A study investigated why productive scholars do research and what factors they believe contribute most to their success as published researchers. Subjects, 39 mass communications researchers who had been identified by a previous study as being the top producers of mass communications research articles, completed a questionnaire employing a five-point Likert-type scale which measured the relative importance to their research of intrinsic and extrinsic factors, structural factors and organizational culture variables. The respondents also answered several open-ended questions. Findings indicated that nearly all of the researchers (97%) felt that personal motivation was the single most important factor in determining one's success as a productive researcher/scholar. The structural characteristics of the department were somewhat less important, for the researchers were very productive in spite of fairly heavy teaching, advising, and service loads. It was noted, however, that many of the faculty received light teaching loads and research assistant time, and many of those who did not suggested that they should. Organizational culture was found to be an important factor in becoming a successful researcher. For the most part, the researchers were found in productive departments or colleges and worked with equally productive colleagues. (Two tables of data are included, and 21 references are attached.) (ARH)
Personal, Organizational and Cultural Factors Affecting Scholarly Research Among Mass Communications Faculty

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According to Bowen and Schuster, financial hard times among the nation's colleges and universities has, among other things, led to the stiffening of requirements for tenure and promotion in rank and salary. "As these requirements have stiffened, faculty members—especially young ones—have felt compelled to pay increasing attention to both research and teaching, undoubtedly at the expense of their private lives." They go on to say:

On campus after campus ... the clarion call to scholarly research rang loud and clear. This was especially true at research universities, where the ethos of scholarly productivity has long obtained; in those settings, the commitment to research was a reinforcement of the longstanding faculty reward structure. But the publishing obsession was also evident at a number of institutions where in the past scholarly productivity was rare and effective teaching was the paramount criterion by which faculty were hired and promoted. Now, however, solid teaching is no longer sufficient for promotion at these campuses. As a result of the research imperative, both junior and senior faculty saw themselves at risk, though for very different reasons.

Although there is considerable debate among mass communications faculties as to the value and necessity of research, the fact remains that in many universities around the country, there is considerable pressure for publication as a route to tenure and promotion even among "professional" as opposed to "academic" faculty. The Association for Education in Journalism and Mass Communication held a seminar on "Research for Tenure and Promotion" prior to its 1987 annual convention. Participants in that seminar were told, paraphrasing the late Vince Lombardi, that "research isn't everything, it is the only thing." And, a small-scale survey of journalism program administrators found that the administrators believed that "their faculty members can and should do 'research.'" Only 14% of them agreed that only "research" schools should demand research, but 45% agreed that "it is impossible to do research while teaching four courses.

Numerous studies have been conducted on the research productivity of faculty in many disci-
plines, including journalism and mass communication. Nearly all of these studies, however, concentrate on the sheer volume of publications. Few of them have examined the underlying factors which might explain faculty research productivity—or the lack of productivity. Cole and Bowers, however, conducted a study among top-producing mass communications researchers to try to determine the factors related to research productivity. One of the factors they found that affected research productivity was “personal motivation.” Motivational factors that are identified with the job itself and one's personal satisfaction with the job are intrinsic factors. Intrinsic factors include a sense of feeling personally responsible for work outcomes, activities which allow the individual to use a variety of skills and abilities and feedback concerning the work which may come from the person him- or herself or from the organization. The intrinsic motivations uncovered in the Cole and Bowers study included, “personal satisfaction in opening new areas of scholarly interest and adding to the fund of knowledge,” “curiosity about how certain aspects of the communication process work” and “my personal curiosity and love of writing and research.”

Other factors affecting research productivity can be classified as extrinsic, such as the pressure to publish for tenure and promotion cited by Bowen and Schuster. Extrinsic factors are separate from the individual and include financial rewards, professional and peer recognition and promotion. Cole and Bowers discovered an important extrinsic factor: “two deans singled out another factor, commitment and support of the university.” Organizational, or structural, factors, as a subset of extrinsic rewards, also affect research productivity. Structural factors are those factors extrinsic to the job itself, under the direct control of the organization and which can make the job more or less enjoyable and “doable.” Structural factors cited by the administrators in the Cole and Bowers study included the availability of research funds, light teaching loads for faculty members engaged in research and publication, and the number of hours of research assistant time available.

Smith, et al. examined factors affecting scholarly productivity among social work academicians and found that the structural factors most affecting scholarly productivity “included faculty size, the importance of productivity for yearly evaluations, and collaboration with social work faculty.” Bresser and Dunbar, in a study conducted among West German Universities, found that research productivity could be predicted by differences in emphasis on teaching, or students. They found that the number of students, the student-faculty ratio and the percentage of non-lecture courses are all negatively correlated with article publications. Bowen and Shuster point out that “when a faculty member is teaching as many as five to eight courses a year, as is common, and is in personal contact in any one term with as many as 50 to 300 students (in some cases more), these tasks become time-consuming and arduous.”

The results of these studies suggest that productive researchers, in addition to being personally (intrinsically) motivated, should also tend to be found in departments or schools which provide the
organizational structure and resources that make a high level of research productivity possible.

Previous research also suggests that the notion of organizational climate, or culture, is a factor that should encourage and stimulate research productivity on the part of faculty. While there is little consensus concerning the definition of organizational culture, a definition that is consistent with most of the research about organizational culture and the organization's performance is that organizational culture is a complex set of values, beliefs, assumptions and symbols that defines the way in which an organization conducts its business. According to Albert and Silverman, "An organization's culture consists of two basic components: (1) the primary values of the organization, or 'what we believe in,' and (2) its pervasive management style: 'what roles and behaviors are expected if we are to be successful' and 'what are the ways we do things around here'." 

The marketing department of the College of Business at Arizona State University recently congratulated itself when it was ranked fourth in research productivity among U.S. departments of marketing. According to the chairman of the department, the increase in research productivity by the ASU marketing department could be attributed to its organizational culture: "We've created an environment that is consistent with the college's emphasis on research." 

Peters and Waterman in their popular book, In Search of Excellence, attribute the consistent success of eight American corporations to their organizational cultures. Two mass communications schools that foster an organizational culture for research productivity are the University of North Carolina and the University of Illinois. Each new faculty member at North Carolina is assigned to a mentor who is responsible for assisting the new faculty member to conduct research. At the University of Illinois new faculty members are given time and resources to conduct research. In both cases, these institutions encourage and foster an organizational climate or culture that encourages and rewards research.

The investigation of faculty research productivity reported here is based on the hypothesis that most productive mass communications researchers would be found in schools and departments which actively support and encourage research. That is, they would be found in those schools and departments with a research culture. Even though each individual must ultimately make a personal commitment to do, or not to do, research, it is argued here that the commitment to do research will remain largely unfulfilled if the organization's culture does not support or foster a research commitment.

More specifically, it was hypothesized that productive researchers (as measured by the number of articles published in refereed scholarly journals) would largely be found in schools and departments that support faculty research in several significant ways. These include such structural factors as reduced teaching loads and committee work to compensate for research and writing, monetary support for research, paid release time for research, smaller classes, number and quality of graduate students, number of research assistants, undergraduate/graduate course loads, computer availability and support-
ive colleagues and administrators.

It was also hypothesized that the organizational culture would be conducive to research. Organizational culture was measured by the respondents' perceptions of the amount of stimulation and encouragement by the administration, by colleagues in and outside the faculty member's academic unit, by the number of other productive researchers on the faculty and by respondents' assessment of their academic unit's research record.

Thus, this study was conducted to determine whether productive researchers were more or less likely to be found in schools and departments in which the organization provides tangible support as well as encouragement for research. It was anticipated that the results, based on the responses of successful researchers, would be valuable to other researchers and to administrators who wish to improve or enhance the research productivity of their faculty.

Method

The mass communications researchers included in this study were identified in a previously published study in which they were found to be the top producers of mass communications research articles. Four of these productive researchers were mailed a draft of the questionnaire and asked to comment on its construction and the wording of the questions. Their feedback was used to develop the final questionnaire. The final version of the questionnaire was mailed to 49 of the top researchers identified in the earlier study. Responses were received from 39 for a response rate of nearly 80%. The questionnaire included measures of intrinsic and extrinsic factors, structural factors and organizational culture variables. Respondents were asked to respond to sixteen fixed-response questions. The responses were arranged on a 5-point Likert-type scale ranging from "extremely important" to "not at all important." In addition, they were asked several open-ended questions such as what could be done to improve the quantity and quality of research and how they evaluated the atmosphere for conducting research in their school or department.

Intrinsic rewards were measured by questions having to do with personal motivation, how much the respondents liked doing research and whether they felt personally rewarded for doing research.

Extrinsic rewards were measured with questions that asked about the researchers' graduate school training, monetary support for research, number and quality of graduate students and number of graduate student theses or dissertations directed in the past six years.

Structural factors affecting research were measured with questions that had to do with the number of hours of research assistant time available, paid release time for research, the number of courses and number of students taught and advised during an academic year (not summer), the number of hours spent in administrative or committee work, whether computer terminals or personal computers for
research were available, whether research productivity was rewarded more than nonproductivity and perceptions of the amount of pressure to publish.

The organizational culture for research was measured with such questions as the amount of encouragement received from the administration and colleagues for conducting research, the number of other faculty who were actively engaged in research, the number of theses and/or dissertations directed, departmental requirements and expectations for research and publications, the department or school's research productivity, the university's record in research activity and the atmosphere in the department or school for conducting research.

Results

Intrinsic factors. Nearly every respondent regarded "personal motivation to do research" as important or very important (97%). The mean score for this factor was 4.8 out of a possible 5.0, the highest of all the responses. Another factor intrinsic to the job is "to use personal research as a teaching tool for courses." The mean response to the importance of this factor was 3.9. Over half (54%) of the respondents believed this item to be important or very important to their scholarly productivity.

In addition to the closed-ended questions, respondents were also asked several open-ended questions. Respondents were asked, "What has been the single most important factor accounting for your personal success as a mass communication scholar and researcher." The responses to this open-ended question were overwhelmingly intrinsic in nature. Most responses (19) revolved around the theme of personal motivation or the enjoyment and satisfaction of conducting research. Some included culture and structural conditions along with personal motivation. For instance one researcher said, "I've succeeded despite, not because of, where I teach and the help it provides." Another mentioned "a general socializing network at this and other universities."

Extrinsic Factors. The second most important factor accounting for these top researchers' productivity is their graduate training. Thirty-four of the 39 respondents (87%) ranked their graduate training as either "important" or "extremely important" to their success. Another important extrinsic factor is the stimulation and encouragement of colleagues at other schools. Some 62% of the respondents rated this factor as important or very important to their success. A requirement of publication for promotion and tenure by the department is also a strong extrinsic motivator among these researchers. Some 54% of them rated it important or very important to their personal success as a mass communication researcher.

Other, but less important, extrinsic factors contributing to the success of these researchers are the research ability of Ph.D. students, monetary support for research, the number of Ph.D. students, the research ability of M.A. students and the number of M.A. students.

Structural Factors. These researchers seem to be productive in spite of their course loads and
student contacts, not because of them. Their undergraduate student load per academic year (not including summer school) ranges from as few as 6 to as many as 550. On average, they teach 139 undergraduates a year. Their graduate student load ranges from 4 to as many as 80, but averages 22 students per year. They teach more undergraduate courses (3) than graduate courses (1) on average and they average slightly more than 3 separate courses in an academic year (not including summers). But the number of different courses taught per year ranges upward to as many as 6. Nor do these productive scholars escape student advising. They average nearly 30 students a year, but the total number of advisees ranges from one or two to as many as 100. Thesis and dissertation work also take up a considerable amount of these respondents' time. During the past six years, they have directed an average of 6 master's theses and slightly more than 2 Ph.D. dissertations each. One respondent has directed 25 master's theses, and one has directed 12 dissertations.

Some 56% of the researchers thought that a "reduced teaching load to compensate for research and/or writing" was important or very important in explaining their own research productivity. In addition, 10 of the researchers also mentioned a reduced or reasonable course load in response to the open-ended question which asked what could be done to encourage more and better mass communication research.

Further taking time away from research is administrative and committee work. On average, these busy men and women spend slightly more than 6 hours a week on committee or administrative work.

Another, but apparently much less important, structural factor affecting productivity is research assistance. Only about 37% of these researchers rated the number of research assistants as important or very important to their success as published scholars. And, in fact, most of them do not have research assistants. The average amount of research assistant time per week is six, but in this case, the average is misleading since 16 (41%) of the respondents receive no assistance at all. Among the remaining 23, the modal response is 10 hours of research assistant time.

In response to the open-ended question which asked what departments could do to encourage more and better research, the most often mentioned structural factors were release time for research, money for research (mailings, travel, etc.), and reasonable (2 to 3) course loads. Less than a third of these top producing researchers receive paid release time such as summers to conduct research.

When asked if productive mass communications researchers were rewarded in ways different from others in the department or school, the respondents indicated that productive researchers were given preference for travel funds, tended to be promoted earlier and were given larger merit raises. On the other hand, 10 of the respondents said the rewards they received were no different from non-researchers. One of them went so far as to say that research "productivity is sometimes a liability."

Organizational Culture Factors. The fourth most important factor contributing to these researchers' success is a cultural variable; "stimulation and encouragement of colleagues in your
department.” Some 67% of the researchers said this factor was important or very important to research success. In response to the open-ended question which asked for the single most important factor accounting for success, eight researchers mentioned “research oriented colleagues,” and a “supportive environment” lending some support to the organizational culture hypothesis.

In addition, when asked what could be done to encourage more and better research on the part of mass communication faculty, 20 respondents mentioned organizational culture factors such as “chance to interact with other productive scholars” (4), “give recognition to researchers” (3), “hire research oriented faculty” (9) and “create a scholarly atmosphere” (4). And, when asked how important the stimulation and encouragement of departmental colleagues was to their success, 67% of the respondents said such encouragement was important or very important to their success as researchers. Nearly 57% of the respondents said that the university administration’s expectation of research by faculty members is an important or very important factor in their research success. Also, 43% of them think that stimulation and encouragement from the dean or department chair is an important factor in their success as a researcher. On the other hand, only about 11% of the respondents believe stimulation and encouragement from colleagues on campus, but outside the department is important to their research success.

In another attempt to measure the importance of organizational culture to research productivity, the researchers were asked to assess the atmosphere for conducting research in their departments or schools. As might be expected from successful researchers, the assessment was favorable. The most often mentioned factors were “supportive” (14), “positive, encouraging” (13), and “encouraged by colleagues” (7), each of which are organizational culture values. When they were asked to comment on the atmosphere for research in their university, the assessment was again favorable with such cultural factors as “very supportive,” “encouraged” and “committed” being most often mentioned.

Finally, these productive researchers tend to be members of productive faculties. By their own estimates, there are about 8 active researcher-scholars to every 6 who are not active in research-scholarship on their faculties.

Table 1 shows the mean response to each of the 16 closed-ended questions.

Table 1 About Here

**Respondent Characteristics**

*Academic rank.* Respondents are almost equally divided between associate and full professors. There are no assistant professors among the respondents, although there are assistant professors among the top-producing mass communications faculty. Why the assistant professors contacted for this
study failed to return the questionnaires they were sent is unknown.

**Length of service.** As might be expected from their rank, the mean length of time in an academic appointment among these respondents is 12.4 years. Their length of service ranges from a low of 3 years to as long as 26 years. The respondents are not as mobile as might have been expected. None of them has taught at more than 4 different schools and 18% of them have taught at only one school. The average number of schools at which they have taught is only 2.4.

**Highest degree.** The vast majority (86.5%) of these respondents hold the Ph.D. degree. Another 5.5% hold the Ed.D. degree and only 2% of them hold the master's degree or less. The institutions from which the largest number of these researchers received their highest degree are Minnesota and Southern Illinois (5 each). In all, 20 institutions are represented among these 39 researchers. Other universities from which more than one of the respondents received the doctorate are: Wisconsin (4), Michigan State (3), Illinois, Indiana, Stanford and Tennessee (2 each). Table 2 shows the complete list of schools attended by the researchers.

<table>
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<th>Table 2 About Here</th>
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**Graduate adviser.** Very few of the 39 productive researchers had the same graduate adviser. Three were students of Don Gillmor at Minnesota, 2 were students of Erwin Atwood at Southern Illinois and 2 were students of G. Cleveland Wilhoit of Indiana. Each of the other researchers included in this study had different graduate advisers. But what a list! Included among the graduate advisers of these productive researchers are some of the best known names in mass communications research. Names such as Nathan Maccoby, Bill Rivers, W. Phillips Davison, Ed Emery, Steve Chafee, Bradley Greenberg, Donald Shaw, Phil Tichenor, George Gerbner, Charles Sandage, Verling Trolldal and Jack McLeod. It would appear that the individual's dissertation adviser is also an important contributor to one's research productivity.

**First publication.** It appears that productive researchers' commitment to research begins while still in graduate school. Nearly 80% of these respondents had published their first article before finishing their highest degree. An early commitment to research is apparently a function of the person's graduate school and graduate adviser.

**Journals subscribed to.** A total of 32 different academic and professional journals were mentioned in response to the question, “to which academic journals do you subscribe?” Leading the list
was Journalism Quarterly which was mentioned by 33 of the 39 respondents. Journal of Communication is subscribed to by 22 of the respondents and 19 of them subscribe to the Newspaper Research Journal. Public Opinion Quarterly is subscribed to by 9 of the respondents. The Journal of Broadcasting and Communication Research each had eight subscribers among these respondents and Mass Communications Review is subscribed to by seven respondents. Needless to say, all respondents subscribe to at least two journals.

Discussion

This research was conducted to try to determine why productive scholars do research and what factors they believe contribute most to their success as published researchers. It was anticipated that the results would be useful not only to mass communications researchers, but also to administrators who must develop and administer reward systems for researchers.

It was hypothesized that personal motivation would be the single strongest factor contributing to research and publication. Indeed, personal motivation is the single most important factor in determining one's success as a productive researcher-scholar if these respondents are to be believed. Nearly all (97%) of the respondents said that the most important factor contributing to their success as researchers was their personal motivation to do research. It should be pointed out, too, that many of the respondents to this survey have achieved success as researchers with very little help or assistance from their academic institution. Of more importance, perhaps, is how their motivation to conduct research is cultivated and developed. Where and with whom the person studied for the highest degree is apparently an important factor in developing researchers although these factors were not specifically mentioned by any of these researchers. It is also possible that there is a process of self-selection occurring. That is, students interested in research may select where and with whom to study based on their research interests. This is a question to be asked in future research.

It was also hypothesized that organizational, or structural, characteristics of the academic unit would be important to the respondents' success as researchers. The importance of structural characteristics of the department seem to be of somewhat less importance than hypothesized. These researchers are very productive in spite of fairly heavy teaching, advising and service loads. For the most part, they don't seem to receive any special consideration for their research productivity. It should be noted here, however, that many of them do receive light teaching loads and research assistant time. And, many of those who do not, suggest that they should. They do perceive, on average, that the organization rewards them for their research activity. They believe they are given some preference for travel funds, merit pay and promotion. The results seem to suggest that highly motivated faculty will at least attempt to do research regardless of the organizational structure. But, structural characteristics of the organization can certainly facilitate research activity on the part of those motivated to do it.
Organizational culture was also hypothesized to be an important factor in becoming a successful researcher. The results certainly lend support to the notion of the importance of organizational culture. For the most part, but certainly not universally, the researchers are found in productive departments or colleges and work with productive colleagues. In many, but not all, cases, they rate their department and university as better than average in research activity and support. Several of the researchers cited the importance of having a supportive administration and research-oriented colleagues as important contributors to their success.

While it cannot be argued that either structure or culture factors will stop a determined scholar, the results clearly suggest that a supportive organization and culture will enhance research productivity. Whether a supportive organization and a healthy research culture will help motivate those faculty less inclined to do research is less clear. There are hints in the results that those who are not motivated to do research will not do research even in a research environment. The results do suggest, however, that even though researchers will survive in a desert, they will bloom in a more fertile environment.

Researchers seeking such a fertile environment would do well to look for an institution that is research oriented as measured by the number of productive faculty and number of publications that can be attributed to that faculty.

Administrators seeking to improve the research productivity of their organizational unit must first find potentially productive researchers. This can be done by recruiting them from the most productive programs and from the most productive mentors. Once potentially productive researchers are found, they will flourish in an environment in which the organization is structured to facilitate research. Ideally, this means giving the researcher a reasonable teaching load (no more than four courses a year), a lighter administrative load and the tools to conduct research. Tools include computer access, research assistant time and travel funds. These results suggest that research funding is much less important than the reward system including the research culture at the institution.

Finally, the administrator must build a research culture within the organization. This means encouraging, recognizing and rewarding research. It also means finding other research faculty in order for the researchers to have others with whom to discuss ideas.

A final caveat. This paper does not mean to imply that research published in refereed journals is the only test of excellence of either faculty or institutions. Published research is only one measure and there are several others which some might believe are more important. For example, no mention is made in this paper of books, monographs, or other writing. Neither teaching nor service is recognized. This paper is concerned only with more traditional research, but this is not to suggest that other contributions are valid.

Researchers should investigate "non-productive" faculty to determine the reasons they do not produce refereed articles. It would be interesting to compare answers between those who do
and those who do not publish research. Future research might also compare journal article production between tenured and nontenured faculty.

It would also be instructive to update the research done among administrators to get a better feel for how they feel about published research compared to other measures of productivity and contribution to mass communications programs.
References


5. For a summary and extension of these studies, see John C. Schweitzer, “Mass Communications Research Article Productivity,” *Journalism Quarterly*, (in press).


TABLE 1

Rank and Mean Ratings of Each of 16 Factors' Importance to Research Success

<table>
<thead>
<tr>
<th>Factor</th>
<th>Type</th>
<th>Rank</th>
<th>Mean Rating</th>
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<tbody>
<tr>
<td>Personal motivation to do research</td>
<td>Intrinsic</td>
<td>1</td>
<td>4.784</td>
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<tr>
<td>Graduate school training received</td>
<td>Extrinsic</td>
<td>2</td>
<td>4.162</td>
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<tr>
<td>Use as a teaching tool for courses</td>
<td>Intrinsic</td>
<td>3</td>
<td>3.946</td>
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<td>Stimulation and encouragement of departmental colleagues</td>
<td>Culture</td>
<td>4</td>
<td>3.703</td>
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<td>Stimulation and encouragement of colleagues at other schools</td>
<td>Extrinsic</td>
<td>5</td>
<td>3.378</td>
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<td>Requirement of research for promotion and tenure by depart.</td>
<td>Extrinsic</td>
<td>6</td>
<td>3.351</td>
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<tr>
<td>Expectation of research by university</td>
<td>Culture</td>
<td>7</td>
<td>3.324</td>
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<td>Reduced teaching load to compensate for research/writing</td>
<td>Structural</td>
<td>8</td>
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<tr>
<td>Research ability of Ph.D. students</td>
<td>Extrinsic</td>
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<td>3.108</td>
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<td>Monetary support or funding for research</td>
<td>Extrinsic</td>
<td>10</td>
<td>3.027</td>
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<td>Stimulation and encouragement from dean or chair</td>
<td>Culture</td>
<td>11</td>
<td>3.018</td>
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<td>Number of research assistants</td>
<td>Structural</td>
<td>12</td>
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<td>Culture</td>
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<td>Number of M.A. students</td>
<td>Extrinsic</td>
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<td>2.000</td>
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*5 = Extremely important; 1 = Not at all important
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