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December 1998

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Attitudes Toward Information Privacy: Differences Among and Between Faculty and Students

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As the information age continues to develop and telecommunications capabilities continue to expand, information privacy can be threatened in many ways. University faculty members are in a unique position of influencing opinion. Additionally, records maintained by universities are, by their very nature and by law, private. Further, universities are experiencing an expanding role in providing access to information through the use of networking technologies. Students are exposed to dramatically increasing pressures to use and study technology and many of their fields of study incorporate practices for which information privacy is of paramount importance. Therefore, this study was undertaken to explore both the level of concern among faculty and students regarding information privacy issues and to identify factors associated with possible differences in those attitudes.

Based on the instrument developed and validated by Smith, Milberg and Burke and published MIS Quarterly, June 1996, a study was designed to further our understanding about attitudes of the university community concerning organizational practices in the collection and use of information. Smith, Milberg and Burke developed an instrument to measure individual concerns relating to organizational use of information along four dimensions: collection, errors, unauthorized secondary use, and improper access. This 15-item instrument was used in combination with a set of additional questions allowing the respondents to self-report their skill level and usage habits regarding computers and Internet technologies. In addition the respondents were asked demographic questions. Respondents were asked to complete the attitude questions on the front of the form then turn the form over to complete the descriptive questions.

Smith, Milberg, and Burke suggest that higher levels of concern are associated with individuals who have less understanding of the processes associated with organizational collection and use of information. Others have suggested that frequency of use of various technologies is associated with lower levels of concern with privacy issues. Still other writers suggest that various personality characteristics are associated with information privacy concerns. This study was designed to explore some of the factors associated with concerns about information privacy, taking as the population to be studied two segments of the university community—faculty and students.

A survey of all faculty at one regional public university in the southeast United States was conducted. A total of 107 responses were received (49.54 percent). Differences were analyzed based on computer skills, computer usage, college within the university, and gender. Significant differences were found among faculty respondents in three of the four dimensions of information privacy concerns. (Table 1) From this study our conclusion is that business college faculty are less concerned about organizational practices related to collection, errors, and unauthorized secondary use of information than their counterparts in arts and sciences, education, and nursing.

During the same semester, a survey of students was conducted. The student survey was administered in classes throughout the university. The survey form for students was similar in format to that for faculty. A simple random sample of classes was selected and all faculty members contacted agreed to allow class time to participate in the survey. The survey was administered by the authors personally, with assistance from one student worker. All students were informed that their participation was voluntary and were asked to complete the form only once (in case they were in more than one of the sample classes). A total of 378 students (in 25 classes) responded to the survey, representing 7.4 percent of the student population. Statistically significant differences occurred in the dimensions of collection, errors, and unauthorized secondary use related to which college the respondent student was enrolled in. (Table 2) The mean level of concern was lower for college of business students than for students in arts and sciences, education or nursing.

Because of the identified differences in both faculty and students by college, further analysis was conducted to determine whether there were significant differences between faculty and students in each college. Faculty in arts and sciences, nursing, and education have significantly higher levels of concern about information collection than students in those colleges. Further study is needed to refine the differences by college to understand the underlying reasons for these differences. This is important so that information systems faculty and practitioners can more effectively address these concerns in application planning, development and implementation.

References

References are available from the first author at Palexand@unanov.una.edu, 256-765-4409 (voice), or 256-765-4959 (fax).

Table 1. Analysis of Variance of Faculty Data

| | Dependent Variable | | | | | | |
|----------------------|--------------------|----------|-------------------------------|-----------------|--|--|--|
| Independent Variable | Collection | Errors | Unauthorized Secondary Use | Improper Access | | | |
| • | F=4.14 | F=3.23 | F=2.86 | F=1.70 | | | |
| College | p=.0038* | p=.0157* | p=.0275* | P=.16 | | | |
| | F=0.63 | F=0.27 | F=1.04 | F=0.63 | | | |
| Classification | p=.60 | p=.85 | p=.38 | P=.60 | | | |
| | F=0.52 | F=0.24 | F=0.48 | F=0.45 | | | |
| Computer Skills | p=.66 | p=.79 | p=.62 | P=.64 | | | |
| | F=1.64 | F=8.56 | F=5.66 | F=13.21 | | | |
| E-Mail | p=.20 | p=.0004* | p=.0047* | p=.0001* | | | |
| | F=1.77 | F=1.33 | F=0.94 | F=2.29 | | | |
| Internet Use | p=.18 | p=.27 | p=.40 | P=.11 | | | |

^{*}significant at alpha=.05

Table 2. Analysis of Variance of Student Data

| | Dependent Variable | | | | | | |
|----------------------|--------------------|--------|---------------|-----------------|--|--|--|
| Independent Variable | Collection | Errors | Unauthorized | Improper Access | | | |
| | | | Secondary Use | | | | |
| | F=4.72 | F=2.55 | F=2.65 | F=2.42 | | | |
| College | p=.003* | p=.05* | p=.05* | P=.06 | | | |
| | F=3.44 | F=0.06 | F=0.61 | F=0.52 | | | |
| Classification | p=.03* | p=.94 | p=.34 | P=.59 | | | |
| | F=0.37 | F=1.16 | F=0.51 | F=0.34 | | | |
| Computer Skills | p=.69 | p=.32 | p=.60 | P=.71 | | | |
| | F=1.31 | F=0.35 | F=1.05 | F=0.96 | | | |
| E-Mail | p=.27 | p=.71 | p=.35 | P=.38 | | | |
| | F=1.72 | F=1.19 | F=1.44 | F=0.32 | | | |
| Internet Use | p=.18 | p=.30 | p=.24 | P=.72 | | | |

^{*}significant at alpha=.05

Table 3

| | Means (SD) | | Means (SD) | | Means (SD) | | Means (SD) | |
|------------------|-----------------|---------|------------|---------|------------|---------|------------|--------------------|
| | Arts & Sciences | | Business | | Education | | Nursing | |
| Subscale | Faculty | Student | Faculty | Student | Faculty | Student | Faculty | Student |
| N = | 57 | 143 | 14 | 124 | 19 | 96 | 8 | 15 |
| Collection | 6.03 | 4.98 | 5.14 | 4.59 | 6.11 | 5.26 | 6.69 | 5.02 |
| | (1.00) | (1.41) | (1.02) | (1.30) | (0.88) | (1.29) | (0.32) | (1.32) |
| Errors | 6.13 | 5.84 | 5.02 | 5.51 | 6.22 | 5.85 | 5.5 | `5.58 [°] |
| | (1.06) | (1.06) | (1.57) | (1.15) | (0.85) | (1.04) | (1.63) | (1.59) |
| Unauthorized | 6.49 | 6.43 | 5.55 | 6.10 | 6.64 | 6.39 | 6.69 | 6.18 |
| Secondary Access | (1.00) | (0.73) | (1.70) | (1.24) | (0.63) | (0.98) | (0.53) | (1.56) |
| Improper | 6.42 | 6.31 | 5.71 | 6.03 | 6.49 | 6.38 | 6.38 | 6.13 |
| Access | (1.00) | (0.85) | (1.36) | (1.25) | (0.70) | (0.95) | (0.49) | (1.37) |
| | 6.25 | 5.89 | 5.36 | 5.56 | 6.37 | 5.97 | 6.29 | 5.73 |
| Overall | (0.94) | (0.74) | (1.24) | (0.99) | (0.69) | (0.84) | (0.46) | (1.29) |







