Assessment of the Impact of Teaching Demands on Research Productivity Among Doctoral Nursing Program Faculty

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This article reports the findings of a study that examined the research and scholarship productivity of doctorally prepared nursing faculty teaching and mentoring doctoral students and the conflicting demands on them to maintain programs of research and scholarship. The specific aims were to (a) examine the research productivity and scholarship of faculty members teaching in doctoral programs and mentoring doctoral students to examine the perceived effectiveness of existing institutional mechanisms to support scholarship, (b) explore institutional features and personal practices used by doctoral program faculty to develop and maintain research and scholarship productivity, and (c) analyze predictors of scholarship productivity. Data were collected via an on-line researcher-developed survey that examined doctoral faculty roles/responsibilities and their relationship to their scholarly productivity, overall research productivity, and institutional features and personal practices to support research/scholarship activities. Survey respondents reported spending a large amount of time engaged in research-related activities with 58.9% (n = 326) spending anywhere from 6 to 20 hours per week conducting research, writing research-based papers, giving presentations, grant writing, or conducting evidence-based improvement projects. Scholar productivity among the respondents was robust. Personal practices that most strongly supported faculty members' scholarship productivity were the belief that engaging in scholarship made them better teachers and the personal gratification in experiencing doctoral students' successes. A multiple regression analysis conducted to determine predictors of productivity indicated that the strongest predictor was the average number of hours spent on research/scholarship-related activities, followed by time bought out from teaching and other responsibilities of the faculty role for research. (Index words: Doctoral nursing faculty; Research productivity; Mentoring doctoral students; Doctoral nursing education) J Prof Nurs 32:180–192, 2016.

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THE 2010 INSTITUTE of Medicine (IOM) report, *The Future of Nursing: Leading Change, Advancing Health* (IOM, 2010), has called for increasing the proportion of nurses with baccalaureate (BSN) degrees to 80% and doubling the population of nurses with doctorates by 2020 in order to teach future generations of nurses and to conduct research (IOM, 2010; National Research Council, 2005). The primary strategy to meet these recommendations is to increase the number of schools of nursing offering doctoral degrees, including both doctorates of philosophy (PhDs; research doctorates) and doctorates of

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nursing practice (DNPs), and to encourage more nurses with BSNs and master's degrees to obtain doctorates early in their career.

The need for more BSN-prepared nurses and nurses with graduate degrees clearly increases the demand for nursing faculty (Yordy, 2006) and requires concerted efforts to prepare more nursing faculty qualified for faculty positions in colleges and universities (Smeltzer et al., 2014a). The urgent need for doctorally prepared faculty to teach BSN and graduate students is accompanied by a concomitant call for nursing faculty to address national health care needs through nursing research and scholarship (IOM, 2010). The report of the National Research Council (2005) predicted that the current and projected continued shortage of nurse faculty will have negative implications for the scientific base of nursing practice. The scholarly productivity of nurse faculty may be further curtailed by a paucity of nursing faculty engaged in research because of the need for them to teach across all programs in schools of nursing, including the teaching and mentoring of doctoral students.

The shortage of nursing faculty has resulted in substantial teaching loads for all faculty members and less time to devote to research and scholarship (Brady, 2010; Hinshaw, 2001). The proliferation of programs and growing numbers of students increase the teaching and administrative demands on senior faculty, taxing their ability to teach and to conduct research. Those teaching in doctoral programs are ideally senior faculty who have been most productive in research.

Smeltzer et al. (2014a) concluded that a large gap exists in the academic environment in terms of nursing faculty preparation and longevity, scholarly productivity, and production of the number of doctoral graduates sufficient to meet the IOM recommendations. The tension between teaching roles and the impact on scholarship productivity has yet to be empirically examined. These competing demands and the resulting conundrum faced by doctorally prepared faculty teaching and mentoring doctoral students have received little attention in the education and research literature. Empirical data are needed as a basis for solutions that will enable quality teaching and mentoring of the next generation of faculty who also aspire to productive research careers. In addition, strategies aimed at retention of current faculty in academic positions are needed (Smeltzer et al., 2014a).

This article reports the findings of a study that examined the research and scholarship productivity of doctorally prepared nursing faculty teaching and mentoring doctoral students and the conflicting demands on them to simultaneously establish and maintain their programs of research and scholarship. Specifically, this article reports the findings of three aims of the larger study to (a) examine the research productivity and scholarship of faculty members teaching in doctoral programs and mentoring doctoral students and the perceived effectiveness of existing institutional mechanisms to support scholarship, (b) explore institutional features and personal practices, used by faculty teaching in doctoral programs to develop and maintain research and scholarship productivity, and (c) analyze predictors of scholarship productivity. Figure 1 identifies the link between the nursing shortage and the shortages of faculty and doctorally prepared nurse researchers and serves as the study's framework.

Methods

Instrument Development

This study used a mixed-methods approach to address the study's aims. The qualitative portion of the study involved conducting focus groups to identify issues and perceptions among doctoral faculty about factors that affect their continued scholarship. Two focus groups of faculty were conducted with 29 nurse faculty teaching in a PhD or DNP program; these focus groups were held at two national professional conferences (Smeltzer et al., 2014b). Three major themes emerged through the analysis of the focus group transcripts: demands of teaching, the importance of institutional structure and climate, and the sustainability of oneself, the institution, and the discipline (Smeltzer et al., 2014b). The findings generated from the analysis of the focus group interviews were then used to inform the development of a survey, which was administered electronically to a national random sample of faculty identified as involved in teaching PhD or DNP students.

The researcher-developed survey contained 73 overall questions with subquestions that were divided into nine sections: respondents' demographics, teaching/research/scholarship/service commitments, doctoral faculty roles/responsibilities and their relationship to their scholarly productivity, strategies to support research/scholarship activities, characteristics of a successful faculty member, personal implications of the doctoral faculty role, the degree of respondents' research/scholarship productivity, self-assessment of one's work–life balance, and institutional demographics. Results on work–life balance are addressed elsewhere and are reported elsewhere (Smeltzer et al., 2015). The final question was an open-ended question that invited respondents to share additional issues about scholarship activity of doctoral faculty not already addressed in the survey questions. Reponses to this open-ended question are not reported in this article.

Cronbach's alpha coefficients for each section of the survey were calculated. For those questions addressing doctoral faculty roles/responsibilities (teaching, research/scholarship, service commitments) and their relationship to their scholarly productivity, the alpha coefficient was .826. The section of the survey that addressed strategies to support research/scholarship activities had an estimated alpha coefficient of .727. The alpha coefficient for the section of the survey that examined characteristics of a successful faculty member was .790, and the alpha coefficient for the section addressing personal implications of the doctoral faculty role was .550. Three experts in instrument development reviewed the survey items for