

The Motivation to Manage: A Study of Academic Librarians and Library Science Students

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Introduction

AN UNDERSTANDING OF THE factors which contribute to the low proportions of women in administrative library positions can provide the library profession with a theoretical basis from which to initiate change. A number of factors previously have been suggested to explain the underrepresentation of women in the administrative ranks. In particular, recent psychological research on the scarcity of women in management tends to focus on personality characteristics and behavior patterns of women as probable explanations for low job status. Women are seen to be unable to function adequately in the administrative positions from which they are excluded. Obstacles are seen as residing within women themselves—i.e., their own attributes and lack of motivation may impede high levels of achievement.

Several studies address this issue. Findings of these studies support the notion that females are socialized to aspire toward work activities that do not emphasize managerial skills. O'Leary,¹ for example, illustrates that women as a group describe themselves as different from or

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even opposite to men as a group on presumed requisite managerial traits. Both O'Leary and Terborg² discuss the existence of a "male managerial model." As McGregor³ describes it:

The model of the successful manager in our culture is a masculine one. The good manager is aggressive, competitive, firm and just. He is not feminine, he is not soft and yielding or dependent or intuitive in the womanly sense. The very expression of emotion is widely viewed as a feminine weakness that would interfere with effective business procedures.

This model is supported by research which suggests that there are a number of relatively consistent personality differences between males and females. Brenner and Greenhaus⁴ report on studies which show that males tend to be more aggressive than females, and that females are more nurturing than males. The studies also find males to be more dominant and more achievement-oriented than females.

These studies offer support for identification of distinctive roles for males and females in the workplace. For example, a 1973 study by Schein⁵ finds a clear difference between the particular characteristics, traits, and attributes that middle-line managers perceive to be commonly held by women in general and those characteristics held by managers. A follow-up study by Schein in 1975⁶ finds that both successful managers and men are perceived to possess the characteristics of leadership ability, competitiveness, self-confidence, objectivity, aggressiveness, forcefulness, and being ambitious and desirous of responsibility. Female managers as well as male managers identify these characteristics as basically "male" in nature. In other words, for both male and female respondents, "to think manager, means to think male."⁷

Perhaps the most noted recent research on women's motivation to manage is that reported by Horner.⁸ Horner takes the motivation model of achievement developed by Atkinson and Feather⁹ and McClelland, Atkinson, Clark, and Lowell¹⁰ and hypothesizes that women do not achieve because of motivational conflict over achievement (a simultaneous desire for and fear of success). Horner defines this motive as the fear that success in competitive achievement situations will lead to negative consequences, such as unpopularity and loss of femininity. While subsequent psychological research into fear of success fails to find consistent relationships between fear of success and sex of respondent,¹¹ the concept continues to be the impetus for much related research.

One related research trend examines the depressed educational aspirations of women. Cantor¹² suggests that women's expectations about their personal competence may lower their aspirations.

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Having been exposed to general expectations of feminine incompetence, women may come to share their expectations and avoid achievement situations since achievement situations or cues should signal failure to persons who view themselves as incompetent.¹³

Consequently, at a time when discrimination against women in the library profession is gaining increased attention,¹⁴ it is important to know to what extent females actually have the motivational requirements to perform effectively in managerial positions. The question is of equal significance to employing libraries and to women who may be contemplating careers in library administration.

Over the past twenty years a number of studies have been conducted—primarily using the Miner Sentence Completion Scale (MSCS)—which have demonstrated the construct as well as concurrent and predictive validity of the concept of the motivation to manage in highly structured organizations of an essentially bureaucratic form.¹⁵ The motivation-to-manage concept has shown itself to be predictive both of movement up the hierarchy and of effective management performance.¹⁶

Much of the research concerning gender effects on motivation to manage has involved individuals already in managerial positions. Such research may prove misleading because those studied have already chosen a managerial role, and consequently are likely to have a higher motivation to manage than those not in managerial ranks. For example, a Miner study done in 1974 shows no consistent differences in the managerial motivation of male and female managers in a department store.¹⁷

Studies among student populations from which managerial talent is drawn are another approach to examining motivation to manage. Miner finds substantial gender differences in motivation to manage among several samples of college students, including two samples of business students.¹⁸ Bartol also finds significant differences between male and female business students on motivation to manage, although the amount of variance accounted for according to gender is less than 10 percent.¹⁹

One point to be made in evaluating most motivation-to-manage research is that it traditionally has focused on male-intensive, for-profit organizations. It may be that significant differences in motivation-to-manage results can be found in a female-intensive profession such as librarianship. Personality characteristics of librarians have been recently examined by Sukiennik.²⁰ She summarizes a number of studies which show that the typical librarian is more deferential than the general population, and possesses to a greater degree a set of qualities

that Sukiennik characterizes as "endurance." She points out that male and female librarians are less likely to be affiliative, dominant, or aggressive than the population at large.

A separate study by Rainwaters²¹ and reported by Sukiennik examines the personality characteristics of male and female library science students. Using the Edwards Personal Preference Schedules, the men in the experimental group rated significantly higher than the male norm in the subscales on Achievement, Deference, Order, and Endurance. The women's scores were higher than the female norm in the subscales on Deference, Order, and Endurance, and lower in Exhibition, Affiliation, Dominance, and Aggression. A 1957 study by Douglass²² and discussed by Sukiennik supports the notion that librarians (both male and female) lack the characteristics associated with managers. Douglass's most significant finding is that those librarians tested lack ascendancy, drive, leadership qualities, and motivation.

The major purpose of our study was to identify motivation-to-manage levels among one segment of the population of practicing librarians—academic librarians—and the student population from which academic librarians come. The results of the various studies reviewed here support the notion that females are socialized to aspire toward work activities that are not considered managerial in nature. Librarianship emphasizes such activities.²³ Consequently, we hypothesized that women who work as librarians, as a group, are not motivated to manage. However, inasmuch as men are socialized to aspire to management positions, we further hypothesized that male librarians' motivation to manage, while low (based on Sukiennik's findings), will be higher than that of women.

Populations

Inasmuch as our hypotheses were derived from previous research carried out using a population of academic librarians,²⁴ that same population was used in this study. In order to compare the managerial motivation levels of individuals at various levels of experience in librarianship, the population of students preparing for work in academic libraries was selected for inclusion in the study as well. The presence of individuals who possessed no experience, but who had already declared a preference for academic librarianship, offers a test of the hypothesis that levels of motivation to manage vary with amount of professional experience.

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Using estimates of population parameters derived from the authors' just-cited previous research, a sample of approximately 250 academic librarians was indicated. In reality, a determination of the true population of all academic librarians in the United States was not possible: the actual population was dictated by the presence of a convenient sampling frame, the latest edition of the American Library Association's membership directory.²⁵ The total population of students pursuing the first professional degree in librarianship who further could be identified as intending to work in academic/research libraries, was much more difficult to determine. Lacking a frame that could enumerate this population, it was decided that students in MLS programs would be sampled.

The other piece of information needed—the type-of-library preference of students pursuing the MLS—was *not available either*. However, since one of the study's aims was to compare students' responses by academic library preferences *v.* other type-of-library preferences, a type-of-library preference item was included in the student survey. Seven library science programs were sampled and matched according to geographic region and size. Each school's cooperation was obtained by assuring confidentiality in data reporting, with the further cooperation of one faculty member from each program who oversaw the administration of the survey to students who were enrolled in a required course.

Instrumentation

Because of its validity, reliability, amount of previous use, and development of a close-ended form of question-asking, the Miner Sentence Completion Scale was chosen as the device to determine the degree of a respondent's motivation to manage.

The Miner Sentence Completion Scale, multiple-choice version, is a set of forty statement stubs, each stub followed by six multiple-choice alternatives. The forty statement stubs or items include five that are not scored, but are included to assist in disguising the intent of the scale. The thirty-five scorable items, organized randomly, and unknown to the respondent, represent seven subscales:

- Authority Figures
- Competitive Games
- Competitive Situations
- Assertive Role
- Imposing Wishes
- Standing Out From the Group
- Routine Administrative Functions

The six alternatives for each item include two positive responses, two neutral responses, and two negative responses. The alternatives are organized randomly: there is no pattern of listing the six alternatives. Following is an example of one of the statements in the multiple-choice version of the Miner Sentence Completion Scale:

Being interviewed for a job...

- is necessary
- is a pain in the neck
- you should tell the truth
- is very interesting
- makes me nervous
- I am confident

This item, according to the Miner scoring key, is part of the Competitive Situations subscale. The key indicates that the two positive responses are "is very interesting," and "I am confident." The two neutral responses are "is necessary" and "you should tell the truth." The two negative responses are "is a pain in the neck" and "makes me nervous."

Although each subscale offers interesting opportunities to investigate individual components of the motivation to manage, this study used a simple summed score across the subscales, a typical application of the Miner scale.

As a result of pretesting the multiple-choice version of the Miner scale during the summer of 1983, it was determined that three of the scale's forty multiple-choice items elicited undesirable responses, and worse, these three items lowered the participants' probability of completing the scale at all. With the permission of the scale's author, the three troublesome items were modified to increase neutrality according to gender. Although the internal consistency of this present study is not diminished, the comparability of our results to other results based on the Miner scale can be questioned.

Separate sets of additional questions were also pretested among the academic librarians and the students. Both students and practitioners were asked to indicate sex, age, marital status, and education. The student instrument also elicited information concerning the expected date of completion of the master's program and the student's employment goal. Beyond the shared-background variables, the professionals were asked to indicate degree of budgetary authority, category of job activity, number of employees supervised, and total years of professional experience.

Data Collection

During the time period spanning fall 1983 through spring 1984, data were collected from both academic librarians and MLS students. A first and second wave of packets sent to 300 academic and research librarians yielded 262 usable responses, for an effective response rate of 87.3 percent. Analysis of each variable in the data set against a variable reflecting date of return indicated no significant relationships. From this analysis, it was concluded that the assumption of no nonresponse bias could be entertained: the data supplied by the responding academic librarians were assumed to be representative of the population of all academic librarians holding membership in the American Library Association. During the same period, appropriate faculty members at each of the seven library schools sampled were contacted, cooperation was obtained, and packets were sent. Each packet contained the number of data collection sets requested by the faculty member and a set of instructions for the faculty member. Inasmuch as the students filled out the questionnaire during a class period and thus represented a captive audience, the response rate was as would be expected—100 percent or 291 cases. The assumption that the ninety-three students who identified themselves as pursuing a goal of academic/research librarianship are representative of all such students rests on the representativeness of the seven institutions that were chosen. In all, data reflecting the responses of 355 individuals (262 academic and research librarians and 93 students pursuing academic research librarianship) were analyzed.

Responses were coded and keyed into a floppy disk data file using a microcomputer and locally written input-and-data-checking program. Data were uploaded to the University of Oklahoma's mainframe system to be analyzed through SPSS, although data analysis also took place concurrently on a microcomputer.

Results

The subset of those 93 students (out of 291) who expressed a goal of academic librarianship was analyzed for differences on motivation to manage based on sex, marital status, age, presence or absence of another post-bachelor's degree, and the particular library science program in which the student was enrolled.

In no case did the measure of covariation reach statistical significance. A one-way analysis of variance (ANOVA) on the total Miner score by sex indicated no significant difference between the mean of the males (-0.727) and the mean of the females (-1.33) ($F = 0.182$, $df = 1, 91$ and $p > .05$). Although information concerning marital status was collected in four categories, small frequencies in two of the four categories dictated that the classification of marital status be collapsed into two levels for appropriate data analysis: (a) married *v.* (b) either single, separated, widowed, or divorced. Again, the means of the two groups could not be considered significantly different from one another—married mean = -0.972, other categories' mean = -1.31 ($F = 0.058$, $df = 1, 91$, and $p > .05$). The estimate of strength of relationship between age and Miner score was not significant according to zero-order testing ($p > .05$). The possession of some other advanced degree (a characteristic of 32.3 percent of these prospective academic librarians) was not related to the total Miner score according to one-way ANOVA. Those possessing another advanced degree had a mean of -0.633 and those not possessing another advanced degree had a mean of -1.35 ($F = 0.242$, $df = 1, 91$, $p > .05$). Finally, ANOVA could not distinguish these students' Miner scores by the library science school in which they were enrolled ($F = 1.131$, $df = 6, 86$, and $p > .05$).

The sample of 262 academic librarians reflected scores on the Miner scale which were consistently higher than the student scores for both males and females, but neither difference reached statistical significance. While the male MLS students had a mean Miner score of -0.727, the male academic professionals had a mean score of 1.833—an apparent positive shift of approximately 2.5 units. Likewise, the mean of female academic practitioners (1.223) was approximately 2.5 units higher than the mean Miner score of the female MLS students (-1.330). However, it is noted that there was no significant difference among the academic practitioners' Miner scores according to sex ($F = 0.548$, $df = 1, 260$, and $p > .05$).

While the academic librarians were homogeneous with respect to gender on their motivation-to-manage scores, gender was significantly related to one of the measures of actual management responsibility. The males averaged twice as many employees supervised as the females (males = 16.9, females = 7.8, $F = 11.39$, $p < .05$). The first attempt at testing for a relationship between gender and job classification yielded no indication of covariance (Chi-square = 9.43, $df = 6$, $p > .05$). Table 1 shows the original cross-tabulation of gender with job activity.

TABLE 1
 CROSS-TABULATION OF OBSERVED & EXPECTED FREQUENCIES
 FOR GENDER BY JOB ACTIVITY

	General Administrative	Technical Services	Public Services	Administrative and Technical	Administrative and Public	Technical and Public	Administrative, Technical, and Public	TOTALS
Males	28 20.14	18 18.86	22 21.43	8 9.43	10 15	5 4.29	11 12.86	102
Females	19 26.86	26 25.14	28 28.57	14 12.57	25 20	5 5.71	19 17.14	136
Total	47	44	50	22	35	10	30	238

Chi-square = 9.43, $df = 6$, $p = .149$, Cramer's $V = .199$

Close inspection of table 1 reveals the fact that systematic covariance is indeed present in the cross-tabulation between gender and job activity, but present only in those cells that represent administrative activity. The columns in table 1 that represent nonadministrative activity (jobs involving only technical services, or only public services, or both technical and public services) are the columns with observed frequencies that are approximately the same as their expected frequencies.

The opposite, however, is the case for the other four columns—the columns that reflect some degree of administrative activity. Males and females are distributed as would be expected across the nonadministrative activities, but a disparity appears between males and females who are in positions that involve some degree of administrative activity. Of the four columns that denote some level of administrative duties, only one (the first column) indicates general administration. That category of job activity is the only one of the four administratively related columns in which observed frequency for males is higher than would be expected. In the three cells that represent a combination of administrative duties and other functions as well, the number of females present is higher than would have been expected. This relationship is demonstrated in table 2, which cross-tabulates gender by two categories of administration (general administration *v.* the three categories that reflect some combination of administration and technical or public services), $\text{Chi-square} = 7.56, df = 1, p < .05$.

TABLE 2
CROSS-TABULATION OF OBSERVED AND EXPECTED
FREQUENCIES FOR GENDER BY LEVELS OF ADMINISTRATIVE ACTIVITY

	<i>General Administrative</i>	<i>Administrative Plus</i>	TOTALS
Males	28 19.99	29 37.01	57
Females	19 27.01	58 49.99	77
Total	47	87	134

$\text{Chi-square} = 7.55, df = 1, p = .00065, \text{Cramer's } V = .237$

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In the subsample constituting those respondents who were engaged in some form of administrative activity ($N = 134$), the mean score on the motivation-to-manage scale was not related to gender ($F = 0.32$, $df = 1$, 132 , and $p > .05$). Consistently, however, the highest average Miner scale scores were associated with practitioners involved in administrative activity: female administrators of technical services (5.93), males in general administration (4.07), and females in general administration (3.68).

Regression analysis indicated that—of five possible predictors of an academic librarian's level of administrative responsibility among those who claimed some administrative responsibility—gender and the possession or lack of an advanced degree to go along with the library science master's were the best predictors of whether a respondent was a general administrator or the administrator of a functional area ($R = .28$, $F = 5.68$, $df = 2$, 131 , $p < .05$).

Discussion

The major finding of this study is that there is no evidence of any significant difference between the motivation-to-manage scores of males and females who are either (1) master's students preparing for careers in academic librarianship, or (2) practitioners of academic librarianship. Furthermore, the general level of motivation to manage among students who have declared a preference for academic librarianship is lower than academic librarians' motivation to manage. While there is no difference between male and female practitioners on motivation scores, it is still the case that males supervise more employees—twice as many as females, on the average.

Confirming the discrepancy between males and females on number of employees supervised is the picture of job activity and gender. First, male and female practitioners who were sampled hold nonadministrative positions in numbers that match their expected frequencies. The academic librarians who identified their responsibilities as (1) technical services, (2) public services, or (3) technical and public services, were distributed as would be expected according to gender. Second, and more important, the practitioners who indicated administrative activity were distributed according to gender in the following way: males were clearly more likely than females to be involved in general administration. Females were more likely than males to hold positions that involved the administration of either technical services, public services, or both technical and public services.

Finally, among those practitioners who are involved in some form of administrative activity, motivation to manage is not a predictor of who is or is not a general administrator. Of the variables included in the present study, only gender and level of education covary with type of administrative activity.

Conclusion

Taking the findings as a whole, motivation to manage is not a factor that differentiates male and female library science students or male and female academic librarians from one another. Consistently, the data fail to support the hypothesis that the males' motivation to manage is higher than that of women. No evidence can be found to indicate that females, whether students or practitioners, have significantly lower motivation-to-manage scores than their male counterparts. In fact, both student males and females have similarly low motivation-to-manage scores as contrasted with the norm, indicating that neither group begins library science education as likely candidates for an academic library managerial setting. Other samples and other measures may produce different results, but this research effort includes two diverse population groups and employs a measure that has exhibited consistent validity in hierarchic, bureaucratic, organizational settings.

Assuming that the results of this study accurately reflect the levels of motivation to manage of both males and females in the academic library profession, serious questions need to be raised concerning both the process of educating library science students and the process of promoting librarians within the library setting. Beginning with students first, it seems that both men and women select librarianship as a career because a large majority do not want to be managers. Professions dominated by women—such as librarianship—are widely believed to emphasize “feminine” qualities such as nurturance, empathy, understanding, helpfulness, and intuitiveness.²⁶ Managerial positions do not fit this feminine model. They are characterized by such personal attributes as decisiveness, consistency, objectivity, emotional stability, and analytical ability.²⁷

Both men and women who select librarianship as a career and enter library school perceive themselves to be strong in “feminine” qualities and weak in managerial qualities. This notion is supported by theories of vocational choice. Bordin²⁸ proposes that in selecting an occupation,

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a person is actually expressing an acceptance of a particular self-view in terms of occupational stereotypes. Super²⁹ has further suggested that in choosing an occupation, an individual is actually attempting to develop and implement a certain self-concept. Super equates the process of self-concept development with that of vocational development.

The self-concept among most male and female library school students appears to preclude a perceived aptitude for managing. One major research effort supports this notion. Hiatt reports that women librarians investigated in his research "were generally unaware of their management potential, and their management skills typically exceeded their own expectations."³⁰ Research done at the University of Washington Career and Development Assessment Center for Librarians by Hiatt supports the conclusion that self-concept can be changed and management competencies held by librarians can be strengthened and better utilized. It would seem to be valuable for library science educators to use the assessment center concept in working with both male and female library science students to help them in identifying and using skills that they will need in a management setting.

In looking at practicing librarians, male librarians may be being promoted into top management positions "in spite of themselves." That is, because males are perceived to have certain attributes that fit the managerial model, they are promoted whether they actually have these attributes or not. Females, possibly, are not promoted because they are not perceived to have these managerial qualities, whether they do or not.

This study indicates that the highest motivation scores (5.93) were among women heads of technical services departments. Upper-level male general administrators had an average motivation-to-manage score of 4.07. It is interesting to speculate why the most highly motivated group was female technical services administrators. Technical services, as a group of activities, tend to be unambiguous and possess much structure and detailed information to guide action. Control over this section of library activity is possible.

A number of possible explanations can be presented for the predominance of highly motivated women as heads of such highly structured departments. The first explanation is stereotypical, suggesting that such women want structure and lack of ambiguity. They want power but also desire few alternatives and want to follow procedure, seeking the security that structure promotes. This explanation supports the stereotype of the librarian as one who likes to emphasize process and procedure and is interested in "things" rather than people.

A second explanation suggests that those who make hiring and promotion decisions tend to move highly motivated women into more structured situations. Such women, in comparison to men, may have fewer opportunities to acquire or use power-acquisition behavior as part of their managerial job. Thus, this explanation continues, these females will not be perceived as appropriate candidates for upper-level administrative positions.

A third explanation suggests that women simply are not opting for top administrative positions in the same proportions as males, even though these women are equipped to handle top administrative posts. Nowhere is it implied that possessing the motivation to manage necessarily means having the perception of being able to manage. It still may be the case that female academic librarians, as a group, do not aspire to top administration as frequently as males. This explanation leads to the conclusion that the profession's problem may not be discrimination as much as it is self-perception on the part of its largest group. Academic librarianship appears to have a group of capable people who do not see themselves as administrators, and do not seek top administrative positions. Their narrow view is reinforced by the usual forces that have drawn males into the power vacuum thereby created.

Any one of these three explanations, or others that could be proposed, point to the fact that there is a lack of information on the reasons and rationales for promotion and hiring within academic library administrative positions. It is suggested that sex-role orientation occupies a key place in decision-making and needs to be investigated much more intensively. Only through such study will changes become possible, allowing equal opportunities for men and women to fill roles in the library more fitting with their interests and aptitudes.

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