Online Library and Information Science Education in the United States and Canada: Student Experiences and Motivations

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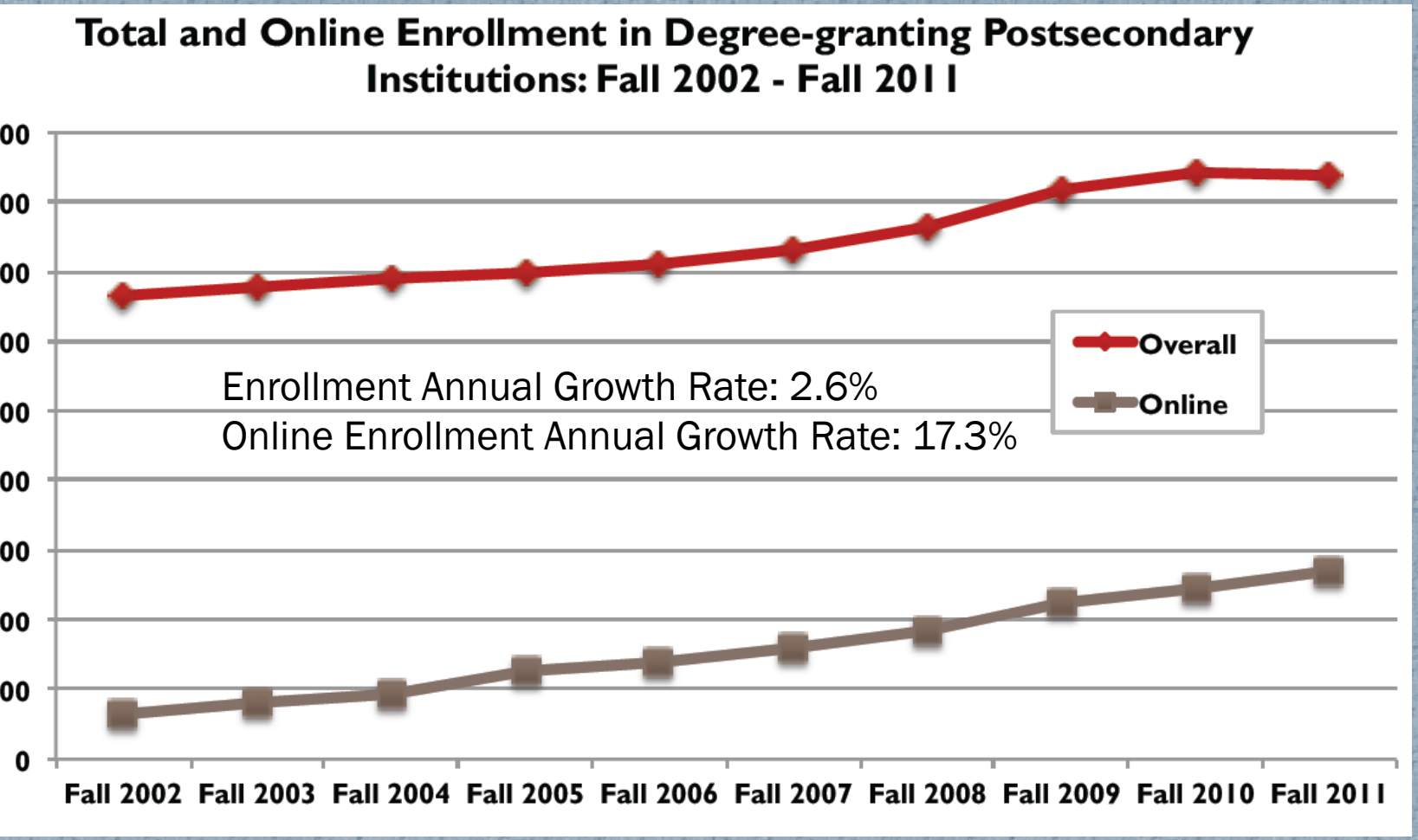
Online Education in US



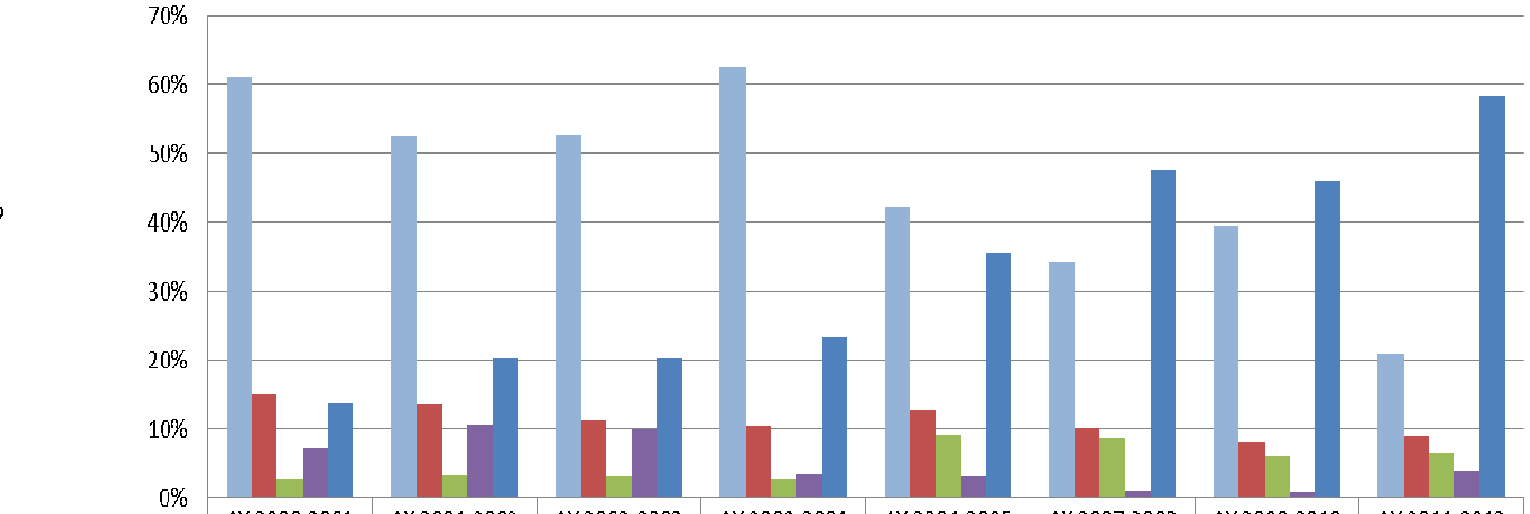
& Seaman, J. (2013). Changing Course: Ten Years of Tracking Online Education in the United States. The Sloan Consortium.
at http://www.onlinelearningsurvey.com/reports/changingcourse.pdf

Online Education Globally

- global distance learning (Hanover Research, 2011)
  - e-learning is the fastest growing market in education which by 2017 is expected to increase by 23% (IBIS Capital, 2013)
- An online course is defined as a Web-based instructional method in which at least 80% of the instruction occurs via the Internet (Allen & Seaman 2007).

Online Education in LIS

- LIS programs in the US have been offering online classes since the 1990s (Small & Paling, 2002)
- The earliest statistics issued by the Association for Library and Information Science Education (ALISE) on online offerings in LIS programs are available from the 2000-2001 academic year, which reports that about 14% (n=994) of course offerings were online while over ten years later (2011-2012 academic year) almost 60% of the courses were delivered online (see Figure 1b)



	AY 2000 2001	AY 2001 2002	AY 2002 2003	AY 2003 2004	AY 2004 2005	AY 2007 2008	AY 2009 2010	AY 2011 2012
On Campus	61.07%	52.43%	52.55%	62.48%	42.21%	34.25%	39.51%	20.88%
On-Site/Off-Campus	15.16%	13.39%	11.21%	10.53%	12.70%	10.04%	8.13%	8.86%
Hybrid/Multimedia	2.74%	3.32%	3.16%	2.62%	9.01%	8.59%	6.02%	6.41%
TV/Telenet	7.32%	10.60%	9.79%	3.57%	2.98%	0.93%	0.68%	3.96%
Internet/Web-based	13.71%	20.27%	20.23%	23.21%	35.43%	47.61%	45.80%	58.14%

Figure 1b - Course Delivery Modality in LIS (Academic Years 2000 – 2011)

Motivations: convenience, flexibility, affordability, more options

Attribute	Study
1. ability to complete the course requirements in a setting of the student's choice	1. Mellon & Kester, 2004; Pastore & Carr-Chellman, 2009.
2. not needing to relocate	2. Mellon & Kester, 2004; Wilde & Epperson, 2006; Wyatt, 2005.
3. ability to keep current employment	3. Pastore & Carr-Chellman, 2009; Small & Paling, 2002; Wilde & Epperson, 2006.
4. ease of access to course content at any time	4. Dutton et al., 2002; Mellon & Kester, 2004; Pastore & Carr-Chellman, 2009; Small & Paling, 2002.
5. set own schedule and not needing to travel to campus for instructional purposes	5. Dutton et al., 2002; Dyrbye, Cumyn, Day, & Heflin, 2009; Fredericksen, Swan, Pelz, Pickett, & Shea, 1999; Mellon & Kester, 2004; Pastore & Carr-Chellman, 2009; Small & Paling, 2002; Wyatt, 2005.
6. flexibility afforded by temporal and physical separation	6. Pastore & Carr-Chellman, 2009; Wyatt, 2005.

Delivery modes: Similarities and Differences

- no significant differences between online and traditional course delivery modalities in terms of **student achievement** (Dutton et al., 2002; Means, Toyama, Murphy, Bakia, & Jones, 2009) and students' perception of academic rigor (Mortagy & Boghikian-Whitby, 2010; Pastore & Carr-Chellman, 2009)
- Differences have been found with regard to satisfaction, learning, and interaction with their peers:
  - older students preferred distance education because family and work commitments (Tucker (2001) and Dutton et al., 2002
  - older students (36-45 age group) were more satisfied with online courses and learned the most online than younger students (16-25 age group) (Fredericksen et al., 1999)
  - students tend to perceive face-to-face classes as more engaging in terms of learning and interaction regardless of their course attendance mode (distance, face-to-face) (Hagel & Shaw, 2006)
  - student-to-student and student-to-instructor interactions were significantly associated with student learning and satisfaction (Sher, 2009)

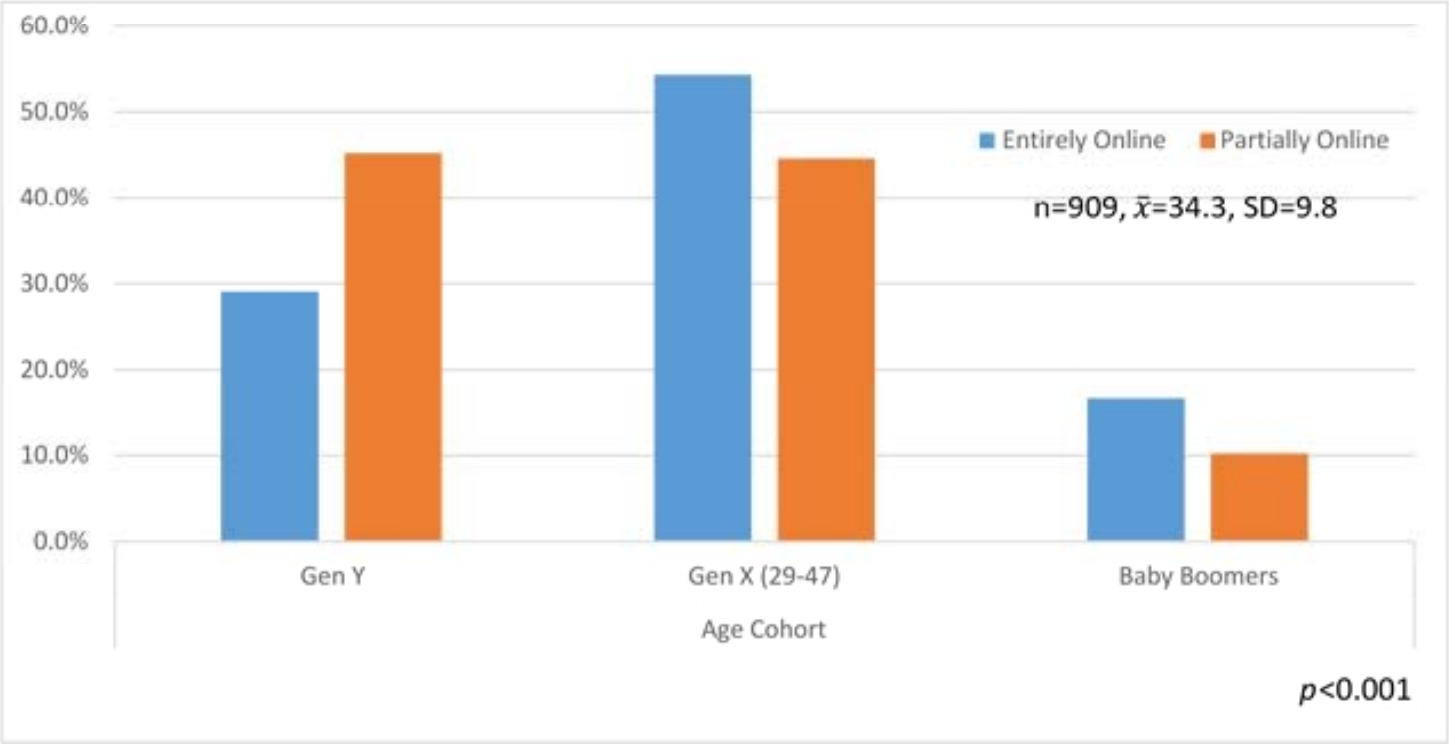
Research Questions

- 1. What are the demographic characteristics of students pursuing an online MLIS education?
- 2. What factors influence students to select online MLIS coursework?
- 3. What factors are associated with student satisfaction and an online MLIS degree?

Research Design

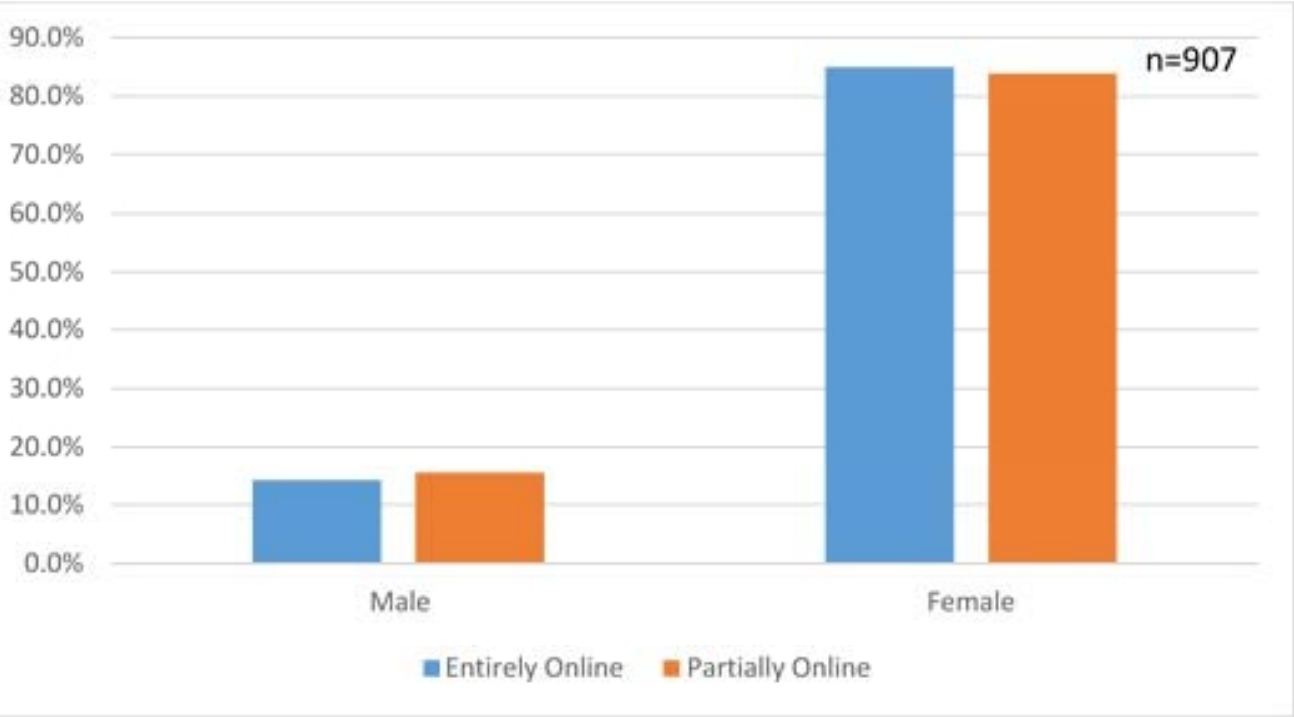
- Online survey (Spring 2012)
- Students took at least one online course in an ALA-Accredited LIS program (N = 58)
- 1038 current MLIS students responded from 36 LIS programs
- Respondents who had taken and completed at least one online course constituted the sample (n=910) that was used for analysis and the reporting of the results
- Google Maps API (application program interface) used for driving distance calculations
- Rural Urban Commuting Area Codes (RUCA) used to determine rural/urban status.

1. What are the demographic characteristics of students pursuing an online MLIS education?



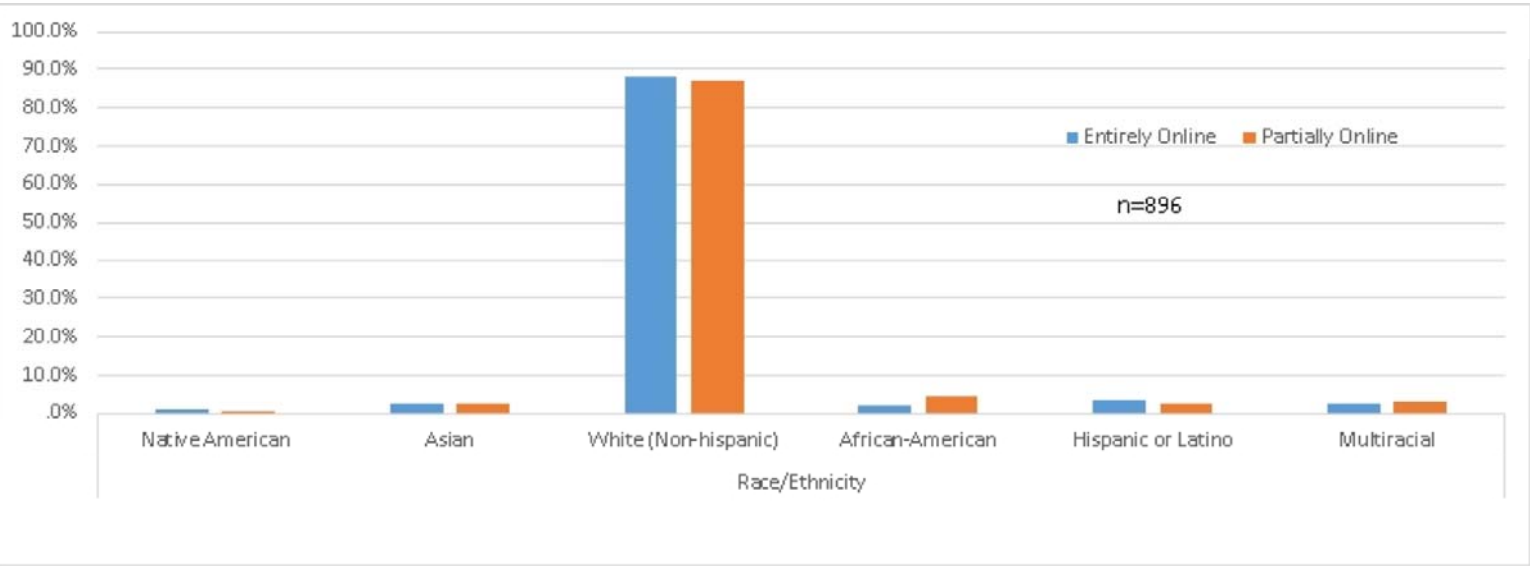
Gen Y: 38% **GenX: 49%** BB: 13%

* The age data were originally collected or calculated as continuous data.



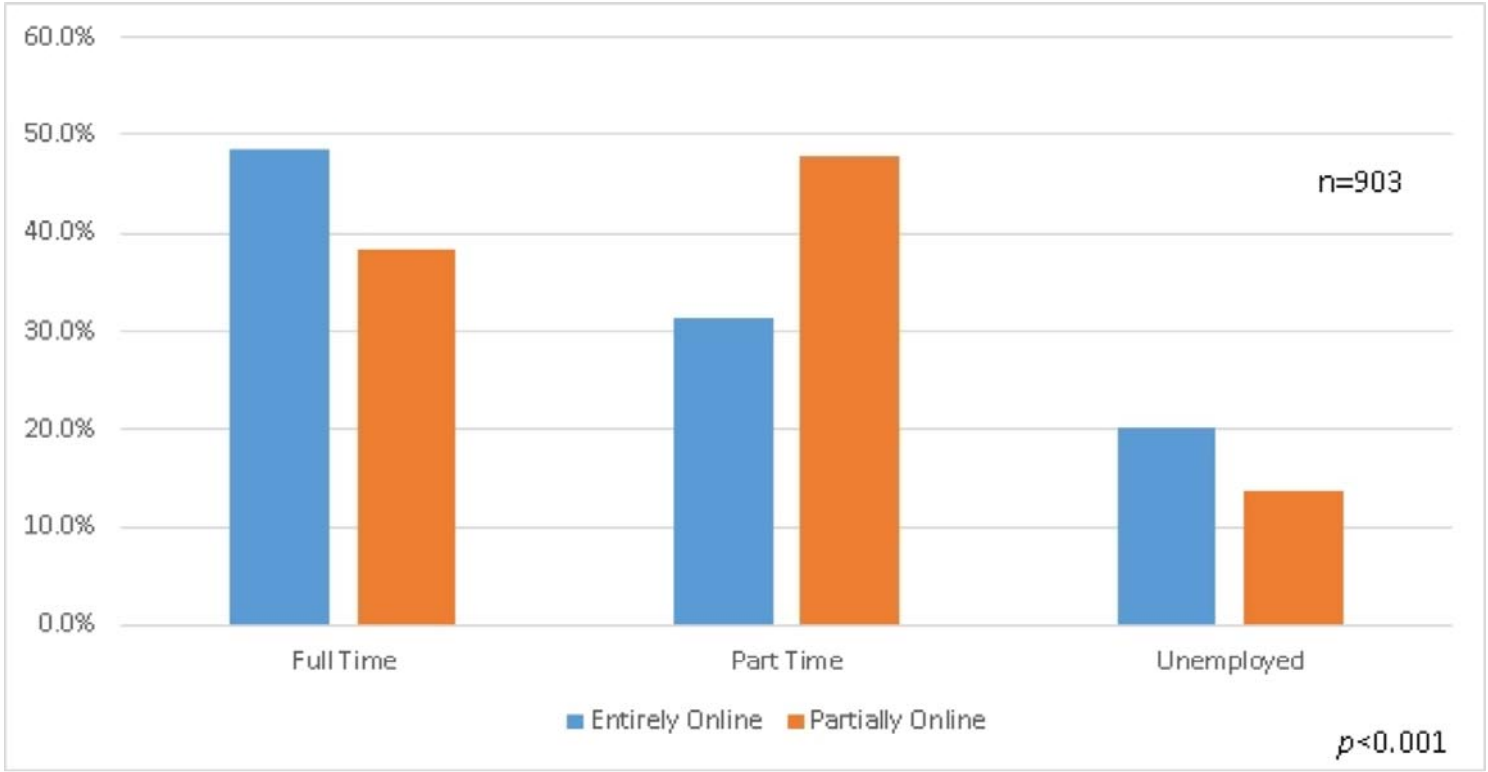
Male: 14.9% **Female: 84.5%** Other: 0.6%

Participation in Online Education by Gender



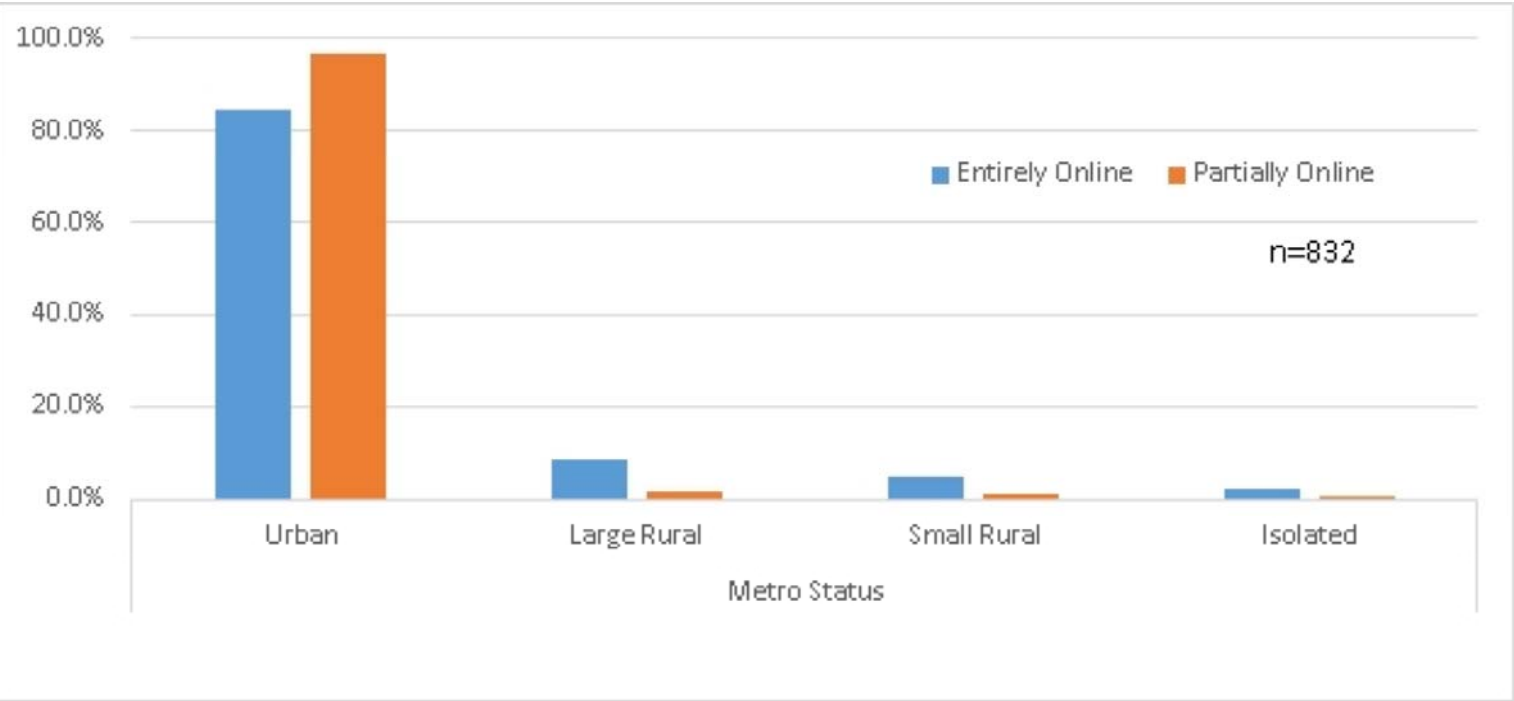
87.5% White (Non-Hispanic) 3.3% Black/African Am. 2.9% Hispanic 2.9% Multiracial 2.6% Asian/Asian Am./Pacific Islander 0.8% Native Alaskan/Am. Indian

Participation in Online Education by Race



Full Time: 43% Part Time: 40.4% Unemployed: 16.6%

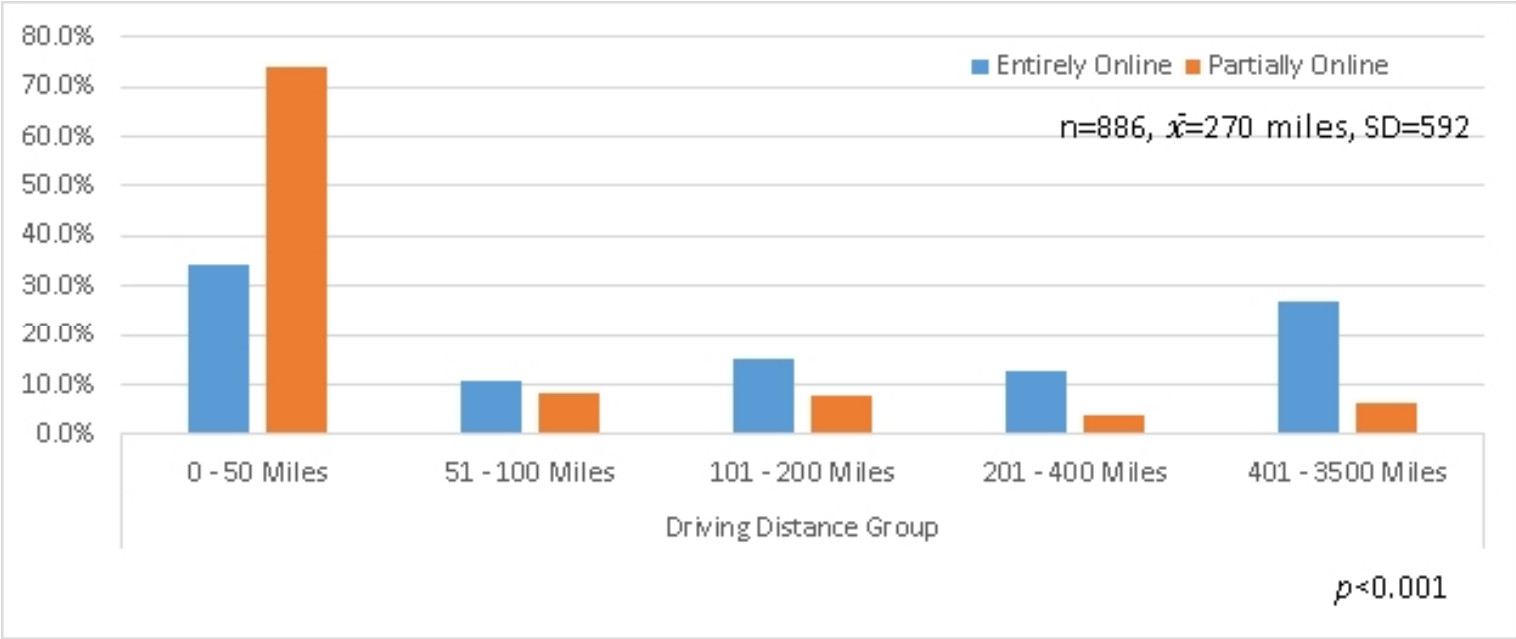
Participation in Online Education by Employment Status



Urban (>50,000): 91.1% Large Rural (10,000-49,999): 4.9% Small Rural (2,500-9,999): 2.9%
Isolated (<2,500): 1.1%

Respondents from MLIS Programs in Canada were not included

Participation in Online Education by Metro Status



0-50 miles: 56.3% 51-100 miles: 9.6% 101-200 miles: 11.1% 201-400 miles:7.7%

401-3500 miles: 15.3%

* The driving distance data were originally calculated as continuous data based on student supplied zip code information.

Participation in Online Education by Driving Distance

Why take an online class? (n=494)*

- 11 statements adopted from literature.
- Factor analysis explained 54% of the total variation ($\alpha = 0.70$).
- Identified 3 factors:
  - Accommodation
  - Predisposition
  - Selectivity

2- What factors influence students to select online MLIS coursework?

Table 2 - Motivations for Taking Online Courses by Generational Cohort (n=494)

	Generational Cohort	n	Mean Rank
Accommodation*	Gen Y	222	205.64
	Gen X	221	273.38
	Baby Boomers	51	317.61
Predisposition	Gen Y	222	258.94
	Gen X	221	236.50
	Baby Boomers	51	245.37
Selectivity	Gen Y	222	236.70
	Gen X	221	258.85
	Baby Boomers	51	245.33

*p<0.001

- Accommodation
  - An online class lets me graduate sooner.
  - Personal circumstances (e.g., family, health, pregnancy) required me to take online classes.
  - An online class is more convenient due to my work schedule.
  - I travel and could not attend a face-to-face class regularly.

Table 3 - Motivations for Taking Online Courses by Employment Status (n=486)

	Employment Status	n	Mean Rank
Accommodation*	Full Time	185	305.48
	Part Time	233	202.03
	Unemployed	68	216.96
Predisposition**	Full Time	185	255.95
	Part Time	233	244.28
	Unemployed	68	206.95
Selectivity	Full Time	185	238.26
	Part Time	233	242.35
	Unemployed	68	261.70

* $p<0.001$ ** $p<0.05$

- Predisposition
  - I had a good experience with an online class before.
  - An online class was recommended by someone.
  - I was curious, wanted to try something new.
  - I thought it was easier than a face-to-face class.
- Selectivity
  - The same class was not available in face-to-face format.

3- What factors are associated with student satisfaction and an online MLIS degree?*

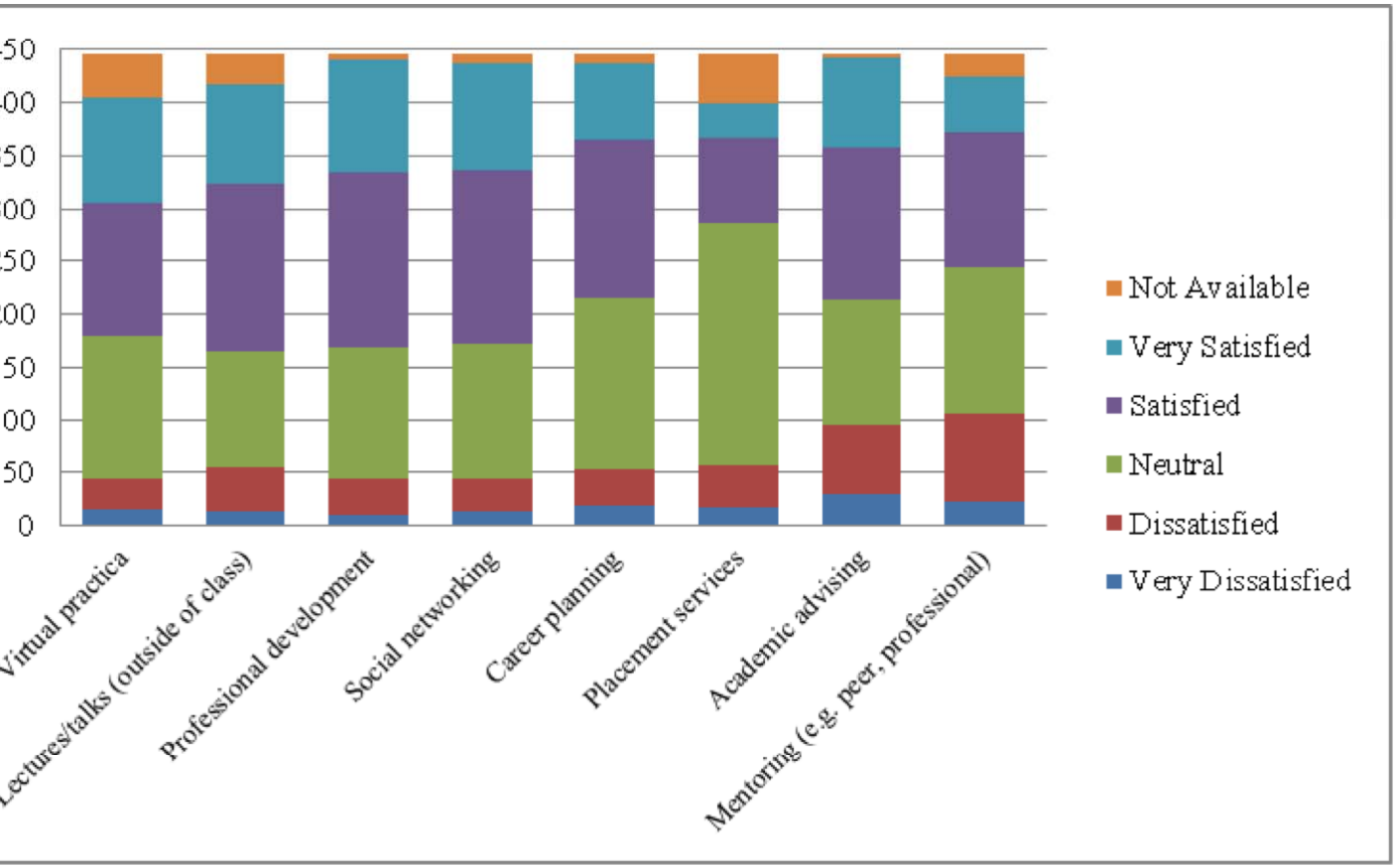


Figure 3 – Online Student Satisfaction (n=447)

Experience with Online Classes (n=885)

- 7 statements adopted from literature to assess issues in online education:
  1. Sense of isolation from peers
  2. Sense of isolation from instructor
  3. Lack of technical support
  4. Lack of academic support
  5. Lack of networking opportunities with peers
  6. Lack of professional development opportunities
  7. Lack of access to professional events on campus

Experience with Online Education (n=885)

- Factor analysis explained 58.2% of the total variation ($\alpha = 0.88$).
- The prevalent issues online MLIS students experienced were a sense of isolation from peers and instructors, and a lack of professional development and networking opportunities with peers.
- Identified 1 factor: Experience
  - Positive Experience
  - Negative Experience

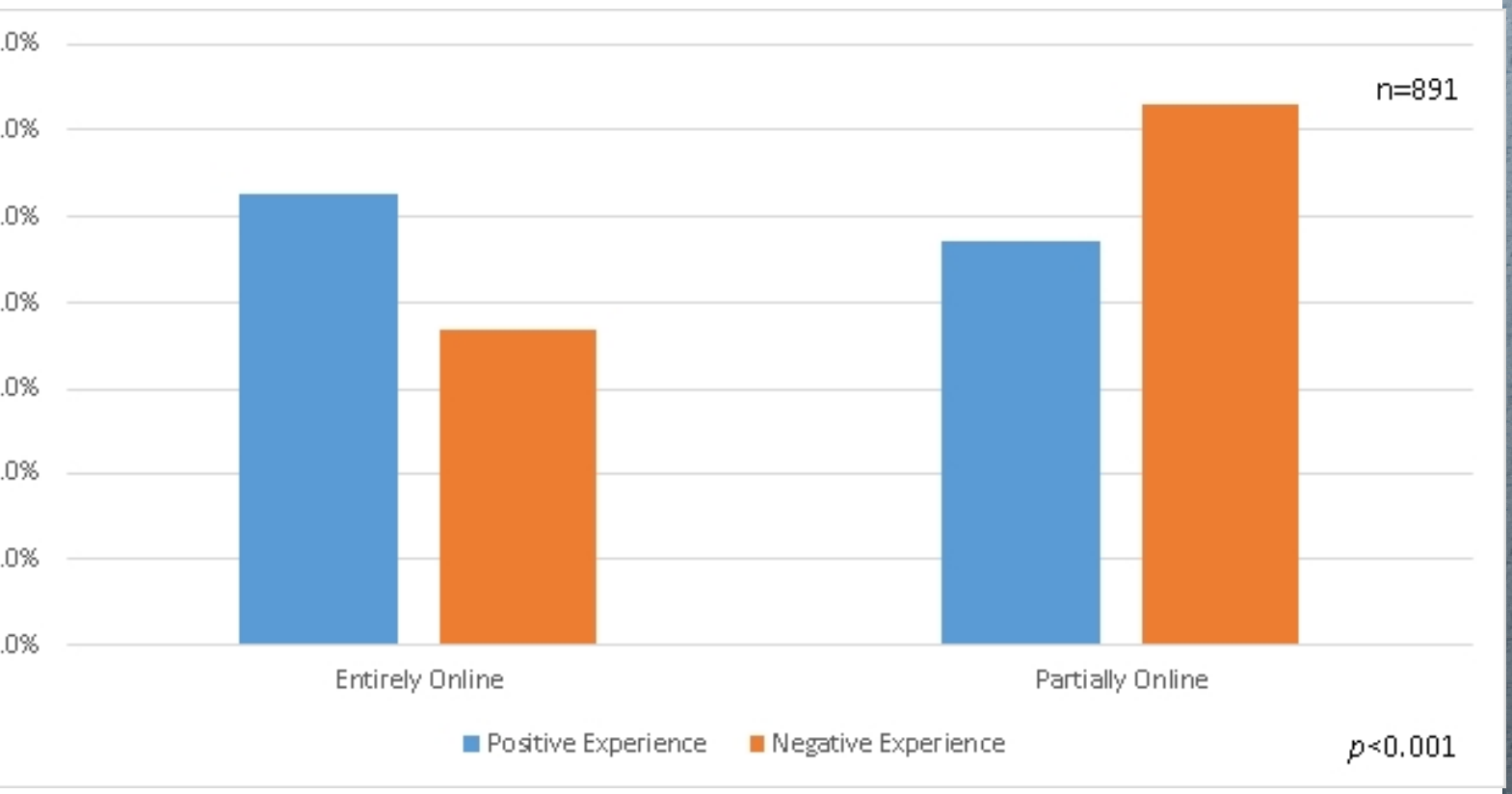
4- What issues concern online MLIS students?

Table 4 - Experience with Online Education by Employment Status (n=885, p<0.01)

	Employment Status			
	Full-Time	**Part-Time**	**Unemployed**	**Total**
Positive Experience	47.6% (219)	35.0% (161)	17.4% (80)	100.0% (460)
Negative Experience	37.9% (161)	46.4% (197)	15.8% (67)	100.0% (425)

Table 5 - Experience with Online Education by Commute Distance (n=868, p<0.05)

	Commute Distance (in miles)					Total
	0 - 50	**51 - 100**	**101 - 200**	**201 - 400**	**>400**	
Positive Experience	47.5% (230)	53.6% (45)	53.1% (52)	62.1% (41)	59.6% (81)	51.7% (449)
Negative Experience	52.5% (254)	46.4% (39)	46.9% (46)	37.9% (25)	40.4% (55)	48.3% (419)



Experience with Online Education by Program Modality

Summary of Findings

- The majority of survey participants were female (84.5%), White (non-Hispanic) (87.5%), employed (83%), lived in urban areas (91.1%), studied partially online (55%), and lived within 50 miles of the physical program (56.3%). Almost half of the students (49%) attending a partially or entirely online MLIS program were of Generation X (29-47 years of age).
- Full-time employed students were most likely full-time online; part-time employed were most likely partially online.
- Findings provide data to support earlier findings.
- Online has opened up access for the urban full-time employed.
- Partially online students are less satisfied which may be related to existing preference for f2f courses and contact

Future Research & Implications

- Socialization aspects of online education experience (e.g., job procurement, professional development).
- In-depth understanding of personal experiences.
- International, comparative and longitudinal studies.
- Opportunities for local connection.
- Implications f cluding marketing, cou udent support services.

Gràcies :: Gracias :: Thank you