

The Structure of Student Satisfaction with College Services: A Latent Class Model

Joseph Adwere-Boamah
Alliant International University

This study was aimed to determine whether distinct groups or clusters of college students could be identified based on their self-report ratings of satisfaction with selected college services. The services were counseling, financial aid, health center, student programs and student government.

A sample of 920 students in a Northern California Community College completed Likert-type survey questionnaire covering many instructional areas including students' current educational goals, financial and academic problems and family related concerns. Selected items dealing with students' satisfaction ratings of the five services were subjected to latent class analysis (LCA).

LCA is a method for analyzing the relationship among manifest variables where a number of latent or unobserved categorical variables are used to explain the relationships among the manifest data.¹ The analysis was performed with Latent Gold Version 4.5 (Vermunt & Magidson 2005).

The analysis began with an exploratory LC analysis of the data; different models were estimated by stepwise addition of classes to identify the model that fit the data well.

Results:

The results of the analysis suggested that the best fitting model to describe the student satisfaction data was a two Discrete-Factor model [2 D-factor (4, 2)]. The first discrete factor (D-Factor #1), consisted of four ordered classes and the second (D-Factor #2) contained two classes. The 2 D-Factor model has the lowest Bayesian information criterion, (BIC= 5386.2) compared to other models. (E.g., two class model, BIC = 5623.7, three class model, BIC = 5458.5, four class model, DIC = 5431.3, and five class model, BIC = 5439.1). The 2 D-factor model indicated that students' satisfaction with college services is described by two dichotomous groups of students (D-Factors #1 & #2) with four and two ordered levels respectfully.

The conditional probabilities of D-Factor #1 classes suggest the four levels or classes of D-Factor #1 may be labeled as a) generally satisfied students (35%), b) a small group (7%) of students who are dissatisfied with all the services, and c) a large group (58%) of those with ambiguous feelings about all the college services. In contrast to D-Factor #1, the two classes of students in D-Factor #2, were differentiated by their feelings about

¹ For more complete information on LCA, see 1) Papers by Jay Magidson and Jeroen Vermunt, <http://www.statisticalinnovations.com> 2.) J.A. Hagenaars and A.L McCutcheon, (2002), Applied Latent Class Analysis NY: Cambridge University Press

counseling, financial aid and health services. The first class of D-Factor #2 students was satisfied with counseling and financial aid services but was ambiguous about health services. The second-class students (D-Factor #2) on the other hand, were dissatisfied with financial aid services. Their feelings about student government, student programs and health services were ambiguous.

Summary: The 2 D-Factor model fitted to the data provided insight into the students' feelings about their college services. It provided a clear differentiation of students in terms of their satisfaction, dissatisfaction or ambiguities with the college services.

References

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