

MARKETING RESEARCH FOR PROMOTING THE PRODUCT SERVICES OF THE UNIVERSITY LIBRARY STUDYING USERS BEHAVIOUR

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ABSTRACT:

To encourage students' use of the library, and in particular of its electronic resources, we need to understand what factors encourage students to seek out information in the library setting. Research has shown that self-efficacy influences academic achievement. This paper looks at the role self-efficacy plays in their search for information and use of the library's electronic resources, by surveying Transilvania University students. Their library and computer use were analyzed and correlated with their self-efficacy scores. Through statistical analysis, we found that use of the library correlated to the students' use of the library's electronic resources. We also found out that students who express an interest in learning about the library's electronic resources will be more likely to have higher self-efficacy.

Key words: electronic resources, university library, marketing research, users behaviour

Background Research

This section is an overview of research conducted on usage of library's electronic resources and examines self-efficacy as applied to academic settings. Information professionals have long sought to comprehend what factors are relevant in encouraging a person to seek out information. More recently, a particular focus of inquiry has been on those factors that play a role in deciding to use the library and its resources as a place to seek information (whether physically or virtually) as opposed to just surfing the Internet. These inquiries assume an even greater importance in light of the fact that more people are using the Internet to find information they need, information that is unmediated by the library. Informed library users know that libraries have resources that are more comprehensive and scholarly than most Web sites provide. Libraries provide access to scholarly literature that, as a rule, is not freely available on the Web, or may not be online at all. Often, it is in college that users become aware of libraries' resources, usually while having to write research papers. Assuming that on average most students face the same number and type of papers and assignments during their college career, it is critical to

understand what makes one student use the library's resources (print and/or electronic) while another will not think of the library as a place to find specialized resources for their papers, especially in the early parts of their college careers. One obstacle to the use of a library's resources, and in particular its electronic resources, is that they are not seen as being straightforward. In contrast to an Internet search engine, where a single keyword search will usually result in thousands of hits, no matter what the topic, in the library, students have to choose a particular database and be more selective in the search words they use. Moreover, database subjects often overlap, with differences in dates, journal and subjects covered, and whether the material is full-text or not. In addition, the library may have a print subscription to a certain title that is not full-text electronically, or the title may be accessible full-text through another database than the one originally searched. Therefore, not only do students have to find the relevant citations, but they also have to know how to locate the article after that. This means juggling many screens, many technologies, multi-tasking electronic jobs, and of course, knowing where to look for all this necessary information. Lastly, there is the additional confusion that more and more library databases use Web-based technologies. Because the interface is seamless there does not seem to be a visible, on the screen, difference between Web-based library resources and general Web-based resources. All of the above also assumes the student is proficient in the use of computers. It is quite clear that searching for information has become "inexorably linked to computer technology

In this study we will examine some factors that correlate with students' usage of the library's electronic resources. While we will examine the relationship of age and gender to usage, we will also focus on the concept of self-efficacy, a person's belief in their ability to attain desired outcomes

Students' Demographics

Demographics often yield important clues as to what factors contribute to undergraduates' use of electronic resources. There is a correlation between background characteristics such as gender, race, and initial critical thinking scores and library use during the freshman and sophomore years, although these played less of an important role in the junior year.

Age

Age is one variable that correlates with comfort with computers and use of electronic resources.

Gender

Gender is another relevant factor in examining use of electronic databases. In a study of high school students, it was found that their attitudes towards computers and their computer use tended to vary by gender. This difference, however, tended to diminish with computer experience.

Faculty influence

A study of faculty's use of electronic resources found that it was "influenced by such factors as computing skills of academics, their age and gender."

Frequency of computer use

Computer anxiety is another contributing reason that discourages users from taking advantage of library resources and services

Library use

Students' library use is another variable influencing the use of electronic resources. It is reasonable to assume that the more an undergraduate uses the library, the more familiar the student will be with its resources, including its electronic resources.

Self-efficacy

The degree of self-efficacy is another variable that appears to influence use of the library's electronic resources.

In this study it is hypothesized that:

1. Students who have more computer experience will be more likely to use the library's electronic resources and have higher self-efficacy.
2. Students who use the library's electronic resources from home have higher self-efficacy.
3. Students who frequent the library more often are more likely to use the library's electronic resources.
4. Students who use the library's electronic resources will be able to discriminate them from information from the Internet.
5. Students who express interest in learning about the library's electronic resources will have higher self-efficacy.

Methods

A pilot survey was conducted in the Spring semester of 2008. That survey had a number of open-ended questions, that were used to determine the close questions we asked in the Fall survey. Although helpful in some areas (for example, to determine what students came to the library for), some of the open-ended questions had a very low answering rate and therefore were not helpful in focusing our final survey's questions (in particular, students did not answer open-ended questions relating to which electronic resources they used.)

Our Fall 2008 survey contained two distinctive parts: a self-efficacy standard measuring instrument and a library component. The survey has been included in ANNEXES A.

The self-efficacy survey made use of a Likert scale. Seventeen statements were presented to the students, and they could agree or disagree with them on a five point scale, from

1=Strongly Disagree to 5=Strongly Agree. Thus, a total numerical value can be calculated from all the responses.

The library section consisted of 31 questions. Questions one through six were concerned with gathering demographic data. Questions seven to 12 focused on whether or not the student used the Internet and what for. Questions 13 to 26 dealt with how the students used the library and its electronic resources. Questions 26 to 31 focused on the how students gather necessary information for their research. Most questions were closed-ended, although some were open-ended.

Survey responses were coded and input into the SPSS statistical package for analysis and the hypotheses presented above were tested using analysis of variance (ANOVA). The ANOVA is used to uncover the effects of independent variables on an interval dependent variable. This procedure employs the statistic (F) to test the statistical significance of the differences among the obtained means of two or more random samples from a given population. The statistic (F) is a ratio, which, if sufficiently larger than 1, indicates that the observed differences among the obtained means are statistically significant. It is important to note here, however, that the samples were not random, which reduces the generalization of our results.

Results and Discussion

Demographics

Data from 340 usable surveys showed that the class was composed of 90% freshmen, 54% female students, 77% who were between the ages of 17 and 21, and 47% were working part-time.

Computer and Internet use

Computers are definitively present in students' lives in that 94% reported having access to a personal computer at home, with 93% saying they own one. For this population of incoming students there is no digital divide. Perhaps because so many students have access to a computer at home, they do not seem fully aware of the computing resources available to them: only 34% said they had access to computers at school, although there are student computer laboratories on campus.

Our incoming students are also very familiar with the Internet: 73% say they access the Internet daily, and an additional 25% at least once a week. In other words, over 97% of students access the Internet weekly or more often. When surfing, 44% look for educational information, 42% for entertainment information, 30% for news, 25% check for sports information, 9% for health information, and 70% report using e-mail often.

Library use.

Data revealed that 67% visit the library weekly, and only 1% has never been to the library [Table 1]. Asked what they did at the library, 80% reported studying, 38% to do research, 33% to sleep, 30% to socialize, 24% to use the library's electronic resources, 22% to check books out and 21% to e-mail or chat [Table 2].

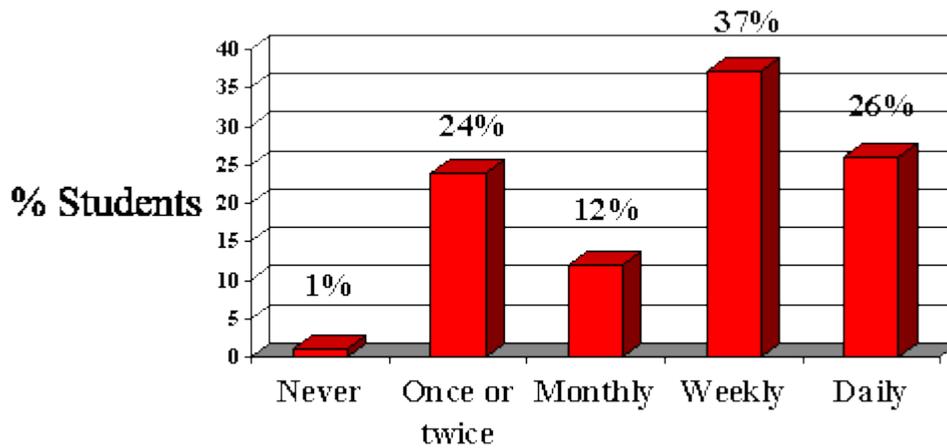


Table 1: No. of library visits

Even though some of these areas overlap (research and use of electronic resources, foreexample), it is clear that these students are mostly using the library as a place, not to make use of the library's resources or services.

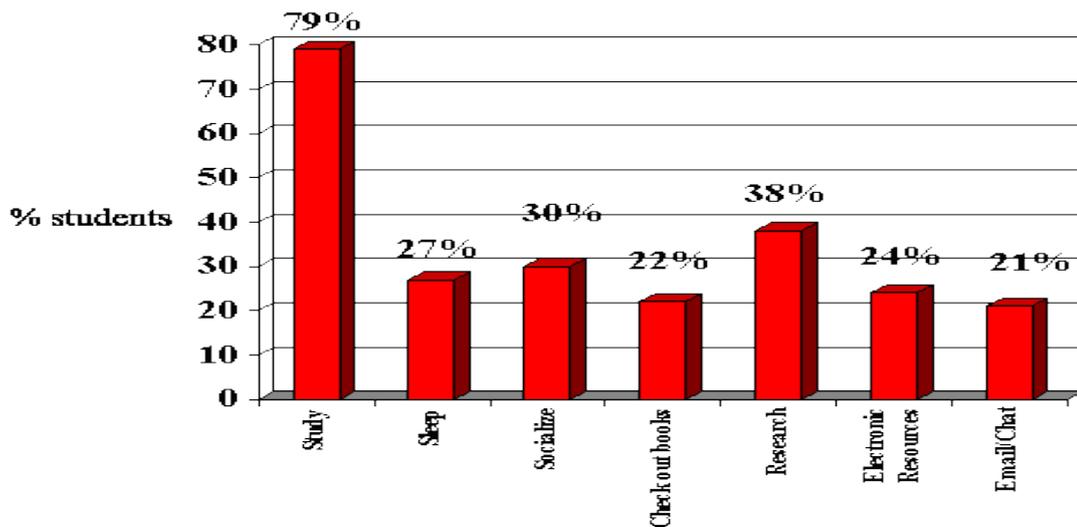


Table 2: Type of library use

It is interesting to note that although only 24% responded that they use the library's electronic resources when at the library, 81% responded that they have used those resources, and 30% said they use them at least weekly.

Use of electronic resources

We then asked students which electronic resources they were familiar with. During the earlier pilot testing students did not reply to open questions on the topic and, therefore, the resources available at the Baruch College Newman library were listed, including some more specialized databases we doubted freshmen would have used. The results are in the table below.

Library Electronic Resources	% of Students
LIBRARY OPAC	51%
SPRINGERLINK	36%
Academic Search Premier	31%
SCOPUS	26%
ENGINEERING VILLAGE	9%
OXFORD JOURNALS	18%
OTHERS	6.3%

Table 3: Students' use of the library's electronic resources

Conclusion

In this study we found significant support for hypothesis 3: that students who frequent the library more often are more likely to use the library's electronic resources; and for hypothesis 5: that students who express an interest in learning about the library's electronic resources will be more likely to exhibit higher self-efficacy. We also have evidence (non-significant) demonstrating that students who have more computer experience will be more likely to use the library's electronic resources and have higher self-efficacy (hypothesis 1), that students who use the library's electronic resources from home have higher self-efficacy (hypothesis 2), and that students who use the library's electronic resources will be able to discriminate them from information from the Internet (hypothesis 4). In this paper we have tried to determine some students' characteristics that would lead them to use the library's electronic resources.

An additional line of inquiry would be to understand how students who use the library as a place to study develop more awareness of the library's resources. If a library understood how students gained that awareness (through interacting with librarians at the reference desk, or through following signs, or by observing other students, for example), the library could make further efforts to reach students in an efficient way. Also, if the library knew how students absorb this kind of information, it could be the basis for developing sound pedagogical methods to transmit information to our students.

Finally, research could also explore, in more depth, what makes students decide to use the Internet as opposed to the library's electronic resources, and what kinds of incentives would encourage students to use more of the library's resources.

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ANEXES A Survey

Each of the following statements is trying to describe you. Indicate the extent to which you agree or disagree with each statement. To complete an item, simply circle the responses that best describe you. Please mark only one answer per item.

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
1. When I make plans, I am certain I can make them work.	1	2	3	4	5
2. One of my problems is that I cannot get down to work when I should.	1	2	3	4	5
3. If I can't do a job the first time, I keep trying until I can.	1	2	3	4	5
4. When I set important goals for myself, I rarely achieve them.	1	2	3	4	5
5. I give up on things before completing them.	1	2	3	4	5
6. I avoid facing difficulties.	1	2	3	4	5
7. If something looks too complicated, I will not even bother to try it.	1	2	3	4	5

8. When I have something unpleasant to do, I stick to it until I finish it.	1	2	3	4	5
9. When I decide to do something, I go right to work on it.	1	2	3	4	5
10. When trying to learn something new, I soon give up if I am not initially successful.	1	2	3	4	5
11. When unexpected problems occur, I don't handle them well.	1	2	3	4	5
12. I avoid trying to learn new things when they look too difficult to me.	1	2	3	4	5
13. Failure just makes me try harder.	1	2	3	4	5
14. I feel insecure about my ability to do things.	1	2	3	4	5
15. I am a self-reliant person.	1	2	3	4	5
16. I give up easily.	1	2	3	4	5
17. I do not seem capable of dealing with most problems that come up in life.	1	2	3	4	5

1. Gender: _____

2. Age:

- a. up to 18
- b. 18 to 21
- c. 22 to 25
- d. 26 to 30
- e. 31 to 35
- f. 36 and up

3.. Status:

- a. Freshman
- b. Second year
- c. Third year
- d. Fourth year

e. Graduate Student

4. I am presently:

- a. Working full-time
- b. Working part-time
- b. Unemployed
- c. Other (Please specify): _____

5. Do you own a personal computer?

- a. Yes
- b. No

6. Do you have access to a computer?

- a. At home
- b. At school
- c. At work
- d. Friend
- e. Other (Please specify): _____

7. Do you use the Internet?

- a. Daily
- b. At least once a week
- c. At least once a month
- d. Less than once a month

8. If you use the Internet, do you use it to check for?

- a. Sports
- b. Entertainment
- c. Education
- d. News
- e. Health
- f. Other (Please specify): _____

9. Do you use search engines?

- a. Yes
- b. No

If you answered yes to question 13, please answer the following 2 questions:

10. How often do you use search engines:

- a. Never
- b. Once or twice
- c. Monthly
- d. Weekly
- e. Daily

11. Which search engine do you use?

- a. Google
- b. Yahoo
- c. Altavista
- d. Excite
- e. MSN

- f. AskJeeves
- g. Other (Please specify): _____

12. Do you use e-mail to communicate?

- a. Often
- b. Sometimes
- c. Rarely

13. How often did you visit the University library this semester?

- a. Never
- b. Once or twice
- c. Monthly
- d. Weekly
- e. Daily

14. At the library, do you:

- a. Study
- b. Sleep
- c. Socialize
- d. Check out books
- e. Research
- f. Use the library's electronic resources
- g. E-mail or chat
- h. Other (Please specify): _____

15. Have you ever used the library's electronic resources?

- a. Yes
- b. No

If you checked yes in question 15, please answer the following 3 questions:

16. Do you use the library's electronic resources?

- a. Daily
- b. At least once a week
- c. At least once a month
- d. Less than once a month

17. Which of the following resources are you familiar with?

- a. Academic Search Premier
- b. Springerlink
- c. Scopus
- d. Engineering Village
- e. Oxford Journals
- f. Library's OPAC

g. OTHERS

i. Other (Please specify): _____

18. Do you use the library's resources from home?

a. Yes

b. No

19. If you answered no to question 18, Did you know you can access the library's resources from home:

a. Yes

b. No

20. Knowing that you can access the library's resources from home, will you access these resources from home in the future?

a. Yes

b. No

21. Is using the library's electronic resources?

a. Very hard

b. Somewhat hard

c. Somewhat easy

d. Very easy

22. In using the library's electronic resources, do you find what you're searching for?

a. always

b. sometimes

c. Never

23. If you use the library's electronic resources, Please describe in detail what steps you take when conducting research:

24. To find information do you usually start your research looking through?

a. Internet at home

b. Internet on campus

c. Printed books

d. Electronic books

e. Printed journals and magazines

f. Electronic databases

g. Electronic journals

h. Other (Please specify): _____

25. How do you learn about the library's electronic resources?

a. Teach myself

- b. From the Reference desk
- c. From friends
- d. From the library's Websites
- e. From workshops
- f. From Professors

26. "I can find the information I need for my papers through the Internet?" What do you think about this statement?

- a. Strongly disagree
- b. Disagree
- c. Agree
- d. Strongly agree

27. "I can find the information I need for my papers through the library's electronic resources?" What do you think about this statement?

- a. Strongly disagree
- b. Disagree
- c. Agree
- d. Strongly agree

28. Do you find most of your information for your school papers:

- a. Through the internet
- b. Through the library's electronic resources

29. Do you feel there is a difference between what you find through the Internet or through the library's electronic resources?

- a. Yes
- b. No

Please explain in detail:

30. How motivated are you to learn how to use the library's electronic resources?

- a. Very motivated
- b. Somewhat motivated
- c. Not motivated

31. Have you attended any of the library's workshops?

- a. Yes
- b. No