

Ateneo de Manila University

RIZAL LIBRARY

4th International Conference

21 - 22 October
Leong Hall Auditorium
Ateneo de Manila University
Quezon City, Philippines

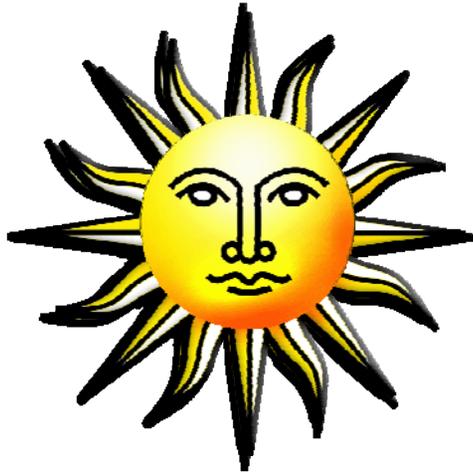
2010



RIZAL LIBRARY

A conference on

“Library Spaces: Building Effective and Sustainable Physical and Virtual Libraries”



How unpopular is the popular?

4th Rizal International Conference



Measuring use patterns
of online journals and databases
among Filipino university students

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Reality

BITES

REALITY # 1

The introduction of the **INTERNET in 1991** has revolutionized the way **library services** are planned and delivered.



John H. Doe 1/2007

REALITY # 2

Not all libraries in
the Philippines
have *online*
databases.



REALITY # 3

The so-called **digital divide** is evident in library and information science practice.



REALITY # 4

While databases are being integrated in the overall library service platform, their maximum effective use remains a research imperative



John H. Lee 1/2007

REALITY # 5

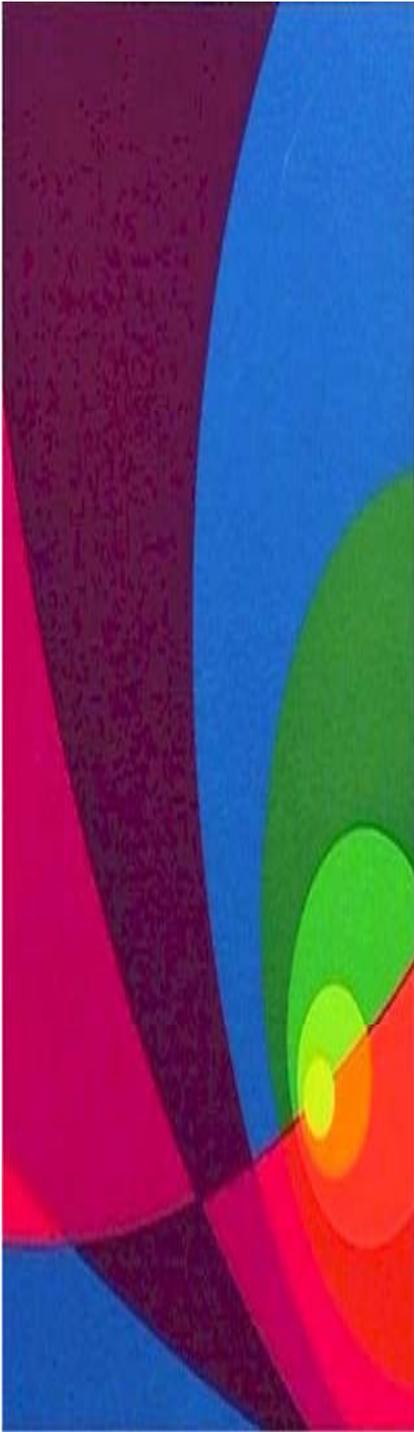
Whether we like it or not, there are underlying reasons that explain why databases remain unpopular despite its popularity.



QUESTION



What is the main
focus or variable
of this
investigation?



THE INTERNET

**“The religion of today’s
communication
exchange.”**

(A. de Guzman, 2010)

PURPOSE: Present and test a **model** that describes **online database use** of university students in the Philippines

Reading e-mail alerts

Scanning citation and bibliography

Searching electronic databases

INTERNET
SEEKING
BEHAVIOR

Reading online books

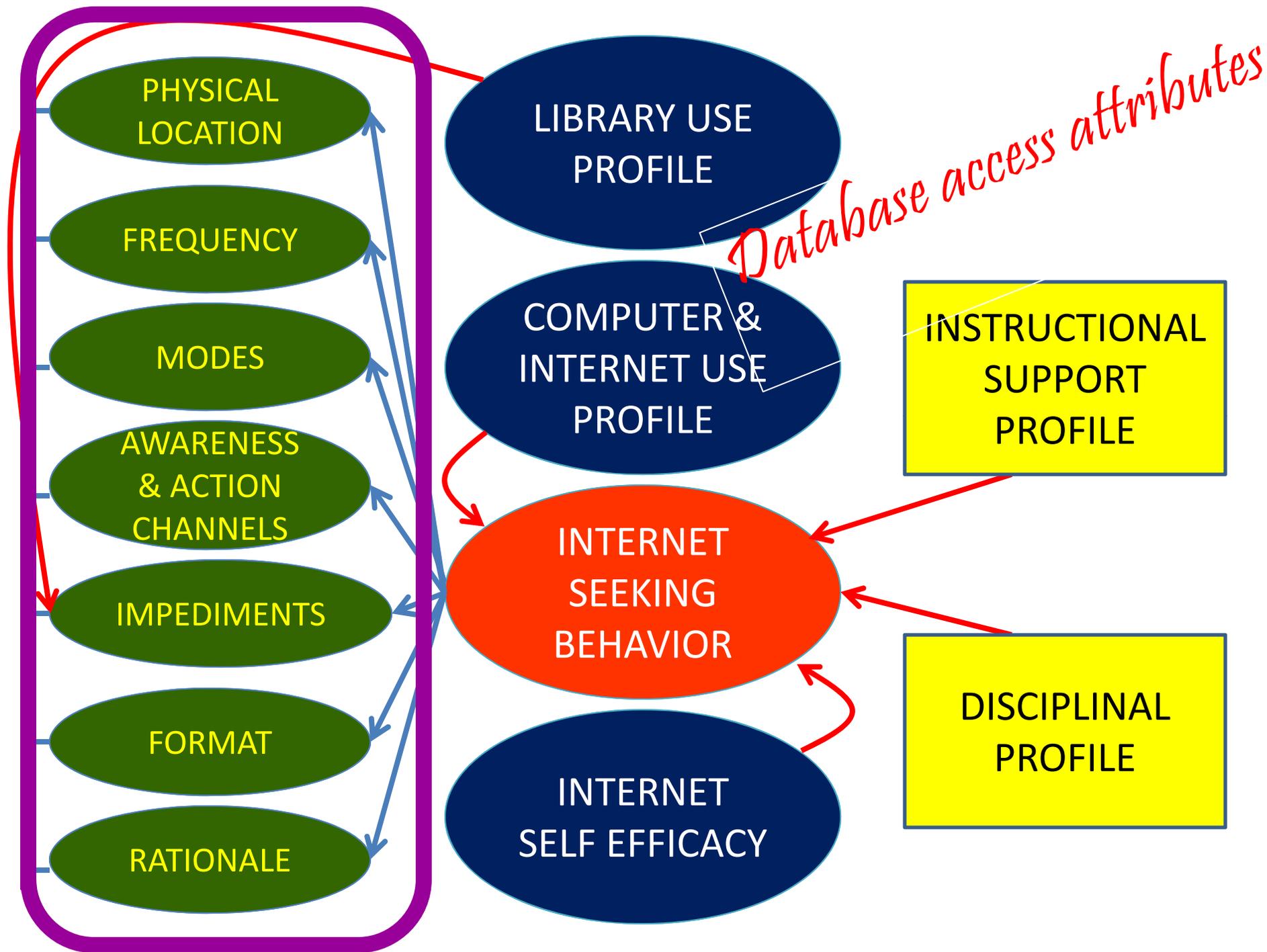
Accessing online library catalogue

Accessing multimedia information

CENTRAL QUESTION



What is the main argument of this investigation?



METHOD

Design	Exploratory
Loci	The University of Santo Tomás & Ateneo de Manila University
Respondents	Undergraduate (n=800) Graduate (n=177)
Sampling Design	Random

Table 1

DEMOGRAPHIC PROFILE OF RESPONDENTS (n=977)

AGE	N	PERCENT (%)
14 - 20	721	73.6%
21 - 30	156	15.8%
31 - 40	33	3.3%
41 - 50	2.5	2.5%
51 - 60	3	.3%
61 - 65	2	.2%
GENDER		
MALE	331	33.9%
FEMALE	618	63.3%

Table 1

DEMOGRAPHIC PROFILE OF RESPONDENTS (n=977)

NATIONALITY		
FILIPINO	915	93.7%
FOREIGNER	34	3.5%
CIVIL STATUS		
SINGLE	905	92.6%
MARRIED	43	4.4%

Table 1

DEMOGRAPHIC PROFILE OF RESPONDENTS (n=977)

DISCIPLINE		
BS/AB	800	81.9%
MASTER	140	14.3%
Ph.D/Ed.D	37	3.8%
FIELD OF STUDY		
HARD SCIENCE	280	28.7%
SOFT SCIENCE	593	60.7%

Asian university rankings - top 200 | Top Universities - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://www.topun

Google op 200 Asian Unive

Asian university rankings -

2010 Top 200 Universities in Asia

Philippine universities that have made significant improvements in their ranking

Rank 1 UP Rank 2 Ateneo
Rank 3 DLSU Rank 4 UST

1	1	University of Hong Kong	Hong Kong	B1 a	100.00	100.00
2	4	The Hong Kong University of Science and Technology	Hong Kong	C2a	99.00	97.50
3	10-	National University of Singapore	Singapore	A1a	98.60	92.20

Bringing Truth and Service to the World
Soongsil University
Seoul National University
Leading the Way!

Done Internet

start Microsoft PowerPoint ... Asian university ranki...

11:01 AM

Among the 2053 HEIs
in the Philippines

From 84 to
58
Ateneo de
Manila
University

rankings - to

53	49	Indian Institute of Technology Madras (IITM)	India	D2a		
54	56	Okayama University	Japan	B1a		
55	53	Kumamoto University	Japan	C1a		
56	72	National Taiwan University of Science And Technology (formerly National Taiwan Institute of Technology)	Taiwan	C3a		
57	141	Indian Institute of Technology Kharagpur (IITKGP)	India	C3a		
58=	51	Universiti Kebangsaan Malaysia (UKM)	Malaysia	B1b	65.40	65.40
58=	77	National Central University	Taiwan	C2a	65.40	56.10
58=	84	Ateneo de Manila University	Philippines	C1d	65.40	54.20
61	54	Yokohama National University	Japan	C2a	65.20	63.90
62=	57	Kyung Hee University	Korea, South	B1b	65.10	62.70
62=	71	National Sun Yat-sen University	Taiwan	C2a	65.10	58.10
64	48	Tokyo Metropolitan University	Japan	C2a	65.00	66.80
65	55	Yokohama City University	Japan	D3a	64.90	63.20
66	171=	Indian Institute of Technology Guwahati (IITG)	India	D2a	64.80	30.90

97=	98	Ajou University	Korea, South	B1b	54.70	49.90
97=		Osaka Prefecture University	Japan	C2a	54.70	
99=	88	Chonnam National University	Korea, South	B1b		
99=	110=	University of Calcutta	India	A2b		
101=	93	Tokyo University of Agriculture and Technology	Japan	C3a		
101=	109	Prince of Songkla University	Thailand	A1c		
101=	144=	University of Santo Tomas	Philippines	A1d		
104	105	National Taiwan Normal University	Taiwan	B2b		
105	130=	Yamaguchi University	Japan	C1b	53.30	39.30
106	76	De La Salle University	Philippines	C2c	53.30	56.30
107	101=	Shandong University	China	A1a	53.00	48.90
108	104	University of Ulsan	Korea, South	B1b	52.80	48.30
109=	100	University of Pune	India	A2c	52.50	49.00
109=	116	Jilin University	China	A1a	52.50	44.40
109=	130=	Airlangga University	Indonesia	B1d	52.50	39.30
109=	114=	National Chung Hsing University	Taiwan	B2a	52.50	45.20

From 144 to
101
Rank 101
University of
Santo Tomas

STRUCTURAL EQUATION MODELLING (SEM)

**Pinpoints exactly the
relationship between and
among variables**

QUESTION



How do the respondents assess their university's online database provision?

LIBRARY DATABASE ASSESSMENT

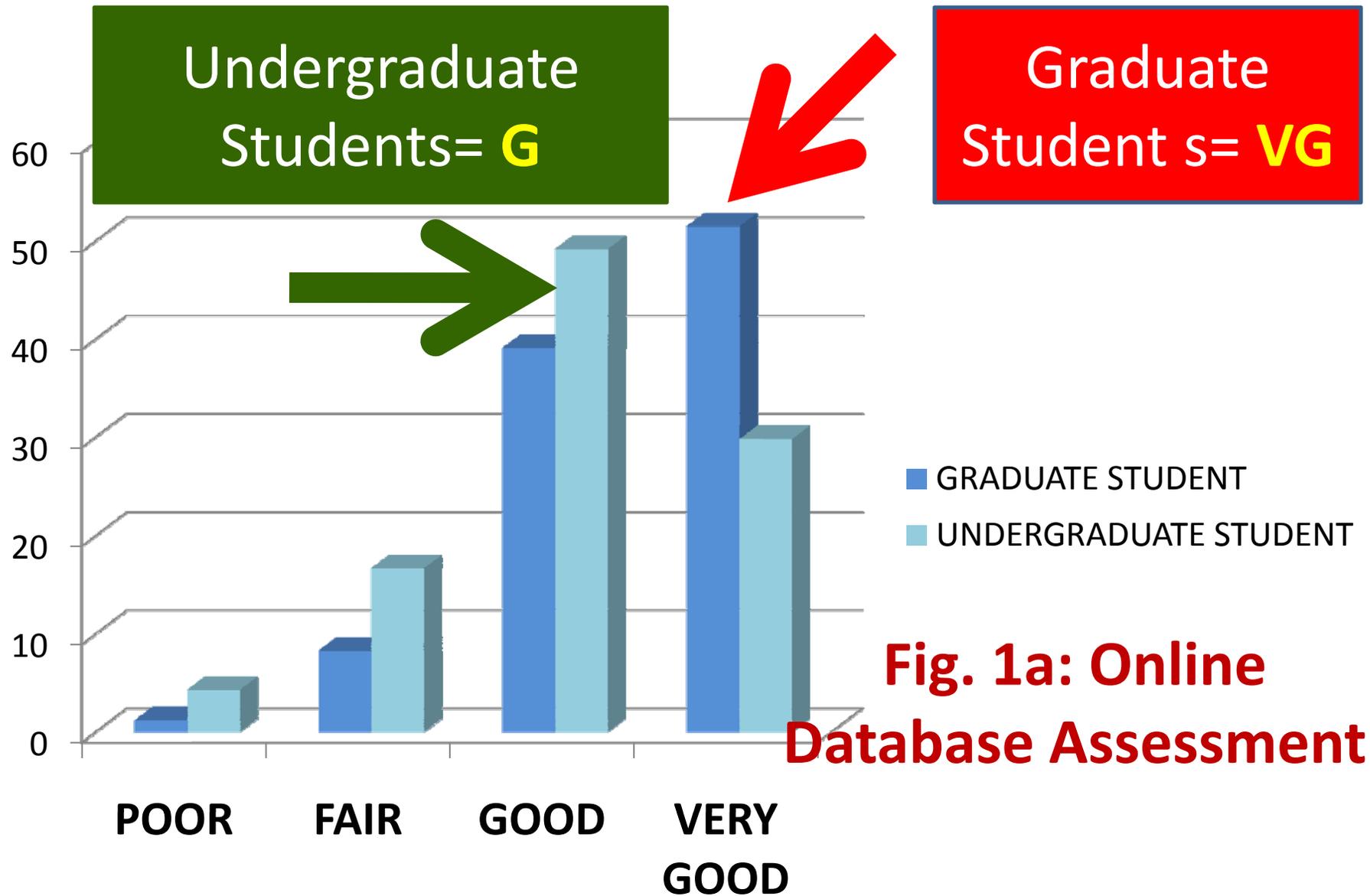
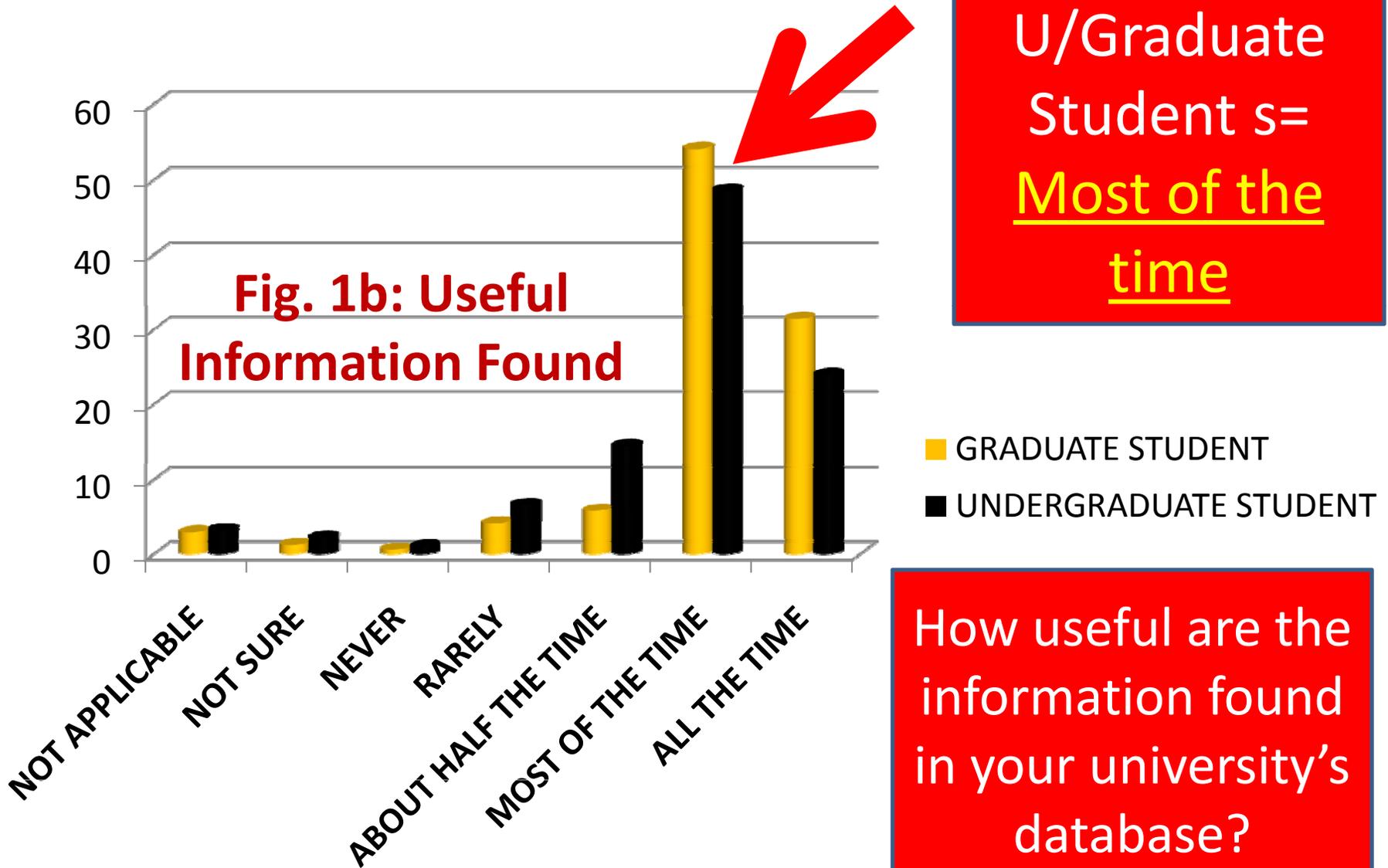


Fig. 1a: Online Database Assessment

LIBRARY DATABASE ASSESSMENT



QUESTION



What characterizes the respondents' library use profile?

LIBRARY USE PROFILE

Are you aware that your university maintains its own website?

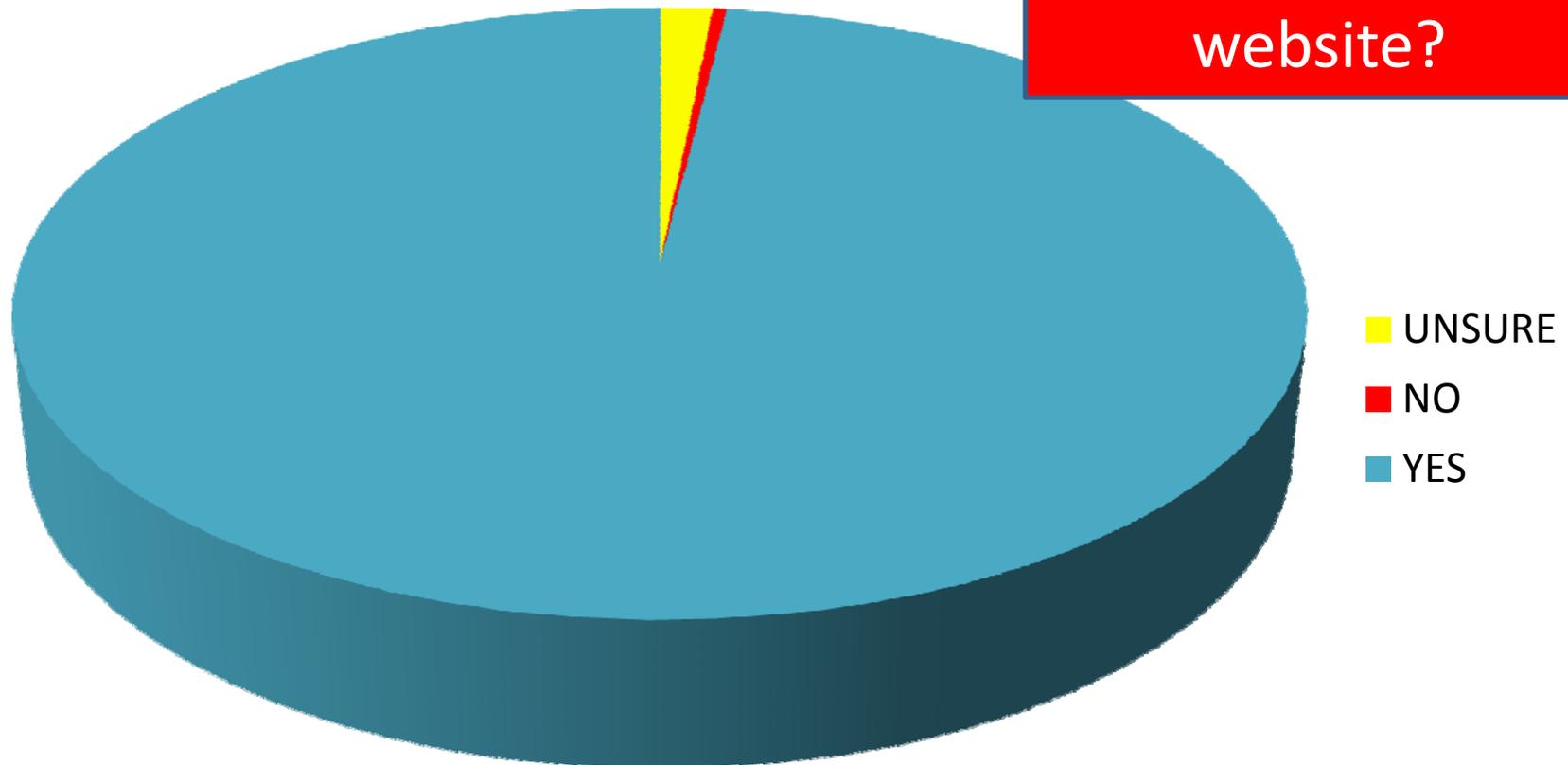
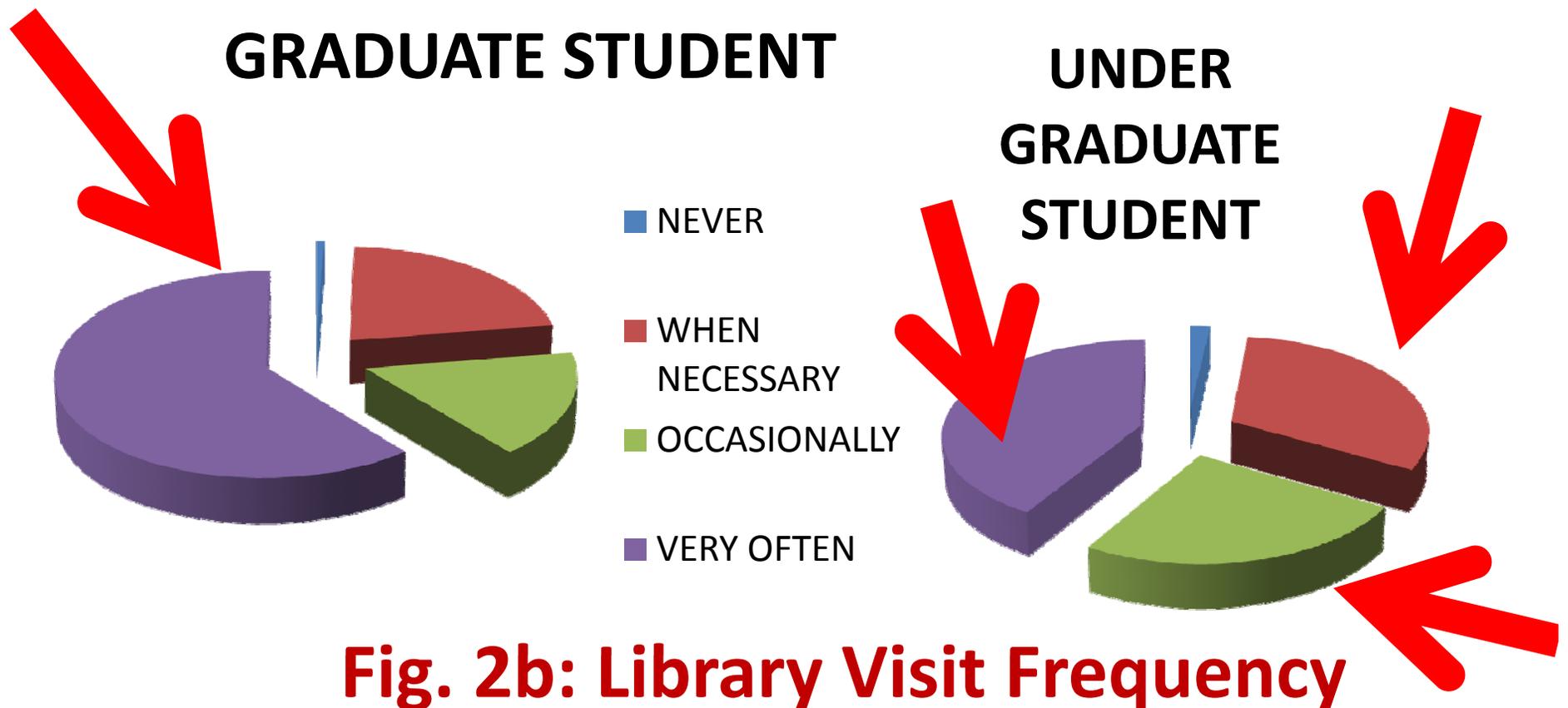


Fig. 2a: University Website Awareness

LIBRARY USE PROFILE



LIBRARY USE PROFILE

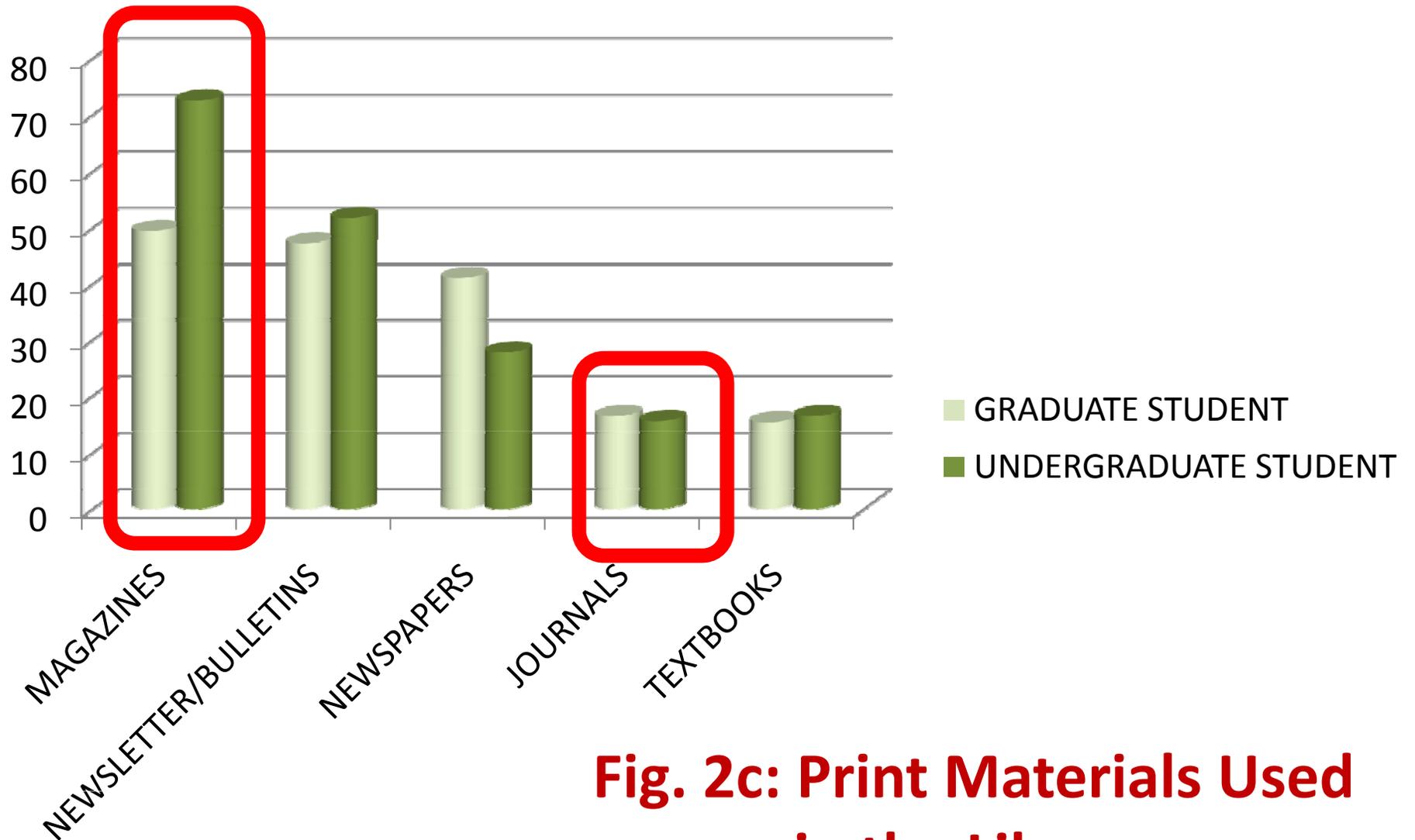


Fig. 2c: Print Materials Used in the Library

QUESTION

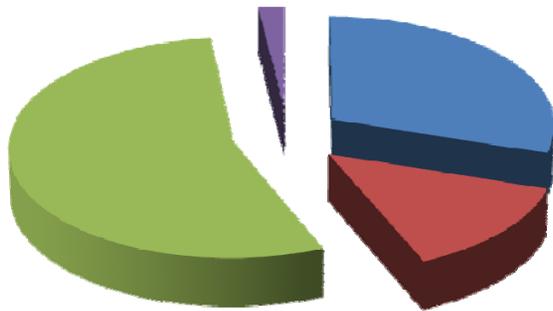


What characterizes the respondents' computer and internet profile?

Computer and Internet use Profile

INTERNET ACCESS

Both home and school



■ YES AT HOME

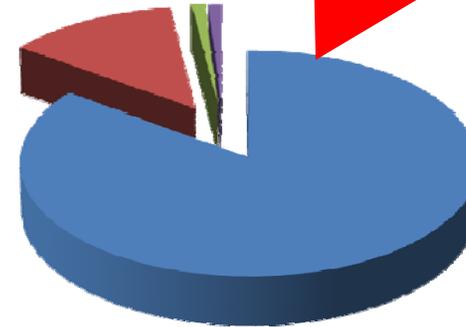
■ YES IN SCHOOL

■ BOTH AT HOME AND SCHOOL

■ NO CONVENIENT ACCESS

COMPUTER ACCESS FREQUENCY

At least once a day



■ ATLEAST ONCE A DAY

■ ATLEAST ONCE A WEEK

■ ATLEAST ONCE A MONTH

■ RARELY OR NEVER

Fig. 5: Computer & Internet Use Profile

COMPUTER & INTERNET USE PROFILE

PROFILE	GRADUATE		UNDERGRADUATE	
	N	PERCENT (%)	N	PERCENT (%)
I do not search the Internet	1	.6%	12	1.5%
Cable access to Internet	74	41.6%	370	46.3%
Dial in using a commercial Internet service provider	84	47.2%	323	40.4%
Dial in using my university as primary provider	14	8.0%	69	8.6%
Direct connection through the university	91	51.1%	360	45.1%

COMPUTER & INTERNET USE PROFILE

PROFILE	GRADUATE		UNDERGRADUATE	
	N	PERCENT (%)	N	PERCENT (%)
Computer at home	152	87.9%	648	83.3%
Have personal laptop	143	82.2%	484	62.3%

QUESTION



What typifies the
**internet seeking
behavior** of the
respondents of UST
and AdMU?

INTERNET SEEKING BEHAVIOR

Undergraduate Students TOP RANKING INTERNET SEEKING BEHAVIOR

1. E-mailing
2. Reading e-mail alerts
3. Searching e-databases

Graduate Students

TOP RANKING INTERNET SEEKING BEHAVIOR

1. Searching e-databases
2. Reading email alerts
3. Reading e-journals

0 0.5 1 1.5 2 2.5 3 3.5

■ GRADUATE STUDENT

Fig. 3: Internet Seeking Behavior

QUESTION



Statistically speaking, is the internet seeking behavior of the graduate and undergraduate students different?

Significant Differences in the Internet Seeking Behavior of Graduate and Undergraduate School Students

INTERNET SEEKING BEHAVIOR	GRADUATE		UDERGRADUATE		t- value
	MEAN	SD	MEAN	SD	
Emailing classmates	3.10	0.84	3.16	0.80	-0.95
Discussion forum/list server	2.29	0.90	2.36	0.77	-0.95
Reading e-mail alerts	3.10	0.98	2.93	0.89	2.29*
Scanning citation and bibliography	2.57	0.81	2.56	0.82	0.24
Searching electronic databases	3.11	0.83	2.64	0.87	6.54*
Reading electronic journals	2.98	0.83	2.58	0.82	5.80*
Attending online seminar and conferences	1.89	0.89	1.84	0.82	0.69

Significant Differences in the Internet Seeking Behavior of Graduate and Undergraduate School Students

INTERNET SEEKING BEHAVIOR	GRADUATE		UDERGRADUATE		t- value
	MEAN	SD	MEAN	SD	
Reading online books	2.59	0.86	2.52	0.85	1.0
Accessing online library catalogue	2.71	.91	2.37	0.83	4.83*
Accessing multimedia information	2.61	0.93	2.64	0.85	-0.33

QUESTION



What database mode of access do students generally prefer?

Preferred Mode of Access

2. Photocopy library copy

1. Save online article to USB/laptop

	Percent (%)	Rank	Percent (%)	Rank
Use interlibrary loan	1.7%	11	3.3%	11
Photocopy library copy	29.2%	3	45.7%	2
Read in personal journal	4%	9	4%	9
Send online journal article	5%	4	5%	4
Save online journal articles to USB/laptop	61.2%	1	56.2%	1
Photocopy articles retrieved by my classmates	26.4%	4	41.4%	3

3. Photocopy articles retrieved by my classmates

ACCESS MODE	Graduate		Undergraduate	
	Percent (%)	Rank	Percent (%)	Rank
Have assistant or student print online journal	3.9%	10	7.0%	10
Print online journals in computer cafe	8.4%	7	18.6%	5
Print online journals in library	12.9%	6	15.6%	7
Print online journal articles at home	7.9%	8.5	11.6%	8
Read electronic journals online	15.7%	5	16.1%	6

Significant Differences in the Internet Self Efficacy of Graduate and Undergraduate School Students

INTERNET SELF EFFICACY	GRADUATE		UDERGRADUATE		t- value
	MEAN	SD	MEAN	SD	
I feel confident learning advanced skills within a specific Internet program	6.27	1.36	6.37	1.38	-0.85
I feel confident turning to an on-line discussion group when help is needed	5.65	1.85	5.97	1.70	*

QUESTION



Which online databases are most popular and to graduate and undergraduate students?

Online Journals	UNDERGRADUATE		GRADUATE		OVERALL	
	MEAN	RANK	MEAN	RANK	MEAN	RANK
Academic Source Complete	2.80	1	3.01	1	2.84	1
Biomedical Reference Collection: Basic	1.99	6	1.71	18.5	1.94	6.5
Business Source Complete	1.93	7	1.71	18.5	1.89	9
Catholic Periodical and Literature Index	1.72	14	1.75	10.5	1.73	12
CINAHL Plus with Full Text	1.74	12	1.69	15	1.73	12
Communication Abstracts	1.79	10	1.80	9	1.80	10
ERIC	1.51	17	1.89	8	1.58	17
Funk and Wagnalls New World Encyclopedia	1.64	15	1.74	12.5	1.65	15.5
Gale Virtual Reference Library	1.63	16	1.74	12.5	1.65	15.5

Academic Source Complete

Online Journals	UNDERGRADUATE		GRADUATE		OVERALL	
	MEAN	RANK	MEAN	RANK	MEAN	RANK
JSTOR	2.08	3	2.62	2	2.18	3
Library, Information Science & Technology	2.01	5	2.02	6	2.01	5
MAS Ultra – School Edition	1.50	1	1.50	1	1.51	18
MEDLINE with Full Text	1.74	12	1.67	17	1.72	14
Military & Government Collection	1.49	19	1.37	16	1.47	19
Primary Search	2.07	4	2.07	5	2.07	4
ProQuest Health & Medical Complete	1.94	7	1.97	7	1.94	6.5
Psychology and Behavioral Sciences Collection	1.87	9	1.87	9	1.87	8
Regional Business News	1.74	12	1.69	15	1.73	12
ScienceDirect	2.28	2	2.53	3	2.32	2

JSTOR

ScienceDirect

QUESTION



Are the respondents' internet seeking behavior supported by the instructional platform of the faculty?

INSTRUCTIONAL SUPPORT FOR DATABASE USE

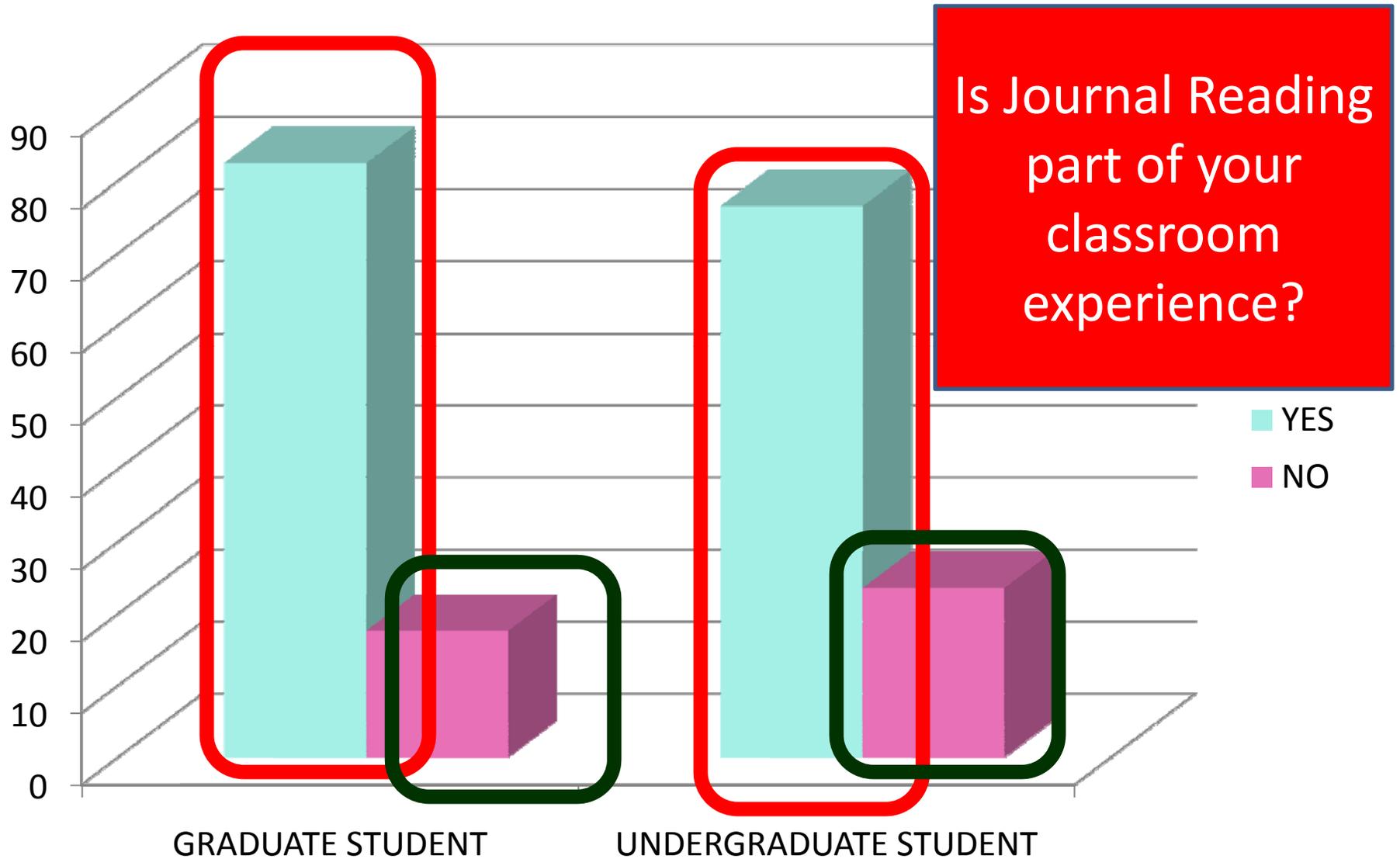


Fig. 6a: Journal Reading as Part of Classroom Experience

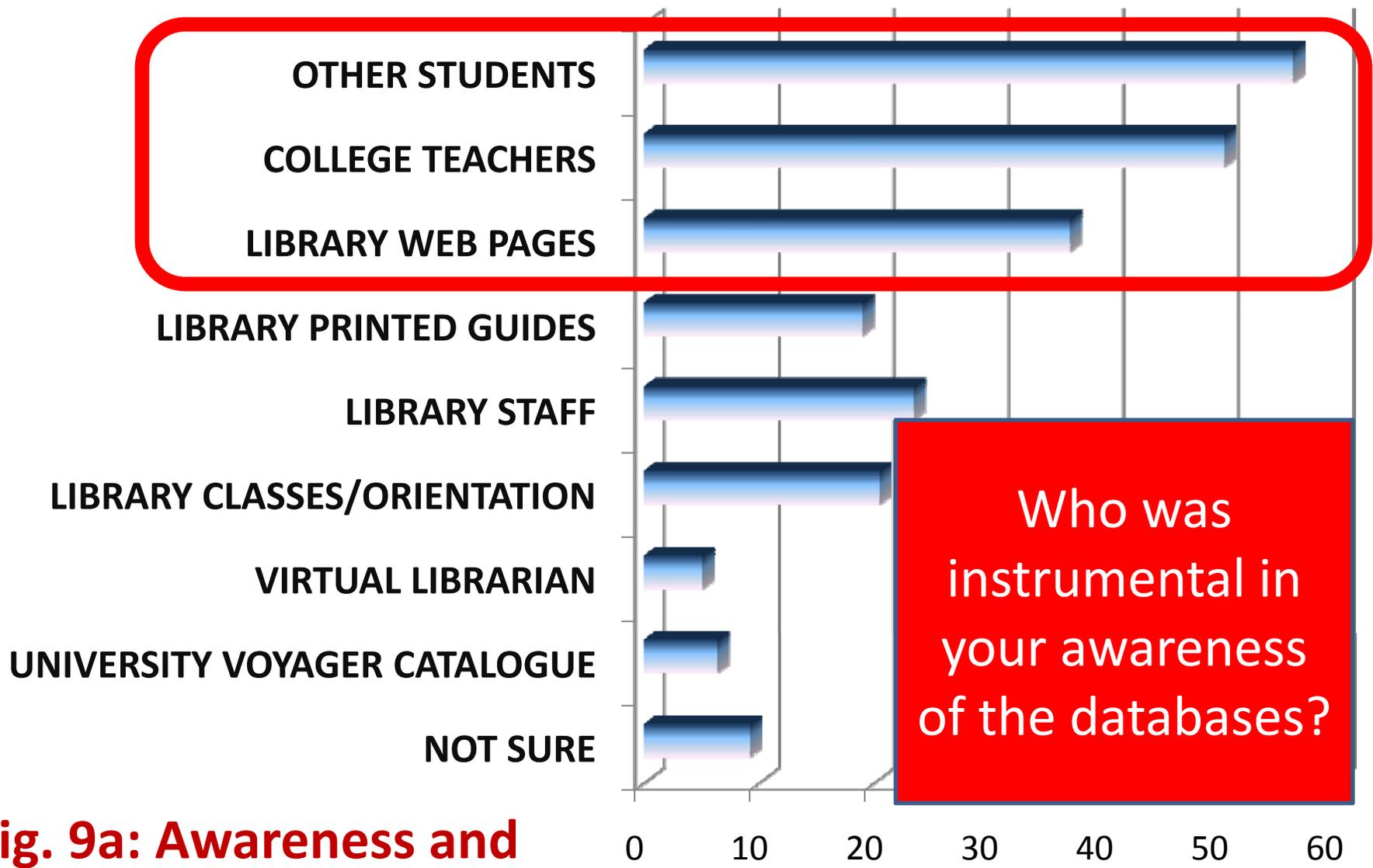


Fig. 9a: Awareness and Action Channels

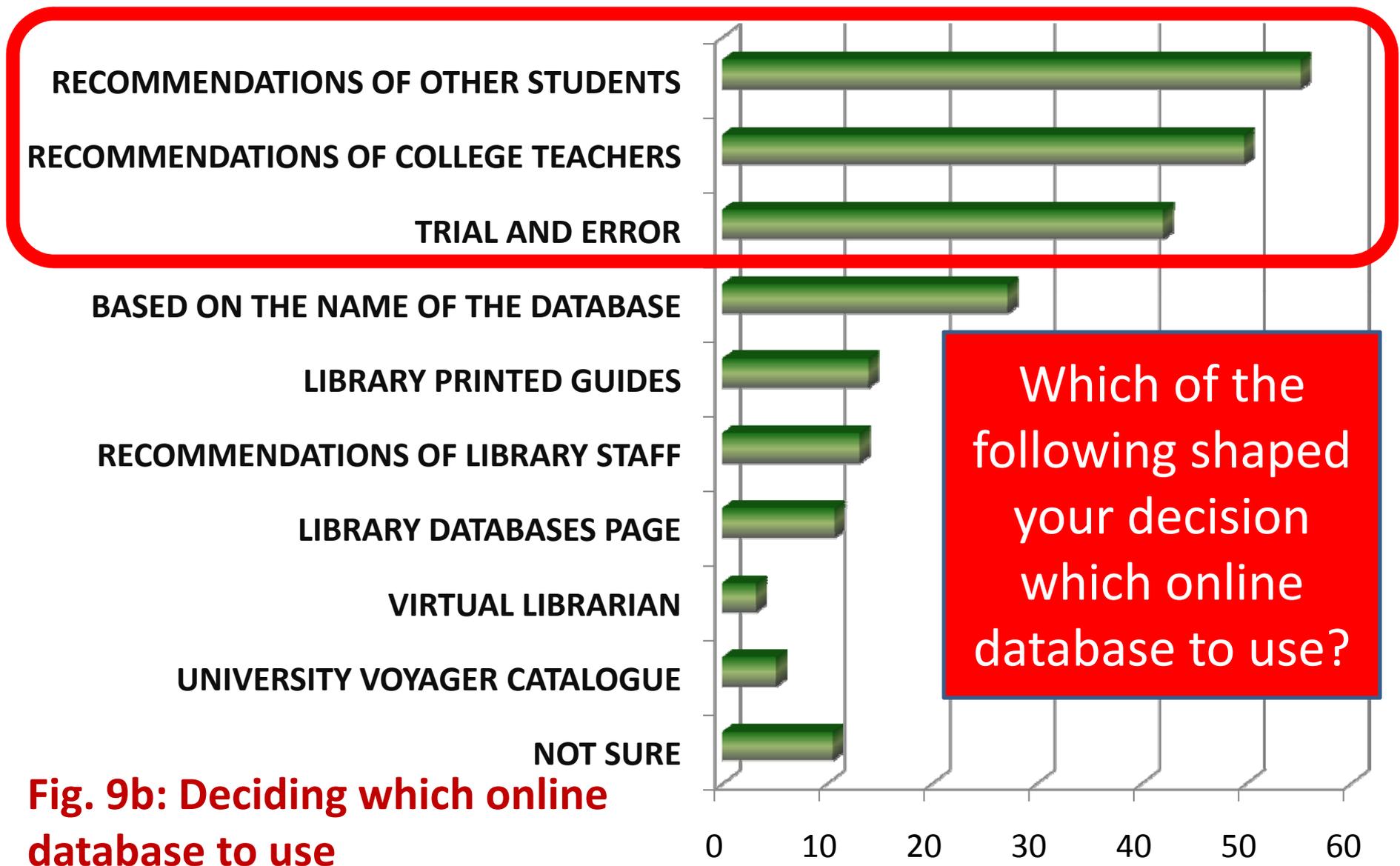


Fig. 9b: Deciding which online database to use

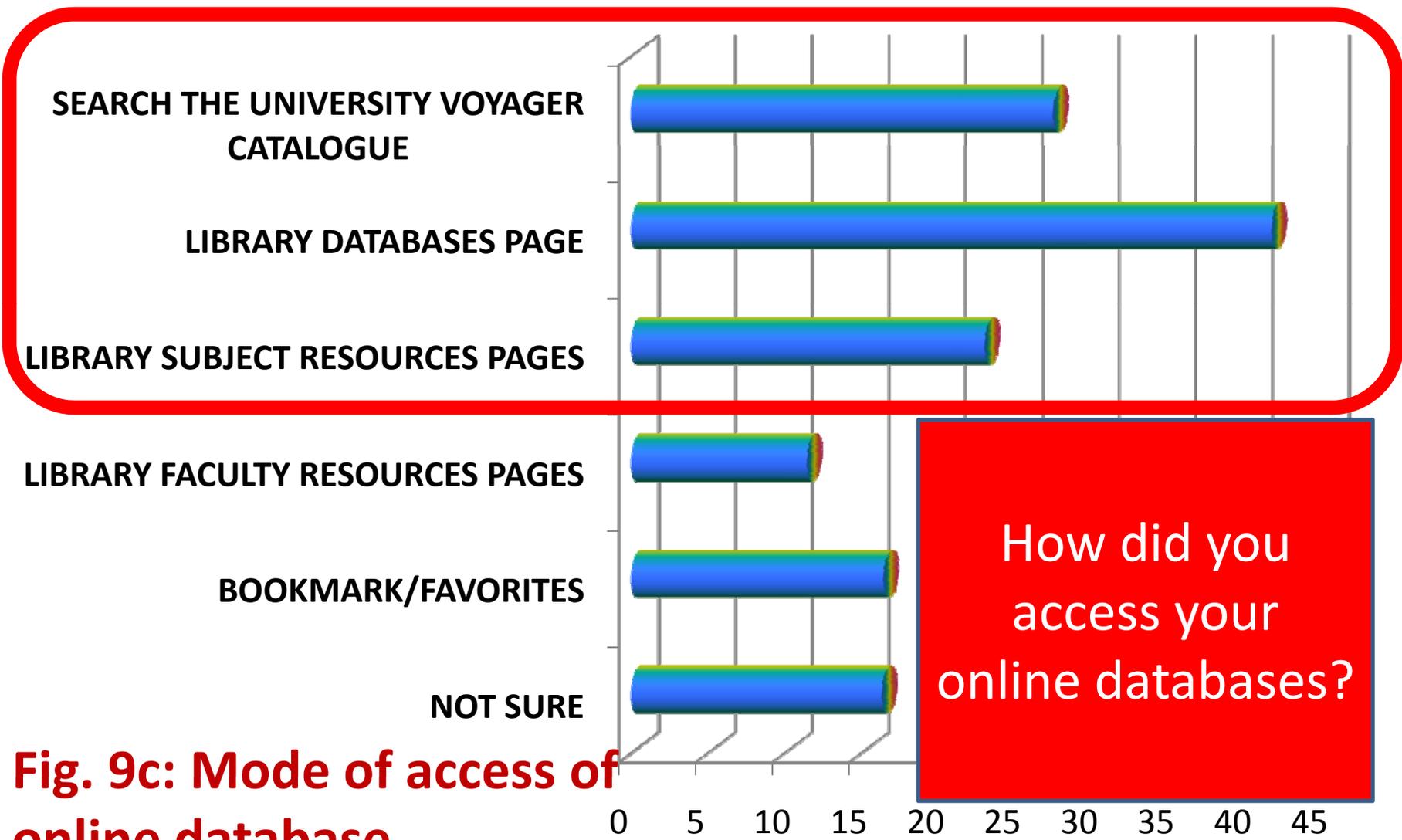
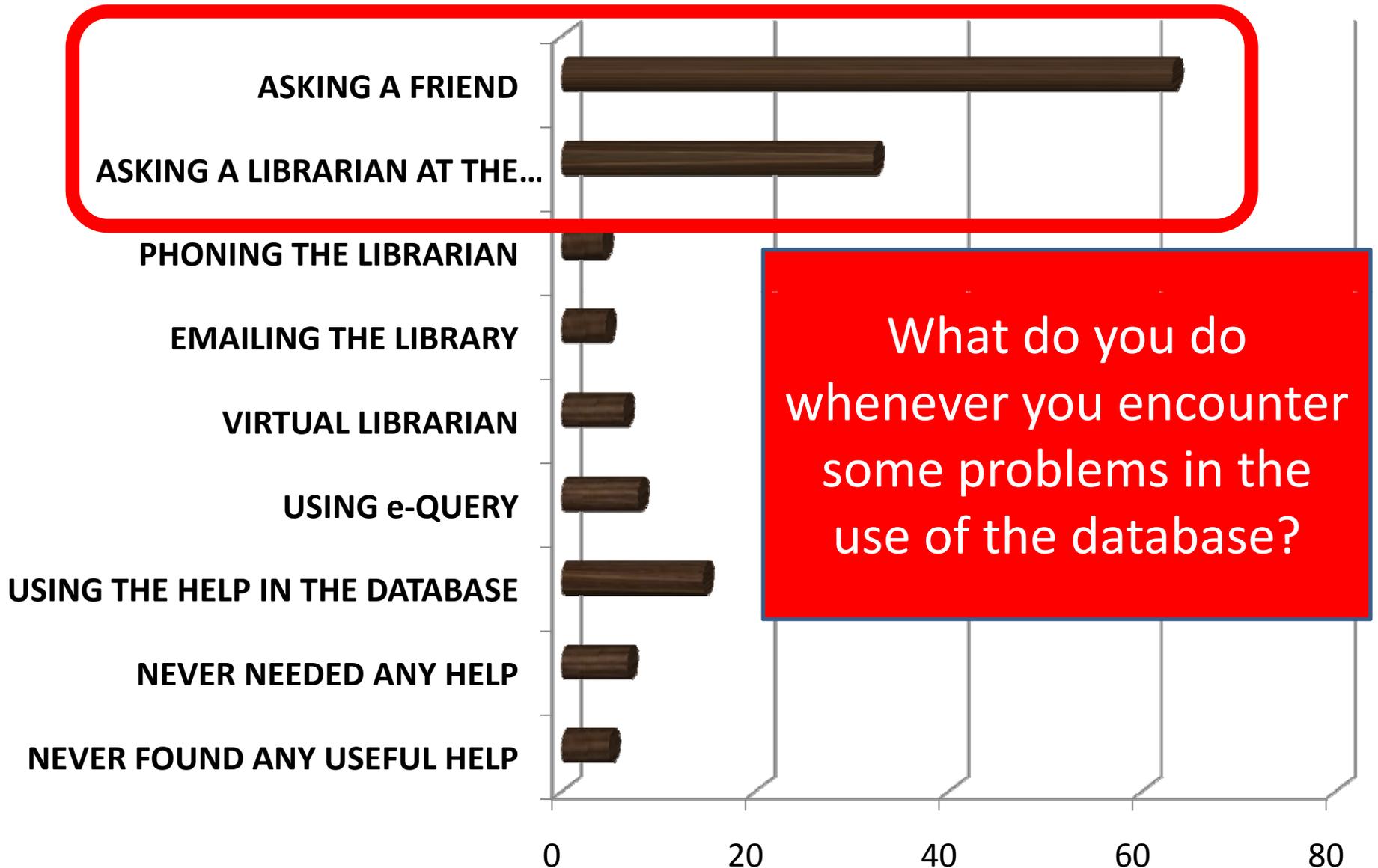


Fig. 9c: Mode of access of online database

Fig. 9d: Aid in Solving Problems related to online Database Access



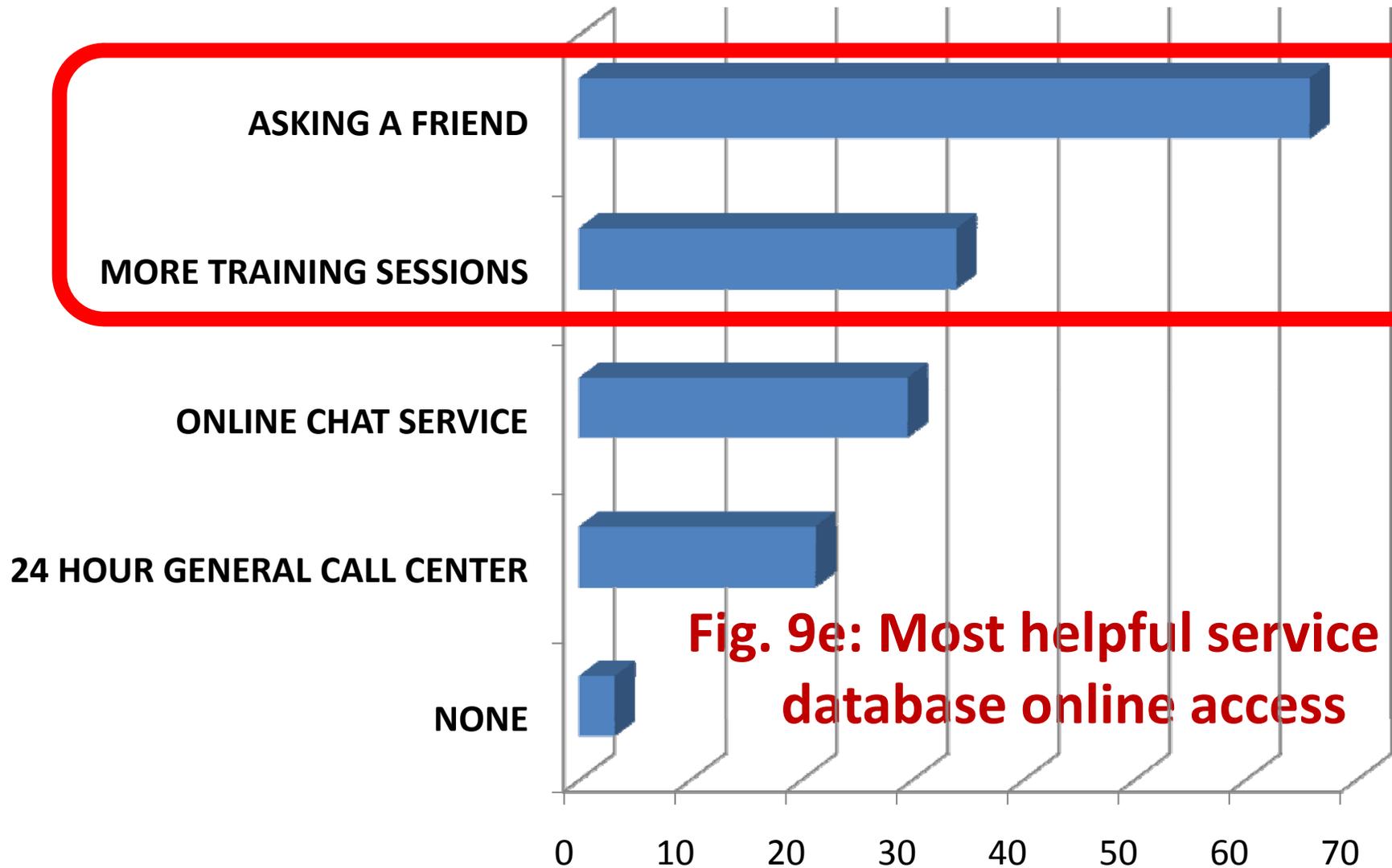


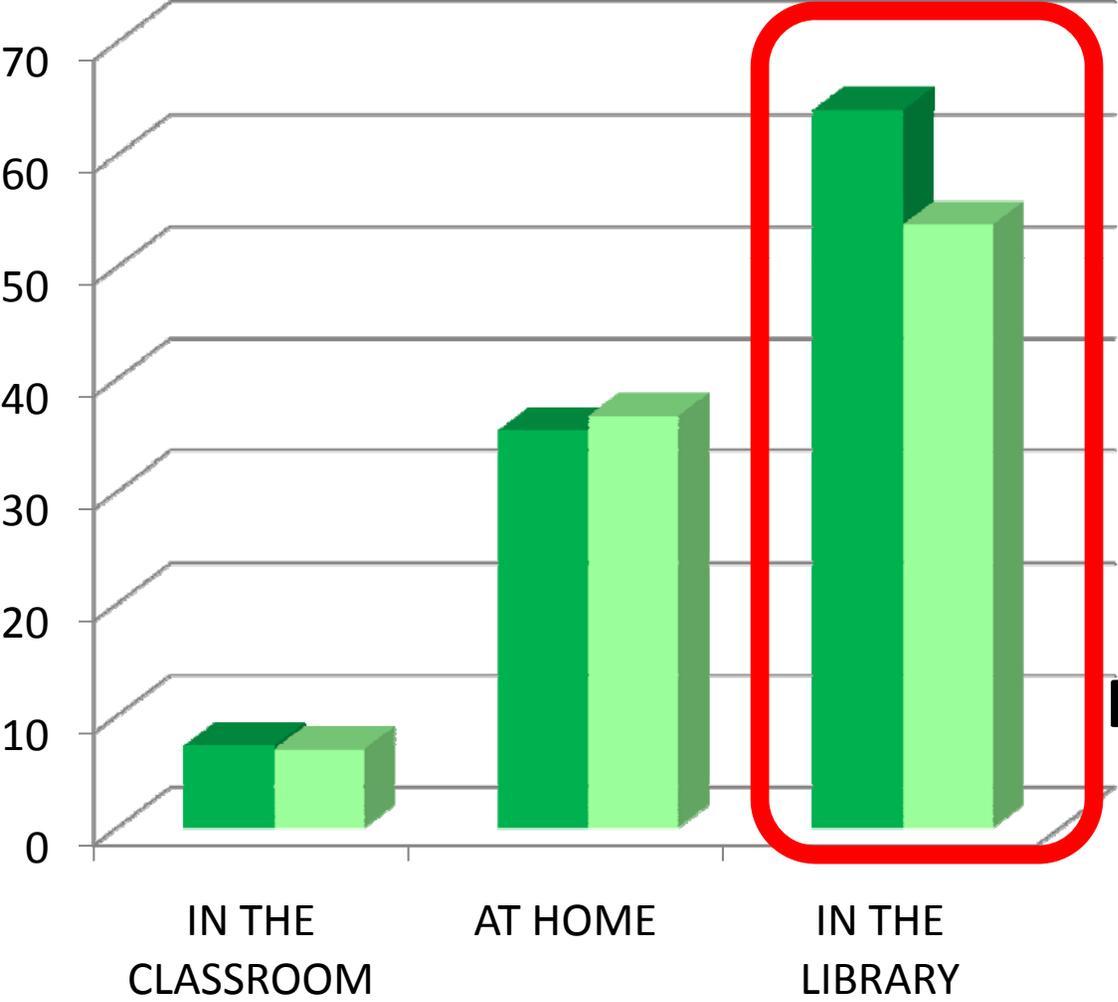
Fig. 9e: Most helpful service in database online access

What do you do
with available
online databases?

Usage of Online Databases

	PRINTING (%)	SAVING (%)	EMAILING (%)
ALL THE TIME	9.5%	23.1%	21.3%
MOST OF THE TIME	35.5%	39.0%	35.9%
ABOUT HALF THE TIME	19.2%	13.0%	12.7%
RARELY	15.0%	10.0%	13.0%
NEVER	6.4%	2.8%	6.4%
NOT SURE	2.8%	3.5%	3.6%
NOT APPLICABLE	7.5%	4.8%	7.1%

PHYSICAL LOCATION ACCESS



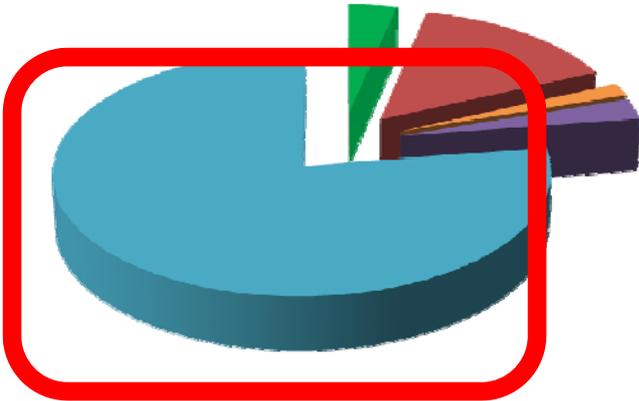
Where do you usually access the university's online databases?

- GRADUATE STUDENT
- UNDERGRADUATE STUDENT

Fig. 7: Physical Location Access

How do you access online databases of your university

GRADUATE



■ USED TO SEARCH ONLINE

■ NO

■ THROUGH AN ASSISTANT

■ THROUGH A LIBRARIAN

■ YES, PERSONALLY

UNDEGRADUATE

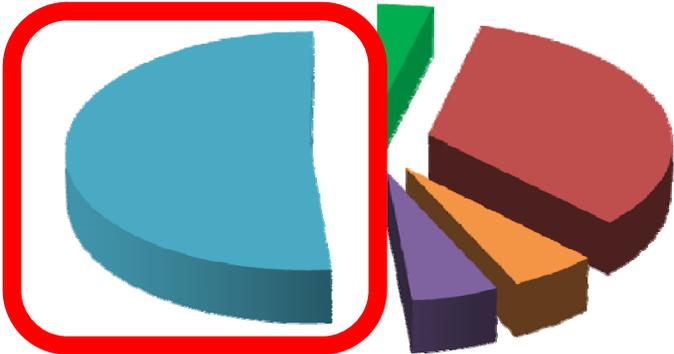
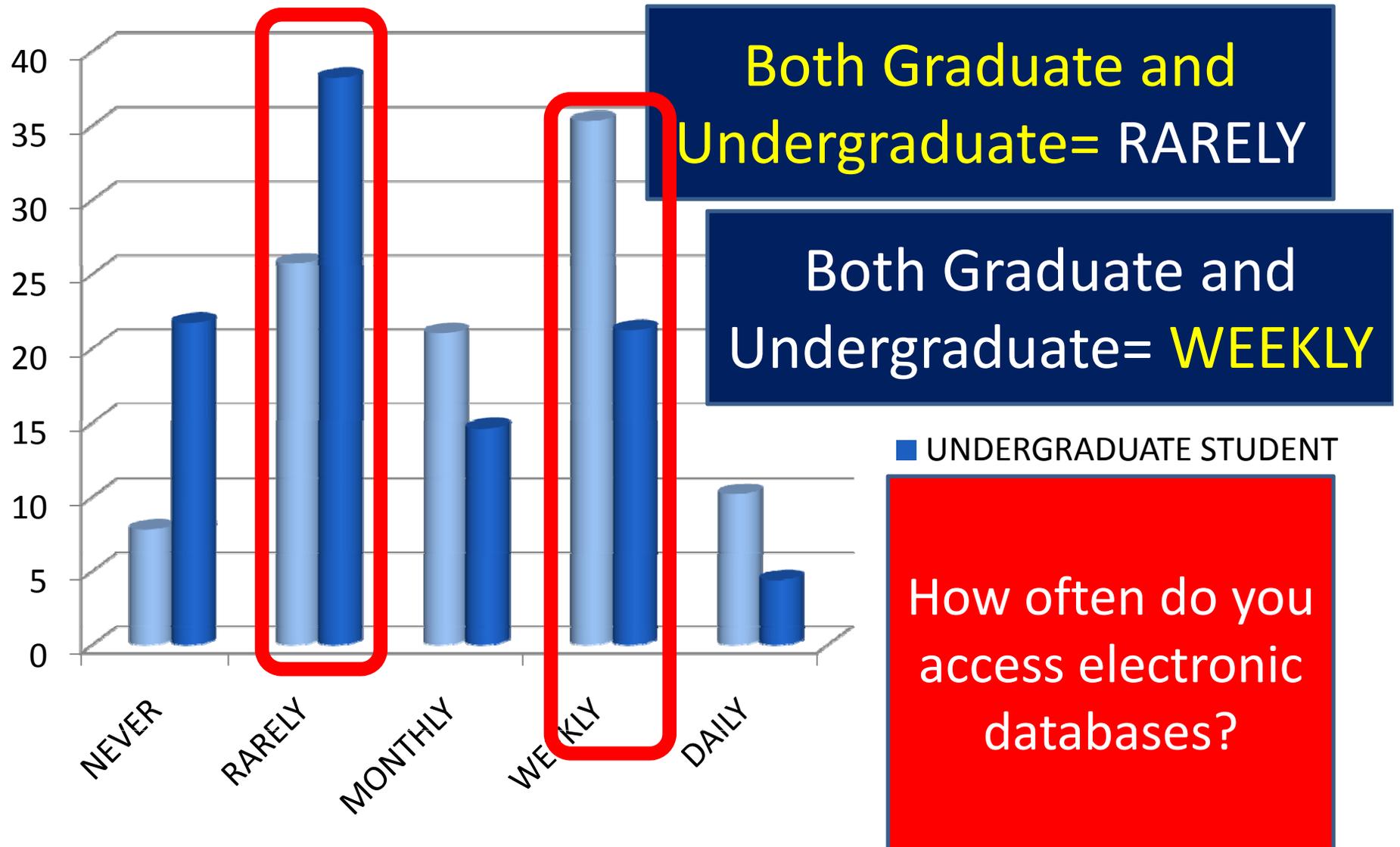


Fig. 8a: Search Online Databases

FREQUENCY ACCESS

Fig. 8b: Frequency of Electronic Database Search



IMPEDIMENTS

Reasons for Not Searching Online

REASONS	PERCENT (%)	RANK
NOT NEEDED	17.5%	1
DO NOT KNOW HOW SEARCH	8.0%	2
NO TIME TO SEARCH	7.4%	3
UNSATISFACTORY RESULTS IN THE PAST	3.0%	
NO HELP AVAILABLE	1.9%	
NO EASY ACCESS TO A COMPUTER	1.6%	

What prevented you from not searching online?

FREQUENCIES IMPEDIMENTS

Reasons for not Accessing Journals Electronically

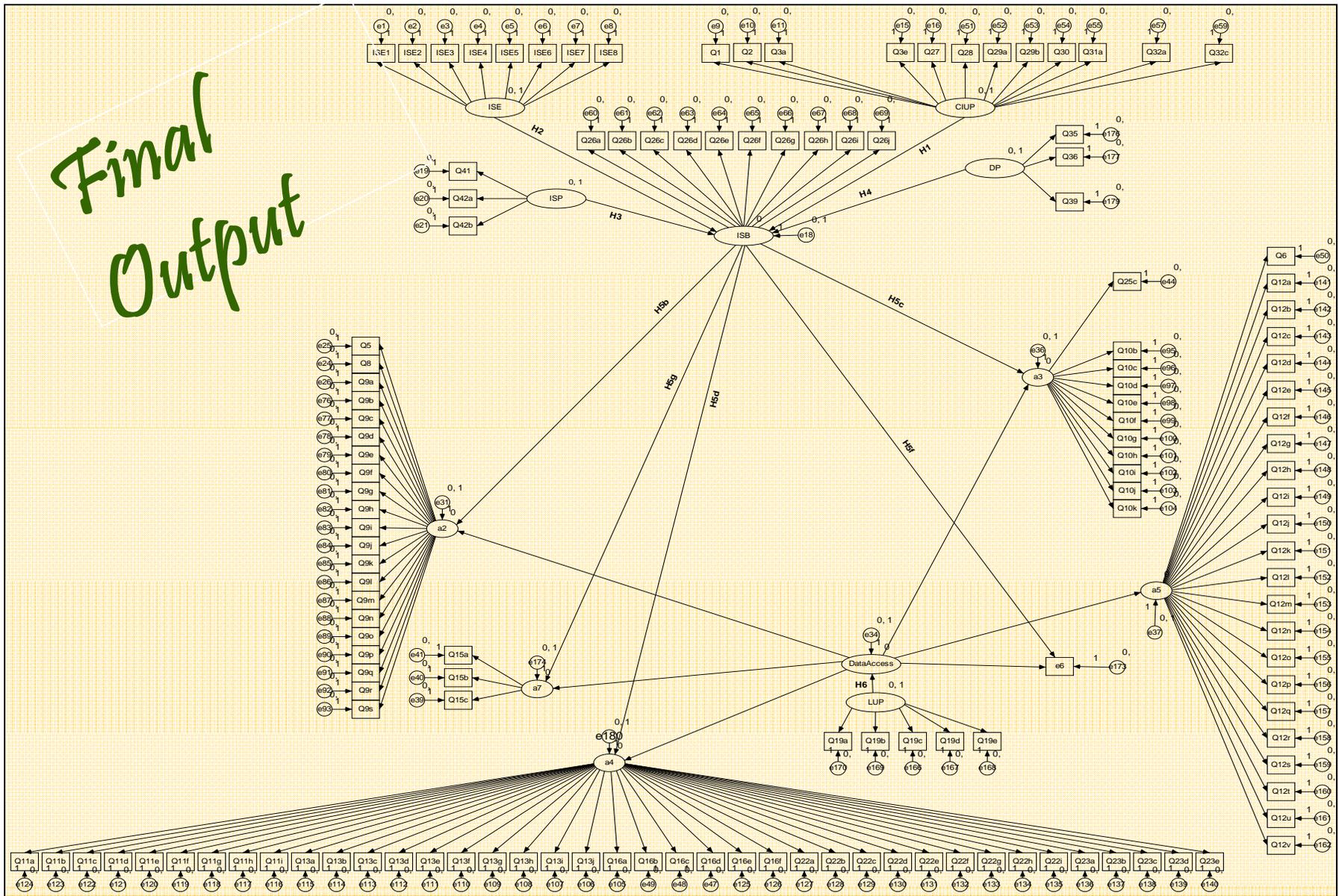
REASONS	PERCENT (%)	RANK
NOT NEEDED	32.9	1
LACK OF SUBSCRIPTION TO FULL TEXT	23.8	2.5
NO TIME TO ACCESS JOURNALS ONLINE	23.8	2.5
TOO SLOW TO DOWNLOAD	19.3	3
PASSWORD PROBLEM	19.0	
TOO MANY LOGINS REQUIRED	17.0	
BREAKDOWN OF SYSTEM	14.2	
ACCESS INSTRUCTIONS NOT CLEAR	12.6	

What prevented you from not accessing journals electronically?

STRUCTURAL EQUATION MODELLING (SEM)

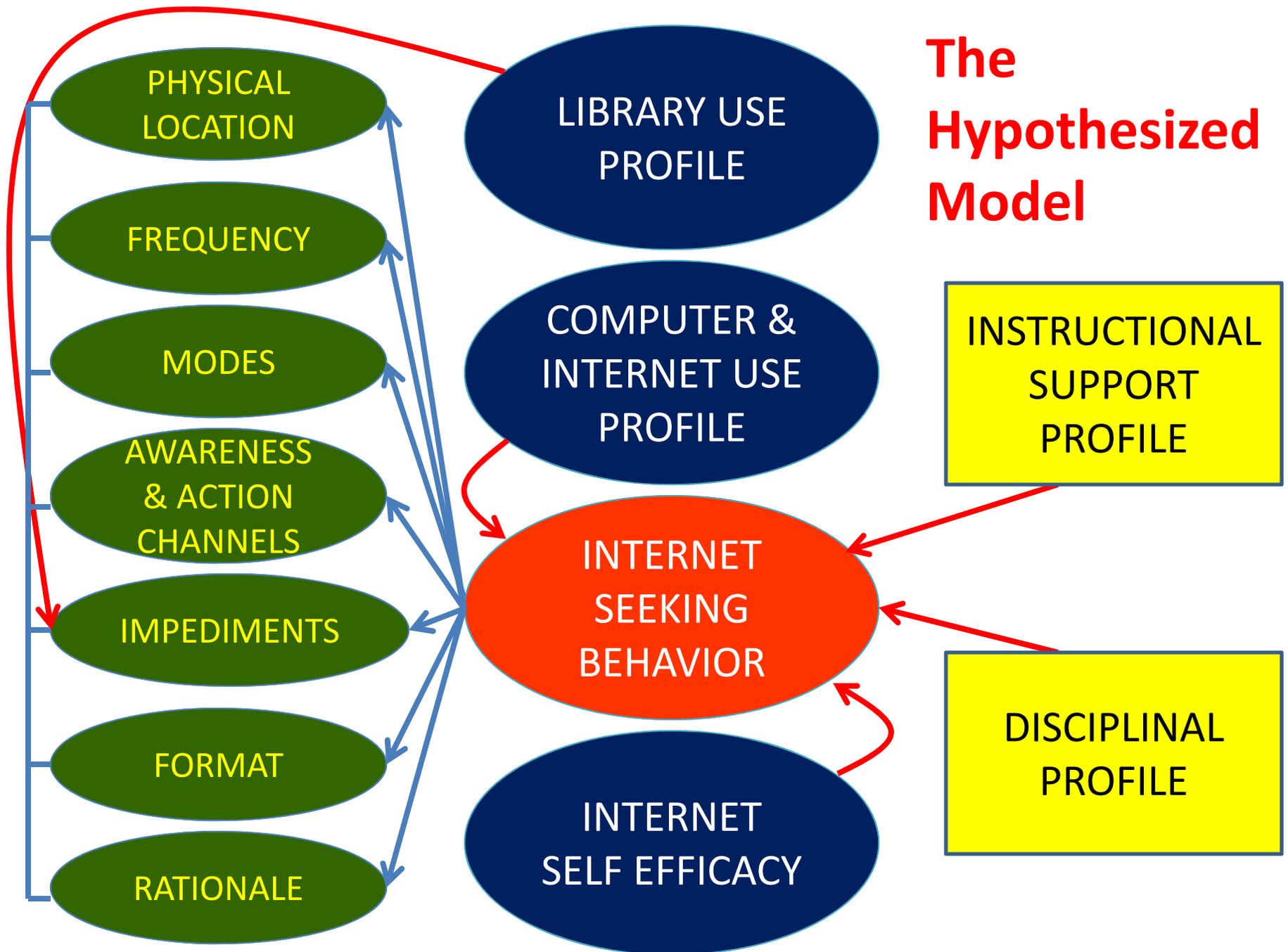
Present and test a **model**
that describes online
database use of university
students

Final Output

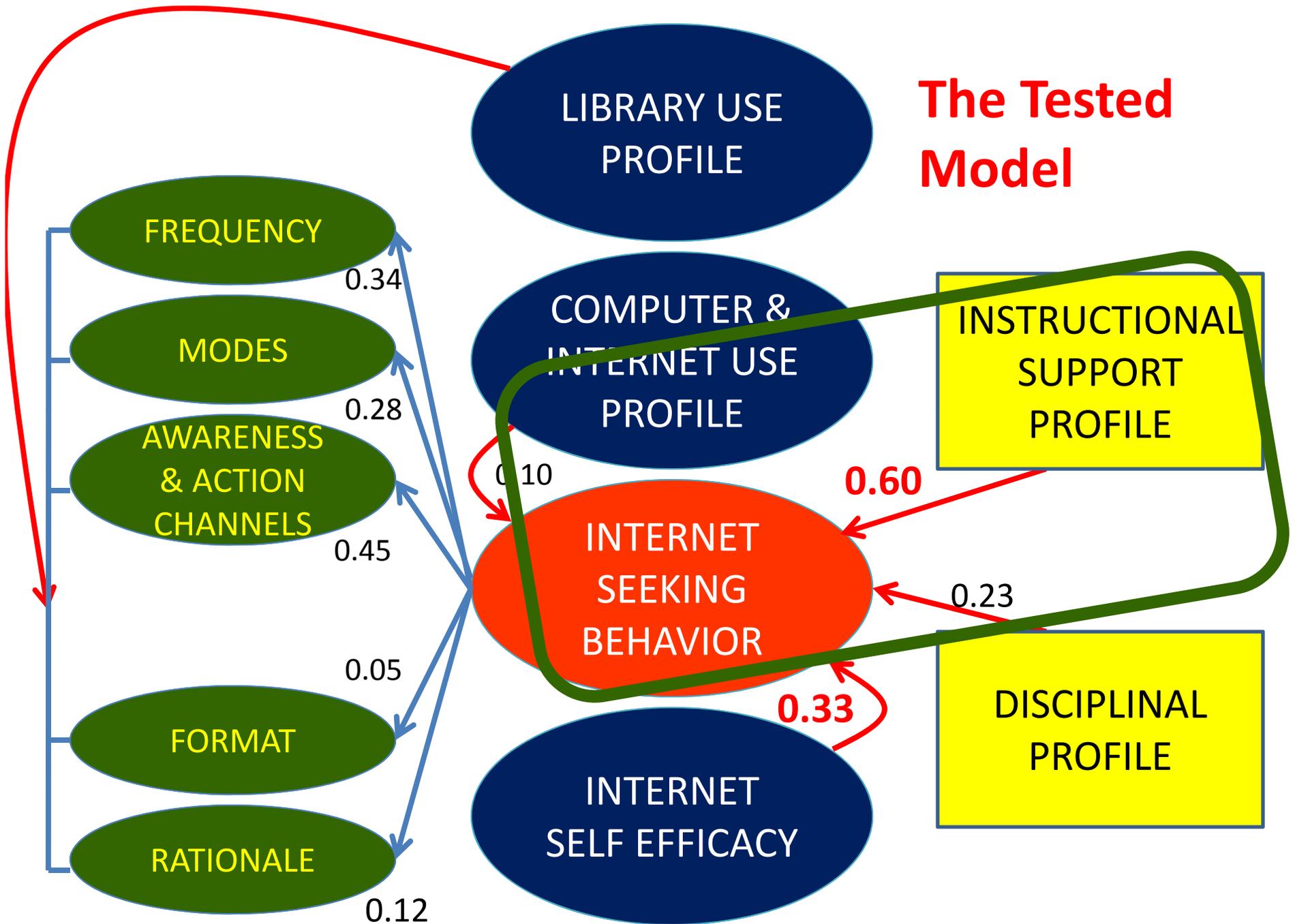


Database Use Structural Equation Model

The Hypothesized Model

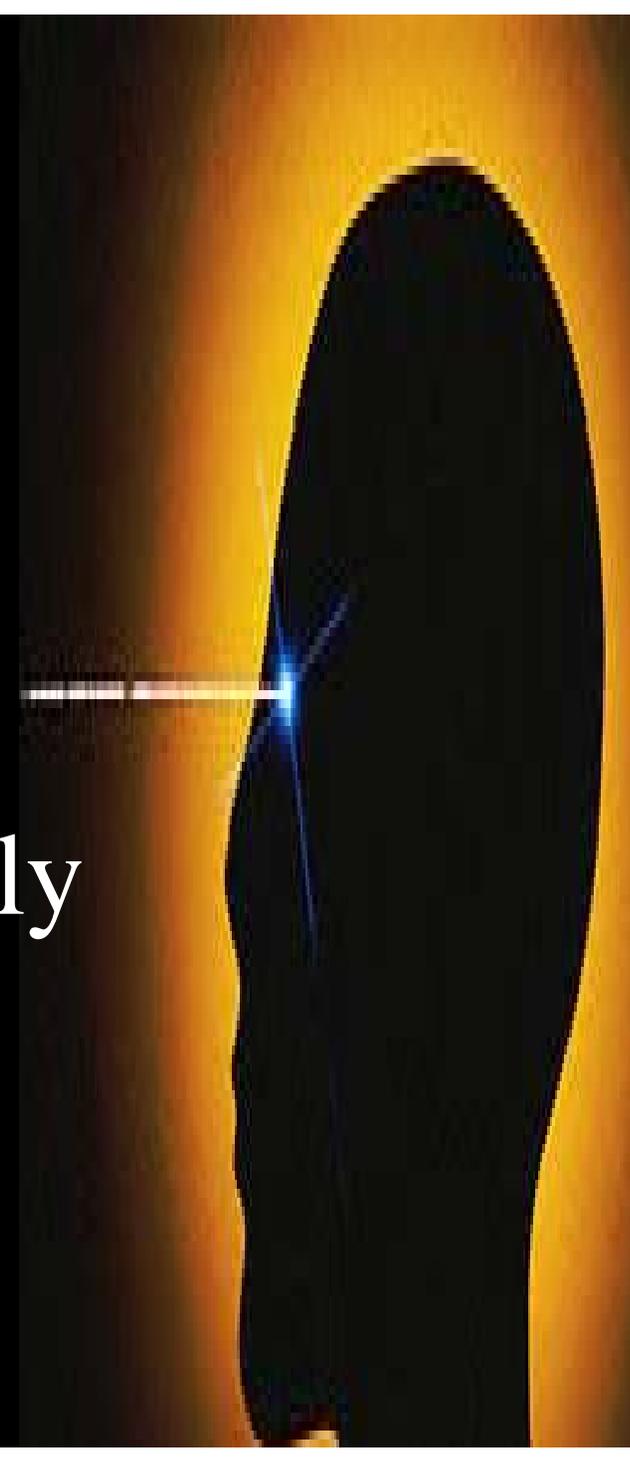


The Tested Model



Conclusion

Library use profile
(awareness of university
website, frequency of visit,
materials used) significantly
relates to the online
database use.



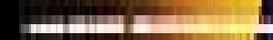
Conclusion

The internet seeking behavior affects the attributes of database access.



Conclusion

Internet seeking behavior is greatly affected by the instructional support profile and the students' internet self-efficacy.



TECHNOPEDAGOGY

Information Sharing

