

Davis, J., & Bentley, S. (1979). Factors Affecting Faculty Perceptions of Academic Libraries. *College & Research Libraries*, 40(6), 527-532. doi:https://doi.org/10.5860/crl_40_06_527

Davis and Bentley's 1979 article, *Factors Affecting Faculty Perceptions of Academic Librarians*, aims to "further statistical exploration of the relationship among selected variables dealing with the perception of an academic library by its faculty" (p. 527). More specifically the authors ask, how do the independent variables of institutional affiliation, subject area, academic rank, or length of time at an institution affect the dependent variables of faculty members attitudes towards, perceptions of, and use of their institutional library. *Attitudes*, *perceptions*, and *use* are generic, undefined, categorical terms used to help organize and define 23 dependent variables under the three headings. When the four independent variables are cross tabulated with the 23 dependent variables, the authors have a total of 92 problem statements (p. 529).

Davis and Bentley hypothesized that subject area, academic rank, and length of time at an institution would result in "statistically significant differences" (p. 528) in responses towards library attitudes, perceptions, and use. The authors did not think there would be a statistically significant difference between institutional affiliation and library attitudes, perceptions, and use based on previous literature.

The authors hypothesized that their findings would "yield significant differences" (p. 528) between subject field and library attitudes, perceptions, and use because of the "differing needs and uses of literature in the various disciplines" (p. 528).

They also hypothesized a significant result in academic rank and the dependent variables based on "the differing reasons for library use, different levels and types of course taught, and different degrees of teaching and research experience associated with increasing rank" (p. 528).

Lastly, the authors also expected length of time at an institution to be significant “because a longer term suggested a correspondingly longer period of library use and, hence, more familiarity with the institution’s library” (pp. 528-529).

Davis and Bentley’s literature review provides over 20 references on which they have a strong historical basis for their study. Out of those references, only three are older than 10 years which suggests that the authors tried to find relevant, contemporary literature (p. 532). As the authors are trying to further research in librarianship, it makes sense that their references were heavily disciplined in library science. It is evident that the authors used their literature review to inform their hypotheses. For example, the authors use Nelson’s research on how rank and length of time at an institution had a relationship on faculty’s awareness and attitudes towards reference service (p. 527).

The study reused data from previous literature. In the original study, the population was 474 full-time, permanent faculty listed in the 1977-78 academic rosters from three private schools in Worcester, Massachusetts (Clark University, College of the Holy Cross, and Worcester Polytechnic Institute). In the original study, the authors deemed that a 25% random sample would be sufficient to gather applicable data. However, according to the Table for Determining Sample Size from a Given Population (Course Materials, p. 21) a more suitable sample would have been 214. Nonetheless, in the original study, 121 participants were chosen randomly from the population. The 121-person sample received, by mail, a thirty, multipart questionnaire that could be answered anonymously. After a week, those who did not respond received a follow-up letter and another copy of the questionnaire. A week after the follow-up letter, library staff at each institution made calls to non-respondents to request the completed survey. At the end of data collection, the sample size was reduced from 121 to 87.

Though the reason was not explicitly addressed, Davis and Bentley used previous instrumentation for their research and did not create their own. In the original study, a thirty multipart survey was created and meant to measure the “viability of merging the three separate libraries” (p. 527). The survey used a five-point Likert scale and checklist responses to aid in data formatting and to provide minimum effort on the part of the participants. In the original survey, questions relating to faculty members institutional libraries were included and these relevant questions were used in the current study. Davis and Bentley do not provide a copy of the original questionnaire (though the original study is referenced), nor do they provide a list of the questions taken from the questionnaire that were used for their study.

Davis and Bentley conducted a Chi-Square Test of Independence to “determine if there were any significant differences” (p. 529) among the faculty’s attitudes, perceptions, and use of their institutional library as related to institutional affiliation, subject area, academic rank, and length of time at institution. The authors state that some Likert-scale categories needed to be combined to “increase the expected frequencies in various cells” (p. 529) so that the test could be performed correctly. In Table 1 and in some instances of Table 2, Davis and Bentley combined the top two Likert-scale responses and the bottom two Likert-scale responses to form two responses respectively, instead of four. Answers of “No opinion” were not included in the calculations.

Out of the possible 92 cross-tabulations performed, only seven were significant at the .05 level (p. 529). The authors do not provide a complete list or graph of all the cross-tabulations, instead focusing their efforts on those that were interesting to the study and statistically significant.

The authors hypothesized that there would be no significant difference between the dependent variables and institutional affiliation. Their data confirmed their hypothesis.

Davis and Bentley hypothesized that their findings would result in “statistically significant differences” (p. 528) regarding subject area, academic rank, and length of time at an institution. Per their findings, subject area ($\chi^2 = 7.76$) and academic rank ($\chi^2 = 11.73$) were only statistically significant when the dependent variable related to faculty expectations on always or frequently finding a specific item in the library.

Of the four independent variables studied, length of time at the institution was the “characteristic that yielded the largest number of significant differences” (p. 529). In this study, length of time was divided into 0-6 years and 7 or more years. When the dependent variable related to faculty expectations on always or frequently finding a specific item in the library, $\chi^2 = 8.10$. Overall, faculty who had been at their institution for seven or more years were more likely to rate library attitudes, perceptions, and use of the library as more favorable or in a more positive light.

In their Discussion, Davis and Bentley explicitly point out three conclusions. First, none of the four independent variables (institutional affiliation, subject area, academic rank, or length of time) were found to have significant differences when the dependent variables were satisfaction/adequacy of collection, policies, or staff. Because of their hypotheses that subject area, academic rank, and length of time would be statistically different, the authors explicitly state that further study is needed to explain

why the hypotheses was rejected. Likewise, the authors point out the frequent correlation between academic rank and length of time at an institution and hypothesized that these variables would yield statistically significant results; however, the data did not confirm their hypotheses.

Davis and Bentley do an adequate job of making warranted conclusions as to the nature of the data that did not test as expected. For example, the authors surmised that perhaps faculty in the science subject area had high satisfaction of expectations due to the “more compact nature of scientific literature as compared with humanities and social sciences” (p. 530). They also posited that the inverse relationship between high satisfaction and lower academic rank may be attributable to the faculty demand on libraries for researching and publishing (p. 530).

The reason that those who had been with their institution less than seven years were the most dissatisfied with their institutional library was not directly addressed, but the authors did provide useful suggestions based on their findings to help academic librarians address the issue. Davis and Bentley’s explicit suggestions to academic librarians on ways they may create positive outcomes for their libraries and faculty based on the data was excellent.

Lastly, the authors provide solid future directions. Using their literature review and the new information learned from the current study, questions on satisfaction are explicitly stated to help future researchers in their endeavor. For example, the very targeted suggestion to “investigate specific causes of dissatisfaction among new and lower-rank faculty” to determine factors that may not have been addressed by the current study.

Davis and Bentley’s article is a good starting point for those looking for literature on factors that may affect faculty perceptions of academic libraries. However, I would not reference it in my own research. Major issues I had with the article include the fact that the authors never defined their dependent variables. With over 20 to measure, the authors categorized them to get an overall picture of faculty’s attitudes, perceptions, and use of institutional libraries but the reader never learns the 23 dependent variables measured. An easy remedy would have been to include the list of questions used from the original survey as an appendix so the reader could, at the very least, see the variables measured.

Regarding results, there was also a paragraph where the authors pointedly mentioned Nelson’s 1973 study wherein Nelson divided his length of time at institution at the 10-year mark (p. 531). In the

article, the length of time at institution is 0-6 years, and then 7+ years. This seems a very arbitrary division and no explanation is given for why those years are chosen. In fact, I am not sure if Davis and Bentley made the division or if this was pulled from the original study. Nevertheless, I would think that you would want to follow previous research so that data can be compared more equally. Davis and Bentley do perform a Chi-Square test with 10 being the dividing year and find that the results for the dependent variable, importance of helpfulness of library staff, produced a different significant result (at .05) than when they used their 7-year mark (p. 531). Knowing that they could have performed and published the results with a 10-year dividing line, I am curious to know why they did not. Especially, as again, the authors do such a good job of referencing their articles from their literature review. Performing the Chi-Square test with the 10-year mark would have made their findings easier to compare to Nelson's.

I applaud Davis and Bentley for using already collected data and finding the questions that were most applicable to their study, however I do not feel that the data was the most fitting. I understand that by not creating their own instrumentation the authors probably saved a lot of time, money, and effort, but the original survey was mailed out three years before the current article was published. Attitudes, perceptions, and use of libraries by the faculty could have changed within the three years. Also, the original study had a very small sample of 87 participants. Though the original study aimed to get 121 participants to account for 25% of their given population, I think (and the Course Materials confirmed) that the sample size was too small. I also feel that the original study could have mailed out more surveys than needed and kept requesting or reminding responders until they received 121 completed surveys. However, considering their small sample size and the very controlled population of full-time private school faculty, I would be hesitant to use that these results as applicable to all academic librarians and their faculty perceptions at large.

Davis and Bentley's literature review was very well done. They do a very thorough job of explaining the previous studies and literature and clearly delineating how the previous research is applicable to their current study. In the same vein, the authors do a very good job of providing future directions and explaining confounding or unexpected results. It is clear that they have a good understanding of their field and, in particular, the expectations of faculty.

If I were to come across this article in my research, I would use Davis and Bentley's literature review and future directions to guide me in finding similar research in the same area but with larger and

more diverse populations and sample sizes. I would also look for research where surveys were conducted closer to the publication date. In the article, I feel that the results could have been made clearer simply by publishing the questions used. Perhaps not as common in the late 1970s, today, I would look for an article that also published their instrumentation.