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Attitudes of Faculty Members of Schools of Public Health Toward Public Service

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SYNOPSIS

Public service has long been considered one of a traditional triad of academic functions—teaching, research, and service. Yet even in schools of public health, where service is purported to be an integral component of the institution's mission, faculty generally do not accord as high a value to service performance or approach it with the same degree of commitment as they do research and teaching.

A study was conducted to examine faculty perceptions and attitudes toward the service function and its relationship to teaching and research within schools of public health. The data were taken from a mailed questionnaire survey of 20-30 faculty members in each of 20 schools of public health in the United States. The response rate was 71 percent, or 387 returned questionnaires.

Respondents generally felt that the greatest value of service lies in its potential for enhancing the image and prestige of the school, and in the fulfillment of the community obligation of the institution. The possibility that service might bring about improvements in faculty research and teaching, or improvements in health services and public health, was rated significantly lower. Thus, respondents did not view service as useful for its contribution to their own careers or to public health practice as much as they regarded it as a beneficial contribution to the reputation of the institution. This view undermines the traditionally held notion that public service either benefits a particular constituency outside the school or enhances the professional development of faculty members themselves.

PUBLIC SERVICE HAS LONG BEEN CONSIDERED ONE of a triad of academic functions along with teaching and research. Mission statements of universities almost universally embrace all three. Accrediting

bodies expect to see some evidence of the service capability and contributions as part of academic qualifications. Although this expectation applies to institutions of higher learning generally, service is

especially significant as an integral component of higher education in the applied human services.

Yet faculty and administrative leaders have not placed service as high in the value system or given it the same priority as teaching and research. Measured by any yardstick of time, effort, money, and visibility, service accounts for only a small fraction of the total program of the university. Even in schools of public health (SPH), where service purportedly comprises a major dimension of the institution's mission, faculty generally do not accord as high a value to the performance of service nor do they approach it with the same degree of commitment that they give to conducting research and teaching duties.

Within the past decade, service has received increasing attention from both constituencies and supporters of universities (1-7). A key issue has been the need to clarify the focus and scope of community service. What is required is a more precise operational definition of the public service mission. Elaborating on this problem of ambiguity surrounding the service function of the university, Long notes (1):

In some cases, public service is defined simply as the residual activities that are left over after traditional instructional and research programs are accounted for. To some people, all that a university does is public service; to others, public service is not a separate mission in itself but rather just a particular way in which research and instruction are provided; and to still others, specialized public services are different from traditional instruction and research even if they are a by-product and result of these other missions.

There had been little documentation of the status of "service" in schools of public health until the Milbank Commission studied several broad questions related to higher education in public health. As part of this inquiry, the commission looked at the relationship between attitudes expressed by faculty and students engaged in graduate training in public health and their behavior in the field of practice. At this point the commission proposed a rather clear picture of what its members considered an acceptable definition of service. The commission argued that public health faculty relationships with the field of practice "should not merely consist of an occasional consultation or membership on a committee, but should include responsible involvement in a wide range of activities, including the provision of direct and continuous service—even if only on a part-time basis" (3a).

These observations prompted us to seek a better understanding of the forces that shape the service function in schools of public health. We pursued this interest by surveying faculty attitudes toward the performance of public service. Faculty members from 20 accredited schools of public health in the United States were sent a questionnaire in an effort to define the role of public service in higher education and its relationship to research and teaching.

In planning the study, a number of fundamental questions merited consideration. First is the nature of service; there is no universally accepted definition, and policies and patterns for service in academic institutions vary, with little consistency from one institution to another. In fact, service is the most nebulous and ambiguously expressed aspect of the university's mission in both application and organization. One could assume that service is directed to an external constituency that benefits from knowledge communicated by the university faculty. Yet, service is also believed to contribute a necessary dimension of learning for faculty in their exposure to the service setting (5). Several kinds of faculty involvement with external organizations were listed. Rather than attempting a precise operational definition, we judged that assessing the salience of each type on a continuum of values was judged to be more useful.

A logical followup question is the rationale for the service. An underlying assumption is its importance to the faculty and its parent institution as well as to the recipients. Little documentation is available to confirm either assumption. The Milbank Commission's report "Higher Education for Public Health" declared that public health faculty should assume responsibilities in the operation of community services which are "relevant to, and will be supportive of their respective fields of academic responsibility" (3a). The inference is that such involvement enhances performance as a member of the public health faculty. We know of no study that attempted to measure the value of service to the university as a whole, to recipients of service, or to individual faculty members.

A third and extremely important question is how service activities fit into the value and reward system for university faculty. Historically, research and publication have been the primary considerations for promotion and reward—indeed in the achievement of status. Does involvement in service affect the reward system? If it does not, should it?

Again, little empirical evidence is available to answer these questions. One point seems certain: unless service is incorporated into the reward system for faculty, service is not likely to change its historically low status and ill-defined part of the university triad of functions.

Study Methodology

Sample. The data for this study are taken from a survey of 387 faculty members who have full-time tenure track (although not necessarily tenured) positions in 20 schools of public health in the United States. Questionnaires were sent to 542 faculty members, and the response rate was 71 percent. For the purpose of sample selection, a list of full-time tenure track faculty with their primary appointment in the school of public health was solicited from the 20 universities. Faculty were divided into three strata: professors, associate professors, and assistant professors or instructors; and an equal sample was drawn within each university from each stratum. Sample sizes ranged from 20 to 30, depending on number of faculty in the schools. Originally, we planned to draw randomly 10 faculty from each rank. In certain schools this step was not possible; therefore, reduced numbers were drawn so that the numbers were as equal as possible for the three ranks from each school. The range of responses among the schools was from 53 to 95 percent. By academic rank, the response rate was 73 percent for professors, 83 percent for associate professors, and 50 percent for assistant professors and lecturers.

Questionnaire. The questionnaire contained requests for two types of information. The first part was to ascertain academic rank, tenure status of the appointment, department name, highest degree earned, and field of specialization. The remainder of the questionnaire consisted of 108 statements about activities that could be considered service. The respondents were asked to rank each statement on a scale of 1 to 5 from strongly disagree to strongly agree. The 108 statements had two parts: first, a description of a service activity and, second, a characteristic or attribute of service. Twelve specific activities were paired with nine attributes. The 12 types of service are listed in table 1. The specific attributes forming the second part of the 108 statements follow.

A. Is important to fulfilling the service obligations of the school of public health (SPH) to the health community at large.

B. Is important to the professional training and advancement of faculty in the SPH.

C. Is likely to produce improvements in research and teaching.

D. Is valuable in enhancing the image and prestige of the school.

E. Is likely to improve health services and public health.

F. Should be given substantial weight in decisions regarding faculty promotions through the professorial ranks.

G. Should be actively promoted by a special unit in the SPH, such as the division of community health service.

H. Should be promoted by faculty members or departments themselves.

I. Indicate below these activities in which you have engaged (attribute I for each of the 12 services received a response of yes or no, rather than a strongly agree to strongly disagree response).

Nonresponse. The difference between respondents and nonrespondents in attitudes about service cannot be tested directly, but there are two indirect methods of determining if nonrespondents might differ significantly in their views from respondents. The response rate between full professors, associate professors, and assistant professors differed, and therefore it is possible to determine if there is a significant difference between ranks. When perceptions of significant dimensions of service were compared, there were no differences by faculty rank. Therefore, it is reasonable to assume that the lower response rate for assistant professors is not likely to have affected the results of the study.

A second way of examining the potential bias of nonresponse is to consider whether the response was to the first wave (302 respondents) or the second wave (85) of data collection. Again, when those who responded to the first wave and those who responded to the second were compared, no differences were found.

The reward system for faculty recognition, promotion, and prestige historically has been dominated by research and publication.

Analysis. Analysis of data was carried out in two stages. The first stage was the process of data reduction by use of factor analysis; the second stage was a comparison of mean values of scores, based on the factor analysis, to determine the view of faculty on the various dimensions of service.

Two sets of factor analyses were produced. The first set consisted of 12 separate factor analyses—1 for each service type relative to 5 specific attribute statements, A through E, which relate primarily to the value or purpose of service. The aim of the factor analysis was to determine if faculty perception of each attribute as it related to a type of service could be considered unidimensional.

The results of these 12 factor analyses suggested that the responses of the faculty were essentially unidimensional with regard to their perception of the 12 service types. In each of the 12 analyses, the first eigenvalue accounted for more than 80 percent of the total common variance, suggesting strongly that a single dimension underlies the faculty's view of the value of each type of service as measured by attributes A through E.

On the basis of these results, a single score of the value of each type of service was constructed. The score combined the responses A through E for each respondent. In a second set of factor analyses, each value statement was factor-analyzed relative to the 12 service types. This process produced 5 factor analyses relative to each service. In these 5 factor analyses, the first eigenvalue did not account, in general, for as large a proportion of the variance as was contained in the first factor for the 12 services, but we continued to believe that a single factor solution was acceptable. The smallest proportion of variance contained in the first factor was 66 percent. On the basis of this observation, single factor solutions were produced that combined all 12 service categories for each of the 5 attributes.

The second phase of analysis was a comparison among the 12 service categories and among the 5 attribute categories in terms of the level of score received. Because factor loadings were more or less equal for all items in each factor analysis, the scores assigned either to the 12 services or the 5 attributes were simply the sum of scores for that category divided by the number of items involved. Thus, the minimum score which could be received for any service or attribute type was 1, the maximum score was 5, and the theoretical midpoint or "undecided" score was 3.

The analyses shown in tables 1 and 2 are a comparison of the means for the service types and the

attribute types. In each table, the services or attributes are listed in descending order in the stub, or lefthand column, by overall score received. The mean score for each service or attribute across all 387 respondents is shown in the last column on the right. The + signs represent those services or attributes that received a significantly lower score than the stub column item. For example, membership by school of public health faculty on national or international grant review committees, expert commissions, advisory boards, working groups, task forces, or other bodies at these levels with a mean score of 4.03 was scored significantly higher by respondents than all other services except service type 2 (table 1). Service type 2's mean score of 3.94 was significantly higher than all other services except No. 6. The interpretation of other entries in the two tables is similar.

Findings

1. What are acceptable service activities?

A broad analysis of the table 1 data reveals that all 12 service categories were scored higher than a value which would theoretically imply an undecided response (a score of 3). In other words, faculty members, on the whole, agreed that all the proposed types of services are appropriate modes or have valuable impact as a "service activity." Although all activities were considered acceptable expressions of service, some were accorded higher value than others. Membership on national or international committees, commissions, boards, or other bodies achieved the highest overall mean score and was given the highest value compared with other activities on the list.

Membership on expert commissions, advisory boards, and task forces—whether at the State or local or at the national or international level—is clearly accorded more value than other categories. At the other extreme, organizing continuing education courses, service as an officer or committee member of a State or local professional organization, and inservice training for external organizations all scored at the low end of the continuum.

Imbedded in these results are certain consistencies which emerge after the initial analysis. Specifically, service on a national or international body is, in general, valued more highly than service to a State or local body. The single clear exception is membership on a State or local commission, board, or task force. Instructional activities as service, whether it

be the organization or teaching of continuing education courses or inservice training, are perceived to have less importance. It should be emphasized again, however, that respondents, on the average, were favorably disposed toward even the service with the lowest score as a legitimate activity for faculty members of schools of public health. Thus, while the listed activities varied in their perceived value or service "valence," all of them were considered worthwhile and appropriate endeavors for public health faculty. In other words, all of the proposed modes, as defined by the activities enumerated in the questionnaire, are considered acceptable boundaries of the institutional service function. The definition of service is refined and further delineated to the extent that faculty accord the different activities varying degrees of value or weight.

2. Who benefits from the service function?

With a working concept of what constitutes service, the next logical question is why service is included in the so-called "triad of academic responsi-

bilities." Once again, there is no single compelling reason. Nor is there any definitive assessment of the multiplicity of forces which seem to provide the impetus for performance of service. The seemingly apparent value of extramural public service to public health faculty has not been systematically studied to determine its role as a motivating factor (8), and the essential worth of service has been accepted without empirical verification to validate and support this position.

A specific question addressed by the data is the value faculty members attach to service. Table 2 compares the five attributes of service. The attributes are ordered by decreasing value of the mean scores. All five scored significantly on the positive side of the scale's midpoint. Faculty, on the average, agree that these are important reasons for engaging in service. Of interest, however, is a comparison of the attributes to determine faculty perception of the most important reasons for engaging in service. Attributes A and D scored significantly higher than attributes B, C, and F. A and D posit the value of service in fulfilling the school's obligation to the

Table 1. Comparison of mean scores across 5 value attributes for 12 service types

Number ¹	Service	Service no.										Mean score	
		2	6	3	11	7	4	8	12	9	5		10
1	Membership by school of public health (SPH) faculty on <i>national</i> or <i>international</i> grant review committees, expert commissions, advisory boards, working groups, task forces or other bodies at these levels.	+	+	+	+	+	+	+	+	+	+	+	4.03
2	Membership by SPH faculty on <i>state</i> or <i>local</i> expert commissions or advisory boards, working groups, task forces or other bodies at these levels.			+	+	+	+	+	+	+	+	+	3.94
6	Technical assistance or consultative services by SPH faculty on day-to-day operations of <i>national</i> or <i>international</i> agencies or service providers.				+	+	+	+	+	+	+	+	3.82
3	Membership by SPH faculty on professional journal editorial boards.					+	+	+	+	+	+	+	3.73
11	Temporary full-time or part-time service by SPH faculty in a <i>national</i> or <i>international</i> agency on a leave basis.							+	+		+	+	3.72
7	Technical assistance or consultative services by SPH faculty on day-to-day operations of <i>state</i> or <i>local</i> agencies or service providers.							+	+		+	+	3.70
4	Service by SPH faculty as an officer, committee chairman or committee member of a relevant <i>national</i> professional organization.								+		+	+	3.60
8	Instruction by SPH faculty in continuing education courses or sessions.									+	+	+	3.57
12	Temporary full-time or part-time service by SPH faculty in <i>state</i> or <i>local</i> agencies on a leave basis.											+	3.55
9	Organization by SPH faculty of continuing education courses or sessions.												3.44
5	Service by SPH faculty as officer, committee chairman or committee member of relevant <i>state</i> or <i>local</i> professional organization.												3.44
10	Instruction by SPH faculty in <i>inservice training</i> for external organizations.												3.34

¹ Service statements are numbered according to order in questionnaire.

NOTE: The service in the lefthand or stub column scored significantly higher ($P = .01$) than the services indicated by plus signs.

Table 2. Comparison of mean scores for 5 attributes' categories across 12 service types

Attribute ¹	A	D	B	C	E	Mean score
A Is important to fulfilling the service obligations of the School of Public Health (SPH) to the health community at large.			+	+	+	3.91
D Is valuable in enhancing the image and prestige of the school.			+	+	+	3.86
B Is important to the professional training and advancement of faculty in the SPH.				+	+	3.60
C Is likely to produce improvements in research and teaching.						3.49
E Is likely to improve health services and public health.						3.41

¹ Attributes are lettered according to order in questionnaire.

NOTE: The attribute in the lefthand or stub column scored significantly higher ($P = .01$) than the attributes indicated by plus signs.

community at large and in the enhancement of the image and prestige of the school; in other words, these two reasons depict the value of service to the school or institution. The data suggest that institutional benefits are perceived as the most important reasons for faculty to engage in service activities. Attributes C and E, which relate service to improvements in faculty research and teaching or to improvements in health services and public health, were rated significantly lower. The value of service in the professional training and advancement of faculty falls between these two endpoints (attribute B). Thus, the data indicate that faculty members do not value service so much for its contribution to their own careers or to public health in general as they view it as a useful contribution to the school. It is reasonable to assume that service will tend to take a backseat to research and teaching as long as this view is held.

3. How does service fit into the faculty reward system?

Having found that faculty perceive the value of service to be primarily to the school's image and prestige rather than to benefit themselves or health services in general, we examine next the academic rewards. As previously noted, the reward system for faculty recognition, promotion, and prestige historically has been dominated by research and publication. Administrators of public service programs must thus grapple with a persistent and fundamental problem: if they depend on the faculty's active involvement for the viability of the program, they confront a reward system that provides little incentive for faculty involvement. It is not unreasonable to expect that faculty members wish to devote most of their time and energy to the activities with the greatest potential for institutional and professional reward. Unless service activities are more fully integrated into the traditional reward system as a criterion for

salary increases, promotion, and tenure, the legitimacy of public service will be undermined and the vitality of the program will be vitiated. If it is acknowledged that, ultimately, there is only one valid reward system, then public service activities must be conceptually integrated into this institutionalized faculty reward system.

As noted in table 2, respondents associated service activity positively with personal recognition and reward, although this factor received a lower score than value to the institution.

In examining the data more closely, some service activities were correlated more highly with personal value and reward for faculty than others. For example, faculty membership on national and State commissions and other organized bodies received more weight than providing technical assistance or continuing education. This conclusion is logical, in that membership on boards of eminent organizations ostensibly confers more prestige. Also investigated was the factor of experience and attitude in reference to personal value and reward. In other words, did previous service activities make a difference in faculty members' view of the value of service? We found that if the faculty member had service experience, he or she was much more likely to agree that it should be given weight in the consideration for faculty promotion than a faculty member who had had no such experience in the service domain.

4. How should service be organized, that is, who should promote faculty participation in public service?

A major question is how to integrate service activities with concurrent pursuits of research and teaching. The Milbank Commission argued that faculty should assume service positions in external organizations. While faculty rated such service relatively high (in fact only significantly lower than membership on expert commissions when the serv-

ice is provided to a national or international agency), it is rated low when it is with a State or local agency (table 1). However, the desirability of such activity also poses practical problems. Administrative arrangements are often complex, interrupt other academic responsibilities, and disrupt family and other activities. In other service activities, such as consultation and technical assistance, the problem is logistical. Under what circumstances may a faculty member solicit or respond to the invitation to enter into such an arrangement? How are the limits of involvement delineated? For senior faculty members with reputations known to members of external organizations, finding appropriate service opportunities is less of a problem than for the younger, less established faculty members.

Who should be responsible for forming service linkages with external organizations? The extent of involvement which a special unit should take, such as a division of community health service within a school, was explored. Each service activity included the following options:

1. Should be promoted by faculty members or departments themselves.
2. Should be actively promoted by a special unit in the school, such as the division of community health service.

The mean value for the sum of the 12 items given to promotion by faculty or departments was 3.67, and promotion by a special unit of the school scored a mean of 2.60. In general, faculty preferred that they promote service themselves or have their department do it rather than have a special division within the school do it. In fact, the mean value of 2.60 for service categories for promotion by a special division actually was on the negative side. In effect, faculty members were negatively disposed toward a separate office acting as a broker for service activities. However, in distinguishing between membership and instructional activities, the responses revealed that faculty believed that promoting technical assistance and continuing education instruction is a more legitimate function of a separate office than is promotion of faculty members for various professional bodies. This attitude toward membership is perhaps correlated with the value factor, in that faculty members view membership on certain bodies as personally rewarding and more worthy of recognition than instructional and technical assistance activities.

'On the contrary, faculty do not perceive service as contributing to their own level of competency so much as benefiting their institution's reputation.'

Discussion

Several implications of significance may be gleaned from this study.

First, the interrelations among service, teaching, and research require a more complete assessment by administrators and deans of schools of public health. The assumption that the three functions are interdependent, or at least complementary, is not upheld by this study. Service as a factor in the effectiveness of teaching and guiding the work of students in a school of public health especially deserves serious attention.

Second, the study findings challenge the generally held assumption that faculty embrace service activities, giving them high priority in their own professional growth and development and perceiving them as essential to enhancing teaching and research skills. Study findings do not support this concept as a prevailing attitude. On the contrary, faculty do not perceive service as contributing to their own level of competency so much as benefiting their institution's reputation.

Third, the attitude of faculty with regard to reward and incentive for service is significant. There is, no doubt, an association between the attitude that service is more important to the educational institution than to the faculty member, and the fact that service involvement does not generally contribute significantly to promotion and advancement. Only faculty who have had extensive experience in service believe that service should be a factor in the reward system. This suggests that universities, especially academic administrators of the professional schools such as public health, should seriously examine faculty expectations about the role of service. Involvement in public service activities will be sanctioned among faculty only when the rewards are commensurate with the time and energy demanded to fulfill such commitments.

Questions regarding a realignment of valued professional activities were posed for two reasons: First, service activities generally are not incorporated into workload assignments of faculty as are teaching and research assignments. Second, several schools of public health have a mechanism for coordinating service attitudes, although there is no uniform administrative or organizational approach to this function. We believe that responses from faculty about responsibility for promoting and facilitating their involvement would provide additional insight on the value they placed upon a service activity.

Finally, the impetus for service in general should be addressed by the schools of public health. At present, service activities are loosely organized and not supported by explicit standards or criteria. If service is valuable, its value should be defined more concretely in terms of the beneficiary. Moreover, if the contribution of services is ever to achieve parity with that of research and teaching duties in institutions of higher education, service programs must be better organized and standardized. At the moment criteria or standards to measure the adequacy of the service activities in schools of public health do not exist. There should follow an initiative to develop with more exactness in purpose and contribution, objectives, standards, and criteria.

Equally important, service must be brought into the reward system for faculty. Regardless of stated values and expectations, the system for advancement and promotion is tied to those activities which are deemed most important. Unless service activities are more fully integrated into the traditional re-

ward system of salary, promotion, and tenure, the legitimacy of public service performance will be undermined and the vitality of the program will be vitiated. If public service is endorsed by the university and if the support for such participation is manifestly reflected in the reward system, then faculty members will perceive service as a professionally worthwhile endeavor.

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Differentials in the Planning Status of Most Recent Live Births to Mexican Americans and Anglos

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SYNOPSIS

Data from personal interviews with 705 Mexican American and 363 Anglo women during the 1979 U.S. Mexico Border Survey were analyzed to answer the question, To what extent do Mexican Americans and Anglos differ in having the number of children they want, when they want them? Mexican Americans had a significantly higher percentage of unwanted births than did Anglos. Much of this difference is related to the fact that Mexican Americans, when compared with Anglos, have completed fewer