

DETERMINING CRITICAL-TO-QUALITY FACTORS OF INDUSTRIAL ENGINEERING FACULTY USING JAPANESE PRODUCT DESIGN METHODOLOGIES

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ABSTRACT

Having the right set of teachers is essential to the success of the students, the future of any nation. Many studies have been conducted to identify attributes or characteristics that make a good teacher for the students. In line with those, this study involves identifying student-preferred attributes of Industrial Engineering teachers using Japanese product design methodologies and multivariate analysis tools. This study is conducted in a university in Cebu, Philippines with 34 respondents. Through a focus group discussion and distribution of survey questionnaires, about 80 Kansei words identified were reduced to ten main attributes of an IE teacher – Competent, Effective, Articulate, Fair, Good-Natured, Reasonable, Consistent, Dynamic, Challenging, and Concerned. These attributes are further evaluated through importance ratings and conjoint analysis, and are categorized based on their impact on student satisfaction using Kano Analysis. The respondents are then clustered using their demographic profiles and preferences on the identified attributes. Results show that students expect IE teachers the following: (1) To be competent in their field and to show mastery of the topics they discuss; (2) Be effective in delivering lessons; (3) Not bias and make sure that students feel that they belong. However, being articulate and/or proficient in using the English language in class is not a must-have character but a teacher becomes more attractive if one is. It is also found in this study that the more good-natured, kind, approachable, and passionate a teacher is, the more satisfied a student would be by the performance of the teacher.

Keywords: Kansei Engineering, Kano analysis, multivariate analysis, teacher characteristics, Philippines