

# Effects of geographic factors on the education and training of health sciences librarians in the mid-Atlantic states

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## OBJECTIVE

Investigate potential relationships between the geographic location of health sciences librarians' graduate education and training, native place of residence, and their subsequent employment and continuing education, in order to assess demand for HSL education within the region.

## RESEARCH QUESTIONS

- Where did librarians employed in (and native to) the mid-Atlantic states earn their professional degrees?
- Do a significant proportion of natives leave the region specifically to earn professional degrees and then return for employment?
- After they earn their degrees and are employed in an HSL, where do librarians receive continuing education and training?

## METHODS

- Web-based survey instruments and online content analysis of Information and Library Science (ILS) program web sites.
- Subjects: Approximately 394 health sciences librarians holding the M.L.S. or related degrees from 29 Association of Academic Health Sciences Libraries (AAHSL) member libraries in the mid-Atlantic states.
- Data sources: ILS program web sites; MLA's resource of health sciences librarianship courses in ALA-accredited programs; AAHSL 2001-2002 statistics.

## SURVEY CODEBOOK EXCERPTS

Nativity Attributes [N1...Nn]	Data Type	Units	Input Type	Question
<i>Demographic</i>				
N1. State_birth	nominal	state code	menu	In what state were you born? [option for not born in US]
N2. State_resides	nominal	state code	menu	In what state do you currently live?
N3. States_lived_num	interval	integer	menu	How many states have you lived in?
N4. Countries_lived	interval	integer	menu	How many countries have you lived in?
N5. State_longest	nominal	state code	menu	In what state have you lived the longest?
N6. State_home	nominal	state code	menu	What state do you consider to be your "home" state? (this is not necessarily the state where you currently live, but the state where you would most like to live) [include option for no home state]
N7. States_lived_list	nominal	state code	menu	Please select all of the states in which you have lived [10 pull-down lists of states + text box]
N8. States_lived_prox	nominal	0 = no, 1 = yes	calculated	[from States_lived_list] If respondents have lived in multiple states, were they all within the [region] region? [for geo-mobility weighting]
N9. States_worked	interval	integer	menu	How many states have you worked in?
<i>Professional Education</i>				
N25. MLS_birth_state	nominal	0 = no, 1 = yes	calculated	Earned MLS in birth state?
N26. MLS_in_birth_region	nominal	0 = no, 1 = yes	calculated	Earned degree in non-birth state within birth state region?
N27. MLS_birth_neighbor_region	nominal	0 = no, 1 = yes	calculated	Earned degree in non-birth state within neighboring region?
N28. MLS_birth_far_region	nominal	0 = no, 1 = yes	calculated	Earned degree in non-birth state outside neighboring region?

Education Attributes [E1...En]	Data Type	Units	Input Type	Question
<i>Professional Education</i>				
E7. Earned_MLS	nominal	0 = no, 1 = yes	radio	Have you earned an MLS degree or equivalent? (If No, skip to question n.)
E8. MLS_year	interval	years	pulldown list	What year did you earn your MLS?
E9. MLS_institution	nominal	institution name	scroll list	What institution is your MLS degree from? [Scroll box has in-region schools at top; additional text box for others not listed]
E10. MLS_state	nominal	state code	calculated	[MLS degree state]
E11. MLS_region	nominal	region code	calculated	[MLS degree region]
E12. MLS_specialization	nominal	specialization name	text box	What was your specialization (if any)?
E13. HSL_intern	nominal	0 = no, 1 = yes	check boxes	Did you have an internship (or similar kind of training experience) in a health sciences library during [check] or after [check] your MLS education?

Work Experience Attributes [J1...Jn]	Data Type	Units	Input Type	Question
<i>General</i>				
J1. First_MLS_job	nominal	0 = no, 1 = yes	radio	Is your current job your first job since earning your MLS?
<i>Library Experience</i>				
J2. Cum_prof_exp	interval	years	menu	How many years of professional library experience do you have in total? (all types of libraries, but only post-MLS experience)
J3. Cum_libs_worked	interval	libraries	menu	How many different libraries have you worked in as a professional? (all types of libraries, but only post-MLS experience)

Distribution of AAHSL Libraries and Professional Personnel by State

States	HSLs	% of Total	Personnel*	% of Total
Delaware	0	0.00	0	0.00
Maryland	3	7.89	60	15.23
New Jersey	1	2.63	31	7.87
New York	13	34.21	177	44.92
Pennsylvania	7	18.42	70	17.76
Virginia	2	5.26	27	6.85
Washington, DC	3	7.89	29	7.36
<b>Total</b>	<b>29</b>	<b>100.00</b>	<b>394</b>	<b>100.00</b>

Data source: 2001-2002 AAHSL statistics, Table 25.4: Personnel  
 \*Rounded to nearest whole FTE.

## MEASUREMENT CONCEPTS

### 1. Nativity

- Where (geographically) subjects have lived, attended school, and worked.

### 2. Mobility

- Geographic Mobility ( $M_g$ ) =  $N1 + N2 + N3 + N4 + N5 + N6 + N8$
- Educational Mobility ( $M_e$ ) =  $E5 + E10 + E19 + E24$
- Job Mobility ( $M_j$ ) =  $N9 + (J3 / J2)$
- Aggregate Mobility ( $M$ ) =  $M_g + M_e + M_j$

### 3. Proximity

- A measure of how far subjects have moved geographically from their native states for education and work.

ALA-accredited Information and Library Science Programs by State

State	College / University	ILS Program	Specialization	Courses	Internships
Maryland	University of Maryland, College Park	College of Information Studies	Health Sciences Information concentration	LBSC 756: Information Access in Science and Technology; LBSC 762: Indexing and Abstracting Sources in the Health Sciences	
New Jersey	Rutgers, the State University of NJ	School of Communication, Information and Library Studies		17.610.542: Information Resources in Science and Technology; 17.610.545: Information Resources in the Health Sciences	
New York	Long Island University	Palmer School of Library and Information Science		LIS 604: Science and Technology Sources and Services; LIS 607: Health Science Sources and Services; LIS: 749 Health Sciences Libraries	
New York	Pratt Institute	School of Information and Library Science	Health/Medical concentration	LIS 614: Reference Materials and Services in Health Sciences; LIS 624: Online Databases in the Health Sciences; LIS 685: Medical Librarianship	
New York	Queens College, CUNY	Graduate School of Library and Information Studies		713: Information Sources and Service: Science and Technology; 784: Health Sciences Librarianship	
New York	St. John's University	Division of Library and Information Science	Double master's program M.L.S. & M.S. in Pharmaceutical Sciences (for drug information specialization)	LIS 252: Information Sources in Science & Technology; LIS 256: Medical Information and Librarianship	
New York	SUNY Albany	School of Information Science and Policy		ISP 645: Information Sources in the Sciences; ISP 647: Health Sciences Information and Communications Systems	
New York	SUNY Buffalo	Department of Library and Information Studies / School of Informatics		LIS 515: Information Sources and Services in the Sciences; LIS 586: Health Science Librarianship	
New York	Syracuse University	School of Information Studies		IST 606: Scientific and Technical Information; IST 609: Biomedical Information Services & Sources	
Pennsylvania	Clarion University of Pennsylvania	Department of Library Science		LS 556: Bibliography of the Sciences	
Pennsylvania	Drexel University	College of Information Science and Technology		INFO 648: Healthcare Informatics; INFO 674: Resources in Science and Technology; INFO 675: Medical Bibliography	Fellowship in Medical Informatics
Pennsylvania	University of Pittsburgh	School of Information Sciences	Medical Librarianship / Informatics specialization	LIS 2585: Health Consumer Resources and Services; LIS 2586: Health Sciences Information Sources and Services; LIS 2587: Applications in Medical Informatics	HSL & Bioinformatics Trainee-ships (2) (w/CBML)
Washington, DC	Catholic University of America	School of Library and Information Science	"Biomedical Information" as a formal area of specialization for M.S.L.S.; joint M.A. in Biology / M.S.L.S. degree program	LSC 708: Science and Technology Information; LSC 870: Health Sciences Literature; LSC 871: Health Sciences Librarianship	

Data sources: ALA web site, program web sites