Survey research conducted in the 1980s involving 275 occupational therapy faculty members from 52 accredited baccalaureate and postbaccalaureate programs showed that most occupational therapy faculty members were younger than 40 years, were female, were educated at the master’s degree level, held junior faculty rank, were relatively new to academia, and had a 36% chance of obtaining tenure (Parham, 1985a, 1985b). The primary research activities were publishing refereed journal articles and giving professional presentations; very few faculty members had any competitive grants. Only 10% of the occupational therapy faculty members surveyed had published three or more research articles; 25% had published three or more nonresearch articles; and 35% had published a book or chapter during their careers (Parham, 1985a, 1985b). Those who published tended to be employed by research universities, held higher academic degrees, and had prominent visibility in the profession (Parham, 1985b). Holcomb, Christiansen, and Roush (1989) surveyed 66 occupational therapy faculty members at selected academic health centers and found their level of scholarly productivity to be lower than their allied health colleagues.

When comparing occupational therapy faculty with higher education faculty in general, most higher education faculty members were older than 40 years; were male; were doctorally trained; and held higher ranks, with a tenure rate of 50% to 70% (Hekelman, Zyzanski, & Flocke, 1995; Print & Hattie, 1997). The overall career publication rates of occupational therapy faculty in the early 1980s were 20% lower than higher education faculty in general (Parham, 1985a).

Up until the mid-1980s, advanced degrees, professional awards, and excellence in teaching offered greater academic rewards to occupational therapy faculty than publications and grants (Parham, 1985b). Neither publication of refereed articles nor publication of books predicted salary (Holcomb et al., 1989; Parham, 1985a). Additionally, most occupational therapy chairpersons stressed teaching over research in their faculty evaluations (Lanier, Hedl, & Christiansen, 1983).
The purpose of this study was to examine the research productivity of occupational therapy faculty in the United States in 1999 to see whether changes had occurred from previous surveys (Parham 1985a, 1985b). Research productivity was defined as the number of publications, including refereed journal articles, books, and book chapters, and competitive grants, acquired by a faculty member over his or her academic career.

**Method**

**Sample**

The sample consisted of 350 full-time faculty members from the United States and Puerto Rico, who were randomly selected from the American Occupational Therapy Association's list of faculty members. Of the 350 surveys mailed, 158 completed surveys were returned for a response rate of 45.1%, which is reasonable for mail surveys (Babbie, 1992). No repeat mailings were done to enhance return rate. The surveys were analyzed to understand the relationship between research productivity and various individual and institutional factors.

**Instrument**

A research productivity questionnaire was used for data collection. The researchers developed the questionnaire, which is based on the literature on faculty productivity. Face validity and content validity of the questionnaire were established by four independent faculty members, who suggested minor changes related to the clarity of items. No reliability data were collected.

The questionnaire was divided into three sections. The first section contained demographic information, descriptive data about time spent in scholarly activities, and number of publications and grants. The second section identified individual competence and institutional factors influencing research productivity. The final section asked the faculty member to prioritize rank a number of research performance indicators, including different publication products, presentations, grants, and other items. A copy of the questionnaire is available from the first author. The time required to complete the questionnaire was 15 minutes, and data collection took place during summer and fall of 1999.

**Results**

The faculty members were primarily women (89.2%), and just over one third (34.4%) were tenured. The sample consisted of 80 (52.6%) assistant professors, 41 (27%) associate professors, 16 (10.5%) full professors, 13 (8.5%) instructors, and 2 (1.3%) clinical coordinators. Six of the 158 (3.8%) did not indicate their rank, and 4 did not indicate their tenure status. Nearly half of the sample (47.5%) was between 41 and 50 years of age, and 58% had been in academia for more than 6 years.

In terms of the terminal degree earned, 48% had master's degrees, 47% had academic doctorates, 2.5% had clinical doctorates, and 1.8% had baccalaureate degrees. Respondents spent an average of 22.4 hours a week in teaching, 8.4 in research, 7.5 in service, and 2.4 in clinical-related activities. Assistant professors spent the most amount of time in teaching-related activities. About one third of the sample had obtained degrees in fields outside occupational therapy; 51% considered themselves to be specialized in a clinical area; and 8.3% had obtained postdoctoral training.

Full professors published the most, followed by associate professors and assistant professors. Tenured faculty published more refereed articles, books, and chapters than untenured faculty. In terms of grantsmanship, 56% of the respondents had secured some form of funding in their career, and the total grants in any individual respondent's career ranged from $100 to $18 million. Tenured associate professors had the highest number of grants, and full professors had the largest grants.

A one-way ANOVA showed a significant difference in perceived research competence among the three faculty ranks (assistant professor, associate professor, full professor), $F(2, 109) = 8.15, p < .01$. A Tukey's honestly significant difference test was conducted to identify the pairwise difference among the three faculty ranks. The results showed that assistant professors had significantly lower perceived research competence ($M = 21.03$) than both associate ($M = 26.24$) and full ($M = 27.69$) professors ($p < .01$). The difference in research competence scores between associate and full professors was not significant ($p > .05$).

An independent $t$ test showed untenured faculty with lower perceived research competence than tenured faculty, $t(108) = 1.65, p < .05$. The mean difference between the two groups was 2.48 (tenured, $M = 25.04$; untenured, $M = 22.56$).

A one-way ANOVA was performed to test for differences in the perceived effects of institutional factors on research performance among the three faculty ranks; no significant differences were observed, $F(2, 114) = .64, p < .05$. However, an independent $t$ test showed that tenured faculty rated institutional factors as more favorable for research than did untenured faculty, $t(113) = 2.07, p < .05$. The mean difference between the two groups was 4.25 (tenured, $M = 26.39$; untenured, $M = 22.14$).

The respondents were asked to rank their perceptions about what items should be considered as research performance indicators for occupational therapy faculty. Of the 11 items listed, refereed journal articles, large grants (> $25,000), and book authored by the department head were ranked as the top three by a majority of respondents.

**Discussion**

Compared with earlier studies, a larger number of occupational therapy faculty members (47%) held academic doctoral degrees. A small percentage (< 5%) of junior faculty members reported clinical doctorates, a trend seen in some clinical professions (Boyer, 1990). A reduction in the number of instructors also was found compared with earlier studies (Holcomb et al., 1989; Parham, 1985a).

In the 1980s, most occupational therapy faculty members were primarily women (89.2%), and just over one third (34.4%) were tenured. The sample consisted of 80 (52.6%) assistant professors, 41 (27%) associate professors, 16 (10.5%) full professors, 13 (8.5%) instructors, and 2 (1.3%) clinical coordinators. Six of the 158 (3.8%) did not indicate their rank, and 4 did not indicate their tenure status. Nearly half of the sample (47.5%) was between 41 and 50 years of age, and 58% had been in academia for more than 6 years.

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apy faculty members were between 25 and 45 years of age, with a median age of 38. In the current sample, the majority of faculty members were between 41 and 50 years of age. In Parham’s (1985a) study, more than half the sample had been in academia for fewer than 5 years. The current sample shows that 58% of faculty members have been in academia for more than 6 years, which supports a gradual increase in academic longevity. Because a direct correlation exists among length of stay, rank, tenure status, and productivity (Baird, 1991), an increase in age of faculty members should correspond to an increase in the number of academicians with higher status and tenure.

Nearly 11% of our respondents were male. Among them, 65% were tenured. Only 30% of the female faculty members were tenured. In many academic fields, male faculty members have been tenured and promoted more often than their female counterparts (Baird, 1991). However, because only 5% of occupational therapists are male, this disparity in male–female tenure ratio in occupational therapy faculty may be the result of a disproportionately large percentage of male occupational therapists entering academia.

An interesting finding was the post-doctoral training reported by 8.2% of the respondents. This finding can be considered a new trend in our profession, which may lead to future faculty members with stronger research backgrounds. Additionally, among the respondents, 51% considered themselves specialists.

The current tenure rate of 34.4% did not differ significantly from the 1980s (Parham, 1985a). Considering the increase in terminal degrees and age of the present sample, one would assume that the tenure rate should increase in the near future.

Occupational therapy faculty members reported spending 22.4 hours in teaching every week, an amount that is higher than some health fields (Waller, Wyatt, & Karni, 1999). Assistant professors reported teaching the highest number of hours per week. In spite of the heavy teaching load, the present data show improvements in article publications, book authorship and contributions, and grantsmanship (Parham, 1985b).

Fifty-six percent of the respondents had acquired grants in their careers. This number is comparable to other allied health fields (Waller et al., 1999). In the 1980s, the primary research activities by occupational therapy faculty members were publishing refereed journal articles and giving professional presentations, with very few faculty members holding competitive grants (Parham, 1985a, 1985b). The increase in grant activity suggests availability of funds to conduct quality research, which should lead to additional publications. Additionally, because many research positions operate on soft money (Bayer & Smart, 1991), grantsmanship increasingly will be required to sustain these positions in the future.

Results suggest that higher ranked, tenured faculty members with academic doctorates felt more competent about their research skills than those without doctorates. This finding is consistent with earlier studies reporting that faculty members’ self-perceptions about research skills were closely tied to the terminal degree, tenure status, and length of stay in academia (Kraemer & Lyons, 1989; Parham, 1987). With this finding in mind, occupational therapy academic programs should encourage their faculty members to obtain higher degrees and new doctoral graduates to consider post-doctoral training to prepare for academic careers.

Previous literature suggested that institutional factors such as higher teaching loads, lack of release time, and reduced administrative support affect faculty research and publications (Baird, 1991). The results of this study indicate that tenured faculty members view institutional factors as favorable for research. In terms of faculty perceptions of research indicators, most respondents considered refereed journal articles, large grants, and books as the three major indicators for research productivity, which is in agreement with faculty perceptions in other allied health fields (Print & Hattie, 1997).

Conclusion

Until the mid 1980s, a large number of occupational therapy faculty members were working in nonresearch universities, held lower ranks, were relatively new to academia, and had low research productivity. The academic climate in the past 2 decades has changed. The results of this study suggest that, in general, today’s faculty members have obtained higher degrees, published more, acquired large external grants, stayed in academia longer, and developed more clinical specialties. These findings must be viewed as tentative given the survey response rate of 45%, but we believe that the reported changes point to a positive shift in productivity patterns of occupational therapy faculty.

References

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