

ACCOMMODATION TO PERSONS WITH DISABILITIES: A CENSUS OF OHIO COLLEGE AND UNIVERSITY LIBRARIES

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The Americans with Disabilities Act (Public Law 101-336) was signed into law on July 26, 1990 and took effect on January 26, 1992. This law, the most sweeping civil rights legislation since the 1964 Civil Rights Act and the 1973 Rehabilitation Act, has far-reaching ramifications for libraries. In a census of Ohio's 134 college and university libraries, data was gathered on the types of accommodations which have been made in Title II (Public), Title III (Private) and Title IV (Communication services and auxiliary aids) with respect to access, auxiliary aids and services, restroom facilities, signage, and staff and policymaking. Hypotheses regarding the effects of library characteristics such as type of school, new/old building, single/multi-storied building, and staff with disabilities were tested. Whether the institution was private or public was by far the most differentiating factor in the institutions' levels of accommodation. Whatever the cause may be behind this difference (funding, demand, etc.), these findings should be a vital consideration to policymakers.

INTRODUCTION

The Americans with Disabilities Act (ADA) was enacted on July 26, 1990, as Public Law 101-336, by President George Bush. The act was designed to provide comprehensive civil rights protection to individuals with disabilities in the areas of employment, public accommodations, state and local government services, and telecommunications.

The ADA gives civil rights protection to the estimated 20% of the population with disabilities with respect to discrimination that are analogous to those provided to individuals on the basis of race, color, national origin, sex, and religion. In doing so, it combines elements drawn principally from two key civil rights statutes: the Civil Rights Act of 1964; and Title V of the Rehabilitation Act of 1973. On July 26, 1991 the Department of Justice (DOJ), the implementing agency for both Title II and Title III of ADA, issued regulations and interpretive guidelines—the *Americans with Disabilities Act Handbook*.

The ADA is divided into four parts. Title I is a federal anti-discrimination statute designed to remove barriers which prevent qualified individuals with disabilities from enjoying the same employment opportunities that are available to persons without disabilities. Title II prohibits public entities from discriminating on the basis of disability in services, programs, or activities. This prohibition applies to all state and local governments. It extends the prohibition of discrimination in federally assisted programs established by section 504 of the Rehabilitation Act of 1973 to all activities of state and local governments, including those that do not receive Federal financial assistance. Title III prohibits discrimination on the basis of disability by private entities in places of public accommodation. It requires that all new places of public accommodation and commercial facilities be designed and constructed so as to be readily accessible to and usable by persons with disabilities. Also, courses for examinations related to licensing or certification for professional and trade purposes are required to be accessible to persons with disabilities. Title IV addresses the area of providing communication services and auxiliary aids.

The passage of the ADA has resulted in changes which affect all places of public accommodation, including libraries. While the ADA does not set rules for compliance, it does provide guidelines for organi-

zations and institutions to follow. These guidelines state that Title II service providers (e.g., public colleges or universities) and Title III service providers (e.g., private colleges or universities) make “reasonable accommodations” for persons with disabilities and to make “readily achievable modifications” to accommodate persons with disabilities.

Since the ADA took effect on January 26, 1992, libraries, as public entities, have been required to take action on these guidelines. However, what is meant by “reasonable accommodations” and “readily achievable accommodations” is a point of controversy and confusion. The purpose of this research study is to determine the types of reasonable and readily achievable accommodations libraries have made in the areas of access, auxiliary aids and services, restroom facilities, signage, and staff and policymaking by conducting a survey of the 134 college and university libraries in Ohio.

For this study, ADA Guidelines for Title II (public entities), Title III (private entities) and Title IV (communication services and auxiliary aids) were used. Title I (employment) was not included as a part of this study. The data gathered in this study was then analyzed for the following purposes: 1) to gain a better understanding of the extent to which libraries have made accommodations for persons with disabilities; and 2) to the degree they have not been met, offer preliminary observations as to potential correlates of this non-accommodation.

LITERATURE REVIEW

A great deal of the literature has focused on helping libraries and other entities understand the Americans with Disabilities Act and on developing prescriptions for compliance with the ADA. Some of these efforts have consisted of question and answer forums to help librarians focus on the various aspects of their facilities which require attention (Gunde, 1991; 1992). Other works have described the ADA, detailing its different facets and their applicability to public and private academic libraries (Park & Foos, 1992). In addition, the expertise of lawyers has also been utilized to understand more completely the ramifications of the ADA and to offer suggestions of ways to comply (Laurie, 1992; Miller, 1992). Other work has focused on highlighting the work of a given institution in accommodating persons with disabilities (Jax & Muraski, 1993).

Most of the literature pertaining directly to the responsibility of libraries in complying with the ADA has focused on explaining the law and providing prescriptions for more complete compliance. An example of this prescription is Norton (1992) who has examined adapting bibliographic instruction (BI) for deaf or hearing impaired patrons. Norton outlines the adaptations which are necessary (e.g., special BI classes, increased use of written as opposed to orally presented materials) to meet the needs of deaf and hearing impaired patrons. Despite these studies, recent bibliographies indicate that the majority of work in library science on ADA compliance remains in a formative stage and has not progressed to evaluating ADA compliance and factors which affect it (Bray, 1992).

This study will address these deficits in the study of the effect of ADA on libraries. However, there has been work in other areas of ADA compliance apart from that directly affecting libraries. In this study of the degree of accommodation with the ADA by college and university libraries in Ohio, as well as the factors which may be associated with this compliance, some of the aspects of these research studies can be integrated. These aspects of previous work include methodology, intervening factors affecting compliance, and statistical analysis.

The dominant methodology to assess the degree of compliance or of accommodation is survey methodology.¹ Surveys have been used to measure the extent to which primary and secondary schools are complying to ADA (Reinert, 1994), as well as to measure compliance by universities in general—beyond the role of the library (Senge, 1993; Fornadel, 1994; Scoggins, 1993). In keeping with this prior research, a survey was utilized to collect data on accommodation with the ADA by college and university libraries in Ohio.

Other studies have used different populations for their respondent groups. In his study, Fornadel (1994) surveys the ADA Compliance Officer at each public college or university in the entire United States. A survey of Compliance Officers was considered for this project, however, this survey population was ruled out, in part because available resources limit this research only to Ohio, and because not every college and university library in Ohio had a Compliance Officer.

Not only has previous work illustrated that survey methodology is appropriate for this research, but it also has provided insights into some of the factors which may affect the libraries' degree of accommodation. In general, the two most-cited barriers to full compliance are the costs involved in removing these barriers and the size of the institution. In examining the extent to which school systems (primary and secondary) in Nebraska are complying with the Act, Reinert (1994) finds that the size of the school affects the degree of compliance. Jaschik (1993) also indicates, in exploring college and university administrators' attitudes towards the Act and its effect on their institutions, that the cost of compliance is a key aspect. These administrators see the cost in removing the barriers to compliance as an important facet in their decision-making process as they deliberate on their reactions to the ADA.

Finally, research to date sheds light on appropriate statistics to utilize in analyzing the data. In general, when assessing the extent to which entities have complied with the ADA, descriptive statistics (e.g., mean, median) are most often used. However, in exploring the various factors which may be covariant with compliance, inferential statistics measuring association are used (e.g., Chi-square and difference of means). These statistics helped to assess whether factors such as size of the institutions and/or cost of barrier removal are associated with compliance in a statistically significant manner.

In summary, this review of the literature has shown that research on the impact of the ADA on libraries is limited to writings explaining the law and the responsibilities of libraries toward compliance. The relatively scarce work describing compliance does not go far beyond case studies of a single school's compliance in a few areas of the library. There has been more work done in areas beyond library science in measuring compliance and enumerating factors which may affect it. This work points to the applicability of survey methodology, the possibility of costs and size of institution acting on the degree of compliance, and the use of several statistics in disentangling the effects.

RESEARCH OBJECTIVES

The purpose of this research study is to compare the ways the 134 college and university libraries in Ohio have made accommodations to persons with disabilities. Several different categories of library accommodations were examined to determine the types of reasonable and readily achievable accommodations that have been made: access; auxiliary aids and services; restroom facilities; signage; and staff and policymaking.

This research study describes the extent to which the college and university libraries of Ohio are meeting the minimum standards of compliance with the ADA and to examine characteristics of the libraries which might cause differences in accommodation. First, in measuring the minimum standards of compliance, this study measures the extent to which libraries have achieved the "easiest" accommodations. The survey instrument (see Appendix) has measures of compliance adapted from *The Americans with Disabilities Act: Title III Technical Assistance Manual* (1992). This publication indicates those steps towards full compliance with ADA which should be readily achievable.

Second, beyond describing the reality of any one library's adaptation to the needs of people with disabilities, the different characteristics of the libraries which might be associated with differences in accommodation were examined. Based on previous library experience, it was suspected that the degree to which all college and university libraries in Ohio provide accommodation varies across library types. In this study, an initial attempt to examine different characteristics of the libraries which might be covariant with accommodation is also provided.

There are several factors which could effect meeting the minimum standards of accommodation: 1) public versus private institutions; 2) whether or not the library was constructed before or after the ADA was enacted; 3) the extent to which the physical facilities exacerbate accessibility issues; and 4) whether or not there are any staff with physical disabilities. Based on personal experiences, it would be expected that private colleges and universities, which can control somewhat the types of students they admit, will be less accommodating to persons with physical disabilities. Public institutions, whose funding is primarily out of public monies, may well feel a greater need to be more ADA compliant than do private institutions. It is possible that buildings which were built after ADA was enacted are more likely to have made accommodations to persons with disabilities. Also, where the physical facilities augment accessibility problems (e.g., where there are multiple floors), there may be a greater likelihood of accommodation. Finally, it is expected that a library that has accommodated a staff person with a physical disability will also be likely to accommodate a patron with a physical disability. This study attempted to confirm that these factors affect minimum standards of accommodation across college and university libraries in Ohio by testing the following hypotheses:

H₁: Public college and university libraries will be more likely to accommodate patrons with physical disabilities than private college and university libraries.

H₂: Libraries which are built after ADA was passed will be more likely to make accommodations to persons with disabilities.

H₃: Libraries which have more than one floor will be more likely to make accommodations to persons with disabilities than single-level libraries.

H₄: College or university libraries which have staff with physical disabilities will be more likely to accommodate patrons with physical disabilities.

Accommodation, school type, age of building, number of floors, and existence of staff with physical disabilities are measured with questions from the survey instrument.

METHODOLOGY

A census of college and university library directors in the state of Ohio was conducted to determine the degree to which libraries accommodate persons with disabilities and how the characteristics of the libraries and their schools or universities affect these accommodations.²

The population for this study is the college and university library directors from the state of Ohio as determined by the *Directory of Ohio Libraries*, 1995 edition.

Library directors were selected because they would be able to provide the most complete information on all aspects of their respective libraries under study. Originally, it was intended to select the librarian in charge of ADA compliance, but not every library has a person specifically designated for this. For consistency, the director of each library was chosen. The ADA bill is complex and even if different library individuals or committees are in place to discuss aspects of library services (e.g., reference, circulation) these individuals or committees would likely convey their conclusions to the library director.

Of the entire population of 134³ Ohio college and university library directors used for this study, 97 (72.4%) completed the survey.

PROCEDURES AND DESIGN

In order to demonstrate the reliability of the survey instrument, elements were re-phrased and repeated within the survey to determine that key aspects of the information confirmed the hypotheses.

The survey instrument for this study was mailed on October 1, 1995. The packets included a cover letter and the actual questionnaire. Included in the mailing was a stamped, self-addressed return envelope in order to increase the response rate. To help reduce the rate of non-response, two and a half weeks after the first mailing (October 18, 1995) a second cover letter and questionnaire were mailed, along with a stamped, self-addressed return envelope, to those who had not yet responded. The questionnaire was identical to the first one mailed, and the cover letter reminded the subject that the first letter and questionnaire were mailed on October 1. If after these two attempts a response was still not received, it was assumed that the respondent chose not to participate in the study.

In order to maintain the confidentiality of this study, the only identifier was a coding number on the back of the envelope. If a second questionnaire was sent in an attempt to persuade a respondent to participate, the same coding number was used. Respondents were told in the cover letter that their responses were confidential, that their responses were for research purposes only, and that their names would never be used or in any way associated with the results.

DATA ANALYSIS

A PROFILE OF ACCOMMODATION

The extent to which college and university libraries in Ohio have made accommodations to persons with disabilities varies considerably, both in terms of the kinds of changes they have made and in the degree of their efforts. This section will detail the amount of accommodation made in each of the six different areas (access; auxiliary aids and services; restroom facilities; signage; and staff and policymaking).

To facilitate the discussion of the extent to which libraries have made accommodations to persons with disabilities, questions within each of the categories of accommodation have been collapsed into scales. Table 1 details, within each of the six categories of accommodation, which questions comprise each of the ten scales. Factor analysis was used to help guide the choice of question grouping. That is, within each of the six categories, questions that belonged together substantively were entered into a factor analysis. The solution was then examined and final judgements made as to which items belonged together in a scale. As a final check on the reliability of the scale, a Cronbach's Alpha statistic was generated for each of the ten scales. For each, the alpha attained acceptable levels.⁴

Once the choice of items in each scale was made, the scale was created. Since the survey questions are bivariate, each question eliciting a positive, or "yes", response received one point. These points were totaled across all the items in the scale and then divided by the total number of items in the scale. For each of the ten scales, this results in scores which are proportions of accommodation rendered. That is, each of the scores varies from 0 to 1.0, where 1.0 indicates the highest level of accommodation.

Table 1 also provides information about the average (mean) score for each of the scales as well as the median score. This is so that a "typical" library can be described. Missing data was excluded listwise; if a respondent did not answer a question among those in a scale, the respondent was removed from the calculation of that particular scale.

Access. Among the six different categories of accommodation the greatest accommodation generally made was in the area of physical access. Of the ten scales created to measure accommodation efforts across the six categories, the average library scored .662 on the access scale. Table 1 compares the mean scores for each of the ten accommodation scales. This table represents how the average library scored on each of the ten measures.

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TABLE 1. ACCOMMODATION SCALES

	Scale Name	Description	Mean	Median
Access	ACCESS	Accessibility to the building (v12 v13 v14 v18 v19)	0.662	0.8
Auxiliary Aids	AUDNET	Availability of audio forms of internet services (v33 v34 v35 v36 v37 v38)	0.079	0
	TDD	Availability of TDD services (v29 v30 v31)	0.034	0
	READ	Availability of manual magnification devices (v32 v40)	0.242	0
	MAGNIFY	Availability of electronic magnification devices (v39 v41)	0.214	0
	PHOTO	Availability of photocopying and paging services (v47 v48)	0.819	1
Restrooms	RESTROOM	Accessibility of restroom facilities (v57 v58 v59 v60 v63 v64 v66 v68)	0.42	0.5
Signage	SIGN	Accessibility of library signage (v74 v75 v76 v77 v78)	0.286	0.2
Staff	STAFF	Existence of staff for persons with disabilities (v1 v2 v79 v80 v81)	0.353	0.4
Policy	POLICY	Existence of policymaking sensitive to persons with disabilities (v6 v7 v8)	0.511	0.667

The relatively high mean on the access scale is indicative of the 30% of all libraries that answered yes to three of the five items in the access scale, and the 54% of libraries which said yes to four out of the five items. (This access score is comprised largely of questions dealing with access to the building itself, in terms of ramps, parking spaces, and curb cuts.)

In contrast to the relatively large portion of libraries which have made access to the building easier, responses to three specific items stood out as overwhelmingly negative: the use of levers for exterior doors; levers for interior doors; and existing doors being widened with offset hinges. A majority of respondents said their library did not have these features (71%, 77%, and 77% respectively).

Access to public phones was slightly more available to persons with disabilities. Almost half of the respondents (49%) said that they had lowered at least one telephone to make it accessible to persons with disabilities.

Auxiliary Aids and Services Interestingly, with the exception of access to photocopying services, auxiliary aids and services were the least accessible to persons with disabilities. As Table 1 demonstrates, four out of the five scales measuring compliance in auxiliary aids and services had the lowest average scale scores (TDD availability, audio access to Internet services, manual magnification devices, and electronic magnification devices).

The average library had only one of the three items that comprise the TDD scale, as reflected in the mean of .034. The largest percentage (94%) had none. Also, most libraries have neither policies to purchase closed captioned videotapes (86%), nor closed captioned decoders (90%).

Similarly, 81% of all libraries did not provide Internet services in audio form. A great many had neither collections of large print books (96%) nor did they provide audio cassette copies of printed books from the collection.

Libraries provided relatively greater access to magnification aids (both manual and electronic). In terms of access to manual magnification devices, the majority of libraries had neither item in the scale, but a fair percentage (37%) had at least one. The slightly higher average score on the scale measuring electronic magnification device availability reveals that a substantial percentage (13%) answered yes to both items in that scale.

Most of the libraries (65%) responded that bibliographic instruction is not taught in special computerized classrooms. Also, many (96%) did not have a special disabilities services room.

Just over half of the libraries did not have workstations established for persons with disabilities (51%). However, of those that did respond that they had such stations, an overwhelming percentage (84%) responded that persons with disabilities have first priority to use the stations.

Interestingly, access to photocopying and/or paging services was the highest across all ten scales. A clear majority (73%) responded that library policy had both the reserve and reference staffs photocopying and paging materials for persons with disabilities.

Restroom Facilities In general, libraries showed moderate accessibility for persons with disabilities to restroom facilities. The typical library had four out of the five items that comprise the restroom scale, as represented by the mean RESTROOM score of .420. Some (11%) even had all eight of the items that were captured by this measure.

Having full-length mirrors was less common. Libraries responded that 87% of men's restrooms and 69% of women's restrooms did not have these features.

Also, many sink pipes had not been insulated to protect persons with physical disabilities. For example, the heat generated from hot water pipes poses a risk of burns to people in wheelchairs. Responses indicated that 85% of men's restrooms and 84% of women's restrooms did not have insulated pipes.

Finally, most libraries have not put paper cups at inaccessible water fountains. Ninety-three percent responded that they had no such paper cup dispensers.

Signage. Libraries were also asked a series of questions regarding the signs posted within the facility. Generally, signs were not made visible to persons with disabilities. The typical library responded that they had only one of the five items that comprise the signage scale, a mean score of .286. Twenty-five percent said they had none.

Staff and Policymaking In general, libraries scored relatively high on the scales that measure both the existence of staff geared toward persons with disabilities and the extent to which persons with disabilities have been taken into consideration in the policymaking process. As Table 1 shows, typical libraries have two out of the five items that comprise the staff scale, a mean score of .511. Many (16%) have three out of the five items.

A full 50% have two out of the three items in the policymaking scale. This suggests that, to a certain extent, the needs of persons with disabilities have been considered in making university and library policy. In fact, almost half of the respondents (48%) said that the library was consulted before changes were made.

Despite the degree of accessibility to the different areas and services within the libraries, there were not very many staff members (either degreed or non-degreed) who had disabilities. Table 2 displays these results. With regards to the degreed staff with physical disabilities, most were disabled in mobility (six cases), while some had hearing disabilities (four cases). In contrast, all but two cases of non-degreed staff had mobility disabilities.

Table 2 also shows the distribution of staff members with disabilities across the various library departments. Within the ranks of the degreed staff with disabilities, most were in reference services. Among non-degreed staff, the distribution was more even. Three cases each were in interlibrary loan and reference; two cases each were in administration, cataloging, and periodicals.

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TABLE 2. STAFF WITH DISABILITIES

	Degreed	Non-degreed
Sight	2	1
Hearing	4	1
Mobility	6	9
Acquisitions	2	1
Administration	0	2
Archives	1	0
Cataloging	2	2
Circulation	2	1
Government Documents	0	0
Interlibrary Loan	1	3
Bibliographic Instruction	2	0
Periodicals	2	2
Reference	7	3
Reserves	2	1
Other	1	1

TABLE 3. ACCOMMODATION BY TYPE OF SCHOOL

Scale	Private School Mean	Public School Mean	t
ACCESS	0.659	0.679	0.601
AUDNET	0.015	0.145	0.003
TDD	0	0.07	0.043
READ	0.136	0.354	0.003
MAGNIFY	0.233	0.198	0.545
PHOTO	0.83	0.796	0.625
RESTROOM	0.39	0.483	0.295
SIGN	0.241	0.339	0.079
STAFF	0.265	0.449	0.001
POLICY	0.427	0.615	0.01

Indicates statistically significant differences

In general, the previous descriptions indicate that there were some areas of the library in which there has been a fair degree of accommodation. Photocopying services and access to the buildings stand out in this regard. However, there are many other areas of the libraries where accessibility was not widely provided to persons with disabilities. Next, the extent to which the level of accommodation is differentiated by characteristics of the libraries is examined.

HYPOTHESES TESTING

Type of school. One of the hypotheses was that public schools would be more likely than private schools to provide accommodation to persons with disabilities. To test this proposition, a difference of means test was performed to see if the difference between these two groups' mean scores on each of the scales of accommodation was statistically significant.


Several of the scales were differentiated by school type. As Table 3 shows, the availability of the following differed significantly between private and public schools: audio Internet services; TDD services; electronic magnification devices; signage; staffing; and policymaking. Across the board, the hypothesis was confirmed: public schools were significantly more likely to provide these services than were private schools.

New/old building. Another hypothesis was that newer buildings, especially ones built after the ADA was passed in 1992, would have a higher likelihood of providing disabilities services. However, there was much less evidence in support of this hypothesis. As one can see from Table 4, only the accessibility of library signage evidences any significant difference between old and new buildings.

Single vs. Multi-floor buildings. Another hypothesis was that where the library structure provides greater challenge to some persons with disabilities, compliance will be greater. In this regard it was expected that multi-floor buildings would show greater accommodation, especially in access to the building. As Table 5 shows, there is some evidence to support this hypothesis. Access to the building varies significantly with whether or not the building has one or more floors; libraries in multi-floor buildings have greater access. Additionally, at relaxed levels of statistical significance, accessibility of library signage also varies by single vs. multi-floor buildings. Again, multi-floor buildings are more likely to have better compliance with sign accessibility.

TABLE 4. ACCOMMODATION BY AGE OF BUILDING


Scale	New Building Mean	Old Building Mean	t
ACCESS	0.7	0.665	0.582
AUDNET	0.125	0.078	0.551
TDD	0	0.038	0.589
READ	0.25	0.25	1
MAGNIFY	0.25	0.212	0.714
PHOTO	0.929	0.803	0.327
RESTROOM	0.542	0.422	0.423
SIGN	0.55	0.276	0.028
STAFF	0.433	0.347	0.427
POLICY	0.444	0.515	0.675

 Indicates statistically significant differences

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TABLE 5. ACCOMMODATION BY NUMBER OF FLOORS

Scale	1 Floor Mean	1+ Floor Mean	t
ACCESS	0.59	0.687	0.034
AUDNET	0.121	0.061	0.206
TDD	0.063	0.023	0.291
READ	0.167	0.272	0.195
MAGNIFY	0.25	0.199	0.413
PHOTO	0.796	0.828	0.668
RESTROOM	0.456	0.407	0.622
SIGN	0.226	0.31	0.16
STAFF	0.374	0.344	0.646
POLICY	0.556	0.496	0.485


 Indicates statistically significant differences

Staff with disabilities. The final hypothesis was that libraries which have staff members (degreed or non-degreed) with disabilities will be more likely to accommodate patrons with disabilities. As Table 6 demonstrates, there is limited evidence that this is the case. Only audio access to Internet services and accessibility of library signage are differentiated by having staff with physical disabilities or not. Even the difference between the groups on these scales is significant only at levels far below conventional levels.

In general, the greatest differentiating factor in whether or not libraries make accommodations to persons with disabilities is the type of school. The likelihood of public schools showing greater compliance was both stronger than other potentially influencing factors and had an impact across a greater portion of the different scale measures.

TABLE 6. ACCOMMODATION BY STAFF WITH DISABILITIES

Scale	No Disabled Staff Mean	Disabled Staff Mean	t
ACCESS	0.667	0.648	0.683
AUDNET	0.094	0.024	0.177
TDD	0.04	0.018	0.576
READ	0.237	0.262	0.775
MAGNIFY	0.2	0.262	0.371
PHOTO	0.833	0.763	0.399
RESTROOM	0.481	0.427	0.929
SIGN	0.265	0.358	0.143
STAFF	0.357	0.338	0.784
POLICY	0.497	0.576	0.404

 Indicates statistically significant differences

SIGNIFICANCE AND CONCLUSION

This study provides insight into how well Ohio college and university libraries have made accommodations for individuals with disabilities. The ADA indicates that approximately 20% of the population is recognized as having a disability. With college and university enrollment declining and more individuals with disabilities being “main-streamed” into society, the number of college and university students with disabilities will fill-in this declining “traditional” student population.

Although college and university libraries will continue to make strides in accommodating persons with disabilities, thus causing this research to be out-dated quickly, it is still important to provide a baseline by which other research studies can determine how rapidly changes are occurring.

Further research needs to include investigation into accommodations made by other types of libraries (i.e., public, school, and special). One might suspect that the degree of accommodation across these types of libraries might vary. In addition to concerns about including studies of other types of libraries, presumably libraries will continue to make their facilities more available. In this light, it will be important to reassess the degree to which they have complied with the ADA. A similar study to this one should be undertaken every three to five years.

Finally, this work helps us to understand accommodation to the ADA in Ohio only. In order to have a basis on which to compare Ohio to the rest of the country, it would be necessary to undertake similar studies in other states. In this way we can know more precisely the adequacy of the job Ohio college and university libraries are doing.

NOTES

- ¹ In this study, rather than measuring compliance (which involves a strict legalistic interpretation of the ADA), the focus is on accommodation. That is, the investigation of the more minimal steps libraries have taken **toward** full compliance with the Act.
- ² When the *Directory of Ohio Libraries* listed head librarian instead of library director these head librarians were surveyed.
- ³ Within the *Directory of Ohio Libraries*, there are actually 136 libraries. However, Denison University was omitted from this study, given their involvement in the circulation of the materials. Additionally, one respondent was director of two libraries, which she indicated were in a joint facility. Thus, the total number of libraries surveyed is 134.
- ⁴ The Cronbach's Alpha statistic measures the extent to which individual items in unidimensional scales belong in the same scale. Using this tool, researchers can examine whether each component adds to or detracts from the reliability of the scale itself.

APPENDIX—SURVEY INSTRUMENT

Due to the length of the survey questionnaire, it has been included in a separate document.

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