



## **Chapter XVII**

# **An Analysis of Academic Research Productivity of Information Systems Faculty**

Qing Hu

Florida Atlantic University, USA

T. Grandon Gill

University of South Florida, USA

Why are some faculty members more productive than others in academic research? We constructed a number of hypotheses about faculty research productivity based on the life-cycle model of academic research and previous studies. Tests were conducted using data collected via a national survey of information systems (IS) faculty. The results show that while there are only two significant factors contributing positively to the research productivity: the time allocated to research activity and the existence of IS doctoral programs, many other factors appear to have significant adverse effect on research productivity, such as the number of years on faculty, the teaching load when exceeding 11 hours weekly, and non-IS, nonacademic employment experience. The results also suggest that some of the commonly proposed influential factors, such as tenure status, academic rank, school type, as well as IS-related employment experience, have no significant effect at all. The implications of these findings and the limitations of the study are also discussed.

## **INTRODUCTION**

What makes a faculty member more productive in academic research? This is a question of great interest to many tenure-earning and tenured faculty members in academic institutions where faculty performance is evaluated heavily based on

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research productivity. Productive faculty not only further the knowledge in their professional fields by integrating their findings with those of others via scholarly publications disseminated around the world, they also bring visibility and prestige to themselves and their affiliated institutions, which in turn attracts research grants and more qualified faculty and graduate students (Grover, Segars & Simons, 1992; Levitan & Ray, 1992). Recent studies have also found significant financial incentives for research productivity (Gill, 2001). Because of this, academic institutions are increasingly emphasizing research productivity when evaluating tenure, merit, funding, and salary decisions (Im & Hartman, 1997; Lane, Ray & Glennon, 1990; Levitan & Ray).

As a consequence, it is no surprise to see a growing interest in studying the factors affecting research productivity of individual faculty members as well as institutions (e.g., Niemi, 1988; Lane et al., 1990; Levitan & Ray, 1992; Grover et al., 1992; Hancock, Lane, Ray & Glennon, 1992). Two distinctive research approaches can be identified in the literature of research productivity. One approach examines the collective characteristics of all academic researchers by focusing on the motivation of research, as represented by the life-cycle model (Diamond, 1986; Goodwin and Sauer, 1995; Levin and Stephan, 1991). This model posits that research productivity of a researcher is determined by the interaction of investment motivation and consumption motivation modulated by the process of aging and career maturity. The other approach emphasizes the effects of institutional and personal characteristics on the research productivity, such as teaching load, time management, and tenure status (Hancock et al., 1992; Lane et al., 1990; Levitan and Ray, 1992).

Although these studies have significantly improved our understanding of academic research productivity, the findings are often inconsistent, sometimes even conflicting, depending upon the research approach undertaken and the academic disciplines being studied. In this study, we examine the institutional and personal factors affecting the research productivity of information systems (IS) faculty in the United States based on the results of a national survey. Our data and test model show that factors influencing research productivity of junior and senior IS faculty members differ although many factors, such as teaching load and time allocation for teaching, research, and service, are common to both groups. We found that prior IS-related employment experience shows significant positive correlation with research productivity of junior faculty members but has no relationship to that of the senior faculty. On the other hand, we found that the affiliation with an IS program that offers a doctoral degree is significantly positively correlated with the research productivity of senior faculty members but has no apparent effect on that of the junior faculty members. These findings, augmenting previous ones, should help administrators and faculty members alike make informed decisions in evaluating performance, managing time, and balancing teaching, research, and service loads.

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