



Measuring association populations using the *Encyclopedia of Associations*: Evidence from the field of labor unions [☆]

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Available online 10 August 2005

Abstract

Identifying populations of organizations has been a significant methodological challenge for scholars interested in examining various organizational dynamics. A common solution has been to rely upon a prior list or database of organizations. One such database on voluntary national organizations is the *Encyclopedia of Associations* (*EA*), a standard tool for sociologists and political scientists interested in associations. This paper compares coverage of labor unions as listed in the *EA* with information on the same universe of organizations taken from the US Department of Labor's Office of Labor-Management Standards (OLMS). Results indicate that 103 of 135 (76%) of unions listed in the DOL were also listed in the *EA*. Among unions with more than 5000 members, *EA* coverage was 91%. Coverage

[☆] This material is based upon work supported by the National Science Foundation under Grant No. 0111611. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation. We would also like to thank Bryan Jones, Frank Scioli, and Thomson/Gale Publications. Daniel Jones-White and several excellent Penn State undergraduate students helped to create the database on which this article is based; thanks to each of them as well.

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rose to 95% among those unions with more than 10,000 members. Finally, two measures of financial size show the vast majority of unions with either receipts or net assets greater than \$1,000,000 are included in the *EA*. The *EA* is therefore quite complete in coverage overall and appears to be nearly universal in its coverage of unions above even quite modest thresholds of organizational size and resources.

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Keywords: Organization population; Methodology; Selection bias; Labor unions

1. Assessing coverage in the *Encyclopedia of Associations*

With the expansion of organizational studies to the population and field levels (Hannan and Freeman, 1989; Scott et al., 2000), the crucial task of identifying the organizational members of the population of interest has presented significant methodological challenges. A common solution is to draw upon a preexisting registry of organizations within a bounded population (Fligstein and Brantley, 1992; Hannan and Freeman, 1987), often, but not always, enumerated by a governmental agency. These registries of organizations can either be used as a dataset unto themselves or as a sampling frame for doing more extensive organizational surveys. Regardless of the ultimate use, the critical element of any source of enumeration is its completeness of coverage (Kalleberg et al., 1990). In this article, we assess the coverage of one of the most widely used sources of national voluntary association sources in America, the *Encyclopedia of Associations* (*EA*). Specifically, we examine one section of the *EA*, labor unions, comparing it to the population of national labor unions identified by the Department of Labor. Drawing upon previous research on the selection bias of media coverage of protest events, we identify two possible sources of variation in coverage: size and location. The results indicate that although the *EA* does not cover all labor unions, its near complete coverage of larger organizations indicates its usefulness for scholars interested in large voluntary associations in America. We find no evidence of significant geographic bias in coverage.

The *EA* has become an increasingly important tool for scholars interested in studying the landscape of national voluntary organizations, from protest and advocacy groups (Minkoff, 1995), to lobbying organizations (Baumgartner and Jones, 1993). In addition to constituting a data source on features of these particular organization types, scholars have used the *EA* as a sampling frame to conduct surveys of individual organizations (Knoke, 1990). By supplementing our existing knowledge of how the *EA* has been used with keyword search of the full-text journal database *JSTOR*, we were able to determine that the *EA* has been employed in four distinct studies as a primary data source for analysis of interest groups (Baumgartner and Jones, 1993) voluntary associations (Lieberson and Allen, 1963; Zander, 1972) and social movement organizations (Minkoff, 1995, 1997), as well as a sampling frame of organizations in nine other studies

(Chittick, 1988; Dobbin et al., 1993; Knoke, 1990; Leighley, 1996; Lerner et al., 1989; Nall, 1967; Smith, 1992; Staber, 1987; Sutton et al., 1994).¹ This list indicates that the *EA* is not only possibly the single best record of national voluntary organizations in America, but that its utility is not limited by academic discipline.

The *EA* has been published regularly since 1956. Originally published by Gale Research, the directory is now published by Thomson/Gale, which makes the data available through library subscriptions on-line in the *Associations Unlimited* database and publishes an annual volume called the *Encyclopedia of Associations*. So far, 40 editions have appeared. Increasingly, scholars are turning to this data source for information about the associations present in various issue areas; it is widely used as a complete list of national associations in the United States. How accurate is it? What are any possible biases in the coverage of the *EA*? How well does the publisher do in compiling information from all those organizations which should be listed? These questions have rarely been addressed because there are few opportunities to compare this data source with any other. The uniqueness of the *EA* is both its greatest value and the cause of some ignorance about its value, ironically. We attempt to address some of these questions here in a limited way by studying the *EA*'s coverage of one type of group: Labor Unions.

Enumerating the entire population of a diverse group such as associations is a daunting task. The basic methodology employed by the *EA* is to contact new and existing organizations directly through a variety of means, including email, fax, and telephone, an approach used for gathering information from all organizational types, including labor unions.² Certainly, there is little reason to expect the *EA* to be perfectly complete in its coverage. Some groups may be active only for a short period of time. Others may be so small that they are not listed in phone directories. Others may not answer queries sent to them by the compilers of the *Encyclopedia* or have a web site from which the *EA* staff can compile information. And these problems may affect certain areas of the associational landscape more than others. Other studies have found significant difficulties in formulating complete enumerations of business firms and social movement organizations (SMOs) (Andrews and Edwards, 2004; Kalleberg et al., 1990). Unfortunately,

¹ In addition, the *EA* has been used in numerous studies as a supplemental data source (for examples, see Jenkins and Eckert, 1986; Lucig and Page, 1994).

² The following methodological description is taken directly from the Associated Unlimited's website: "An attempt is made to verify all entries on at least a yearly basis. This intensive effort includes several revision form mailings, as well as contact with the organizations through email, phone, fax, and other direct correspondence. Entries are also updated using information from the association's website or from other reliable secondary sources. New entries are added using data obtained from questionnaires completed by the associations, as well as data from association websites." Based on direct communications with the research staff at Thomson/Gale, it is clear that they use a variety of means including contacting the groups directly, reviewing publicly available sources of information; that these procedures have changed over time as new technologies such as the Web have become available; and also that the results achieved in the labor union field are not substantially at odds with those in the other sections of the *EA*. Gale's internal estimate is that "the *EA* covers about 90% of the universe for US-based nonprofit membership organizations that are national in scope" (Gale Research, 2005). We would add that based on our own review, this number may be lower for small and new organizations but higher for larger and more mature organizations.

assessing the coverage of the *EA* requires independently collected organizational censuses, which, for most organizational types included in the *EA*, do not exist.

One exception to this is labor unions. In 1959, with the passage of the Landrum-Griffin Act, Congress created the Office of Labor-Management Standards (OLMS), an agency within the Department of Labor charged with monitoring the activities of labor organizations in America. Labor unions operating in the United States and its territories are required by law to file annual financial disclosure reports with this office. These forms, which are available for public inspection, provide the basis of an annual OLMS database of unions that includes basic information, such as size, financial receipts, and location. In addition, it differentiates between national and local unions, which is essential as the *EA* enumerates only national organizations.³ (The database is available from the OLMS via their website: http://www.dol.gov/esa/olms_org.htm.)

The mission of the OLMS, therefore, provides a unique opportunity to systematically assess the *EA*'s coverage of one particular association type. Unfortunately, although the *EA* has been published since the 1950s, the OLMS updates its database annually and does not retain old versions of its database. We cannot, therefore, assess any trends in completeness in coverage over time, but limit ourselves here to a single year, 1999. To determine if particular labor unions identified by the OLMS were included in the *EA*, we compared the names of all unions in the *EA* to the list of national unions in the OLMS database. For nearly all unions, the names were identical or nearly so in both sources. In one instance, the *EA* failed to record a name change for a particular union that was the result of a merger. In this case, the new organization that appeared in the OLMS was coded as being included in the *EA*.

An initial comparison of the *EA* and OLMS indicates that the *EA* is a fairly complete census of national labor organizations. For the 135 national unions in the OLMS database, the *EA* included 103, or 76.3%. When compared to most other response rates, such as mail surveys, this level of coverage is very high. For organizational sampling frames, this coverage rate is very high. For example, Kalleberg et al. (1990) found that the White Pages provides the widest coverage, which includes approximately 73% of all firms.⁴ At first glance, therefore, the 76% coverage rate is a strong performance.

We can go somewhat further in assessing the characteristics of labor unions that make them more or less likely to be included in the annual volumes of the *EA*. Of course, one might expect larger, older, more resource-rich organizations would be most likely to be included whereas newer, smaller, and poorer organizations might be less likely. This would be similar to findings of various sociologists concerning

³ Labor unions in America have, for the most part, adopted a federated organizational structure, resulting in numerous local, state, regional, and national organizations. The OLMS has an explicit category of "national unions," which includes those organizations that have subordinate unions (regional and local) and do not perform functions typically associated with a local union, such as represent members at the shop floor. If this agency's criteria is more inclusive than the *EA*'s then it is likely that some of the variation in coverage discussed below could be due to different definitions of what constitutes a "national union." However, in general we believe that given the prominence of most national unions, including their geographic scope, that the discrepancy between the two sources is minimal.

⁴ This study focused on local organizations, which are more difficult to identify than national organizations included in the *EA*.

Table 1
Membership size by coverage in the *EA*

Covered in <i>EA</i>	Membership size		
	<5000	5000–10,000	>10,000
Yes	24 (50%)	8 (66.7%)	71 (94.7%)
No	24 (50%)	4 (33.3%)	4 (5.3%)
Total	48 (100%)	12 (100%)	75 (100%)

Pearson χ^2 : 32.96 $p < 0.001$.

newspaper coverage of protest events, for example. Recent work shows that large protests and strikes are much more likely to be covered than small ones, for example (McCarthy et al., 1996; Martin, 2005). In any case, membership size may be one important organizational characteristics related to the likelihood of being included in the *EA*.

Table 1 presents the relationship between coverage in the *EA* and organizational size.⁵ It is clear that size is significantly related to coverage for labor unions—nearly all unions with more than 10,000 members were covered, while only half of the smaller unions were included in the *EA*. This table indicates that the *EA* is a particularly complete source of information on larger organizations, though it may overlook a significant number of small national groups. If we collapse the two larger size categories, the coverage is still greater than 90%, indicating that once an organization reaches a certain size, its probability of coverage remains virtually unchanged. We should also note that a national labor union with fewer than 5000 members is a small union indeed, and the lack of coverage by the *EA* could be due in part to the OLMS's use of a broader criterion of a "national union." For all but the smallest unions, therefore, *EA* coverage is over 90 percent, quite a strong performance.

Along with membership, another measure of organizational size is the financial assets controlled by an organization, an important organizational demographic (Edwards and Marullo, 1995). The OLMS database includes two measures of financial size, total incoming receipts (which primarily includes dues, but also other income, such as rent), and net assets (which takes into account savings, loans, property owned by the union, and other assets and liabilities). Since the population of interest is national unions, which tend to be financially quite large, we compare coverage across these two measures using a threshold of \$1 million. Table 2 illustrates that both measures of financial size operate in a manner very similar to membership size—whether the metric is membership or financial resources, all but the smallest unions are highly likely to be listed in the *EA*. Coverage of unions was 89 percent for those with net income over \$1,000,000 and 91 percent for those with net assets above this figure.⁶ In all, the *EA* appears to give good coverage of national labor unions of

⁵ Interestingly, the size distribution of labor unions exhibits a sharp bifurcation between small and large organizations.

⁶ As one would expect, not only are the two financial measures highly correlated with one another (0.857), but they are also correlated above 0.6 with the 10,000 membership threshold measure.

Table 2
Financial size by coverage in the *EA*

Covered in <i>EA</i>	Receipts greater than \$1,000,000*		Net assets greater than \$1,000,000**	
	Yes	No	Yes	No
Yes	80 (88.9%)	23 (51.1%)	77 (90.6%)	26 (52.0%)
No	10 (11.1%)	22 (48.9%)	8 (9.4%)	24 (48.0%)
Total	90 (100%)	45 (100%)	85 (100%)	50 (100%)

* Pearson χ^2 : 23.67 $p < 0.001$.

** Pearson χ^2 : 25.92 $p < 0.001$.

Table 3
Union location by coverage in the *EA*

Covered in <i>EA</i>	Union location	
	DC	Outside DC
Yes	37 (84.1%)	66 (72.5%)
No	7 (15.9%)	25 (27.5%)
Total	44 (100%)	91 (100%)

Pearson χ^2 : 2.19 $p = 0.139$.

all types and achieves extremely high coverage, over 90 percent, for all such groups above even relatively modest thresholds of membership size and financial resources. These results should be reassuring to those using the *Encyclopedia* as a source of information of organizational populations. Of course, whether these findings relating to labor unions apply to other organizational fields is not certain. But the case of labor unions has been instructive because we can compare the *EA* with an official government source that is likely itself to be relatively accurate.

Social movement scholars have also noted the relationship between coverage and the proximity of the protest to the newspapers' physical location (Barranco and Wisler, 1999; McCarthy et al., 1996). Although this specific bias is less relevant for the *EA*, as it is national in scope, the *EA* may over-represent organizations in a specific geographic location. In particular, with the growth of lobbying activity in the US, it seems likely an increasing number of organizational headquarters are located in Washington, DC.⁷ Although only about one-third of all national labor unions are located in Washington, DC, if the *EA* has a particular focus in this area, we might expect these organizations to be over-represented in the *EA*. Table 3 indicates that this is not the case: while unions located in DC are more likely to be covered by the *EA* than unions located outside the capital, the discrepancy in coverage is quite modest.⁸

⁷ The Gale Group, which publishes the *EA*, is located in Farmington Hills, MI, a suburb of Detroit. There is, however, no evidence that unions in either Michigan or the greater Midwest were overrepresented in the *EA*.

⁸ Because the OLMS is treated as a full population of national labor unions, a significance test is not necessarily required, although it does provide a more conservative estimate of the *EA*'s pattern of geographic coverage.

The findings presented here have important implications for scholars interested in using the *EA* either as a source of data on national organizations or as a sampling frame for a more detailed data collection project. First, the high overall coverage rate (above 75%) indicates that, overall, the *EA* is capturing most national labor unions in existence today. Second, it is evident that size shapes coverage as larger unions, measured by both financial and membership size, have a significantly higher probability of being included than their smaller counterparts. Among largest membership unions, fully 95% are covered. Finally, the lack of a strong relationship between Washington, DC headquarters and coverage reassures us that coverage is truly national and not limited only to those in the national capital. Of course, the reader should keep in mind that all of these conclusions are based upon analyzing one section of the *EA*, and may not be generalizable to other subpopulations of organizations. Because the methodology employed by the *EA* is consistent across association types, findings should be generalizable to other organizational fields included in the *EA*. One potential caveat is that the population of labor unions may be more stable than other organizational types, and fields with more new members in any given year might be more difficult to enumerate. Regardless of how the results presented here might apply to other organizational fields, this comparison of the *EA* and the OLMS does provide initial evidence that the *EA* covers the vast majority of national unions in existence today and that its coverage of large union organizations is virtually universal. These findings both support the prior use of this data source and, given the diversity of organizational populations covered in the *EA*,⁹ offer numerous research opportunities for scholars in various fields.

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⁹ In addition to labor unions, the *EA* covers the following organization populations: Social Welfare, Athletic, Hobby and Vocational, Public Affairs, Fraternal, Professional, Trade, Health, Educational, to list just a few. The 2005 edition of the directory includes over 22,000 organizations overall.

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