ANALYSIS OF FACTORS CONTRIBUTING TO UNIVERSITY FACULTY'S EFFECTIVENESS

高校教师教学科研成果的 影响因素研究

景丽珍◎著

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内容摘要

本书以行为理论为基础提出理论框架,探讨高校教师的工作投入和个人与环境的互动对他们教学科研成果的影响。在这个理论框架中,教学成果用《学生评教问卷 II》中有关课程成果的题目测量;科研成果用出版和资助的加权体系评估。个人与环境的互动体现在工作压力和组织承诺中。工作压力用修改后的《高校教师工作压力表》测量;组织承诺用修改过的《组织承诺量表》测量。工作投入有任务投入和关系投入两个维度。任务投入用教师在《学生评教问卷 II》和其他研究中提到的教学和科研活动中的投入程度测量。关系投入用《关系投入量表》测量。在分析理论框架中工作压力、组织承诺和工作投入对教学科研成果的显著影响后,本研究从教师的角度提出对这些显著关系的可能解释。

本研究采用横向研究法,主要有三个阶段。第一阶段在两所教育部直属的北京高校中进行。运用探索性因子分析等方法分析 196名教师在问卷中的回答,展示了问卷各部分的信度和效度。第二阶段同样在教育部直属的北京高校中进行。来自四所大学的 378 名教师回答了问卷。通过验证性因子分析等方法进一步验证问卷的信度和效度。同时探索工作压力、组织承诺、任务投入和关系投入对教学科研成果的影响。第一和第二阶段中的数据分别用 SPSS13.0 和LISREL8.7 两个软件包分析。另外,第三阶段的研究在参加过第二阶段研究的 40 名教师中展开。目的是请他们解释第二阶段研究中

发现的变量间的显著关系。

对三个阶段中收集到的数据进行分析发现了四个主要研究结果。第一,在本研究中,经过修改的问卷在中国高校教师中表现了合理的信度和效度。

第二,统计分析表明工作压力、组织承诺和工作投入是教学科研成果的决定性因素,而且工作压力和组织承诺的不同维度对其他变量有不同影响。这些关系的差异可以用教师可支配的资源、教师的个人目标、对付出和收获的权衡、学术投入以及组织和心理环境等因素解释。

第三,把工作压力和组织承诺同时作为工作投入和教学科研成 果的预测因素时,两变量分别解释显著的方差。组织承诺比工作压 力的解释的方差大,而且两者在工作压力较小的教师中预测工作投 人和教学科研成果的能力更强。这些结果可以用两方面因素解释。 它们是工作压力和组织承诺代表个人和环境互动的不同方面以及在 不同压力下,个人和环境特点对教师工作投入的不同影响。

第四,任务投入和关系投入是工作压力、组织承诺与教学科研成果之间的显著调节变量。这个结果可以用任务投入和关系投入对教学科研成果的显著预测能力解释。

在结合文献、现有研究和本研究中调查对象特点的基础上,本 书探讨了变量之间的显著关系和相关的解释对理论研究以及中国高 校实际工作的重要意义。本书还为以后的研究提出了建议。

Abstract

Addressing conceptual and methodological issues in extant studies, the present research developed and tested a theoretical framework that explored the relationships of faculty's work effort and individual-context interaction to their effectiveness based on the Activity Theory. In the framework, effectiveness was represented by teaching effectiveness and research productivity. Teaching effectiveness was measured by the course outcome scale in Student Instruction Report-II (SIR-II) and research productivity was assessed by a weighted system of publications and grants. Individual-context interaction was embedded in work stress and organizational commitment. Work stress was measured by Revised Faculty Stress Index and organizational commitment was evaluated by Revised Organizational Commitment Inventory. Work effort was represented by performance with two dimensions: task performance and contextual performance. Task performance was measured by faculty's engagement in teaching activities listed in SIR-II, teaching activities discussed in other studies and research activities collected from various studies. Besides, contextual performance was measured by Borman and Motowidlo's Taxonomy of Contextual Performance. After analyzing the significant statistical relationships of work stress, organizational commitment, and performance to effectiveness as suggested in the theoretical framework, the present research provided possible explanations for these relationships from the perspectives of university faculty members in China.

The present research adopted a cross-sectional approach and in-

volved three stages. The pilot study validated all inventories with Exploratory Factor Analysis and other analysis procedures by administering a questionnaire survey among 196 academics in two universities affiliated to Ministry of Education in Beijing. The main study collected data in the same way, but it further validated these inventories with Confirmatory Factor Analysis and other analysis procedures among another 378 faculty members from four universities with the same affiliation in Beijing. The main study also investigated the statistical relationships of faculty's work stress, organizational commitment, task performance, and contextual performance to effectiveness. Responses to questionnaires in the pilot study and the main study were analyzed with SPSS 13.0 and LISREL 8.7 respectively. Besides, the follow-up study was conducted among a subgroup of 40 respondents involved in the main study. These respondents provided explanations of significant relationships among these variables as demonstrated in the main study. These explanations were processed with Content Analysis.

Analysis of data in the pilot study, the main study, and the followup study suggested four major findings. First, the psychometric properties of all revised inventories employed in the present research were reasonably good among Chinese university faculty.

Second, work stress, organizational commitment, and performance presented significant relationships to effectiveness and there was obvious divergence in the relationships of different work stressors and commitment dimensions to other variables. Besides, work stress presented a significant relationship to organizational commitment and performance predicted effectiveness. These significant relationships could be partly explained by the discrete and joint influence of faculty's resources, personal goals, and perceptions of cost/benefit balance, academics' intellectual investment

and the organizational and psychological context in their work.

Third, when used as predictors simultaneously, work stress and organizational commitment accounted for significant variances in task performance, contextual performance and effectiveness respectively. Organizational commitment was generally a stronger predictor than work stress and both variables were stronger predictors in the low-stress group than in the high-stress group. These relationships could be partly explained by conceptual characteristics of work stress and organizational commitment and the impact of individual attributes and contextual factors on faculty's task performance and contextual performance under different levels of work stress.

Moreover, as significant mediators, task performance and contextual performance attenuated the relationships of work stressors and commitment dimensions to effectiveness because task performance and contextual performance were also significant predictors for effectiveness.

In conjunction with literature, extant studies and the specific characteristics of respondents, the present research discussed how the significant relationships among these variables and possible explanations for these relationships contributed to literature and practice in the Chinese context. The present research also made recommendations for future studies.

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