Academia:
Economic, Social, and Administrative Sciences

Background

Academia is an attractive option for pharmacists who enjoy working with students while having opportunities to engage in research. With the increase in the diversity of academic positions, it can no longer be said that an academician’s career is confined to the laboratory or classroom. Three distinct profiles are included in this series: Clinical Practice; Economic, Social, and Administrative Sciences (ESAS); and Pharmaceutical Sciences. Each profile provides information on the similarities and differences in these three academic careers.

ESAS academicians often work with other health care professionals in a consultative capacity or as a lead investigator in research. Moreover, the opinions of ESAS academicians are frequently solicited by the pharmaceutical industry and the government before making policy decisions. Therefore, ESAS academicians have an indirect impact on patient care.

The “Academia” category may be loosely defined as belonging to a university faculty, usually that of a college of pharmacy. However, ESAS academicians also hold academic positions in medical, veterinary, public health, public policy, marketing, and other health care–related educational institutions. Positions may range from the dean of a college of pharmacy to a teaching clinical pharmacy position at an off-campus or remote hospital to a classroom professor.

Duties of an ESAS pharmacist may include administrative activities, scientific research, teaching student pharmacists, supervising research and teaching graduate students, speaking and/or publishing in scientific venues, and teaching student pharmacists through experiential practice sites.

In the 2012-2013 academic year, there were 6,040 full-time pharmacy faculty at the nation’s colleges and schools of pharmacy. (Source: http://www.aacp.org/about/Pages/Vitalstats.aspx Accessed June 2013)

Characteristics

Sixty-four individuals responded to the 2012 APhA Career Pathway Evaluation Program survey in this career area. Seventy percent of the respondents had an entry-level degree in pharmacy, with 16% having earned a PharmD degree. Eighteen percent of respondents had a residency or fellowship. Seventy-three percent reported an advanced degree (PhD) with an additional 13% holding an MBA. An additional 11% indicated certificate training of some kind.

Respondents’ average age was 45 years old. Slightly less than two thirds (61%) of respondents were male. Income data show over one third (36%) earn between $80,000–$100,000, while 45% earn $100,000 or more per year. Consultative fees are included in the
income figures. The average time worked per week was 50.7 hours, among the highest of all job areas surveyed. Respondents represented 30 states.

A large majority of respondents indicated that they were satisfied with their job, with 69% indicating “extremely satisfied” and 28% indicating “somewhat satisfied.” On a similar scale, respondents said that they felt the job was challenging, with 72% indicating “extremely challenging” and 28% indicating “somewhat challenging.”

One respondent from Washington noted, “The opportunity exists to advance practice and work with future practitioners.”

**Insider’s Perspective**

**What aspects of the job are most appealing?**
Reflecting the different types of activities involved in ESAS, 25% of respondents said the most appealing aspect of their work was its “flexibility.” “Working with students,” was cited by 16% of the respondents with “freedom” listed by 10% of the respondents. “Freedom to do what you like—teaching, research, service” was one Minnesota respondent’s message of the most appealing aspect of the position.

Independence, teaching student pharmacists, and working with graduate students were cited in comments, indicating the satisfaction level previously noted.

**What aspects of the job are least appealing?**
Among the least appealing aspects of an academic position was a 14% response for both “bureaucracy” with “administrative activities.”

Working within a large organization, like a university, usually requires a considerable administrative workload in addition to teaching and research responsibilities. “Bureaucratic and political concerns, along with not always working with like-minded folks,” was noted by one Washington respondent. Another stated, “Sometimes I feel my group’s work is not considered important by the remainder of pharmacy.” Just under 8% indicated their concerns for low salaries and long hours as least appealing aspects.

**What advice should students and practitioners consider when selecting the option of academia in economic, social, and administrative sciences?**
The ability to work independently was the most frequent factor cited by respondents, as 12% indicated this need. One respondent from Arizona wrote that pharmacists need the “ability to self-motivate, ability to manage time among multiple responsibilities, and be project oriented.” Other respondents included the thoughts of looking at the “larger issues confronting pharmacy and health care.”
Critical Factor Ratings

Interaction With Patients
Interaction with patients and the public was at 4.2. Although this score is low compared to other practice areas, it is significantly higher than the ESAS score in 2007 which was only 2.8. The increase may reflect a shift in the work that these faculty are doing. A significant variance is noted; some respondents are likely to work with clinical faculty in a clinical setting while others are more research oriented and less likely for such encounters.

= 4.2

Conducting Physical Assessments
Relatively little time is spent in conducting physical assessments. Given the need for multitasking numerous activities, this is likely a reflection of the specific job responsibilities of ESAS faculty.

= 1.4

Interpreting Laboratory Values
Again taking into account the roles of ESAS faculty, there is little opportunity to interpret laboratory values unless involved in a research project that includes these data. This is the lowest ranked factor for this group.

= 1.7

Continuity of Relationships
ESAS pharmacists responded in the low range with a 3.9 rating for the continuity of relationships with patients or consumers, indicating that many are not involved in such relationships. This may illustrate the focus of the respondents with teaching student pharmacists or graduate students. Some relationships may be ongoing with long-term clinical-based research activities.

= 3.9

Extent to Which Effect is Direct
A 3.9 rating places this group on the indirect side of the scale. ESAS academic pharmacists help individual people indirectly though research activities and teaching future practitioners.
Collaboration with Other Professionals
Collaboration with other professionals ranked just below the mid-point with a 4.8 rating, indicating that these pharmacists collaborate some of the time. Again, this could be in conjunction with non–clinical-based practice research activities, with other health care professionals, or with research-based academicians.

Educating Other Professionals
To a somewhat substantial degree, ESAS academicians spend their time involved with educating other professionals. This is not surprising, since many are involved in university, government, or industry projects. In addition, many are involved in interdisciplinary educational efforts.

Variety of Daily Activities
A moderately high score of 7.2, reflects the academic pharmacist’s role in a variety of activities. These range from teaching to research to university work and many others.

Multiple Task Handling
One of the higher ratings at 7.5, multitasking is a near-universal aspect of these positions. Many respondents indicated that the ability to work with both student pharmacists and graduate students on multiple projects was very rewarding.

Problem Solving
The response to this question indicates the need for the academic pharmacist to seek out new solutions for new problems, versus being able to rely on previously useful solutions.
Focus of Expertise
ESAS academicians responding to this survey indicated only a slight tendency toward having sharply defined areas of expertise versus a broader area of expertise. This may be caused by the wide breadth of science and research that is included in this field.

Innovative Thinking
A relatively high rating of 7.7 for this factor suggests that ESAS academicians encounter a high need for innovative solutions and thinking about pharmacy issues, leading to new ideas in general pharmacy practice, as well as in the academic setting. One respondent indicated that the “interest in larger issues confronting pharmacy and health care” require thinking outside the box.

Applying Scientific Knowledge
Not surprisingly, ESAS academicians rely on the application of scientific knowledge in their practice activities whether in teaching, research, or providing expertise for patient care.

Applying Medical Knowledge
Relative to the application of scientific knowledge, ESAS faculty apply less medical knowledge in their practice. Perhaps this is related to the specific research that they pursue, which can be related more to the practice of pharmacy than clinical pharmacy.

Creating New Knowledge by Conducting Research
The slightly higher than mid-range rating of 5.6 for creating new knowledge by conducting research is commonplace for these practitioners. 'Twenty-four percent of the respondents’
time is spent on research activities. = 5.6

Management/Supervision of Others
A lower-mid-range response from participants shows that this group is somewhat involved in the management and supervisory responsibilities of others. This seems to be related to the number of graduate students with whom many ESAS faculty work.

Management/Supervision of a Business
Many of the respondents indicated that they spend little to no time managing a business. A few who are in administrative roles rated this factor higher. Only 7% of respondents’ time is spent on business-related activities.

Pressure/Stress
An upper mid-range rating of 6.8 indicates that ESAS pharmacists have a slight tendency toward experiencing stress or pressure in their work. Some stress is associated with publishing articles in professional journals and obtaining funding for research.

Work Schedule
ESAS academicians responding to this survey are around mid-range of unpredictable versus predictable work scheduling. This reflects the variability of responsibilities throughout the year and the effect of multiple responsibilities including teaching, research, and committee and other administrative work characteristic of an academic institution.

Part-Time Opportunities
Academic settings infrequently offer part-time work opportunities. However, this does vary
by institution and the type of academic position.  

= 3.0

No opportunity for part-time employment

Always opportunities for part-time employment

Job-Sharing Opportunities
Job-sharing is not a common practice in academic institutions, which is discernible by the low ranking of this factor.  

= 2.1

No opportunity for job-sharing

Always opportunities for job-sharing

Exit/Re-entry Opportunities
Exit/re-entry opportunities are mid-range within the academic ESAS practice area  

= 4.4

No opportunity for exit/re-entry

Always opportunities for exit/re-entry

Parental Leave Opportunities
Parental leave opportunities ranked higher than others in the areas of work-related options. Most institutions provide the opportunity for parental leave.  

= 7.6

No opportunity for parental leave

Always opportunities for parental leave

Leisure/Family Time
ESAS academicians reported varying experiences regarding time for leisure and family activities. Some said they have adequate time for these activities, while others claimed to have very little.  

= 6.5

No free time

Always opportunities for free time

Job Security
ESAS pharmacists enjoy a high level of job security, ranking at 7.4. Employment contracts, tenure, and academic year appointments contribute to this stability.
Opportunities for Advancement
To a high degree, academicians enjoy opportunities for advancement in their practice settings. Universities are large organizations with constantly changing and widely varying personnel needs, leading to openings and promotion opportunities, both within the pharmacy areas and administration within the university setting. There is a hierarchy within academia that includes the following positions: lecturers, clinical instructors, post-doctoral fellows, assistant professors, associate professors, full professors, assistant deans, associate deans, and deans. In addition, newer positions appoint directors of specific business units within an institution, such as director of alumni relations. Many ESAS departments have specific business type units that are overseen by a specific faculty member.

Opportunities for Leadership Development
The 7.1 response indicates that ESAS pharmacists have ample opportunities to develop their leadership potential. Such opportunities could be within the college of pharmacy itself, within the greater university setting, nationally within the specialty field, or within the professional association field (e.g., APhA).

Community Prestige
ESAS academicians, generally as employees of a university, are perceived as prestigious members of the community. Over many years of a national public opinion poll, pharmacists in general have been highly respected by the public. Therefore it is not surprising that pharmacists employed by such a prestigious institution as a college or university would be even more highly respected. Many ESAS faculty also work with the local and state professional associations by providing research in many areas.

Professional Involvement
Highly rated by the respondents to this survey is their level of opportunity to participate in
professional association meetings and similar events within the profession of pharmacy. Accordingly, it is not unusual to see an academically based ESAS pharmacist in a leadership position in a state or national professional association. Indeed, some universities provide faculty members incentives for such “community” service involvement.

Income
Academicians perceive that they are above the mid-range of being properly versus not properly compensated for their professional services. It is not uncommon, however, for faculty members to be expected, even encouraged, to seek additional outside sources of income, through consulting projects, for example, which would supplement their faculty salary. In addition, some ESAS faculty work limited part-time hours as practicing pharmacists.

Benefits (vacation, health, retirement)
This ranking moves toward the upper end of the scale, indicating a higher level of benefits in the form of vacation time, health insurance, and retirement packages. Faculty members are typically employees of large institutions, which normally offer such benefits to all their employees.

Geographic Location
With a moderate to higher end ranking on this factor, ESAS academicians have an opportunity to practice many places in the country among the nation’s 120+ colleges and schools of pharmacy. Nearly all states have at least one college of pharmacy, and those that do not are geographically close to another state’s colleges. Also, many colleges have “outreach” or similar programs in which faculty members are placed or “shared” with off-campus hospitals, clinics, and other sites. Another recent trend has been to have satellite campuses across a state.
Autonomy
A high ranking of 7.8 indicates that pharmacy faculty members are trusted professionals with a high level of independence and decision making. The underpinning of this autonomy, however, is a high sense of responsibility, self-discipline, and initiative. A number of respondents listed autonomy as one of the most appealing aspects of their practice.

Self-Worth
One of the higher rankings by ESAS academicians is for opportunities that create self-worth. College and university settings encourage the advancement of personal value and the full development of the potential of student and teacher alike. Many ESAS faculty are sought by practitioners for their knowledge in a variety of practice-based systems.

Future Focus
Academicians are focused on the future of the profession and health care. Activities such as teaching and research are concerned with advancing knowledge and understanding the latest scientific information.

Professional Prestige
The rating of 8.0 among ESAS academicians indicates a high level of prestigious exposure within the pharmacy profession. Former students, as well as other pharmacists, appropriately hold faculty pharmacists in high esteem.

Unique Practice Environment
Faculty members indicated a relatively middle to high level of uniqueness in their practice settings. An ESAS pharmacist might be involved with a research project that is set in a unique environment.

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Advanced Degree
Advanced and graduate degrees as well as other educational training and experiences are required for this field. Sixty-five percent of respondents hold a PhD degree.

Entrepreneurial Opportunity
ESAS faculty members indicate a mid-range level of entrepreneurial opportunity in their practice settings. External consulting or research activities present such opportunities

Additional Training
Despite the high number of respondents who hold a PhD, many respondents indicated the need for additional training. However, one can take into account the need for additional training in research methodology, statistics, and other related areas, which underscores the ranking of this factor.

Interacting With Colleagues
Academicians tend to interact with coworkers on a regular basis through committee work and group teaching. ESAS faculty also tend to work together on committees for graduate students’ research and projects.

Travel
Academicians for the most part have lower needs to travel for their day-to-day activities. However, attending state, national, or international meetings provides some travel opportunities.
Writing
Respondents were in the mid-range regarding writing. ESAS respondents focused on the preparation of publications, research proposals, and administrative reports they are involved with for the school of pharmacy.

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Working with Teams
ESAS pharmacists tend to have more team-related assignments because they often team teach courses and work collaboratively on graduate student projects.

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### Mean Scores for Critical Factors

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<tr>
<th>Factor</th>
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<tr>
<td>1. Interaction with people</td>
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<tr>
<td>2. Performing physical assessments</td>
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<td>3. Interpreting laboratory values</td>
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<td>4. Continuity of relationships</td>
<td>3.0</td>
<td>3.9</td>
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<tr>
<td>5. Extent to which effect is direct</td>
<td>2.9</td>
<td>3.9</td>
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<tr>
<td>6. Collaboration with other professionals</td>
<td>4.7</td>
<td>4.8</td>
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<tr>
<td>7. Educating other professionals</td>
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<tr>
<td>8. Variety of daily activities</td>
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<td>9. Multiple task handling</td>
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<td>10. Problem solving</td>
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<td>11. Focus of expertise</td>
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<td>12. Innovative thinking</td>
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<td>13. Applying scientific knowledge</td>
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<td>14. Applying medical knowledge</td>
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<td>15. Creating new knowledge by conducting research</td>
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<td>16. Managing others</td>
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<td>17. Managing business operations</td>
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<td>18. Pressure/Stress</td>
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<td>19. Work schedule</td>
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<td>20. Part time opportunities</td>
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<td>21. Job sharing</td>
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<td>22. Exit and re-entry</td>
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<td>24. Free time for leisure/family activities</td>
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<td>25. Job security</td>
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<td>26. Opportunities for advancement</td>
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<td>27. Opportunities for leadership development</td>
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<td>28. Community prestige</td>
<td>8.2</td>
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<td>29. Professional involvement</td>
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<tr>
<td>30. Income</td>
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<tr>
<td>31. Benefits (vacation, health, retirement)</td>
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<td>33. Working Remotely</td>
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<td>34. Autonomy</td>
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<td>35. Self-Worth</td>
<td>9.0</td>
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<td>36. Future focus</td>
<td>8.1</td>
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<td>37. Professional prestige</td>
<td>9.1</td>
<td>8.0</td>
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<td>38. Unique practice environment</td>
<td>7.0</td>
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<td>39. Advanced degree</td>
<td>8.6</td>
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<td>40. Entrepreneurial opportunity</td>
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<td>41. Additional training</td>
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<td>42. Interacting with co-workers</td>
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<td>43. Travel</td>
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<td>44. Writing</td>
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<tr>
<td>45. Working with teams</td>
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References


Professional Organizations
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