

Summary of Discussion for
Disciplinary Differences and Undergraduates' Information-Seeking Behavior
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This article sparked several lines of discussion in the class.

Nearly everyone in class took issue with Biglan's Typology, as presented and used in this paper. While the author talks of each of the three axes of the typology as a continuum, in practice each axis is treated as a binary choice. A discipline is either "hard" or "soft", with no in-between values. Also, we saw the choice of the three axes as somewhat arbitrary, particularly the "life / non-life" axis. Apparently, "biology" is not classifiable in this typology, though the author did not explicitly state why. Interdisciplinary fields, such as bioinformatics, would presumably also be unclassifiable -- are you studying living things, chemicals, information structures, or computer algorithms? Picking one for the purpose of classification with Biglan's model ignores large portions of the field.

We felt that the the author placed too much emphasis on using and validating Biglan's model in lieu of focussing on the existence of any information-seeking differences among undergraduates of different academic disciplines. Since Biglan's model seems a bit arbitrary in it's classification scheme, we did not feel that it was a good fit for determining meaningful differences in information-seeking behavior. We felt that if the classification scheme were more reflective of the divisions between disciplines (perhaps based on tasks performed, or even on just the academic major of the students surveyed), the results would have been more meaningful. With such a large data set available, it must be possible to find a meaningful classification that can yield statistically interesting results. The author showed statistics on the gender and ethnic makeup of her sample, but failed to do anything else with this information.

It would be interesting to see what the results would have been had the lower classmen been excluded from the analysis. Freshmen are often taking only the general courses required of all students, and thus are not as "deep" into their chosen field as, say, a junior or a senior might be. Also, many freshmen have either an undecided major, or change majors over the course of their undergraduate education. Who is to say that the freshman who said he was a sociology major at the time of the survey will not ultimately graduate with a computer science degree instead, or vice versa? By not looking at the degree that a student finally graduates with, the analysis of this data is more looking at the personal qualities of the students surveyed, instead of at the qualities of practitioners of a given discipline. By including so many freshmen in the analysis, the results may have been significantly skewed.

There is also a question of bias, both in filling out the survey and in selecting responses to analyze. Are students in the "soft, pure, life" disciplines more disposed to filling out surveys than those in the "hard, applied, non-life" disciplines? Also, how were the results to analyze chosen? The author says that only those with majors that were classifiable by Biglan's model were included -- but presumably the almost 5000 students who responded but were not select for this study each have a field of

study, as well as information-seeking behaviors. Biglan's model might not be the ideal choice for a classification scheme if it cannot be used to analyze almost 50% of a given sample.

We felt that the sheer number of survey responses used in the analysis was perhaps the strongest point of this article. While we realized that the author did not have the ability to determine what questions were asked, and while we realize that some surrogate for information-seeking behavior would likely have to be used, we did not feel that the survey questions used were necessarily the best ones to ask. All the questions look at information-seeking in terms of physical library usage, ignoring the use of internet resources. Also, a few of the questions were not very pertinent to information-seeking (see Questions 1, 4, and 10). We assume that the author chose the best questions from the survey to examine, but it would be interesting to look at the entire questionnaire to see if there were perhaps any better suited questions to use.

We felt that while the results, strictly speaking, do show that Biglan's Typology can detect significant differences in information-seeking behaviors, these differences are of questionable importance. Since the categorization is to some extent arbitrary, so too are the results. The analysis presented in the article was basically a counting exercise. If the author had looked at other models in addition to Biglan's, more interesting and meaningful results may have been uncovered.