Orginal Article

Developing and Validating the Model for the Measurement of Productivity at Farhangian University

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Introduction

This study seeks to develop and validate the productivity model in Farhangian University (Teacher Training University) and the purpose of productivity is to maximize the use of resources, manpower, facilities and to reduce production costs and expand markets and increase employment.

Method

The present study is conducted within an exploratory framework with regard to the data collection, and regarding to the purpose, it is considered applied-developmental. In the qualitative phase, in order to develop and validate the productivity measurement model in Farhangian University (Teacher Training University), the participating team includes academic and organizational experts (n=50), who are selected by a non-probability (purposive) manner and the snowball method. The participating team consisted of academic experts in the fields of public administration, business management, educational management and educational sciences, as well as organizational experts including the directors of Farhangian University campuses (Teacher Training University). Fifteen interviews were conducted with university faculty members until theoretical saturation was reached. To rank and fit the productivity measurement model, a questionnaire consistent with the findings of the quality department was sent to the managers, deputies and faculty members of Farhangian University (Teacher Training University) at random. The content validity of the questionnaire was calculated by experts, the construct validity by factor analysis and the reliability of the questionnaire were calculated by Cronbach's alpha-test of 0.70 and all were confirmed. Out of 274 questionnaires distributed, 221 complete questionnaires were returned

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which were used as the basis for statistical analysis.

Result

After conducting interviews and reviewing previous researches, indicators related to productivity measurement by content analysis method (142) and interviews with experts (34) were identified and finally by Delphi method 138 indicators in the areas of "design, planning and resource development" "Education", "Research and Technology" and "Student, Cultural and Social " fields were approved. In the quantitative phase, the structural equation model was used for validation.

Discussion

Considering that all productivity measurement indicators in Farhangian University (Teacher Training University) have been approved using confirmatory factor analysis in each field, the indicators in the field of research and technology with a path coefficient of 0.977 have a value of t, higher than 1.96. And this can explain that 95.4% of the productivity measurement which occupies the first rank. The index of the student, cultural and social field with a path coefficient of 0.947 have a value of t, higher than 1.96 which forms 89.7% of the productivity measurement and sits in the second rank. The indicators of the field of education with a path coefficient of 0.937 have a value of t, higher than 1.96 that is 87.9% of the productivity measurement and has the third rank. And the coefficient of determination of design, planning and resource development with the path coefficient of 0.936 explains 87.7% of the productivity measurement and ranks fourth among other factors. After determining the productivity indicators, by choosing an appropriate method such as data envelopment analysis, it is possible to perform calculations related to productivity indicators and determine the factors affecting productivity changes.

Keywords: research productivity, faculty members