite can be found in Google Scholar. The study looked at all citations in MS and PhD theses from the UCSD Jacobs School of Engineering in 2008.

Of the 13,701 citations across five departments (Bioengineering, Mechanical and Aerospace Engineering, Electrical and Computer Engineering, Computer Science and Engineering, and Structural Engineering), 95.8% were found in Google Scholar. Document types traditionally found in databases were most likely to be indexed in Google, including journal articles (99.7% of 9164), conference proceedings (98.3% of 2220), and books (99.7% of 1210). Websites were least likely to be found (11.9% of 336). Other types of documents such as technical reports (80.3% of 294), theses (89.7% of 116), standards (84.4% of 96) and patents (97.2% of 36) were indexed to varying degrees. A breakdown of these statistics by department is included on the poster.

The conclusion of the study is that while Google Scholar does not offer the more advanced searching or filtering options, it surpasses traditional databases in terms of recall of information. This is especially true considering the non-disciplinary nature of Google indexing.