# Open Access Journals in Communication Studies

Open Access Journals in Communication Studies:

Indexing in Five Commercial Databases

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# Abstract

This study investigates the degree of indexing of gold Open Access (OA) journals within the field of communication studies in five major commercial bibliographical databases commonly subscribed by academic libraries and used by researchers and students. Results of the study indicate that 32 percent of the 147 gold OA journals identified were indexed in the five target databases. The communication studies databases provided the most complete indexing, while among the multidisciplinary databases, *Scopus* provided more coverage compared to *Academic Search Complete*, and *Web of Science*.

# Introduction

The *Directory of Open Access Journals* (*DOAJ*) currently provides article level searching to over one million articles published in scholarly, freely available, Open Access (OA) journals (DOAJ Team 2013). These articles represent the publication output of only 51 percent of the journals included in the *DOAJ* demonstrating that there is a significant, potentially important volume of scholarly articles published within OA journals.<sup>1</sup> The growth of OA scholarly journal publication has been well documented (Laakso et al. 2011; Solomon 2012). Articles published within OA journals not only expand the fields of science, technology, engineering and medicine (STEM), but also extend into the arts, humanities and social sciences. In fact, 40 percent of the journals in the *DOAJ* have been assigned subject categories in the arts, humanities and social sciences.<sup>2</sup> OA scholarly journal publishing in the field of communication studies is also growing. In December 2012 under the subject heading "Media and Communication," the *DOAJ* listed 104 OA journals. A few months later, by May 2013, the number of journals within this category increased almost 12 percent to 116 journals. However, only 48 percent (56 of 116) of these journals were searchable at the article level within the *DOAJ*.<sup>3</sup>

Although a journal may be freely available, scholars still need to discover which articles have been published in order to decide whether they would need to access them. Articles in OA journals, just like their toll-based counterparts, can be discovered as a result of searching, browsing or exploring resources such as the *DOAJ*, search engines, and commercial databases. If an OA article has been cited by others, it may facilitate its discovery as scholars follow-up citations they find of interest. Although search engines such as Google Scholar significantly enhance access to OA journals (Neuhaus et al. 2006; Norris, Oppenheim, and Rowland 2008),

commercial bibliographic databases are considered primary and authoritative sources for searching the scholarly journal literature (Cummings 2013, 167; Walters and Linvill 2011, 1615). Research by King et al. (2009, 132-3) indicates that in terms of articles found via online searching, scholars are still finding the majority of articles from commercial databases: 14 percent as a result of using web search engines, and 58 percent as a result of searching commercial abstracting and indexing databases. Consequently, the indexing of OA journals within commercial databases may increase the discoverability of OA journal articles and a lack of indexing may represent an obstacle.

In the field of communication studies, no single database encompasses the literature of communication studies (LaRose 1989, 34; Tyler et al. 2008, 81). Communication studies includes a broad spectrum of subject areas such as, speech communication and rhetoric, organizational communication, public relations, mass communication, interpersonal communication, and cultural, critical and social aspects of communication. Librarians may direct students and researchers to databases in communication studies as starting points to access the journal literature, however the use of databases from other disciplines and/or large multidisciplinary databases are also usually required. This study investigates the indexing of gold road OA journals within the field of communication studies in a selection of five major commercial bibliographical databases commonly subscribed by academic libraries and used by researchers and students.

#### **Literature Review**

Fully open access journals, commonly referred to as gold road OA journals, provide immediate and free access to their articles without an embargo (Harnad et al. 2004, 313; Guédon 2008, 41). Green road OA journals are subscription based journals, often well established,

where the publisher has adopted a policy of allowing authors to self-archive their articles (usually a pre or post-print manuscript) in an institutional, subject or other repository (Harnad et al. 2004, 313; Guédon 2008, 41). Articles published through the gold or the green road may have increased visibility by virtue of being freely available since no barriers exist to accessing these articles. Several citation studies have in fact indicated that OA articles are cited more frequently compared to toll-based articles (Hajjem, Harnad and Gringas 2005; Swan 2010; Antelman 2004). Other studies (Björk and Solomon 2012; Solomon, Laakso, and Björk 2013) have found higher citation rates for OA journals with article processing fees than for those without. A study by Miguel, Chinchilla-Rodriguez and Moya-Anegón (2011, 1134) found that green road OA journals were more frequently cited than gold road OA journals. In addition, they discovered that while 32 percent of OA journals indexed by *Scopus* were green road, only nine percent were gold road (Miguel, Chinchilla-Rodriguez, and Moya-Anegón 2011, 1134).

A study by Cummings (2013, 170) compared indexing of gold road OA journals in three large multidisciplinary databases and found that in 2011 *Academic Search Complete* indexed 25.7 percent of the journals listed in the *DOAJ*, *Proquest 5000 International* indexed 5.3 percent while *Gale Onefile* indexed 2.5 percent. Cummings (2013, 173) also found that 7.9 percent of journals in *Journal Citation Reports* (*JCR*) were gold road OA journals, a 300 percent increase from data reported in 2003. Walters and Linvill (2011) investigated the indexing of gold road OA articles in six subject areas, biology, computer science, economics, history, medicine and psychology within eleven discipline specific and multidisciplinary databases. They found a significantly higher rate of indexing in the life sciences than in other disciplines. Two databases, *Biological Abstracts* and *PubMed* provided coverage of over 60 percent of OA articles in their discipline, while the "most comprehensive databases in computer science, economics and

psychology each indexed fewer than 25 percent of OA articles in those fields" (Walters and Linvill, 2011, 1624). *Historical Abstracts* and *America History and Life* combined, were found to index 2.8 percent of OA journals (Walters and Linvill 2011, 1620). In terms of multidisciplinary databases, the same study found that *Academic Search Complete* and *Web of Science* indexed 17 times more OA journal content than *Wilson OmniFile* and *Proquest Research Library* (Walters and Linvill 2011, 1619). In addition, they concluded that, together, the indexing of OA journals within the discipline-specific databases studied provided a higher level of coverage than the multidisciplinary databases (Walters and Linvill 2011, 1620).

Studies measuring the indexing of OA journals often derive their sample set of journals from the DOAJ. A 2011 study using 30 OA journals in Art History found only 6 journals (20 percent) were indexed in commercial art databases (Evans, Thompson, and Watkins, 175). Another study, in 2010, discovered that out of a sample of 61 OA journals in law, 46 journals (75 percent) were not indexed in the four major legal research information databases (Hart 2010, 29). Ball (2009, para. 19) found that out of a sample of 83 OA journals in business and management, EBSCO's Business Source Complete indexed 33 percent of the journals, the highest number compared to other mainstream commercial business and social science databases. Fisher, Hart, and Yonz (2009, 133) reported an increase in the rate of indexing of OA journals in library and information science from 2007 to 2009. They found that 62.5 percent of titles from a sample of 96 OA journals in library and information science were indexed in at least one of six databases within the field compared with 46 percent of titles from a sample of 78 journals taken two years earlier. The same study also found that those journals with start dates between 1991 and 1995 had the highest rate of indexing whereas those with start dates after 2005 had the lowest rate of indexing (Fisher, Hart, and Yonz 2009, 133). Nowick, Jenda and, Azzam (2004, 21) studied a

sample of 121 OA journals in agriculture and found the rate of indexing in *Agricola*, *CAB Direct* and *Biological Abstracts* varied from approximately five to 50 percent.

There have been few studies examining the coverage and indexing of communication studies databases. Moreover, no studies to date have examined the indexing of OA journals in communication studies. Funkhouser (1996) found that the lack of indexing coverage of communication studies journals within Social Sciences Citation Index and Arts and Humanities Citation Index was a serious obstacle to using citation data for evaluating authors in the field (Funkhouser 1996, 570). According to Stephen (2011, 65), "Nearly twenty years later the situation remains unchanged" as in 2008 these same databases indexed only 30 of the over 120 titles indexed by ComAbstracts (Communication Institute for Online Scholarship) - an index "limited to the core academic serial literature of the communication field" (Stephen 2011, 66). A study by Tyler et al. (2008) compared the coverage of communication studies journals in EBSCO's Communication & Mass Media Complete, ComAbstracts, ComIndex, and EBSCO's Communication Abstracts with five multi-subject databases. Their conclusion was that the "field of communication studies has become too large and too varied in its interests and scope to be wedged into its own little index" (Tyler et al. 2008, 81). An earlier study by Albert J. LaRose (1989, 29) of eight indexes and abstracting services found that none provided comprehensive access to a core list of communication arts journals. These studies demonstrate that the literature of interest to communication scholars are not indexed by any one single discipline specific database and that coverage within multidisciplinary databases may not be complete.

# Methodology

The *DOAJ* was selected as the primary source as it is the most complete source of scholarly gold OA journals. Criteria for inclusion in the *DOAJ* requires that all content in the journal be freely available without embargo, that the target audience of the journal be researchers and/or scholars

and that there be a process of quality control through peer-review, an editorial board, or editor. The journal must also appear regularly and have an ISSN number (DOAJ 2013). In May 2013 the *DOAJ* listed 116 journals under the subject category "Media and Communication".

Given the broad nature of communication studies, it was anticipated that there would be communication studies journals in the *DOAJ* classed under subject categories other than "Media and Communication". Thus, relying exclusively on this subject category within the *DOAJ* might result in missing key titles. Browsing through all subject categories of the *DOAJ* to identify and retrieve relevant titles was not seen as practical. Keyword searching was also ruled out as only slightly more than 50 percent of the journals listed within the *DOAJ* were indexed at the article level.<sup>4</sup>

The use of other lists of OA journals in communication studies was seen as a possible solution. Nordicom (Nordic Information Centre for Media and Communication Research) maintains a list of OA journals in media and communication studies and the IAMCR (International Association for Media and Communication Research) maintains another. Unfortunately, neither of these organizations publish the criteria used to select journals for inclusion on their lists. It was apparent from scanning these lists that not all journals were gold OA journals. In order to ensure that all additional titles identified via these lists were gold OA journals, scholarly and had an editorial review process to ensure quality, additional titles identified were only added to the study if they were also listed in the *DOAJ*.

Five commercial databases were selected for the purpose of this study. Two discipline specific databases were selected, both produced by EBSCO: *Communication Abstracts* and *Communication & Mass Media Complete (CMMC)*. Three large multidisciplinary databases were also selected: *Web of Science*, *Scopus*, and EBSCO's *Academic Search Complete (ASC)*.

Web of Science and Scopus were selected as they are among the largest and most common of the multidisciplinary databases available. ASC was selected as it is widely available in academic libraries, and in our experience working with communication studies students and faculty complements the two communication studies databases well. In addition, previous studies had demonstrated that ASC had significantly more OA content than similar products (Cummings, 2013, 170; Walters and Linvill, 2011, 1619).

To determine if the journals were indexed in the target databases, the source files of the databases were searched using journal title and matches were based upon ISSN. Journals which were not indexed in the target databases were checked in *UlrichsWeb* to ascertain if they were reported to be indexed in other databases.

#### Results

A total of 116 journals were identified from the *DOAJ*. Thirty-one additional titles were also identified using the Nordicom and IAMCR OA journal lists. These journals were listed in the *DOAJ*, but not under the subject "Media and Communication". Rather, they were scattered across 14 different *DOAJ* subject categories. Most (almost half) were categorized either in "Performing Arts" or "Computer Science". Table 1 lists the number of journals found by *DOAJ* subject category. The addition of these titles increased the total number of unique journals in the study from 116 to 147.

Forty-seven of the 147 journals (32 percent) were indexed in at least one of the five target databases. This represents a lower figure than what has been reported for the life sciences (60 percent), a higher figure than what has been reported for computer science, economics and psychology (lower than 25 percent) and a substantially higher percentage than the low figure of

2.8 percent reported for history (Walters and Linvill 2011, 1620). *CMMC* indexed the largest number of journals (30 journals, 20 percent) followed by *Scopus* (20 journals, 14 percent), *Communication Abstracts* (16 journals, 11 percent), *Academic Search Complete* (9 journals, 6 percent), and *Web of Science* (4 journals, 3 percent) (Table 2). Twenty-two journals (47 percent) were indexed in multiple target databases, while 25 journals (53 percent) were indexed by only one database. Only one journal, *Comunicar*, was indexed in all five databases.

Of the remaining 100 journals not indexed in the target databases, *UlrichsWeb* indicated that 38 titles were indexed elsewhere, in over 30 different databases, while 62 titles did not have indexing or abstracting information reported.

# **Discussion**

Together, the two communication studies databases indexed more OA journals identified in the study (31 journals, 21 percent) than the three multidisciplinary databases (24 journals, 16 percent). Overlap in coverage between the communication studies and multidisciplinary databases was only 8 journals (5 percent) (Table 3). Sixteen journals covered by the multidisciplinary databases were not indexed by the communication studies databases. *Scopus* alone indexed 13 of these journals, 8 of which were not indexed by any of the other databases. *Scopus* indexed twice as many journals as *ASC* and five times as many journals as *Web of Science*. *ASC* indexed only 3 journals that were not indexed by any of the other target databases and all four of the journals indexed in *Web of Science* were indexed by *Scopus*. *CMMC* provided unique indexing for 14 titles that were not indexed by any of the other target databases. Fifteen of the 16 journals indexed by *Communication Abstracts* were also indexed in *CMMC*. Table 4 summarizes the number of unique titles indexed by each database.

Although the multidisciplinary databases proved to be an important source of indexing in this study, journals classed in subjects other than "Media and Communication" in the DOAJ were not more frequently indexed in the multidisciplinary databases. Of the 31 journals in this group, only four were indexed within the multidisciplinary databases while three were indexed within the communication databases. In addition, the level of indexing in the target databases as a whole was higher for the 116 journals classed within the subject category "Media and Communication" than for those classed within other categories. Only six of the 31 journals (19 percent) were indexed in the target databases compared with 41 of the 116 journals (35 percent) in the DOAJ with the subject category "Media and Communication". However, the reverse was true in terms of indexing in non-targeted databases. Based upon data taken from *UlrichsWeb*, only 29 percent of the journals not indexed in the target databases and classed within the "Media and Communication" subject category of the DOAJ, were indexed in other non-targeted databases compared to 68 percent of the journals classed in other subjects. Table 5 presents the number of journals indexed by broad subject category of the non-targeted databases. The variety of subject areas represented, as well as the significant number of titles indexed in the targeted multidisciplinary databases suggest that the OA journal literature of interest to communication scholars is widely scattered.

Journals listed in a journal ranking tool were more likely to be indexed in the target databases.<sup>5</sup> Seventeen of the 47 journals (36 percent) indexed in the target databases were listed in a journal ranking tool compared to only four of the 100 journals (4 percent) not indexed by the target databases. Criteria considered by the producers of the target databases when selecting a journal for indexing include citation data or journal ranking (Elsevier 2012, 18; Testa 2012, 3; EBSCO, pers. comm., 27 May 2013). Journal ranking or citation counts may influence database

producers as they are often viewed as an indicator of quality. In June 2013, the DOAJ announced that it was considering new selection criteria as the research community needs "a trusted and reliable information resource that identifies good quality open access journals and filters out disreputable publishers" (Bjørnshauge 2013). The *DOAJ* plans to re-evaluate all journals it currently includes to ensure that they meet the new selection criteria. The indexing impact from this new criteria could be worthy of future study.

Language of publication may present an obstacle to the indexing of OA journals that do not include any publication in English. From the 47 journals indexed in the target databases, 41 journals (87 percent) published articles in English: 26 journals (55 percent) published only in English, while 15 journals (32 percent) published in multiple languages including English. Only six journals (13 percent) that published in languages excluding English were indexed, and of these, all were indexed in the communication studies databases. Criteria for journal inclusion within *Web of Science* favour journals with full-text in English (Testa 2012, 2). *Scopus* requires at minimum an English language abstract and an English language version of the journal homepage when a website is available (Elsevier 2012, 18).

Another element considered when evaluating journals for inclusion within *Scopus* and *Web of Science* is the geographical distribution of authors and editors (Elsevier 2012, 18; Testa 2012, 2). This may have been a factor with the 47 journals indexed in the target databases. In this study, European journals in communication studies accounted for 40 percent of the journals indexed in the target databases, while those journals originating from North America accounted for 21 percent. Journals from Asia, Oceania and Africa represented 23 percent of indexed titles, while those originating in Central and South American accounted for 15 percent.

There was no correlation in this study between the starting date of publication and journal indexing. The mean starting date for the 47 journals was 2006, while that for the remaining 100 journals was 2005.

Of the 147 journals in this study, the *DOAJ* indicated that 11 of the titles had article processing charges including two that were conditional. Of these 11 titles, seven were indexed in the target databases.

# **Conclusion**

A significant portion (32 percent) of the OA journals identified in this study was found to be indexed within the five databases targeted. Results confirm the utility of both communication studies databases and multidisciplinary databases within the field. Twenty-one percent of the journals were indexed in the two communication studies databases while another 11 percent were indexed only by the multidisciplinary databases. Data from *UlrichsWeb*, which suggest the importance of databases from other disciplines to the field of communication studies, could be an area for future study, as the source databases for these other disciplines would need to be checked directly.

As 68 percent of the OA journals in the study were not found to be indexed in the target databases, librarians may wish to advise researchers to supplement their searches in commercial databases by using alternative tools such as Google Scholar and or the *DOAJ* to increase the discovery and awareness of articles published within the gold OA journal literature of communication studies and help to contribute to the future viability of this publication model.

Table 1 Journals by Alternate DOAJ Subject

DOAJ Subject	Number of Journals
Computer Science	9
Education	2
Language & Literatures	1
Library Studies	3
Linguistics	1
Multidisciplinary	2
Performing Arts	6
Philosophy	1
Political Science	1
Psychology	1
Religion	1
Social Sciences	1
Sociology	1
Visual Arts	1

 Table 2
 Number of Journals Indexed by Database

Database	Number of Journals
Academic Search Complete	9
Communication Abstracts	16
Communication & Mass Media Complete	30
Scopus	20
Web of Science	4

 Table 3
 Journals Indexed by Type of Database

Database Type	Number of Journals
Communication studies	31
Multidisciplinary	24
Overlap	8

 Table 4 Unique Journals Indexed by Database

Database	Number of Journals
Academic Search Complete	3
Communication Abstracts	0
Communication & Mass Media Complete	14
Scopus	8
Web of Science	0

**Table 5** Journals in Non-Targeted Databases by Broad Subject Category of the Database

DOAJ Subject	Number of Journals
Business	3
Computer Science	3
Education	2
Film	4
Fine Arts	1
Languages & Literature	10
Library Science	2
Medicine	1
Music	3
Political Science	5
Psychology	1
Religion	1
Sociology	6

# Notes

- 1. Figures are based on data taken from the *DOAJ* on May 3, 2013, which reported that the *DOAJ* included 9,088 journals and that 4,632 of these were searchable at the article level.
- 2. Author's calculations based upon the total number of journals in the *DOAJ* classified in the following *DOAJ* subject categories: Arts & Architecture, History & Archaeology, Languages & Literature, Law & Political Science, Philosophy & Religion, Social Sciences. On May 5, 2013, there were 3,628 journals within these categories while the total number of journals listed in the *DOAJ* was 9,123.
- 3. Based upon author's examination of the 116 titles listed in the *DOAJ* under "Media and Communication" on May 3, 2013 to identify those searchable at the article level.
- 4. See note (1) above.
- 5. Journal ranking tools checked were: *Journal Citation Reports* (Thomson-Reuters 2011), *SJR-SCImago* (SCImago 2011), *EigenFactor.org* (University of Washington 2012), and the *ERIH Revised 2011 List* (European Science Foundation 2013).

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