A Review of Faculty Perceptions, Barriers and Resources Related to Scholarly Productivity

Aurora Denial, OD, FAAO
Elizabeth Hoppe, OD, MPH, DrPH

Abstract

Purpose: The purpose of this study was to gain information on faculty members’ perceptions of their institutions’ expectations of scholarship, faculty members’ interests and perceptions of their own expectations of scholarship, and perceived barriers and resources to scholarship.

Methods: An online survey was developed and distributed to all faculty members listed in the Association of Schools and Colleges of Optometry directory of optometric institutions in the United States and Puerto Rico.

Results: Faculty members perceived original research as most valued on an individual and institutional level. The expectation from both institutions and faculty for dissemination of scholarly work was publication in a peer-reviewed journal. Only 7% of the faculty responded that their primary scholarly interest was in education or educational theory. The most frequently perceived barriers to faculty scholarship were identified as clinical schedule (41%) and classroom/laboratory teaching schedule (23%). Faculty indicated that resources such as time allocated for scholarship (73%), financial support (37%) and mentorship (37%) would improve their ability to engage in productive scholarly activity.

Conclusion: Faculty members’ expectations for their own scholarship and perceived institutional expectations can impact scholarly productivity. In general, responses support an overall good fit between faculty members’ personal and professional expectations and how they perceive the expectations of their colleges and universities.

Key Words: faculty, scholarship, optometry
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Introduction

In the late 19th century, American universities instructed teachers to not only teach but seek new knowledge. Original research was the means of attaining new knowledge and became the traditional form of scholarship. In 1990, Ernest Boyer published in Scholarship Reconsidered: Priorities of the Professoriate a broader concept of scholarship. Boyer’s model included the scholarship of discovery (research), the scholarship of integration, the scholarship of application and the scholarship of teaching. This model, while subject to interpretation, acknowledges a broader impact and more diverse roles for scholarship.

Boyer’s model is applicable to the healthcare professions and health professions education. In healthcare professions educational settings, faculty members are often diverse in their responsibilities, schedules and assignments. Their responsibilities can include patient care, public health roles, teaching, scholarship and service to the college, profession and community. Based on the multifaceted roles and responsibilities of a healthcare faculty, Boyer’s model provides a greater opportunity for meaningful contribution. Additionally, achievement in scholarly activity has become an integral component of most healthcare faculty members’ academic career success within an institution.

Webster’s Ninth New Collegiate Dictionary defines the word faculty as the teaching and administrative staff having an academic rank at an institution. In the profession of optometry, the criteria for the achievement of an academic rank can vary. The spectrum of contributions needed to achieve an academic rank usually includes teaching, scholarship, service and patient care. Understanding the habits, expectations, resources and barriers related to scholarship is essential in providing faculty development, institutional infrastructure, support and encouragement. Additionally, the growth and development of a profession, as well as the educational process for students, is dependent on the discovery or creation of new knowledge as well as the integration, implications and assessment of that knowledge. Scholarly activity is...
needed for the expansion and progress of optometric curricula and the development of new teaching pedagogies, activities and philosophies as well as outcome assessment. The Accreditation Council on Optometric Education has set as a standard that optometric programs must support, encourage and maintain research and scholarly activity. In the absence of rigorous scholarship, the profession of optometry and optometric education risk stagnation.

In the profession of optometric education, there is a paucity of research into the topic of faculty and scholarship. A search of VisionCite, Educational Resources Information Center (ERIC) and PubMed using the terms scholarship, faculty and optometry revealed only a few articles regarding optometric faculty and scholarship. The purpose of this study was to gain information on faculty members’ perceptions of their institutions’ expectations of scholarship, faculty members’ interests and perceptions of their own expectations of scholarship, and perceived barriers and resources to scholarship. Additionally, the authors sought to compare faculty members’ responses regarding their own professional expectations with their reported perceptions of their institutions’ values and expectations. The authors hypothesized that when faculty members’ personal expectations for their professional goals align with their perceptions of institutional expectations, barriers to scholarly productivity would be reduced. The survey was used to gain a “snapshot” description of how well individual faculty members’ beliefs and perceptions about scholarly activity are aligned with their perceptions of their institutional environments.

**Methods**

The survey instrument used for this study was developed after a search of the relevant literature and a review of study objectives. The survey was first distributed to a small select group of administrators for the purpose of obtaining feedback and to clarify wording, survey construct and organization of the items used for comparison.

The authors recognize that different institutions may have differing definitions of scholarship, or may delineate the characteristics of scholarly activity specific to their own institutional culture. To ensure a similar construct for purposes of the survey responses, the authors provided a brief description for four different types of scholarly activity. The survey defined scholarship based on Boyer’s model of scholarship: the scholarship of discovery, integration, application and teaching. Examples and elaboration of terms were provided to aid in the understanding. The scholarship of discovery was defined as original research; integration was defined as novel insights, interpreting themes in discovery, identifying connections between discoveries, e.g., literature synthesis; application was defined as building bridges between theory and practice, e.g., case reports; and teaching was defined as communication of one’s knowledge, facilitating student learning. Additionally, the definition of scholarship included the criteria requiring materials to be shared, judged and disseminated in order to be considered scholarship.

The final survey consisted of 21 questions, covering faculty members’ perceptions of their institutions’ expectations of scholarship, their own expectations of scholarship, and perceived barriers to scholarship. Most questions were forced-choice with an option for “other responses” when appropriate. Some questions allowed for multiple responses.

A Web-based survey was developed using the Zoomerang™ survey hosting system, and an e-mail invitation was sent to a list of 646 full-time faculty members who were listed as having a faculty appointment at one of the 20 optometric institutions in the United States and Puerto Rico. The 2009-2010 Association of Schools and Colleges of Optometry (ASCO) Annual Faculty Survey Report provided a list of 646 full-time faculty members for survey distribution. A follow-up e-mail was sent to the Chief Academic Officers from the ASCO member institutions with the request that they encourage their faculty members to participate. Participation in the survey was voluntary and anonymous. The study was reviewed by the Institutional Review Board at the New England College of Optometry. Descriptive analysis was based on response frequency. The number and percentage distribution were calculated for each response option for each survey question. Additional statistical analyses were conducted for selected pairs of questions. Pearson chi-square, Pearson correlation and p-values were calculated to assess the level of concurrence between faculty members’ perceptions regarding institutional values, expectations and rewards as compared with their own perceived values, expectations and rewards in the context of professional development.

**Results**

The complete survey and raw data are available by request. (Contact corresponding author Dr. Aurora Denial.) One hundred and ninety-three surveys were received, which represents a 30% response rate. The respondent profile breaks down as follows: 90 (47%) from stand-alone optometry-only schools or colleges; 79 (41%) from state-support-
ed universities; 24 (12%) from private universities. A majority of respondents (65%) reported that their institutions required scholarship for both promotion and tenure decisions with an additional 21% reporting that scholarship was required for either promotion or tenure. (Figure 1) Sixty-seven percent of the respondents reported that expectations for advancement were communicated by faculty handbook. (Figure 2)

Faculty Perceptions of Their Institutions’ Expectations
In the area of faculty members’ perceptions of their institutions’ expectations of scholarship, 67% of the respondents reported that original research was the area of scholarship most valued by their institution. The perceived expectation from faculty for dissemination of scholarly work was publication in a peer-reviewed journal (97%). Eighty-two percent of the faculty felt their institution placed a great or important value on their role in scholarship. (Figure 3) Fifty-four percent of the respondents felt that scholarly activities were appropriately valued and rewarded by their institution with a 26% perception of undervalued/under-rewarded and

Figure 2

Figure 3

Figure 4
a 14% perception of overvalued/over-rewarded. (Figure 4)

Faculty’s Perceptions and Interests in Their Own Expectations of Scholarship

A large majority of respondents (73%) indicated that they feel it is part of their role as a faculty member to contribute to optometric educational literature, whether or not it is explicitly stated in their contract. Fifty-nine percent of the respondents spend at least 4 hours or more a week on scholarly activity with 27% spending greater than 8 hours per week and 36% spending less than 4 hours per week. Seventy-four percent perceive their role in scholarship to be important or very important. (Figure 5) Forty-seven percent of the respondents value original research as the most important for their own professional development. Fifty-five percent felt that their own scholarly activities were appropriately valued by their institution. (Figure 6) The main expectation for dissemination was peer-reviewed journals (87% of faculty). (Figure 7) When deciding where to publish scholarly material, peer-reviewed journals

![Figure 5](image)

How much value do you place on your individual role relative to scholarly activity?

![Figure 6](image)

Do you feel that your own scholarly activities are appropriately valued and rewarded by your institution?

![Figure 7](image)

What are your expectations for dissemination of your scholarly work, for purposes of your professional development? select all that apply
(72%) and journals with an appropriate readership (42%) were two of the most influential factors. (Figure 8)

Clinical specialty or clinical science was reported as the primary scholarly interest by 62% of faculty respondents. Only 7% of faculty responded that their primary scholarly interest was in education or educational theory. (Figure 9) Of the 154 faculty members who engage in original research, most identified their main research area of interest as clinical science (61%), with applied or transitional science (28%), basic science (24%) and educational interest (13%) also reported.

Fifty-one percent of the respondents indicated they had not utilized their teaching responsibilities as an opportunity to conduct educational research. Among potential sources for educational research topics, the most commonly reported were clinical teaching (20%), a didactic course (17%) and student opinions of an educational experience (17%).

Comparing Faculty Perception of Institutional and Personal Expectations

Four question pairs were compared to evaluate similarities and differences between faculty members’ perceptions regarding institutional values, expectations and rewards as compared with their own perceived values, expectations and rewards in the context of professional development. The first question pair that was analyzed compared responses for “Rank the type of scholarship your institution values most from its faculty members” vs. “Rank the type of scholarship you value most for your own professional development.” Each question provided the same options in the same order, consisting of: Discovery – original research; Integration – novel insights, interpreting themes in discoveries, identifying connections between discoveries (examples: literature synthesis, conceptual framework); Application – building bridges between theory and practice (examples: case reports);
and Teaching/Communicating One’s Knowledge – facilitating students’ learning, enhancing self-directed learning (examples: comparison of teaching methodologies, development of new pedagogy, writing of text books).

Statistical analysis revealed that the ratings in the category of “Teaching/Communicating One’s Knowledge” were statistically significantly different (Pearson chi-square, p<0.000), indicating that faculty members tend to rate this type of scholarship more highly for their own professional development, with a perception of a lower value attributed to their institutions. For the other three response options, the results were inconclusive. Due to the small sample, chi-square tests showed that the statistical comparison is not valid due to a small value of expected cell size. The distribution of responses for the various response options did not differ greatly between the faculty members’ perceptions about the types of scholarship valued by their institution and their own priorities for scholarship.

“Discovery” was perceived to be the most important type of scholarship valued by the institution by 66.8% (95% confidence interval 73.4% - 60.2%) of the respondents, compared with 46.6% (95% confidence interval 53.6% - 39.6%) of the respondents who selected “discovery” as the most important type of scholarship for their own professional development. “Integration” was perceived as more valuable to the individual (21.2% “most important”; 95% confidence interval 27.0% - 15.4%) compared with the value to the institution (14.0% “most important”; 95% confidence interval 18.9% - 9.1%). The response option for “application” had a slightly greater value on the level of the individual vs. the perceived value by the institution, with 30.6% (95% confidence interval 37.1% - 24.1%) responding “most important” for their own professional development vs. 13.5% (95% confidence interval 18.3% - 8.7%) responding “most important” for the type of scholarship valued by their institution.

The second question pair compared responses for “What is your institution’s expectation for dissemination of your scholarly work, for purposes of merit, promotion, and/or tenure” vs. “What are your expectations for dissemination of your scholarly work, for purposes of your professional development.” Each question provided the same options, consisting of: local or community-based talks; poster or presentation at a state-level meeting; poster or presentation at a national meeting; publication in a non-peer-reviewed journal; and publication in a peer-reviewed journal.

Each of the five response options was analyzed as a dichotomous variable (either selected as “expected” or not selected as “expected”) comparing responses for the perceived expectations of the institution vs. the individual faculty member. Table 1 shows the responses for local or community-based talks. As shown, the majority of respondents indicate that both they and their institution do not expect participation in this activity. Of the total responses, 69.9% are in agreement that this activity is not expected, 11.4% are in agreement that this activity is expected, and the remaining 18.7% are discordant in the expectations, showing a statistically significant difference between expectations (Pearson chi-square, p<0.000).

Table 2 shows the responses for poster or presentation at a national meeting. As shown, the majority of respondents indicate that both they and their institution expect participation in this activity. Of the total responses, 68.4% are in agreement that this activity is expected, 13.5% are in agreement that this activity is not expected, and the remaining

### Table 1

**Expectations for Local or Community-Based Talks**

<table>
<thead>
<tr>
<th></th>
<th>Faculty member expects local or community-based talks</th>
<th>Faculty member does not expect local or community-based talks</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution expects</td>
<td>22 (11.4%)</td>
<td>15 (7.8%)</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(19.2%)</td>
<td></td>
</tr>
<tr>
<td>Institution does not</td>
<td>21 (10.9%)</td>
<td>135 (69.9%)</td>
<td>156</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(80.8%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>43 (21.8%)</td>
<td>150 (77.7%)</td>
<td>193</td>
</tr>
</tbody>
</table>

Concordant Responses Discordan t Responses

### Table 2

**Expectations for Poster or Presentation at a National Meeting**

<table>
<thead>
<tr>
<th></th>
<th>Faculty member expects poster or presentation at a national meeting</th>
<th>Faculty member does not expect poster or presentation at a national meeting</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution expects</td>
<td>132 (68.4%)</td>
<td>17 (8.8%)</td>
<td>149</td>
</tr>
<tr>
<td></td>
<td>(68.4%)</td>
<td>(77.2%)</td>
<td></td>
</tr>
<tr>
<td>Institution does not</td>
<td>18 (9.3%)</td>
<td>26 (13.5%)</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>(9.3%)</td>
<td>(22.8%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>150 (77.7%)</td>
<td>43 (22.3%)</td>
<td>193</td>
</tr>
</tbody>
</table>

Concordant Responses Discordan t Responses
18.1% are discordant in the expectations, showing a statistically significant difference between expectations (Pearson chi-square, p<0.000).

Table 3 shows the responses for publication in a non-peer-reviewed journal. As shown, the majority of respondents indicate that neither they nor their institution expect participation in this activity. Of the total responses, 65.8% are in agreement that this activity is not expected, 16.1% are in agreement that this activity is expected, and the remaining 18.1% are discordant in the expectations, showing a statistically significant difference between expectations (Pearson chi-square, p<0.000).

Table 4 shows the responses for publication in a peer-reviewed journal. More than two-thirds of respondents indicate that both they and their institution expect participation in this activity. Of the total responses, 68.4% are in agreement that this activity is expected, while only 10.4% are in agreement that this activity is not expected. Discordance in expectations was found for 21.2% of the responses, showing a statistically significant difference between expectations (Pearson chi-square, p<0.000).

The statistical analysis for poster or presentation at a state-level meeting showed that the results were inconclusive. Due to the small sample, the analysis is not valid due to small expected cell size. The majority of respondents were in concordance that neither the faculty member nor the institution expect this method for dissemination of scholarly work (n=164, 85.0%, Pearson chi-square, p=0.078, not significant).

The third question pair compared responses for “How much value do you feel your institution places on its faculty members’ roles relative to scholarly activity” vs. “How much value do you place on your individual role relative to scholarly activity.” Each question provided the same options in the same order, consisting of: great importance and value; important; somewhat important; or not at all important.

The correlation between responses was low (Pearson correlation 0.148) but statistically significant (significant at the 0.05 level; 2-tailed). The greatest proportion of respondents rated both the institutional value and personal value as “great importance and value” (n=47, 24.4%). None of the respondents selected the option “not at all important” for both institutional and personal value of scholarly activity.

The fourth question pair compared responses for “Do you feel that scholarly activities are appropriately valued and rewarded by your institution” vs. “Do you feel that your own scholarly activities are appropriately valued and rewarded by your institution.” Each question provided the same options in the same order, consisting of: yes – appropriate value and reward; no – undervalued and rewarded; or no – overvalued and rewarded.

The distribution of responses did not allow for a statistically valid comparison due to small expected cell size. Interestingly, no respondents selected both “no – overvalued and rewarded” for both their personal and institutional perceptions. The distribution of response options and the 95% confidence intervals are

Table 3

<table>
<thead>
<tr>
<th></th>
<th>Faculty member expects publication in non-peer-reviewed journal</th>
<th>Faculty member does not expect publication in non-peer-reviewed journal</th>
<th>Total</th>
</tr>
</thead>
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<tr>
<td>Institution</td>
<td>20 (10.4%)</td>
<td>18 (9.3%)</td>
<td>38</td>
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<td>expects</td>
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<td>publication</td>
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<td></td>
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<td>non-peer-reviewed</td>
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<tr>
<td>journal</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Institution</td>
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<td>155</td>
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<tr>
<td>does not</td>
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<td>expect</td>
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<td>publication</td>
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<tr>
<td>non-peer-reviewed</td>
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<td></td>
</tr>
<tr>
<td>Responses</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Discordant</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Responses</td>
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<td></td>
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</tr>
</tbody>
</table>

Table 4

<table>
<thead>
<tr>
<th></th>
<th>Faculty member expects publication in peer-reviewed journal</th>
<th>Faculty member does not expect publication in peer-reviewed journal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution</td>
<td>164 (85.0%)</td>
<td>24 (12.4%)</td>
<td>188</td>
</tr>
<tr>
<td>expects</td>
<td></td>
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<tr>
<td>publication</td>
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<tr>
<td>peer-reviewed</td>
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<td></td>
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<tr>
<td>journal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institution</td>
<td>3 (1.6%)</td>
<td>2 (1.0%)</td>
<td>5</td>
</tr>
<tr>
<td>does not</td>
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<td></td>
</tr>
<tr>
<td>expect</td>
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<td>publication</td>
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<td>peer-reviewed</td>
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<tr>
<td>journal</td>
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<tr>
<td>Responses</td>
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</table>
shown in Table 5.

Table 6 shows the distribution of concordant and discordant responses. Eleven respondents did not complete this question pair. Of the remaining 182, 84% show concordance. The greatest area of discord indicated that respondents believe that their own activities are undervalued and rewarded, but overall, the institution overvalues and over-rewards scholarly activity.

Barriers and Resources

The most frequently perceived barriers to faculty scholarship were identified as clinical schedule (41%) and classroom/laboratory teaching schedule (23%). (Figure 10) Faculty members indicated that resources such as time allocated for scholarship (73%), financial support (37%) and mentorship (37%) would improve their ability to engage in productive scholarly activity. The types of journal resources that faculty members find the most important for their faculty roles and responsibilities are journals emphasizing patient care (47%) and basic science research (30%). The most important resource to assist faculty members in staying current about educational topics, theories and research was identified as professional meetings (47%).

Discussion

The ambiance of a culture of scholarship lends itself to many different interpretations. Kennedy, et al., describe it as “an environment of creativity and productivity that extends from an active investigation designed to create, advance or transform new knowledge.” Assessment of scholarship usually involves peer review and dissemination. Sustaining a scholarly culture requires clear expectations of that culture, perceived value, appropriate evaluation, a reward system and a supportive infrastructure.

Perceived Values Between Individual and Institution

Scholarly activity and publications are necessary to ensure that the practice of optometry and optometric education are based on peer-reviewed, shared evi-
dence. In some instances, scholarly activity and publications are necessary for job retention and academic career advancement. Most faculty members do not receive formal training in the skills needed for scholarly activities. Additionally, the diversity of faculty responsibilities necessitates time commitments in other areas. These conditions, along with the significant time and cognitive commitment involved with scholarship, can lead to challenges in pursuing and successfully accomplishing scholarly activity. To ensure sufficient motivation for scholarly activity, faculty must perceive either an intrinsic or extrinsic value or reward to scholarship. Intrinsic value may be related to a desire for promotion or tenure opportunities, monetary gains, expanding a reputation and expertise or a sense of responsibility to contribute to the profession. Extrinsic value may reflect institutional expectations or mandated requirements. Ideally, to maximize efforts and support a culture of scholarship, institutional and individual expectations of scholarship should be communicated and perceived to be similar. Faculty perception of expectations and value of scholarly activities at an institutional level are important because of the potential to impact motivational levels.

How scholarship is rewarded will have an impact on the level and motivation of scholarly activity. Promotion and tenure requirements and monetary rewards are two of the most tangible rewards of accomplishments in scholarship. In the survey, the majority of faculty members reported that scholarship is a requirement for promotion and tenure at their institution. However, this study did not ask if promotion/tenure is mandated or if scholarship without promotion/tenure is monetarily rewarded. Utilizing the assumption that most faculty members are required or motivated to seek promotion, the potential impact of scholarly accomplishment on motivation may be significant.

To avoid inconsistencies between faculty expectations, institutional expectations and compensation for scholarly activity, the requirements must be communicated in a concrete, specific and clear manner. At most institutions, faculty reported that this goal was accomplished by a faculty handbook, which represents a concrete method of communicating scholarly expectations to faculty. The contents of a faculty handbook should be as specific as possible so that both faculty and administration are in sync with expectations. Discrepancies between faculty and administration expectations have the potential to negatively impact productivity and morale.

Most faculty respondents in this study perceive an institutional culture that places a high value on its faculty members’ roles relative to scholarly activity. Most respondents also placed a high value on their role in scholarship. Most faculty members indicated that scholarship in general, and their individual scholarship, was appropriately valued and rewarded.

It is interesting to note that none of the responses indicated that scholarly activity was “not at all important” for both themselves and for the institution, and only six respondents (3.1% of the total) reported that scholarly activity was not at all important for their own personal and professional goals. A total of four respondents (2.1% of the total) perceived that scholarly activity is not important at all to their institution. These small numbers support the assertion that faculty members in the schools and colleges of optometry embrace the value of scholarship as an important component of their career path.

However, some faculty members did feel that their institution undervalued scholarship, and an even greater number felt that their individual scholarship was undervalued. A culture perceived as undervaluing scholarship may lead to frustration, impact faculty motivation and not be a supportive environment.

Faculty members perceived original research to be the most valued both on an institutional and individual basis. Faculty members tended to rate the scholarly activity of teaching, communicating one’s knowledge, facilitating students’ learning, and enhancing self-directed learning more highly for their professional development, while indicating that this type of activity was less valued by their institutions. Perhaps this difference can be partially explained by the difficulty in distinguishing normal teaching responsibilities from the development of a robust scholarly portfolio of teaching and learning engagement.

While the sampling did not permit the ability to draw a statistically valid conclusion, apparent differences in the data also indicate that the value of the scholarship of “application” may differ between faculty members and their perceptions about their institutions. This difference may highlight perceptions about normal faculty duties, roles and responsibilities vs. taking the next step to turn an application between theory and practice into a form of scholarly engagement.

Many authors emphasize that the true value of scholarly activity comes from the dissemination, citation and impact of the work done. The expectation for the dissemination of scholarship was similar between institutions and faculty. Peer-reviewed publications represented the hallmark. Creation of knowledge may be a first, and crucial, step. However, the value of creating knowledge is significantly limited if that knowledge is not disseminated to a broader audience and ultimately has an impact in changing some element of clinical practice, scientific applications or educational applications. This agreement is important because of the potential impact on rewards for faculty and faculty motivation.

Faculty Scholarly Interests/Habits

Faculty scholarship and productivity are often measured in publication outcomes. When considering where to publish, faculty respondents value the peer-review process and target readership in their area of focus. Indexing, impact factor, turnaround time and overall size of readership were less important factors. When striving to gain recognition and a reputation, it is important that faculty members have direct access and influence with their peer group or those that could benefit from their area of focus.

The majority of faculty members identified a clinical specialty as their primary interest for scholarly activity and original research. Faculty members also identified journals emphasizing patient care as the most important to read on a regular basis. This is not surprising because of the clinical nature of
the profession. However, only a small percentage of respondents are involved in education-related scholarship or research as a primary interest. This is surprising because most faculty members have in common teaching responsibilities and frequently set a goal to aspire to be effective teachers. Faculty members indicated that professional meetings, rather than education conferences or education journals, are resources that are most helpful for staying current about education topics. Therefore, it becomes important that professional optometric organizations, such as the American Academy of Optometry and the American Optometric Association include education-related faculty development at their annual meetings. The majority of respondents felt it was their role to contribute to the optometric education literature whether or not it was explicitly stated in their contract. This perception of faculty role is in contrast to the actual reported interest in education research or scholarship. Two explanations for this dichotomy are possible: 1) faculty members may acknowledge it is their role to contribute but in reality barriers prohibit the accomplishments; or 2) survey respondents misinterpreted the question to mean optometric literature in general. However, educators should ask themselves how does this lack of interest in education-related scholarship impact the profession of optometric education?

Barriers/Resources

The most frequently perceived barriers to faculty scholarship were identified as clinical schedule and classroom/laboratory teaching schedule. These factors limit the time available to participate in scholarly activities. Lack of dedicated time is a well-documented and common barrier to scholarship in clinical professions such as medicine, nursing, pharmacy and dentistry. The obvious solution to this barrier is to re-evaluate and reallocate faculty time allotment on a regular basis to allow for adequate time to engage in scholarship. However, working within the framework of teaching as a mission of optometric education, the need for revenue from clinical practice and budgetary constraints, the reallocation of time or hiring of additional faculty may not be realistic. Some institutions, especially those that place a high value on scholarship, may provide some dedicated time for scholarship. This dedicated time may or may not be sufficient for faculty needs. This study did not explore institutional allotted time for scholarship. A majority of faculty respondents devote at least 4 hours or more per week to scholarship, but we do not know how much time is allotted by the institution. Faculty may delay or assign a lower priority to scholarly activity to attend to other imminent responsibilities such as teaching or patient care. Faculty may need to realize that at different points in their career time spent on scholarly activity within or outside of scheduled working hours is a necessity and an investment in their future and the future of the profession.

The implementation of good time management skills is also essential. This may be particularly challenging for a faculty member who has transitioned from a clinical to academic environment. Traditionally, in a clinical environment, time management is determined by patient schedule. In the academic environment, faculty members are responsible for managing both long-term and short-term projects. Development of effective time management skills is ultimately the responsibility of the faculty member but can be expedited and enhanced by institutional support in the form of time management workshops, support help for non-essential faculty functions, such as photocopying and resources, and support for scholarly activity, such as access to statisticians and support help for accessing information via literature searches.

Faculty respondents indicated that financial support would be a helpful resource for scholarship. Faculty members must acknowledge responsibility for developing a successful track record of scholarly activity before being rewarded with additional dedicated scholarship time and increased opportunities for funding. The development of a track record can be facilitated by utilizing smaller local funding sources, the conversion of presentations/posters into publications, and dealing with the necessary manuscript revisions and rejection within the peer-review system. Institutional support and infrastructure can be instrumental in providing resources for scholarship. Survey respondents indicated that resources such as mentorship would improve their ability to engage in productive scholarly activity. Collaborative scholarly efforts can involve peer-to-peer collaborations or mentorship between junior and senior scholars. Studies have demonstrated that faculty members are more likely to publish if they are involved in a collaborative effort. Mentors can facilitate scholarly accomplishments by offering networking opportunities, providing advice, offering research opportunities, offering practical suggestions for career development, and providing insight into the academic environment.

In addition to supporting and initiating collaborative activities, institutions can provide support with in-house faculty workshops on topics such as writing, research design and statistical analysis. They could also provide funding to attend workshops that develop these scholarly skills. Institutional support can also involve freeing up faculty time for scholarship by instituting innovative teaching techniques that decrease face-to-face classroom time and by appropriately rewarding scholarly activities.

The profession of optometry must also take responsibility for providing resources for scholarly activity. Although this was not specifically addressed in the survey, some possible contributions by the profession are centralized resources, grant opportunities, national collaborative efforts and instituting a professional culture that values scholarship.

Limitations

The limitations of the study involved the response rate, distribution of respondents and nature of questions. The study was distributed to 20 optometric institutions. Of the 20 optometric institutions, 20% are stand-alone optometry-only colleges, 45% are within a state-supported university, and 35% are optometry schools within a private college/university. The respondent profile breaks down as follows: 90 (47%) from stand-alone optometry-only colleges; 79 (41%) from state-supported universities; 24 (12%) from private universities. The extent to which the study results can be generalized may be impacted by the lack of congruence be-
tween the types of institutions and the distribution of respondents.

The sample size represented a 30% response rate. The literature does not show agreement on an acceptable survey response rate.11 Non-response error, which indicates non-respondents having a different opinion than the responders and/or response bias, which reflects the respondents being different and therefore not accurately reflecting the target audience, are always more of a risk the lower the response rate.11 The non-response bias may also indicate a differential response rate based on the level of engagement in scholarly activity. It may be likely that faculty members who are less involved in scholarship would tend not to respond to a scholarship survey, whereas faculty members who are more involved in scholarship would be more likely to respond.

In hindsight, additional questions concerning criteria for promotion and tenure may have been beneficial. The question asking faculty if “it is part of their role as a faculty member to contribute to the optometric educational literature whether or not it is explicitly stated in their contract” may have been interpreted as contribution to the general optometric literature. More specificity in the question would have aided in the clarity. The authors also acknowledge that some institutions may not utilize faculty contracts at all, which in turn could bias the responses. One question was asked about time spent doing scholarly activities. An additional question(s) on time spent on other responsibilities such as teaching, service and clinical responsibilities would have yielded a clearer representation of potential barriers to scholarship.

Questions regarding academic rank or track (clinical, tenure or non-tenure) may also have been useful in providing more specific information on scholarship habits. Scholarship habits may change depending on academic rank, track or based on the number of years in an academic career.

Conclusion

A perception of shared values between the individual faculty member and his or her home institution is an important foundation for a long and productive academic career. In general, responses support an overall good fit between faculty members’ personal and professional expectations and how they perceive the expectations of their colleges and universities. It is gratifying to note that more than half of the respondents believed that scholarly activity is appropriately valued and rewarded by themselves and by their home institution. This consistency bodes well for the profession of optometric education and for continued growth in scholarly activity by the nationwide faculty body. To support this sustained level of agreement, it will be important to recognize the existence of perceived barriers identified by this survey. Vigilance in identifying and eliminating potential barriers to scholarship will be critically important as more experienced optometric educators are nearing plans for retirement and the next generation of educators will be transitioning into key leadership roles.

References

References


