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Research Climate Faculty Survey

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The Office of the Vice Chancellor for Research and Graduate Dean (OVCR/GD) hired Applied Research Consultants (ARC) to assess the research climate among Southern Illinois University Carbondale faculty with the purpose of determining the extent and quality of externally funded and non-funded research activities. ARC offered consultation on survey development, implemented the survey, and analyzed the results. This report contains the tabulated results and analyses of the collected data.

[1]Applied Research Consultants (ARC) is an organization composed of graduate students and faculty within the Psychology Department of Southern Illinois University. For more than 20 years, ARC has been applying psychological principles and methods to find practical solutions for our clients' problems and concerns.

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Executive Summary

The Office of the Vice Chancellor for Research and Graduate Dean (OVCR/GD) sought to assess the general climate towards research among tenured and tenure-track faculty members at Southern Illinois University Carbondale (SIUC). As an internal consulting firm, Applied Research Consultants (ARC) adapted the Research Climate Faculty Survey created by the OVCR/GD, and administered it to the participants via an on-line survey (Appendix A). Out of 954 faculty members to whom the survey was sent, 324 responded yielding a response rate of 34%. The sample consisted of 63% male and 34% female participants. For this and other demographic characteristics of the sample, please refer to Table 15.

Survey respondents indicated their values, experiences, and opinions towards research within their respective fields. Overall, the research climate at SIUC is positive, as research is seen as both valuable and motivating. There is, however, room for improvement as the institution may explore ways to encourage and motivate more research as well as provide additional support and resources. Generally, allowing more time to do research, reducing a number of total responsibilities, providing better funding, and creating a more supportive ORDA would motivate more research, increase productivity, and prompt more external funding seeking.

Five general themes emerged across the survey questions including: 1) Importance of research activities, 2) Research motivation and productivity, 3) Research funding, 4) Utilization of research resources, and 5) Research limitations. These themes are elaborated more extensively in the introduction section and technical report.

On a more specific level, data indicate that research activities are generally perceived as very important both personally and professionally. Publishing work in articles, attending professional meetings, and presenting at conferences were reported as the three most important research activities. The data also suggest that motivation for doing more research is largely generated by personal values such as satisfying needs for intellectual challenge, enjoying research, and earning tenure, promotion, or professional stature. The respondents furthermore expressed that releasing them from teaching, providing more research assistants, offering financial rewards, and creating a more supportive environment for research (e.g., more responsive ORDA and administration) would encourage more research. Too little funding and too much teaching and other additional responsibilities were also most frequently mentioned research limitations.

Over one half of respondents have not been funded or awarded by any of the external funding sources. Federal funding and Research grant were the most frequent sources of funding for the faculty who have been funded or awarded. Release from teaching, direct and Bridge funding, as well as more helpful administration were reported as internal mechanisms most responsible for motivating faculty to actively seek funding.

Finally, faculty members do not utilize research resources optimally, reasons for which may lie in the factors such as not knowing about the existing resources or not being able to make the use of available resources.

Introduction

The following report represents the quantitative and qualitative data collected from an internet-based survey for Southern Illinois University Carbondale tenured and tenure-track faculty members. All data were obtained between April 12 and 26.

The report integrates the data obtained from the survey and interprets the results focusing on the general themes inferred from the survey content. The technical report follows the same order as the questions in the survey and also includes inferential analyses where applicable. Such order helps ARC to summarize and describe SIUC's research climate as a whole, but also identify segments of the faculty population which may have unique views and attitudes on research.

In the technical report, statistical results for individual questions are reported using means, standard deviations, and frequencies, with brief interpretations for each set of items. Group comparisons are made using Analysis of Variance (ANOVA) tests, which reveal significant differences between specific sets of faculty members (e.g., differences in opinions among Associate Professors, Assistant Professors, and Professors), and are included with questions providing data for these statistical tests. Results of certain demographics questions are also reported.

The following sections include a more detailed description of the five major theses identified in the survey.

Importance of Research Activities

Respondents revealed that research activities play a pivotal role in their overall sense of professional accomplishment and satisfaction (Table 1). They also think that their research activities are valued externally by their departments, colleges, administration, students, and campus (Table 7.1.), with subtle differences in their perceptions, though. Professors perceived both their departments (Table 7.2) and their students (Table 7.10.) to valued their research more than the assistant professors perceived the same in regard to their departments and students, whereas faculty from Law believed their students valued faculty research less than faculty from Science believed of their students (Table 7.11.). In fact, associate professors in general tended to rate research activities as less important to overall satisfaction than professors (Table 1.3.). On a college level, Applied Sciences and Arts find research activities less important to overall satisfaction than both the College of Liberal Arts and Science (Table 1.2.). While all colleges differ in the extent of perceived importance of research activities, this particular difference was at the statistically significant level.

Overall, 88% of those who responded said that performing research is very important for their own professional identity. On the other hand, a minority of respondents (less than 5%) reported that research activities play a marginal role in their own sense of accomplishment. Among specific professional and research-related activities, respondents indicated that *Publishing articles* (M = 4.45, SD = 1.07); *Attending professional meetings* (M = 4.15, SD = 1.07); and *Presenting at national venues* (M = 4.07, SD = 1.06) are personally the most important research activities. In contrast, *Juried exhibits, performances* (M = 1.87, SD = 1.30) and *Foreign*

travel (*M* = 2.86, *SD* = 1.41) are perceived as the least important research activities. Most other research activities fall in the neutral range revealing no strong tendencies (Table 2).

In summary, the data suggest that research activities are highly important to, and personally valued by faculty as well as by their academic environment. Main venues for expressing research activities are publishing articles and attending or presenting at national venues and conferences. This information suggests a need to continually institutionally recognize the importance of research and focus on further promoting the primary venues for research expression, especially among assistant professors.

Research Motivation and Productivity

Amongst several motivators for research activities, *Intellectual challenge* (*M* = 4.48, *SD* = 0.83); *Personal passion for research* (*M* = 4.43, *SD* = 0.94); *Success in tenure/promotion* (*M* = 4.06, *SD* = 1.25); and *Professional stature* (*M* = 4.05, *SD* = 0.95) are the most highly rated factors (Table 3). Working with students as well as department merit pay and encouragement are not as highly motivating; these factors fall neatly within the neutral range. This is indicative of the fact that intrinsic motivation plays a large role in how faculty members approach research activities. Intrinsic motivation in this domain is generated by the sheer pleasure of doing research and is an essential factor for high performance, satisfaction with work, and professional integration and growth. The two highest rated items (*Intellectual challenge* and *Personal passion for research*) reflect this intrinsic source of motivation. Extrinsic motivators, such as monetary rewards or departmental encouragement, do play a role in encouraging faculty to do more research, but do so to a lesser degree.

The most encouraging internal mechanisms for engaging in more research activities include both intrinsic and extrinsic factors as well. Table 10.1.lists factors such as *Release time from teaching* (*M* = 4.26, *SD* = 1.12); *More research assistants or post-docs* (*M* = 4.07, *SD* = 1.14); and *Direct financial rewards by university* (*M* = 3.97, *SD* = 1.25) as the most encouraging internal mechanisms. The *Other* category (*M* = 4.48, *SD* = 1.27), though reflecting the highest average, has the smallest number of responses as this option was not applicable to most respondents (91%). Most frequently mentioned *Other* encouraging mechanisms, however, were more supportive ORDA and greater recognition and technical support (Table 10.2.). While release from teaching duties may allow more time to do research, faculty, nevertheless, perceive the emphasis that the university places on research (*M* = 3.15, *SD* = 1.12) and teaching (*M* = 2.97, *SD* = 1.14) to be quite balanced (Table 8).

In summary, while intrinsic factors such as personal reasons for doing research may be most motivating for engaging in research activities, both internal and external factors serve as most encouraging elements. This implies that fostering factors such as creativity, greater time allotment for research, supportive technology and staff services, better funding and higher pay, and greater awareness and institutional valuing of research is necessary to achieve an optimal level of encouragement for being more research-productive. Greater emphasis on quantity, or productivity, may interfere with quality, or intrinsic motivation for doing research. Further research is warranted to validate such conclusions.

Research Funding

Over two-thirds of faculty (68%) mentioned not having been funded by any of the listed sources of external funding. This was followed by *Federal* funding source (13%) as the second most selected option. Other sources were less prominent (Table 5.1). Nearly the same pattern is evident in awarded funding in which a majority of faculty (55%) has not been awarded any of the listed types of external funding. This is somewhat closely followed by *Research grant* source (31%), while the rest of the sources of awarded funding were small in comparison (Table 5.1.). There seems to be no apparent overall reason for not having been awarded with any external sources of funding as most faculty members (85%) chose N/A as the most frequent response option (Table 6.1).

Additionally, faculty reported that among internal mechanisms deemed as motivating for working harder toward seeking external funding for research, *Direct financial awards from the university* (*M* = 3.95, *SD* = 1.29); *Release from teaching* (*M* = 4.11, *SD* = 1.27); *Bridge funding* (*M* = 3.83, *SD* = 1.30); and *Other* (*M* = 4.76, *SD* = 0.75) were most important (Table 11.1.). The rest of the existing internal mechanisms are not as highly motivating for faculty to work harder at seeking external funding.

Utilization of Research Resources

Out of the available institutional research support facilities ("shops"), faculty do not generally make a great use of them. Only 3% of respondents (*N* = 9) have utilized *Central Research Shop*, while 9% (*N* = 28) have used the *Integrated Microscopy and Graphics Expertise* (IMAGE) shop. Other research support facilities are utilized either marginally or not at all (Table 12). Furthermore, only 16% of the respondents (*N* = 53) are affiliated with an SIUC research center, while 49% (*N* = 135) are unsure or have no opinion about wanting to be affiliated with one. The remaining respondents (51%) were equally divided between being interested and not interested in getting affiliated with any of the research centers (Table 13).

An overall assessment of the utility of research resources reveals that a vast majority of faculty members is either not affiliated or has no interest in affiliation with any research center, while those research-support facilities that are available to faculty are not being optimally utilized. Further research is necessary to determine what kind of research support facilities are needed and why the existing ones are utilized so sporadically.

Research Limitations

As with most other items, faculty reported *Other* (*M* = 4.41, *SD* = 1.08) as the main obstacle to being highly productive (Table 9.2). This category encompasses issues such as a lack of research support and lack of time to do research. Of note is that both *Other* and *None of the above limit my research productivity* categories received nearly 90% of N/A responses, making these categories less open to drawing a general conclusion about research limitations. Other high rated research-productivity hindering factors include *Inadequate funding for travel* (*M* = 3.65, *SD* = 1.29); *Too much teaching/advising* (*M* = 3.52, *SD* = 1.29); and *Too much service/committee work* (*M* = 3.44, *SD* = 1.29) (Table 9.1). In summary, there exist a number of limitations precluding faculty from engaging in research activities more productively, most conspicuous of which entail not receiving enough funding for travel; handling too many other responsibilities such as teaching, advising, service, and committee duties; and the lack of administrative support.

Technical Report

The technical report is organized by survey questions, with appropriate tables, figures, and interpretations provided.

Note: When comparing across college of appointment in the following analyses, the College of Agriculture was removed due to a sampling error that compromised the accuracy of that particular college appointment. All other analyses are unaffected.

Question-by-Question Analysis

Question 1

On a scale from 1 "Not important" to 5 "Very important", please indicate how important your research activities are to your overall sense of professional accomplishment/satisfaction.

Table 1.1. **Overall sense of professional accomplishment/satisfaction**

Item	*M*	*SD*	*Not Important*		*Neither*		*Very Important*
Importance of research activities	4.45	.896	2%	3%	7%	25%	63%

Table 1.1. Interpretation: Faculty members indicated that their research activities were important to their overall sense of accomplishment and satisfaction (*M* = 4.45, *SD* = .896), with 63% indicating they were “very important”, and only 2% claiming they were “not important”. This demonstrates that faculty value research and the outcomes of research, suggesting that the general climate towards research at SIUC is in fact positive and valued.

Table 1.2. **ANOVA comparing across colleges on importance of research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	27.867	10	3.772	< .001
Error	229.735	311		

Table 1.2 Interpretation: This ANOVA tested for differences in faculty members' perceptions of the importance of research activities to professional accomplishment (Question 1). Comparisons were made across the college of appointment (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see if faculty members in one college considered research more important than those in another college. The ANOVA revealed that there were significant differences in faculty members' views on the importance of research activities to an overall sense of accomplishment, F (10, 311) = 3.772, p < .001.

A Tukey's HSD post-hoc test was conducted to identify which specific colleges were significantly different from one another. Faculty members in Applied Sciences and Arts rated research activities as significantly less important to overall satisfaction (M = 3.88, SD = 1.18) than the College of Liberal Arts (M = 4.71, SD = .67), p = .002; and Science (M = 4.84, SD = .375), p = .002. No other statistically significant differences between colleges were identified.

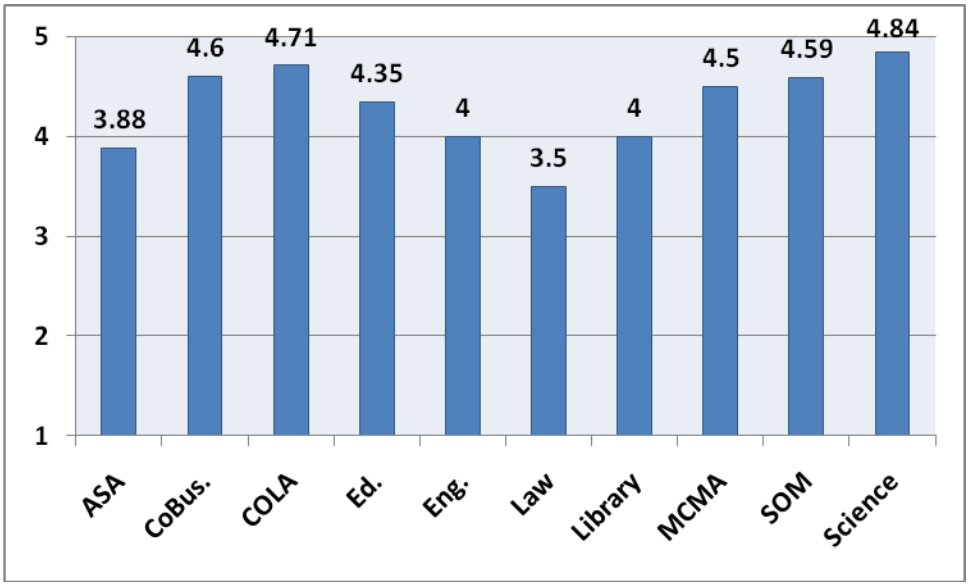

Figure 1.2. **Graph comparing across colleges on importance of research activities**

Table 1.3. **ANOVA comparing across ranks on importance of research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	6.897	2	4.353	.014
Error	249.584	315		

Table 1.3 Interpretation: This ANOVA also tested for differences in faculty members' perceptions of the importance of research activities to professional accomplishment (question 1). Comparisons were made across faculty member rank (Associate Professor, Assistant Professor, and Professor) to see if faculty members at one rank considered research more important than those at another rank. The ANOVA revealed that there were significant differences in faculty members' views on the importance of research activities to an overall sense of accomplishment, F (2, 315) = 4.353, p = .014.

A Tukey's HSD post-hoc test was conducted to identify which specific ranks were significantly different from one another. Associate professors (M = 4.26, SD = .849) rated research activities as significantly less important to overall satisfaction than Professors (M = 4.62, SD = .797), p = .010. No other statistically significant differences between ranks were found.

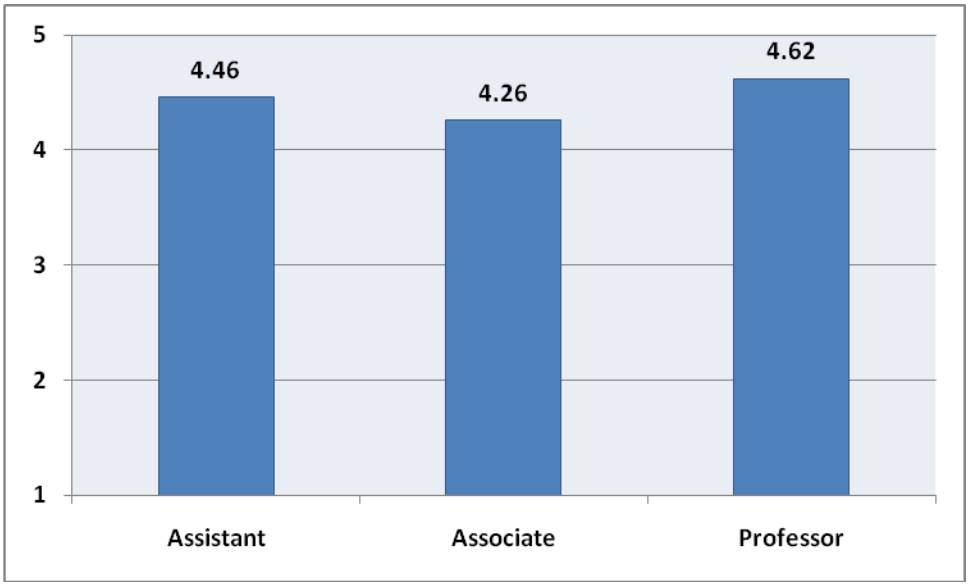

Figure 1.3 **Graph comparing across ranks on importance of research activities**

Question 2

On a scale from 1 "Not important" to 5 "Very important", how important to you are the following among your research activities?

Table 2.1 **Importance of research activities**

Research Activity	***M***	***SD***	***Not Important***		***Neither***		***Very Important***
Publishing books	2.95	1.39	20%	20%	23%	19%	18%
Publishing articles	4.45	1.07	4%	4%	6%	13%	73%
Presenting at international venues	3.54	1.26	9%	10%	25%	29%	27%
Presenting at national venues	4.07	1.06	2%	8%	15%	30%	45%
Juried exhibits, performances	1.87	1.30	61%	13%	12%	6%	8%
Supervising students	3.73	1.22	8%	9%	18%	32%	33%
Collaborative work	3.64	1.20	8%	9%	21%	35%	27%
Interdisciplinary work	3.53	1.19	8%	11%	28%	29%	25%
Foreign travel	2.86	1.41	26%	15%	21%	23%	15%
Attending professional meetings	4.15	1.07	3%	6%	13%	28%	50%

Table 2.1 Interpretation: Faculty members considered most of the listed research activities as important. Three activities were consistently viewed as more important to professional accomplishment than others, specifically *Publishing Articles* (*M* = 4.45, *SD* = 1.07), *Attending Professional Meetings (M* = 4.15, *SD* = 1.07*)*, and *Presenting at National Venues* (*M* = 4.07, *SD* = 1.06). *Juried Exhibits/Performances* (*M* = 1.87*, SD* = 1.30) were less important to faculty members, with 61% of respondents indicating they were “not important”.

Table 2.2. **ANOVA comparing across ranks on importance of publishing books**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	13.127	2	3.484	.032
Error	585.841	311		

Table 2.2 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of publishing books. The ANOVA revealed that there were significant differences in the viewed importance of publishing books based on the rank of the faculty member, F (2, 311) = 3.484, p = .032.

A Tukey's HSD post-hoc test was conducted to identify which specific ranks were significantly different from one another. Assistant Professors (M = 2.77, SD = 1.143) felt that publishing books was less important than did Professors (M = 3.23, SD = 1.477), p = .041. No other statistically significant differences between ranks were found.

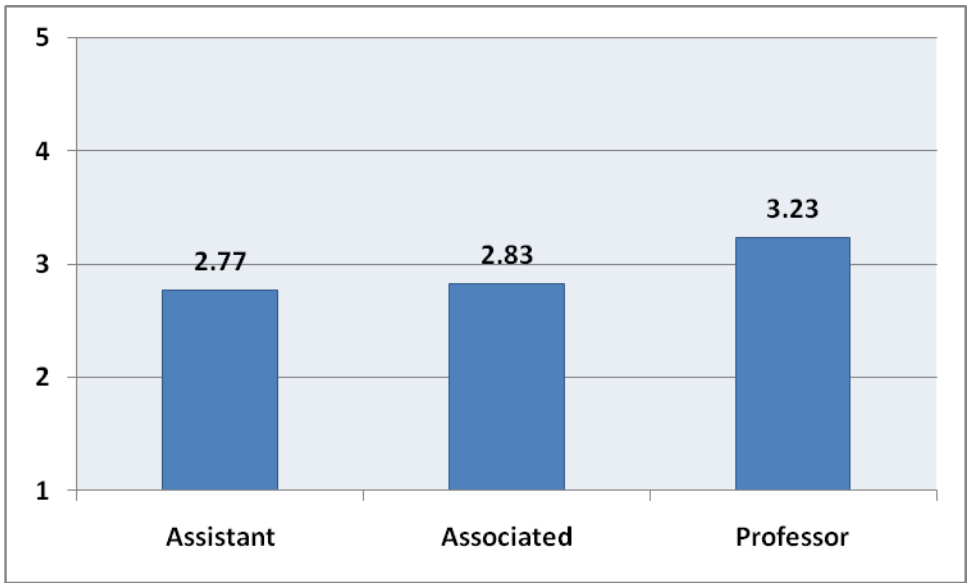

Figure 2.2. **Graph comparing across ranks on importance of publishing books**

Table 2.3. **ANOVA comparing across college of appointment on importance of publishing books**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	53.509	10	2.946	.002
Error	557.686	307		

Table 2.3 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of publishing books. The ANOVA revealed that there were statistically significant differences in the viewed importance of publishing books, F (10, 307) = 2.946, p = .002.

A Tukey's HSD post-hoc test was conducted to identify which specific colleges were significantly different from one another. Faculty from COLA (M = 3.54, SD = 1.474) felt that publishing books was more important than did ASA faculty (M = 2.56, SD = 1.340), p = .048, and SOM faculty (M = 2.44, SD = 1.050), p = .015. No other statistically significant differences between colleges were found.

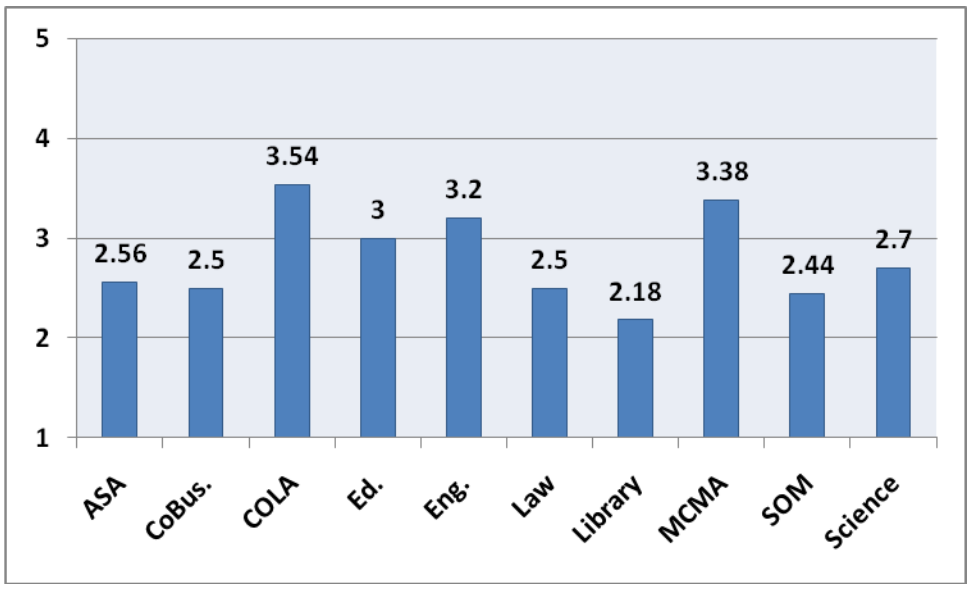

Figure 2.3. **Graph comparing across college of appointment on importance of publishing books**

Table 2.4. **ANOVA comparing across ranks on importance of publishing articles**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	12.621	2	5.690	.004
Error	350.470	316		

Table 2.4 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of publishing articles. The ANOVA revealed that there were significant differences in the viewed importance of publishing articles, F (2, 316) = 5.690, p = .004.

A Tukey's HSD post-hoc test was conducted to identify which specific ranks were significantly different from one another. Associate Professors (M = 4.19, SD = 1.262) felt that publishing articles was less important than both Professors (M = 4.53, SD = 1.031), p = .042, and Assistant Professors (M = 4.65, SD = .810), p = .004. No other statistically significant differences between ranks were found.

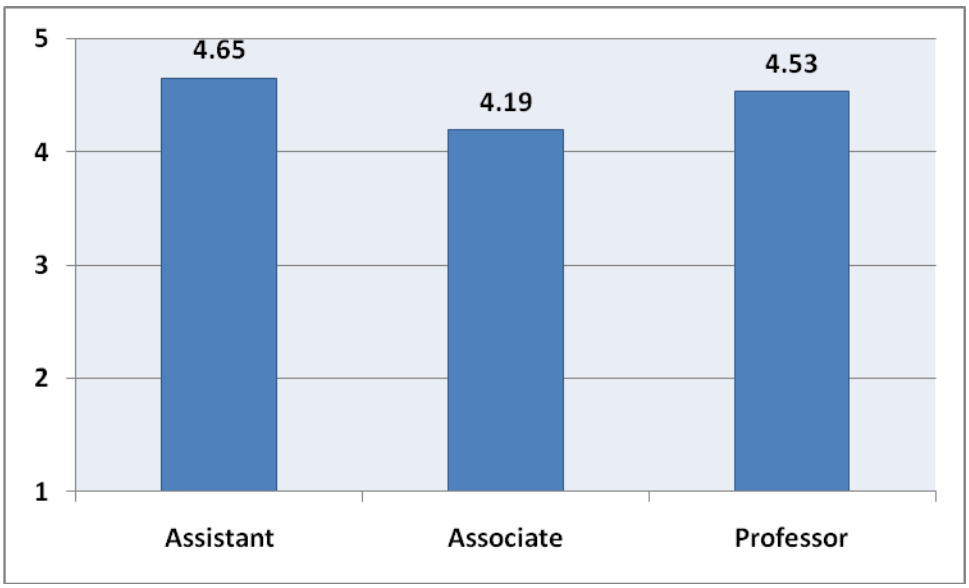

Figure 2.4. **Graph comparing across ranks on importance of publishing articles**

Table 2.5. **ANOVA comparing across college of appointment on importance of publishing articles**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	24.316	10	2.220	.017
Error	341.690	312		

Table 2.5 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of publishing articles. The ANOVA revealed that there were statistically significant differences in the viewed importance of publishing articles, F (10, 312) = 2.220, p = .017.

A Tukey's HSD post-hoc test was conducted to identify which specific colleges were significantly different from one another. Faculty from Science (M = 4.90, SD = .301) felt that publishing articles was more important than did ASA faculty (M = 3.96, SD = 1.192), p = .030, and MCMA faculty (M = 3.81, SD = 1.328), p = .032. No other statistically significant differences between colleges were found.

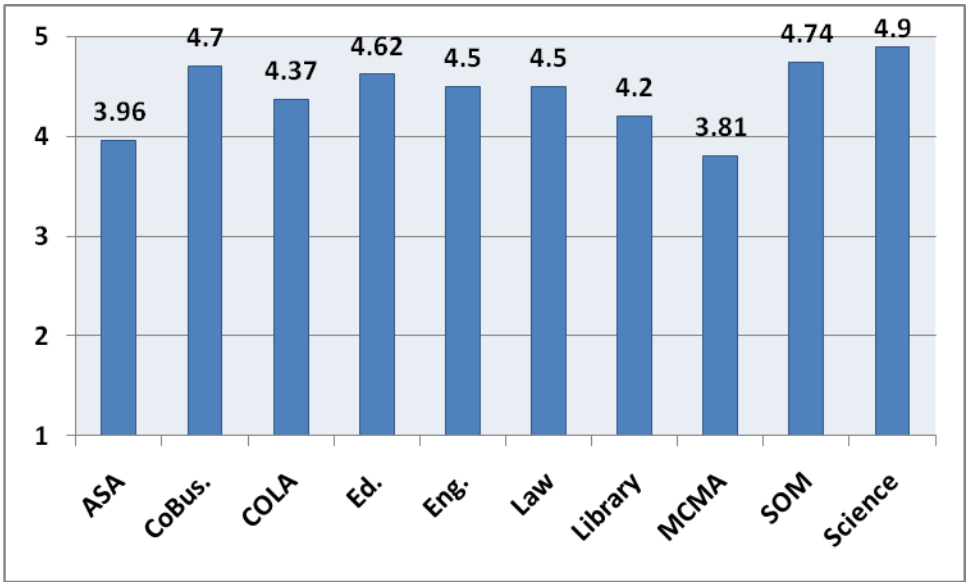

Figure 2.5. **Graph comparing across college of appointment on importance of publishing articles**

Table 2.6. **ANOVA comparing across ranks on importance of presenting at international venues**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	4.078	2	1.303	.273
Error	492.969	315		

Table 2.6 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of presenting at international venues. The ANOVA revealed that there were no significant differences between ranks, F (2, 315) = 1.303, p = .273. No post-hoc tests were conducted because no significant differences existed.

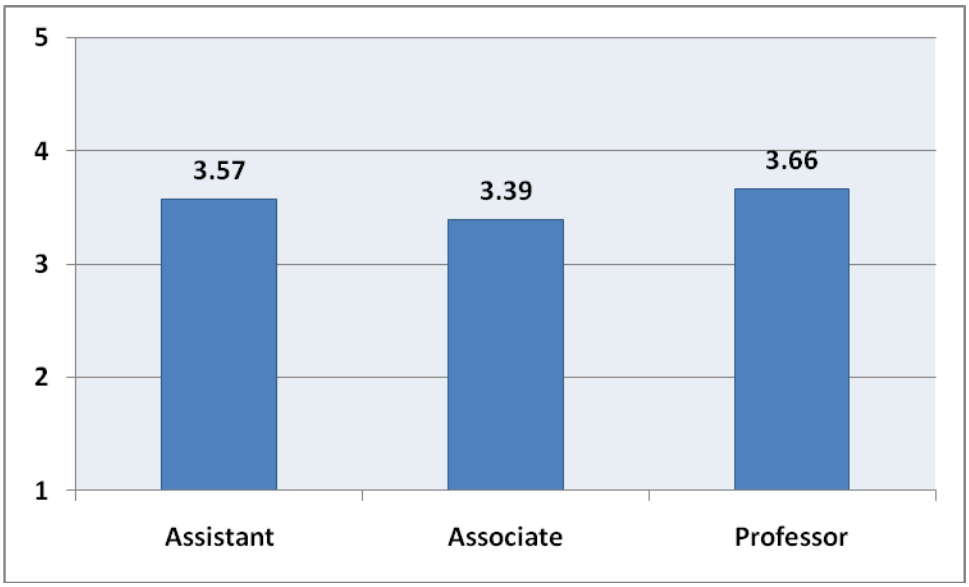

Figure 2.6. **Graph comparing across ranks on importance of presenting at international venues**

Table 2.7. **ANOVA comparing across college of appointment on importance of presenting at international venues**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	55.110	10	3.836	<.001
Error	446.781	311		

Table 2.7 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of presenting at international venues. The ANOVA revealed that there were statistically significant differences in the viewed importance of presenting at international venues, F (10, 311) = 3.836, p < .001.

According to a Tukey's HSD post-hoc test, a number of specific comparisons yielded significant differences. Law faculty (M = 1.50, SD = .577) felt that presenting at international venues was less important than did Education faculty (M = 3.68, SD = 1.093), p = .028, MCMA faculty (M = 3.94, SD = 1.124), p = .014, SOM faculty (M = 3.67, SD = 1.000), p = .034, and Science faculty (M = 4.03, SD = .875), p = .004. Library faculty felt that presenting at international venues was than important than did COLA faculty (M = 3.44, SD = 1.234), p = .024, Education faculty (M = 3.68, SD = 1.093), p = .008, MCMA faculty (M = 3.94, SD = 1.124), p = .005, SOM faculty (M = 3.67, SD = 1.000), p = .012, and Science faculty (M = 4.03, SD = .875), p < .001.

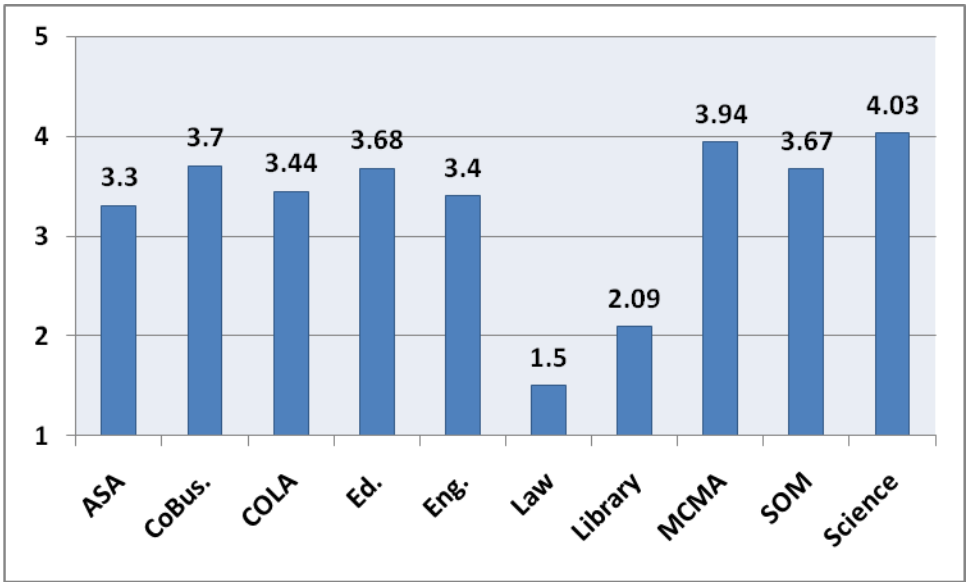

Figure 2.7. **Graph comparing across college of appointment on importance of presenting at international venues**

Table 2.8. **ANOVA comparing across ranks on importance of presenting at national venues**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	5.135	2	2.311	.101
Error	352.212	317		

Table 2.8 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of presenting at national venues. The ANOVA revealed that there were no significant differences between ranks, F (2, 317) = 2.311, p = .101. No post-hoc tests were conducted because no significant differences existed.

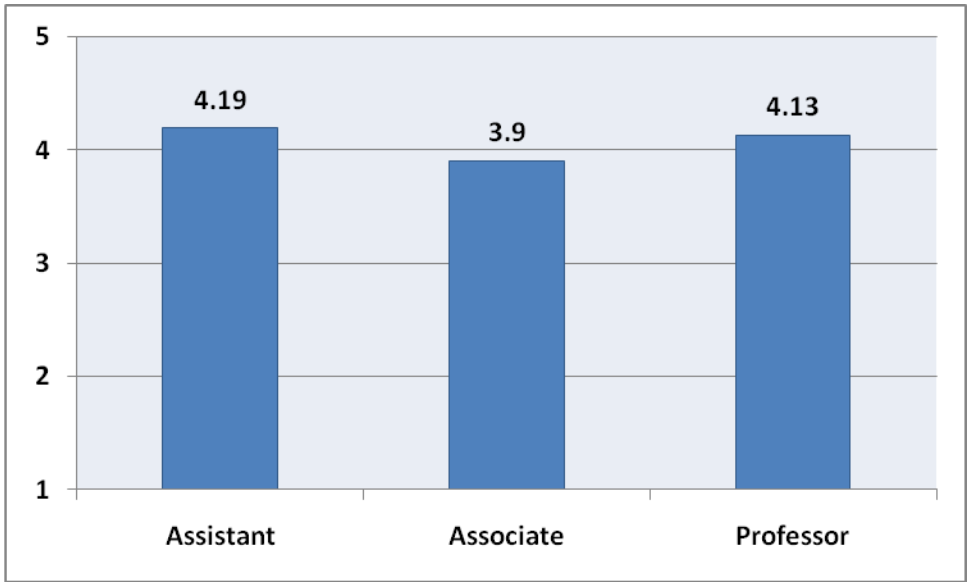

Figure 2.8. **Graph comparing across ranks on importance of presenting at national venues**

Table 2.9. **ANOVA comparing across college of appointment on importance of presenting at national venues**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	24.566	10	2.269	.014
Error	338.802	313		

Table 2.9 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of presenting at national venues. The ANOVA revealed that there were statistically significant differences in the viewed importance of presenting at national venues, F (10, 313) = 2.269, p = .014.

A Tukey's HSD post-hoc test was conducted to identify which specific colleges were significantly different from one another. Faculty from Education (M = 4.41, SD = .821) rated presenting at national conferences as more important than did ASA faculty (M = 3.59, SD = 1.248), p = .045. There were no other significant differences.

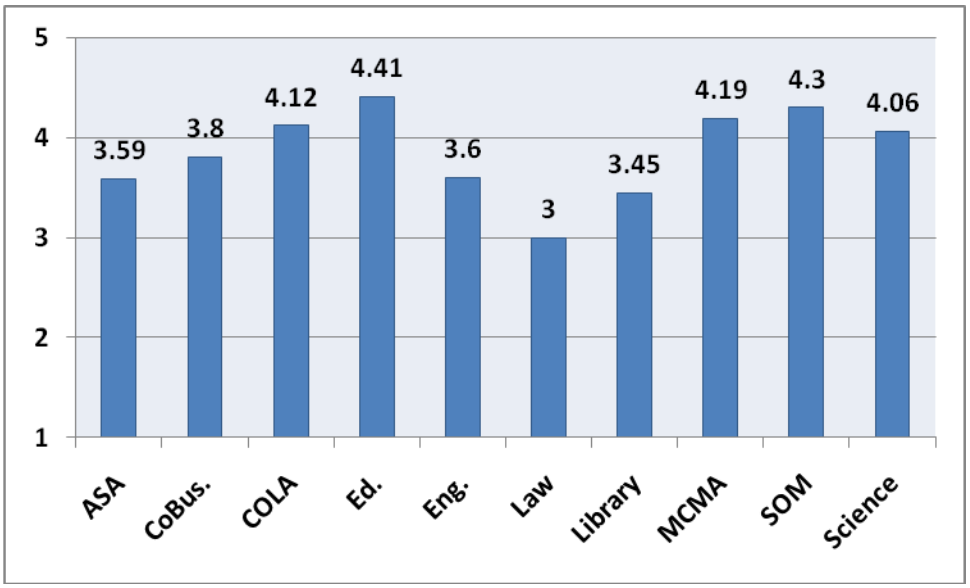

Figure 2.9. **Graph comparing across college of appointment on importance of presenting at national venues**

Table 2.10. **ANOVA comparing across ranks on importance of juried exhibits, performances**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	7.857	2	2.343	.098
Error	509.668	304		

Table 2.10 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of juried exhibits and performances. The ANOVA revealed that there were no significant differences between ranks, F (2, 304) = 2.343, p = .098. No post-hoc tests were conducted because no significant differences existed.

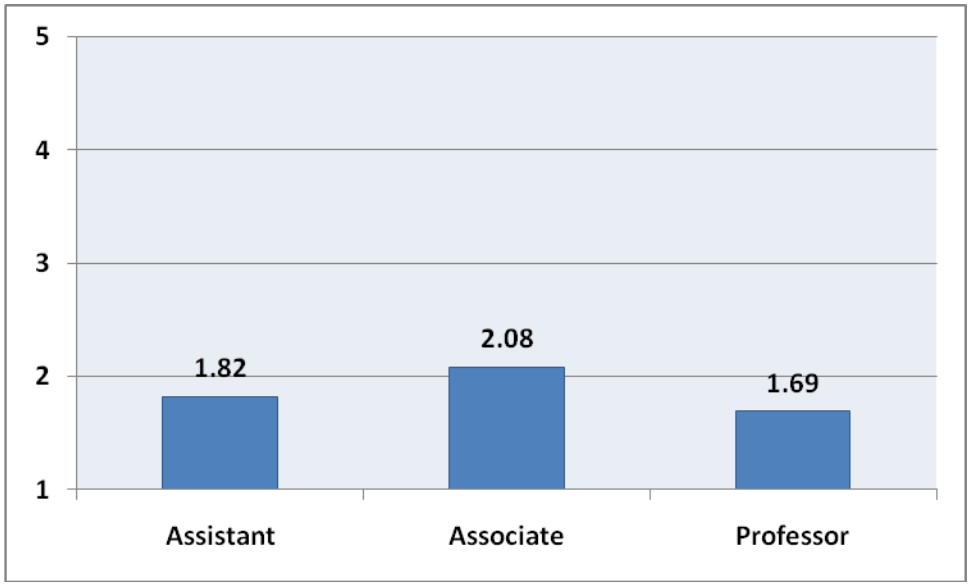

Figure 2.10. **Graph comparing across ranks on importance of juried exhibits, performances**

Table 2.11. **ANOVA comparing across college of appointment on importance of juried exhibits, performances**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	35.544	10	2.185	.019
Error	488.051	300		

Table 2.11 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of juried exhibits and performances. The ANOVA revealed that there were statistically significant differences between colleges, F (10, 300) = 2.185, p = .019.

A Tukey's HSD post-hoc test revealed that faculty in MCMA (M = 3.13, SD = 1.248) valued juried exhibits and performances more than faculty from COLA (M = 1.38, SD = 1.405), p = .017, SOM (M = 1.58, SD = 1.065), p = .009, and Science (M = 1.57, SD = 1.006), p = .006.

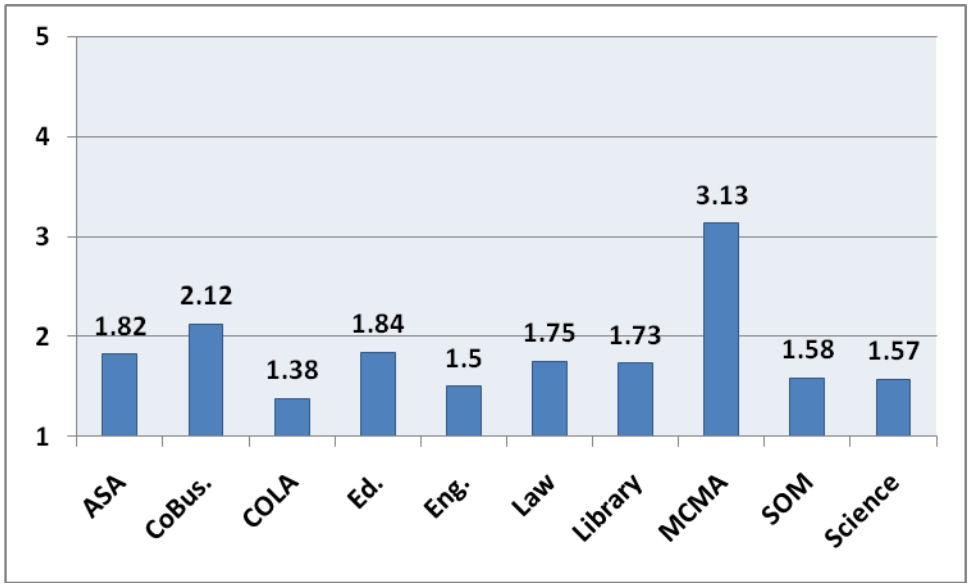

Figure 2.11. **Graph comparing across college of appointment on importance of juried exhibits, performances**

Table 2.12. **ANOVA comparing across ranks on importance of supervising students**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	2.844	2	.952	.387
Error	468.897	314		

Table 2.12 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of supervising students. The ANOVA revealed that there were no significant differences between ranks, F (2, 314) = .952, p = .387. No post-hoc tests were conducted because no significant differences existed.

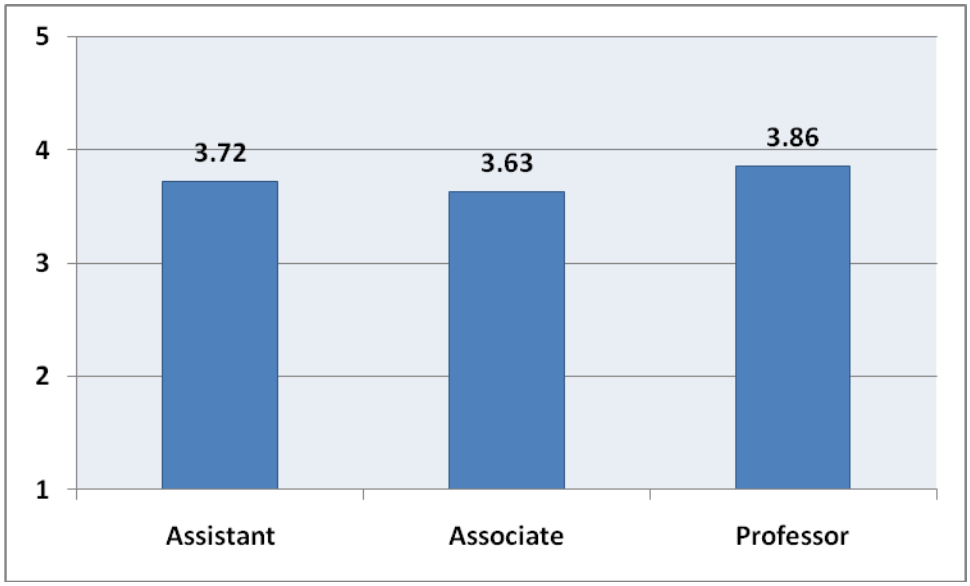

Figure 2.12. **Graph comparing across ranks on importance of supervising students**

Table 2.13. **ANOVA comparing across college of appointment on importance of supervising students**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	48.902	10	3.541	<.001
Error	428.058	300		

Table 2.13 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of supervising students. The ANOVA revealed that there were statistically significant differences between colleges, F (10, 300) = 3.541, p < .001.

A Tukey's HSD post-hoc test revealed that the only differences in the importance of supervising students occurred between faculty from Library as compared to all other colleges. Given that library faculty do not supervise students, these results are logical. No other significant differences were found.

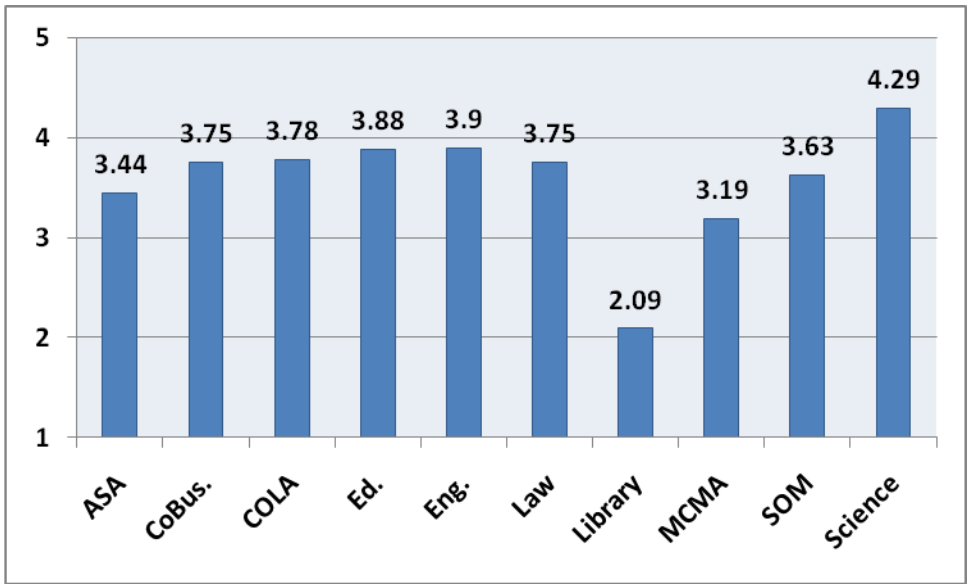

Figure 2.13. **Graph comparing across college of appointment on importance of supervising students**

Table 2.14. **ANOVA comparing across ranks on importance of collaborative work**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	12.051	2	4.255	.015
Error	447.491	316		

Table 2.14 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of collaborative work. The ANOVA revealed that there were statistically significant differences between ranks, F (2, 316) = 4.255, p = .015.

A Tukey's HSD post-hoc test revealed that Assistant Professors (M = 3.13, SD = 1.057) rated collaborative work as more important than did Associate Professors (M = 3.44, SD = 1.270), p = .012.

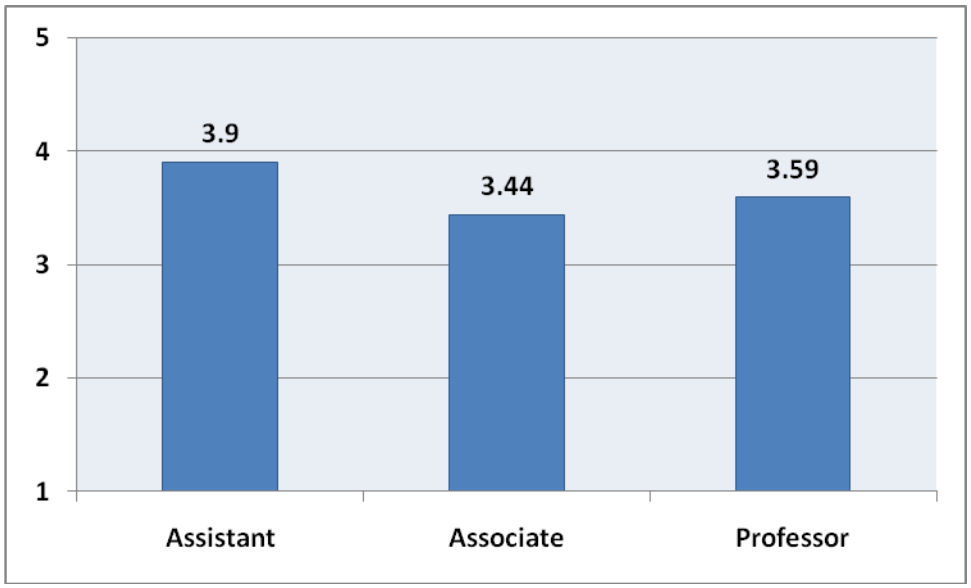

Figure 2.14. **Graph comparing across ranks on importance of collaborative work**

Table 2.15. **ANOVA comparing across college of appointment on importance of collaborative work**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	16.661	10	1.168	.312
Error	443.550	311		

Table 2.15 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of collaborative work. The ANOVA indicated that there were no statistically significant differences between colleges, F (10, 311) = 1.168, p = .312. No post-hoc tests were conducted because no significant differences existed.

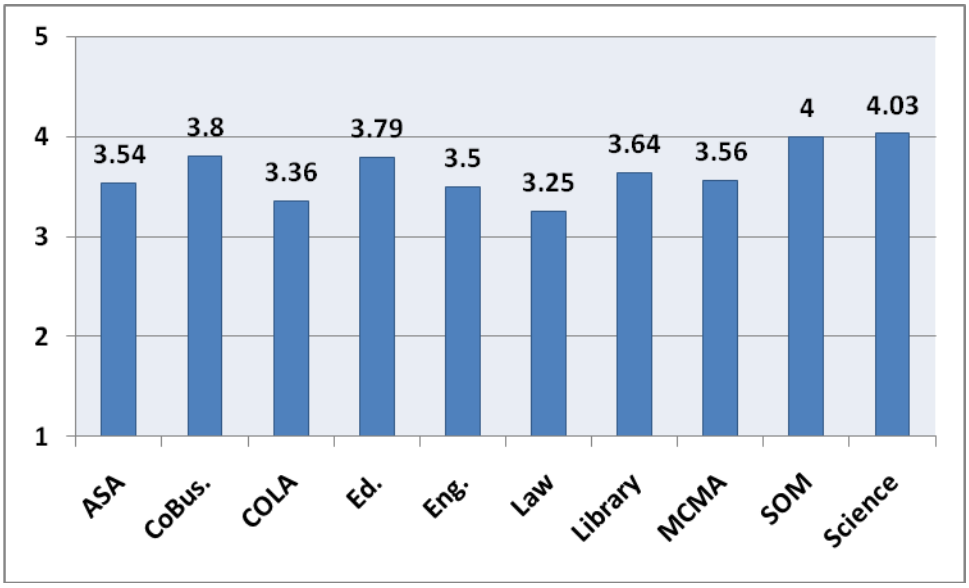

Figure 2.15. **Graph comparing across college of appointment on importance of collaborative work**

Table 2.16. **ANOVA comparing across ranks on importance of interdisciplinary work**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	.136	2	.048	.954
Error	451.268	316		

Table 2.16 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of interdisciplinary work. The ANOVA revealed that there were no statistically significant differences between ranks, F (2, 316) =.048, p = .954. No post-hoc tests were conducted because no significant differences existed.

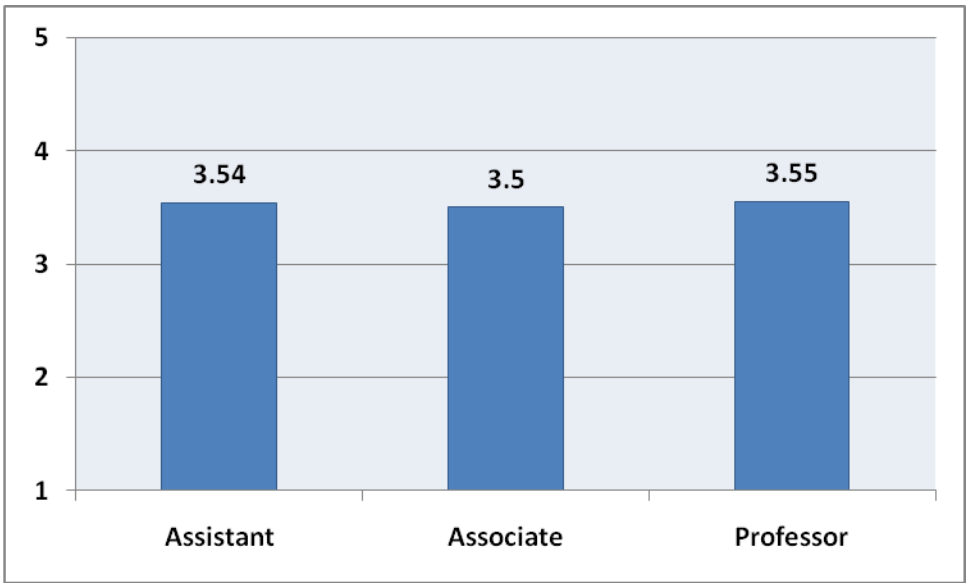

Figure 2.16. **Graph comparing across ranks on importance of interdisciplinary work**

Table 2.17. **ANOVA comparing across college of appointment on importance of interdisciplinary work**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	15.000	10	1.067	.387
Error	437.124	311		

Table 2.17 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of interdisciplinary work. The ANOVA indicated that there were no statistically significant differences between colleges, F (10, 311) = 1.067, p = .387.

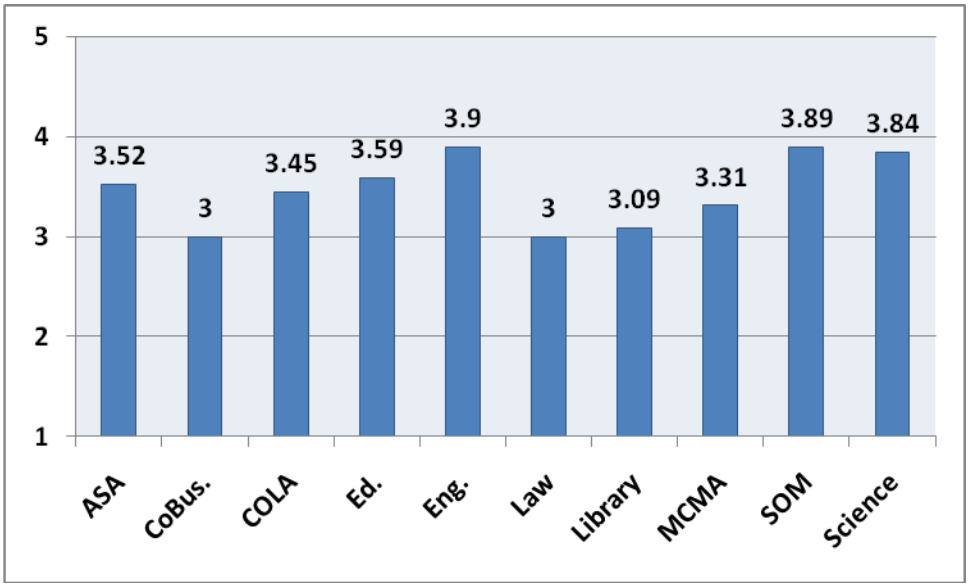

Figure 2.17. **Graph comparing across college of appointment on importance of interdisciplinary work**

Table 2.18. **ANOVA comparing across ranks on importance of foreign travel**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	1.153	2	.289	.749
Error	636.878	314		

Table 2.18 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of foreign travel. The ANOVA revealed that there were no statistically significant differences between ranks, F (2, 314) =.289, p = .749. No post-hoc tests were conducted because no significant differences existed.

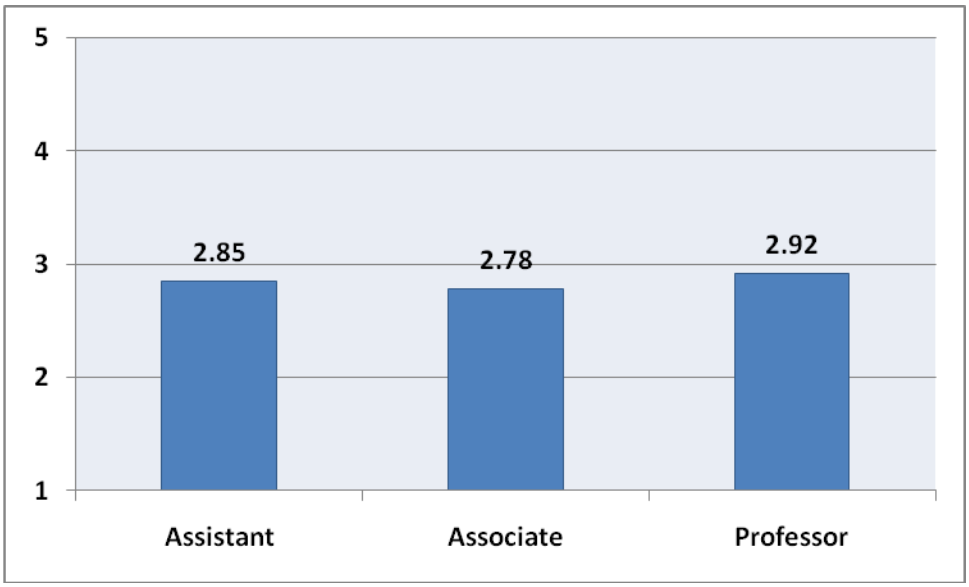

Figure 2.18. **Graph comparing across ranks on importance of foreign travel**

Table 2.19. **ANOVA comparing across college of appointment on importance of foreign travel**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	46.417	10	2.427	.009
Error	590.970	309		

Table 2.19 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of foreign travel. The ANOVA indicated that there were statistically significant differences between colleges, F (10, 309) = 2.427, p = .009.

A Tukey's HSD post-hoc test revealed that Library faculty (M = 1.64, SD = 1.027) rated foreign travel as less important than did COLA faculty (M = 3.15, SD = 1.451), p = .030, and MCMA faculty (M = 3.56, SD = 1.365), p = .019.

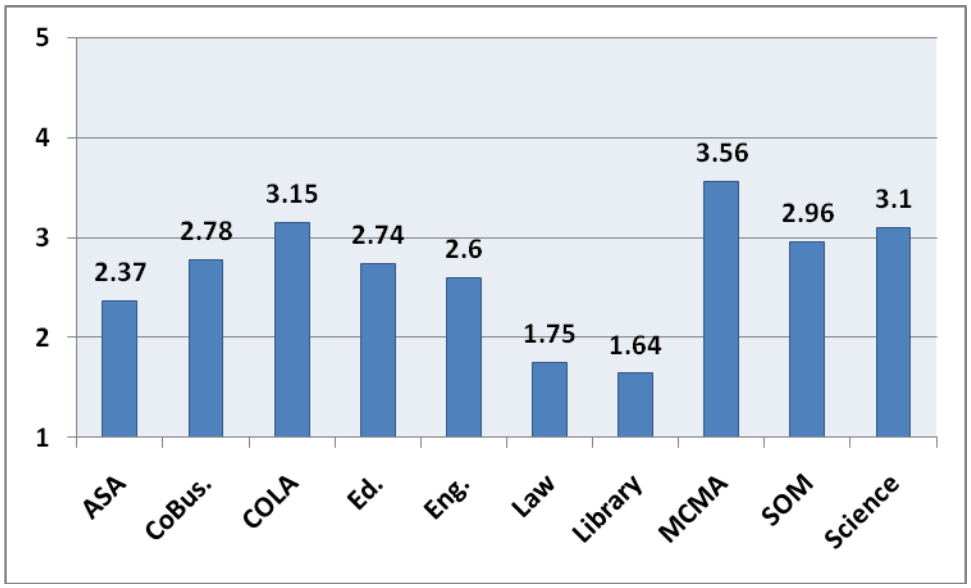

Figure 2.19. **Graph comparing across college of appointment on importance of foreign travel**

Table 2.20. **ANOVA comparing across ranks on importance of attending professional meetings**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	.636	2	.274	.761
Error	364.689	314		

Table 2.20 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of attending professional meetings. The ANOVA revealed that there were no statistically significant differences between ranks, F (2, 314) =.274, p = .761. No post-hoc tests were conducted because no significant differences existed.

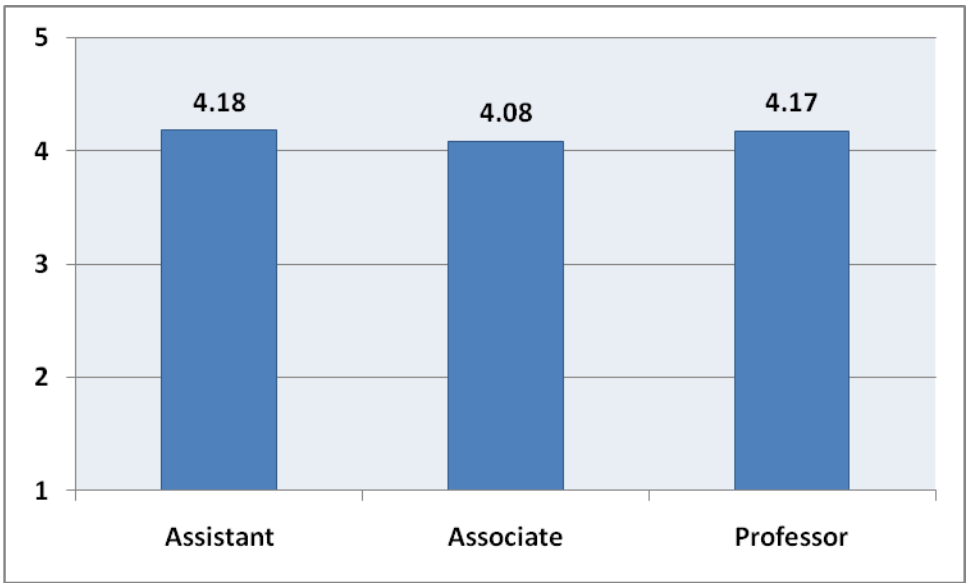

Figure 2.20. **Graph comparing across ranks on importance of attending professional meetings**

Table 2.21. **ANOVA comparing across college of appointment on importance of attending professional meetings**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	20.484	10	1.828	.055
Error	346.316	309		

Table 2.21 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of attending professional meetings. The ANOVA indicated that there were no statistically significant differences between colleges, *F* (10, 309) = 1.828, *p* = .055. No post-hoc tests were conducted because no significant differences existed.

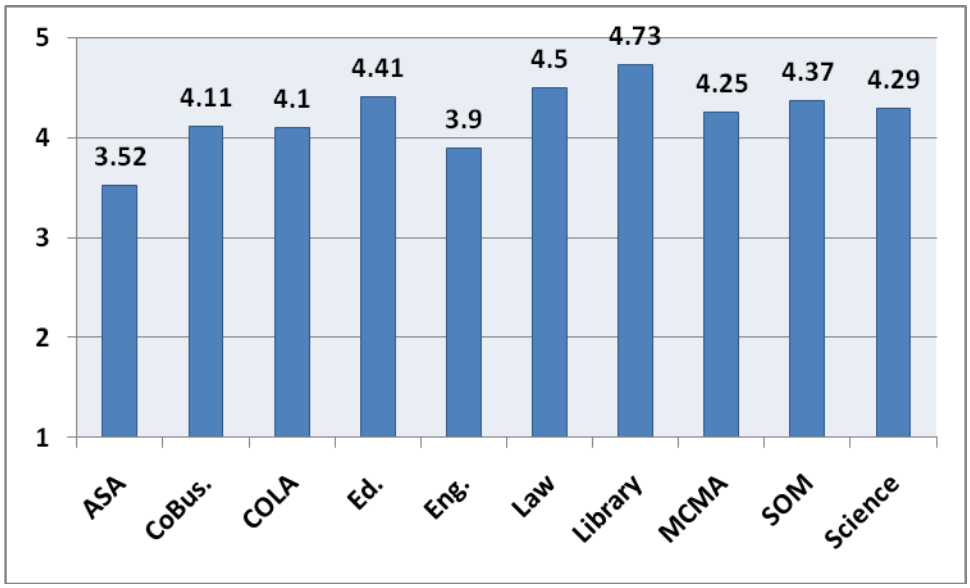

Figure 2.21. **Graph comparing across college of appointment on importance of attending professional meetings**

Question 3

On a scale from 1 "Not important" to 5 "Very important", how important are the following as motivations for your research activities?

Table 3.1 **Motivation of research activities**

Research Activity	***M***	***SD***	***Not Important***		***Neither***		***Very Important***
Personal passion for research	4.43	0.94	3%	3%	6%	24%	64%
Success in tenure/promotion	4.06	1.25	8%	3%	14%	23%	52%
Professional stature	4.05	0.95	2%	4%	17%	40%	37%
Intellectual challenge	4.48	0.83	1%	2%	8%	25%	64%
Working closely with students	3.73	1.24	9%	9%	16%	34%	32%
Department merit pay system	3.18	1.30	14%	16%	27%	25%	18%
College/Dept. encouragement	3.25	1.27	13%	14%	27%	28%	18%

Table 3.1 Interpretation: The *Departmental merit pay system* (*M* = 3.18, *SD* = 1.30) and *College/department encouragement* (*M* = 3.25, *SD* = 1.27) were considerably less important to faculty than the other options, and each of these are extrinsic motivators. Conversely, the two activities rated as most important, *Personal Passion for Research* (*M* = 4.43, *SD* = .94) and *Intellectual Challenge* (*M* = 4.48, *SD* = .83) are intrinsic factors and deviated very little. This suggests that faculty members see internal rewards and challenges as more motivating and important than external rewards such as pay.

Table 3.2. **ANOVA comparing across ranks on importance of personal passion for research as a motivator for research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	7.914	2	4.557	.011
Error	274.387	316		

Table 3.2 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of personal passion for research as a motivation for their research activities. The ANOVA revealed that there were statistically significant differences between ranks, F (2, 316) = 4.557, p = .011.

A Tukey's HSD post-hoc test was conducted to identify specific differences between ranks. It revealed that Professors (M = 4.65, SD = .741) rated personal passion for research as a more important motivator than did both Assistant (M = 4.33, SD = 1.009), p = .030, and Associate professors (M = 4.31, SD = 1.020), p = .022. There was no difference between Associate and Assistant professors.

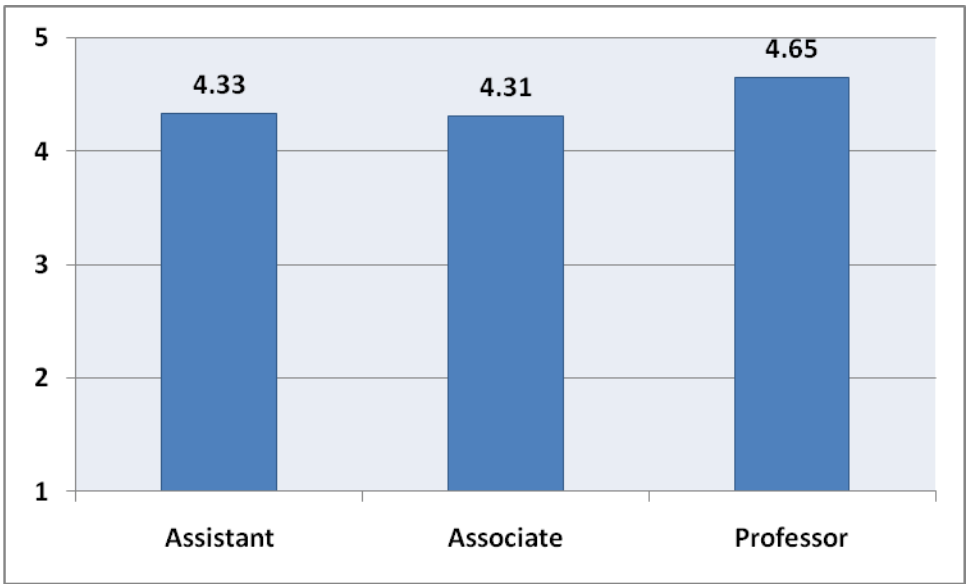

Figure 3.2. **Graph comparing across ranks on importance of personal passion for research as a motivator for research activities**

Table 3.3. **ANOVA comparing across college on importance of personal passion for research as a motivator for research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	28.047	10	3.420	<.001
Error	255.083	311		

Table 3.3 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of personal passion for research as a motivator for their research activities. The ANOVA indicated that there were statistically significant differences between colleges, F (10, 311) = 3.420, p < .001.

A Tukey's HSD post-hoc test was conducted to identify specific differences between colleges. The test revealed that faculty from ASA (M = 3.81, SD = 1.327) considered personal passion for research less of a motivator than did faculty from COLA (M = 4.73, SD = .638), p < .001, SOM (M = 4.78, SD = .506), p = .006, and Science (M = 4.68, SD = .475), p = .015. There were no other significant differences.

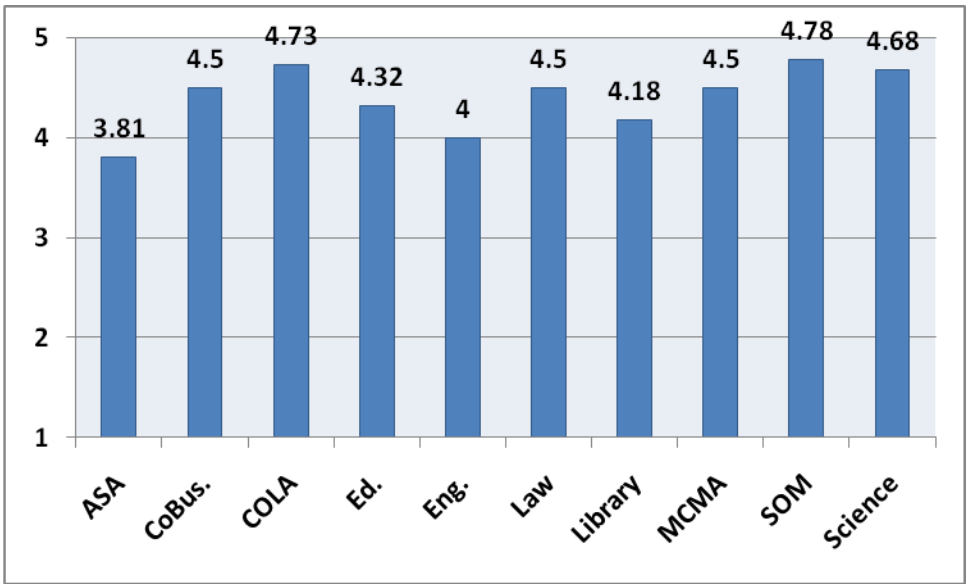

Figure 3.3. **Graph comparing across college on importance of personal passion for research as a motivator for research activities**

Table 3.4. **ANOVA comparing across ranks on importance of success in tenure/promotion as a motivator for research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	85.174	2	33.534	<.001
Error	401.308	316		

Table 3.4 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of success in tenure/promotion as a motivation for their research activities. The ANOVA revealed that there were statistically significant differences between ranks, F (2, 316) = 33.534, $p < .001$.

A Tukey's HSD post-hoc test was conducted to identify specific differences between ranks. It revealed that Professors (M = 3.39, SD = 1.471) rated success in tenure/promotion as a less important motivator than did both Assistant (M = 4.64, SD = .736), $p < .001$, and Associate professors (M = 4.18, SD = 1.047), $p < .001$. Assistant Professors (M = 4.64, SD = .736) also rated success in tenure/promotion as more important than did Associate Professors (M = 4.18, SD = 1.047), p = .009.

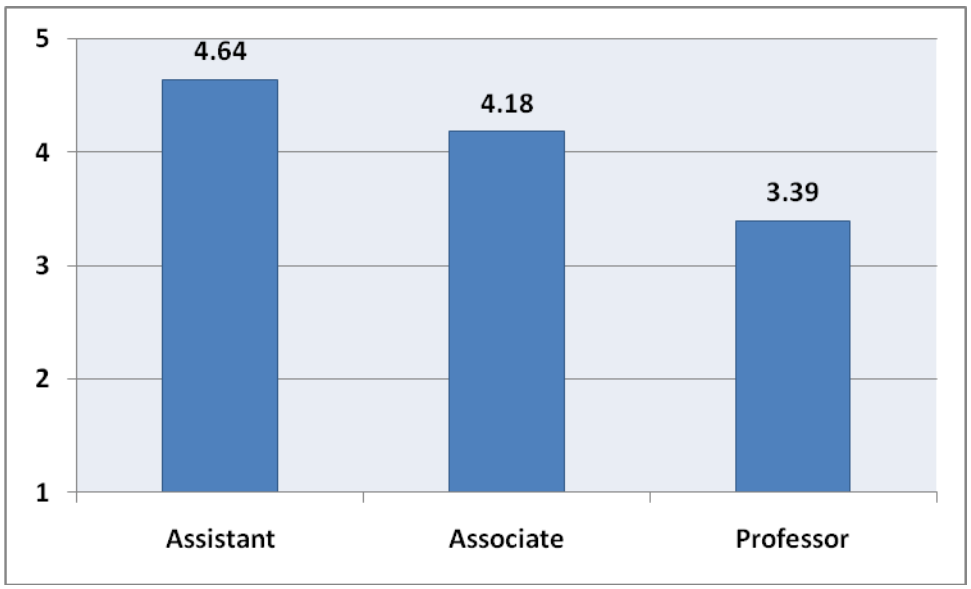

Figure 3.4. **Graph comparing across ranks on importance of success in tenure/promotion as a motivator for research activities**

Table 3.5. **ANOVA comparing across college on importance of success in tenure/promotion as a motivator for research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	11.147	10	.712	.713
Error	486.732	311		

Table 3.5 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of success in tenure/promotion as a motivator for their research activities. The ANOVA indicated that there were no statistically significant differences between colleges, F (10, 311) = .712, p = .713. No post-hoc tests were conducted because no significant differences were found.

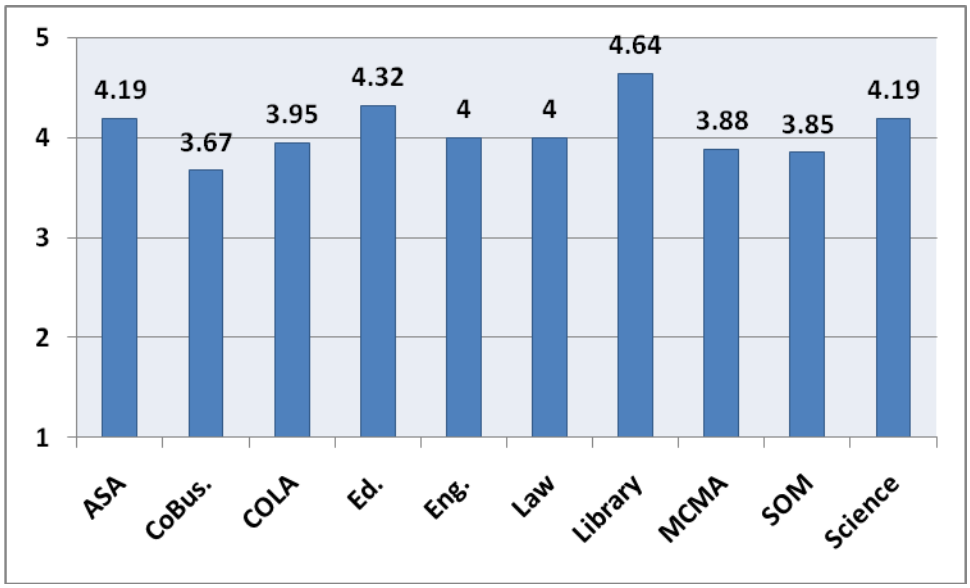

Figure 3.5. **Graph comparing across college on importance of success in tenure/promotion as a motivator for research activities**

Table 3.6. **ANOVA comparing across ranks on importance of professional stature as a motivator for research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	5.107	2	2.859	.059
Error	282.278	316		

Table 3.6 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of professional stature as a motivation for their research activities. The ANOVA revealed that there were no statistically significant differences between ranks, F (2, 316) = 2.859, p = .059. No post-hoc tests were conducted because no significant differences existed.

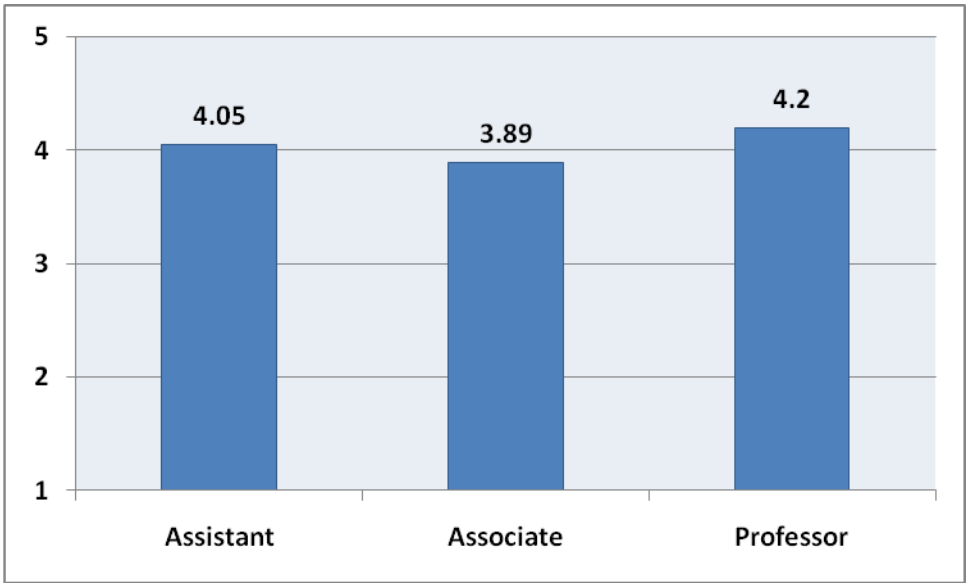

Figure 3.6. **Graph comparing across ranks on importance of professional stature as a motivator for research activities**

Table 3.7. **ANOVA comparing across college on importance of professional stature as a motivator for research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	3.536	10	.383	.953
Error	286.765	311		

Table 3.7 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of professional stature as a motivator for their research activities. The ANOVA indicated that there were no statistically significant differences between colleges, F (10, 311) = .383, p = .953. No post-hoc tests were conducted because no significant differences were found.

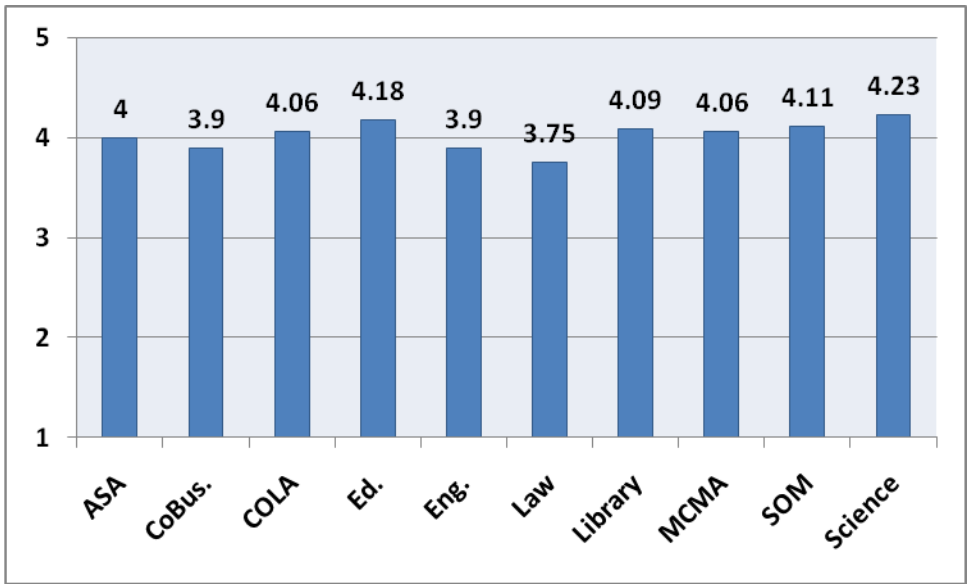

Figure 3.7. **Graph comparing across college on importance of professional stature as a motivator for research activities**

Table 3.8. **ANOVA comparing across ranks on importance of intellectual challenge as a motivator for research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	7.481	2	5.572	.004
Error	212.137	316		

Table 3.8 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of intellectual challenge as a motivation for their research activities. The ANOVA revealed that there were statistically significant differences between ranks, F (2, 316) = 5.572, p = .004.

A Tukey's HSD post-hoc test was conducted to identify specific differences between ranks. It revealed that Professors (M = 4.69, SD = .692) rated intellectual challenge as a more important motivator than did both Assistant (M = 4.41, SD = .810), p = .034, and Associate professors (M = 4.34, SD = .935), p = .005. There was no difference between Associate and Assistant professors' ratings of intellectual challenge.

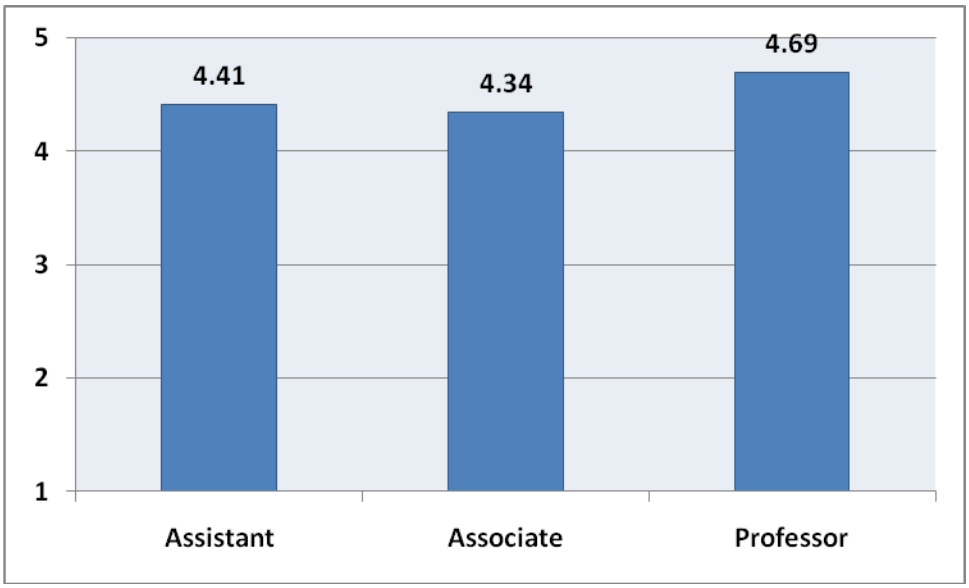

Figure 3.8. **Graph comparing across ranks on importance of intellectual challenge as a motivator for research activities**

Table 3.9. **ANOVA comparing across college on importance of intellectual challenge as a motivator for research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	18.005	10	2.767	.003
Error	202.383	311		

Table 3.9 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of intellectual challenge as a motivator for their research activities. The ANOVA indicated that there were statistically significant differences between colleges, F (10, 311) = 2.767, p = .003.

A Tukey's HSD post-hoc test was conducted to identify specific differences between colleges. The test revealed that faculty from ASA (M = 3.89, SD = 1.086) considered intellectual challenge less of a motivator than did faculty from COLA (M = 4.62, SD = .725), p = .003, SOM (M = 4.85, SD = .362), p = .001, and Science (M = 4.60, SD = .563), p = .039. There were no other significant differences.

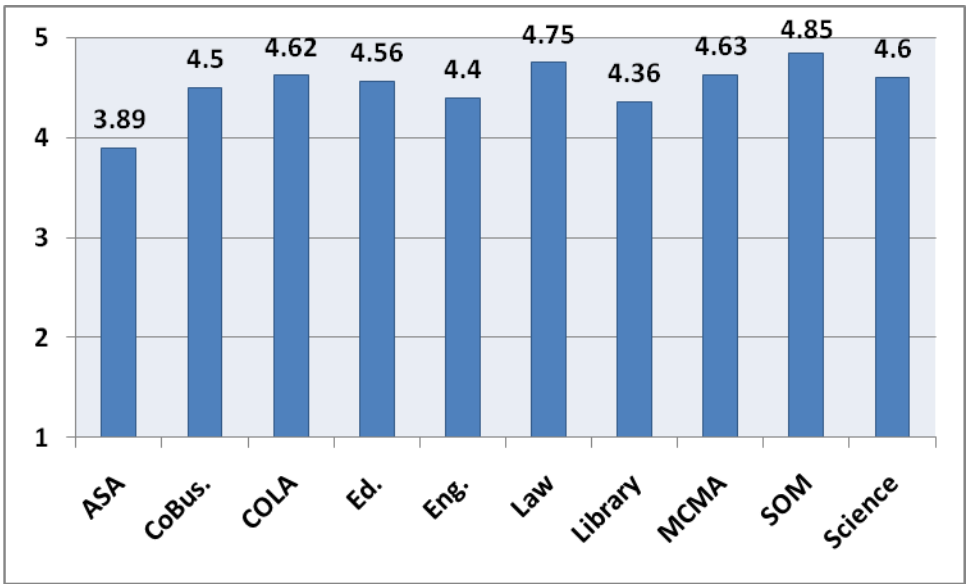

Figure 3.9. **Graph comparing across college on importance of intellectual challenge as a motivator for research activities**

Table 3.10. **ANOVA comparing across ranks on importance of working closely with students as a motivator for research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	.865	2	.280	.756
Error	485.583	314		

Table 3.10 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of working closely with students as a motivation for their research activities. The ANOVA revealed that there were no statistically significant differences between ranks, F (2, 314) = .280, p = .756. No post-hoc tests were conducted as a result of the lack of significant differences.

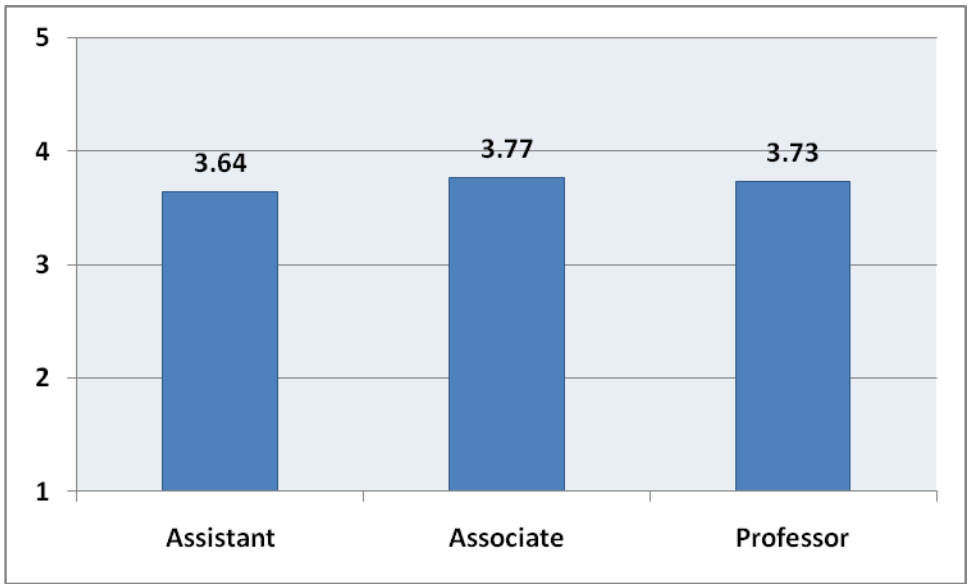

Figure 3.10. **Graph comparing across ranks on importance of working closely with students as a motivator for research activities**

Table 3.11. **ANOVA comparing across college on importance of working closely with students as a motivator for research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	40.920	10	2.817	.002
Error	448.880	309		

Table 3.11 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of working closely with students as a motivator for their research activities. The ANOVA indicated that there were statistically significant differences between colleges, F (10, 309) = 2.817, p = .002.

A Tukey's HSD post-hoc test was conducted to identify specific differences between colleges, and it indicated that Library faculty were less motivated by working with students than all other programs. This is an expected result, because Library faculty do not directly supervise students. No other differences between colleges were found.

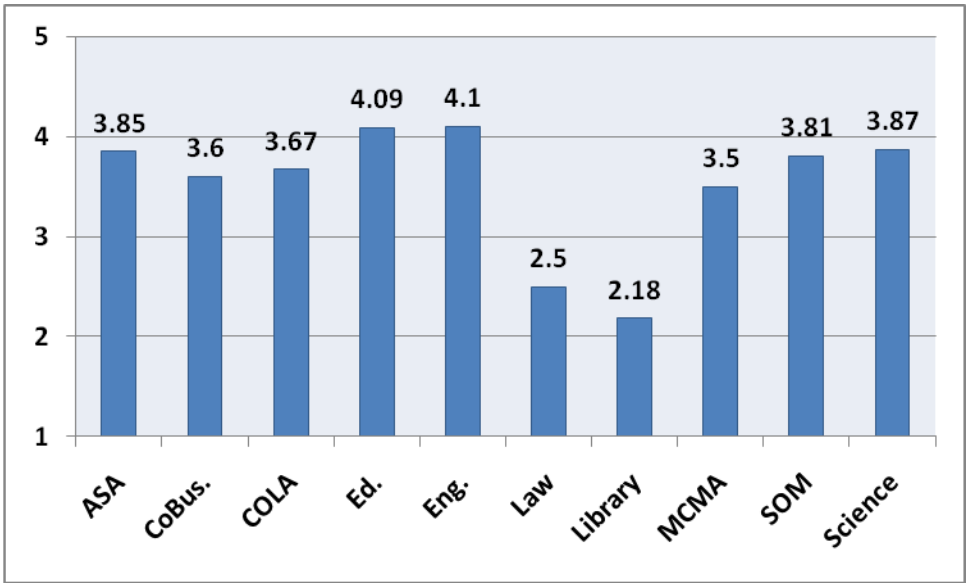

Figure 3.11. **Graph comparing across college on importance of working closely with students as a motivator for research activities**

Table 3.12. **ANOVA comparing across ranks on importance of departmental merit pay system as a motivator for research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	8.810	2	2.981	.052
Error	518.244	315		

Table 3.12 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of departmental merit pay systems as a motivation for their research activities. The ANOVA revealed that there were no significant differences between faculty ranks, F (2, 315) = 2.981, p = .052. Because of the lack of significant differences, no post-hoc tests were conducted.

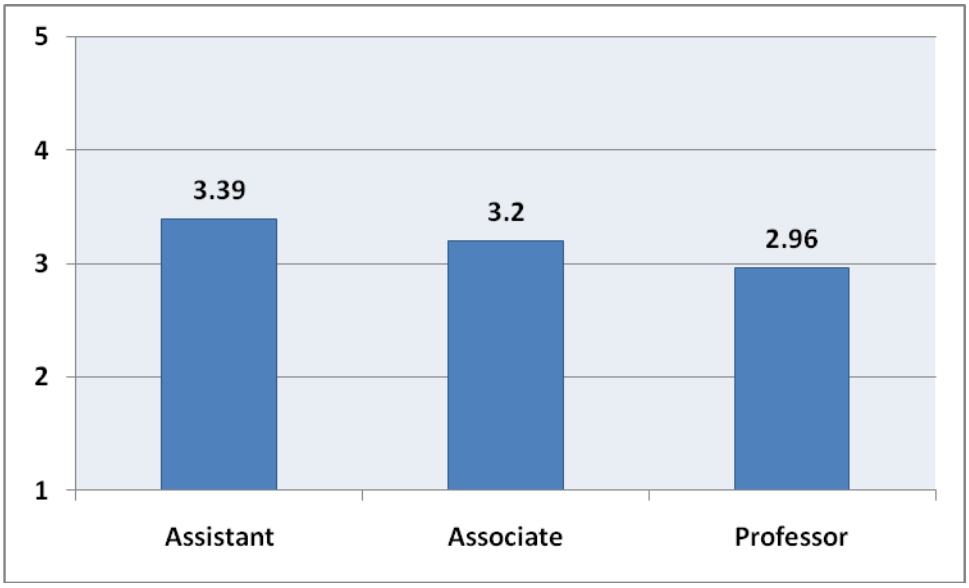

Figure 3.12. **Graph comparing across ranks on importance of departmental merit pay system as a motivator for research activities**

Table 3.13. **ANOVA comparing across college on importance of departmental merit pay system as a motivator for research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	37.257	10	2.309	.013
Error	500.264	310		

Table 3.13 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of departmental merit pay systems as a motivator for their research activities. The ANOVA indicated that there were statistically significant differences between colleges, F (10, 310) = 2.309, p = .013.

A Tukey's HSD post-hoc test was conducted to identify the specific differences, and it indicated that SOM faculty (M = 2.63, SD = 1.182) were less motivated by a departmental pay system than ASA faculty (M = 3.59, SD = 1.152), p = .042. There would likely be a significant difference between Law and most other colleges if more Law faculty had participated in the survey, but that cannot be concluded from this analysis alone.

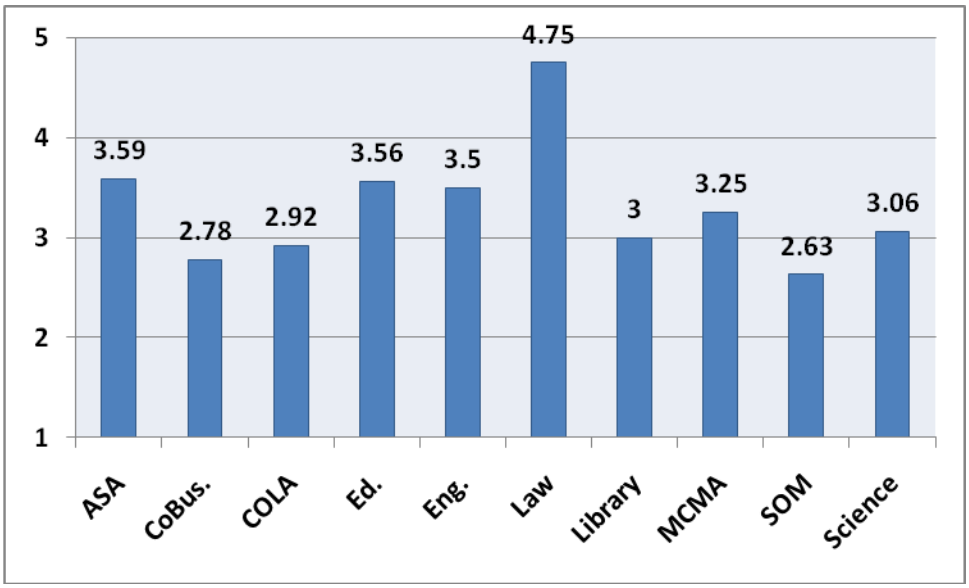

Figure 3.13. **Graph comparing across college on importance of departmental merit pay system as a motivator for research activities**

Table 3.14. **ANOVA comparing across ranks on importance of college/dept. encouragement as a motivator for research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	9.621	2	3.023	.055
Error	501.246	315		

Table 3.14 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of college/dept. encouragement as a motivator for their activities in research. The ANOVA indicated that there were no significant differences between faculty ranks, F (2, 315) = 3.023, p = .055. Because of the lack of significant differences, no post-hoc tests were conducted.

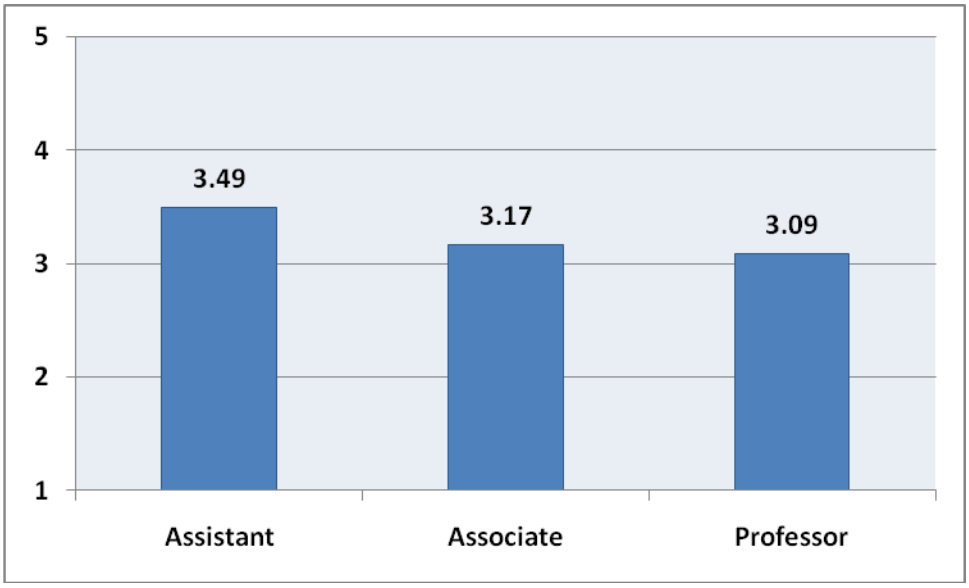

Figure 3.14. **Graph comparing across ranks on importance of college/dept. encouragement as a motivator for research activities**

Table 3.15. **ANOVA comparing across college on importance of college/dept. encouragement as a motivator for research activities**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	5.836	10	.356	.964
Error	508.226	310		

Table 3.15 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from different colleges viewed the importance of college/dept. encouragement as a motivator for their research activities. The ANOVA indicated that there were no statistically significant differences between colleges, F (10, 310) = .356, p = .964. This suggests that all colleges and departments are similar in the degree to which they meet the encouragement needs of faculty. No post-hoc tests were conducted because no significant differences were obtained.

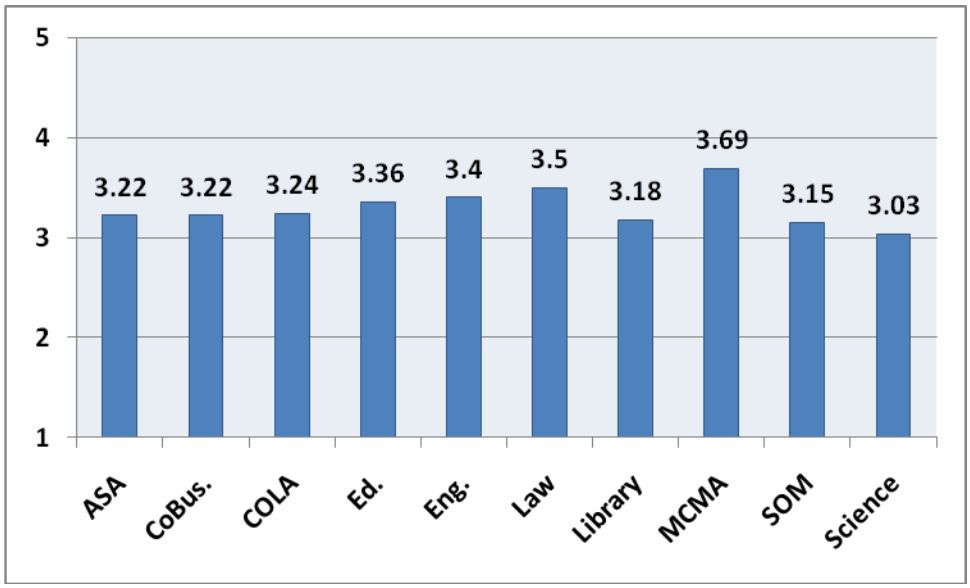

Figure 3.15. **Graph comparing across college on importance of college/dept. encouragement as a motivator for research activities**

Question 4

On a scale from 1 "Not important" to 5 "Very important", how important are the following as motivations for your seeking external funding?

Table 4.1 **Motivation for external funding**

Motivation	*M*	*SD*	*Not Important*		*Neither*		*Very Important*
Personal passion for research	3.69	1.34	12%	6%	19%	26%	37%
Success in tenure/promotion	3.38	1.41	16%	11%	21%	24%	28%
Professional stature	3.44	1.30	12%	10%	25%	28%	25%
Intellectual challenge	3.40	1.36	14%	11%	22%	26%	27%
Working closely with students	3.04	1.38	20%	16%	24%	22%	19%
College/Dept. encouragement	3.04	1.31	17%	16%	28%	23%	16%
Salary support	3.25	1.45	19%	11%	22%	21%	27%
Support for students	3.58	1.42	15%	7%	19%	22%	37%
Essential to research agenda	3.35	1.49	20%	9%	20%	20%	31%

Table 4.1 Interpretation: Motivations for external funding were rated relatively consistently across all factors. The two lowest scoring items were *Working closely with students* (*M* = 3.04, *SD* = 1.38) and *College/dept. encouragement* (*M* = 3.04, *SD* = 1.31), but both were still above the mid-point.

Table 4.2. **ANOVA comparing across ranks on importance of personal passion for research as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	1.387	2	.385	.681
Error	553.261	307		

Table 4.2 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of personal passion for research as motivation to seek external funding. Results of the ANOVA indicated that there were statistically significant differences between faculty ranks, F (2, 307) = .385, p = .681. Post-hoc tests were not conducted due to the lack of significant differences between groups.

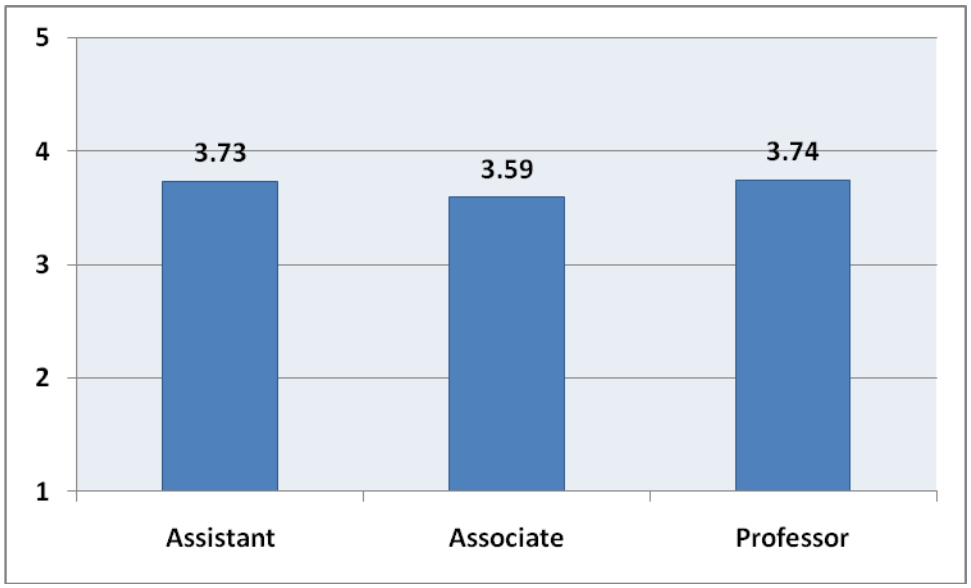

Figure 4.2. **Graph comparing across ranks on importance of personal passion for research as a motivator to seek external funding**

Table 4.3. **ANOVA comparing across college on importance of personal passion for research as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	57.972	10	3.498	<.001
Error	498.871	301		

Table 4.3 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of personal passion for research as a motivator to seek external funding. The ANOVA results indicate that there were statistically significant differences between colleges, F (10, 301) = 3.498, p < .001.

A Tukey's HSD post-hoc test was conducted to identify which specific colleges the differences were between. The test suggests that Law faculty (M = 1.75, SD = .957) considered personal passion for research less of a motivator than did faculty from COLA (M = 3.91, SD = 1.289), p = .046, SOM (M = 4.33, SD = .961), p = .010, and Science (M = 4.27, SD = .907), p = .013. There was also a difference between SOM faculty (M = 4.33, SD = .961) and Library faculty (M = 2.82, SD = 1.328), p = .043.

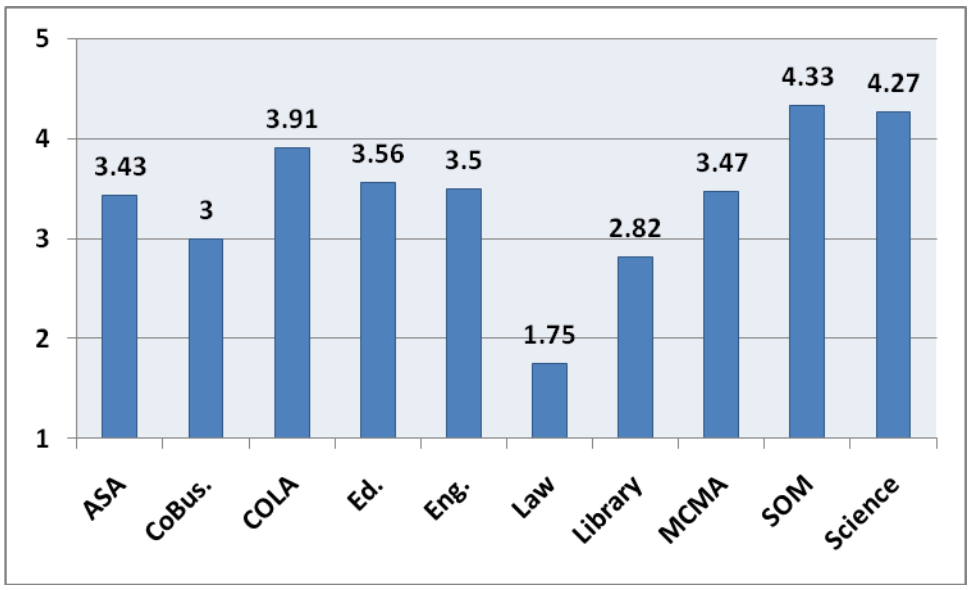

Figure 4.3. **Graph comparing across college on importance of personal passion for research as a motivator to seek external funding**

Table 4.4. **ANOVA comparing across ranks on importance of success in tenure/promotion as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	70.796	2	19.994	<.001
Error	547.051	309		

Table 4.4 Interpretation: Comparisons were made between three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how faculty members at different ranks rated the importance of success in tenure/promotion as a motivator for seeking external funding. The ANOVA revealed that there were statistically significant differences between faculty ranks, F (2, 309) = 19.994, p < .001.

To identify which of these groups differed from one another, a Tukey's HSD post-hoc test was conducted. It revealed differences between faculty at all levels of comparison. Professors (M = 2.79, SD = 1.439) find success in tenure/promotion less motivating than both Assistant (M = 3.96, SD = 1.134), p < .001, and Associate professors (M = 3.41, SD = 1.394), p = .002. Similarly, Assistant Professors (M = 3.96, SD = 1.134) rated success in tenure/promotion as more motivating than Associate Professors (M = 3.41, SD = 1.394), p = .009.

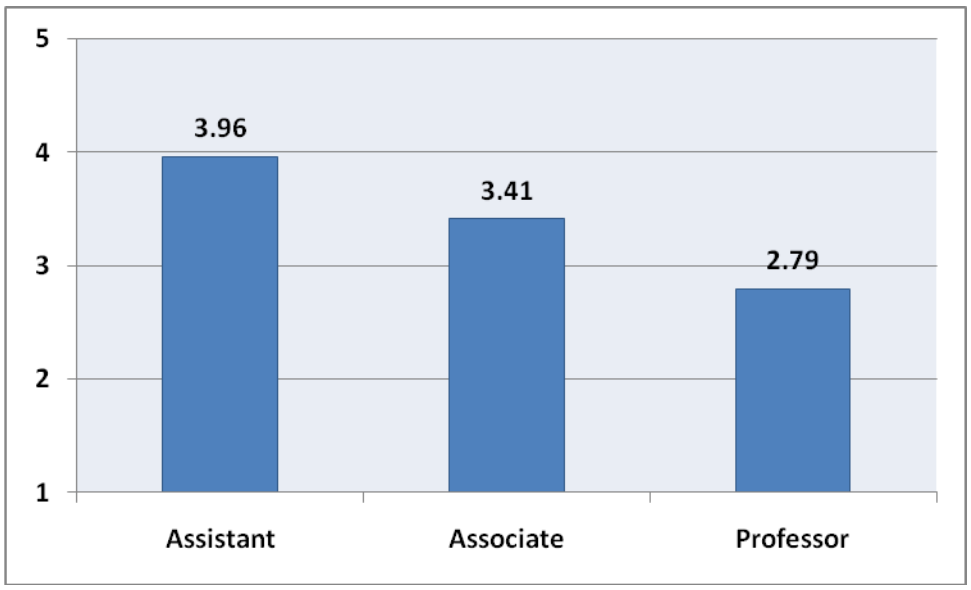

Figure 4.4. **Graph comparing across ranks on importance of success in tenure/promotion as a motivator to seek external funding**

Table 4.5. **ANOVA comparing across college on importance of success in tenure/promotion as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	53.324	10	2.833	.002
Error	570.332	303		

Table 4.5 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of success in tenure/promotion as motivation to try for outside funding. Results of the ANOVA indicated that there were statistically significant differences between colleges, F (10, 303) = 2.833, p = .002.

A Tukey's HSD post-hoc test was conducted. It revealed that Science faculty (M = 4.10, SD = .923) value success in tenure/promotion as a stronger motivator than do faculty from Law (M = 1.5, SD = .577), p = .018, and CoBus. (M = 2.33, SD = 1.803), p = .032. There were no other significant differences between colleges.

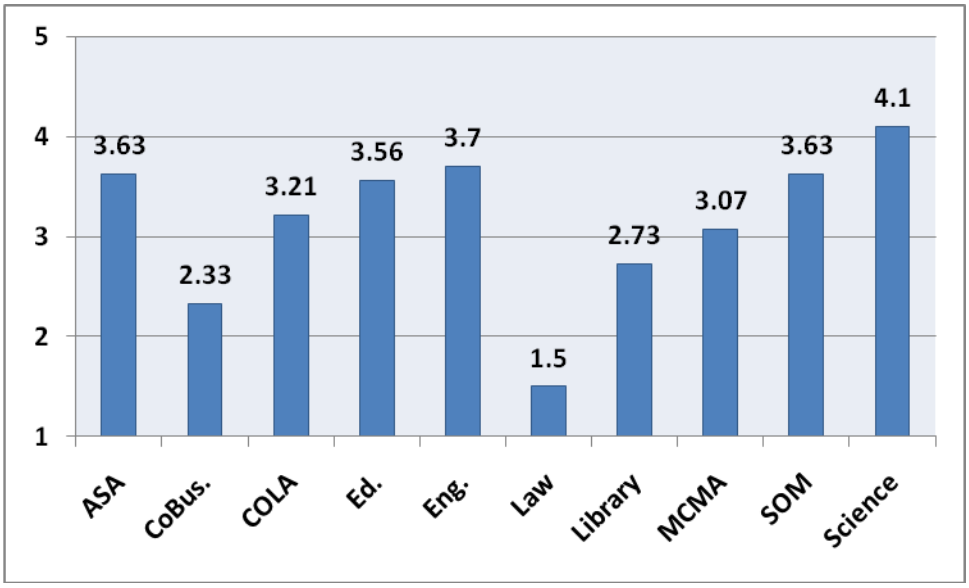

Figure 4.5. **Graph comparing across college on importance of success in tenure/promotion as a motivator to seek external funding**

Table 4.6. **ANOVA comparing across ranks on importance of professional stature as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	1.596	2	.470	.625
Error	525.676	310		

Table 4.6 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of professional stature as a motivator for outside funding. The ANOVA revealed that there were no statistically significant differences between faculty members at different ranks, F (2, 310) = .470, p = .625. No post-hoc tests were conducted because of the lack of significant differences.

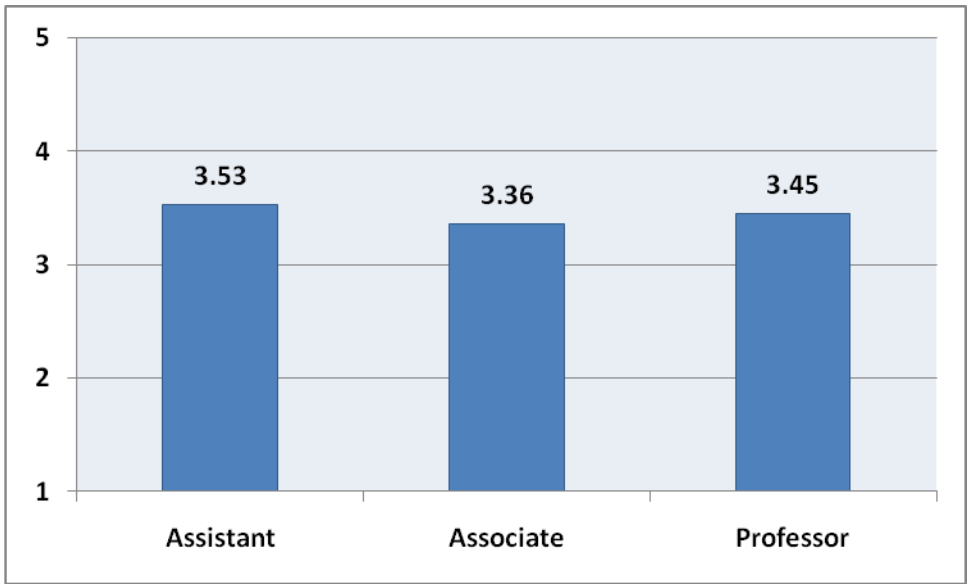

Figure 4.6. **Graph comparing across ranks on importance of professional stature as a motivator to seek external funding**

Table 4.7. **ANOVA comparing across college on importance of professional stature as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	39.167	10	2.437	.008
Error	488.496	304		

Table 4.7 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of professional stature as a motivator for external funding. The ANOVA indicated that there were statistically significant differences between colleges, F (10, 304) = 2.437, p = .008.

A Tukey's HSD post-hoc test was conducted to identify specific differences between colleges of appointment. It revealed that CoBus. Faculty (M = 2.6, SD = 1.506) see professional stature as less motivating than do SOM faculty (M = 4.19, SD = 1.039), p = .033, in light of the desire to seek external funding. There were no other differences identified in the analysis.

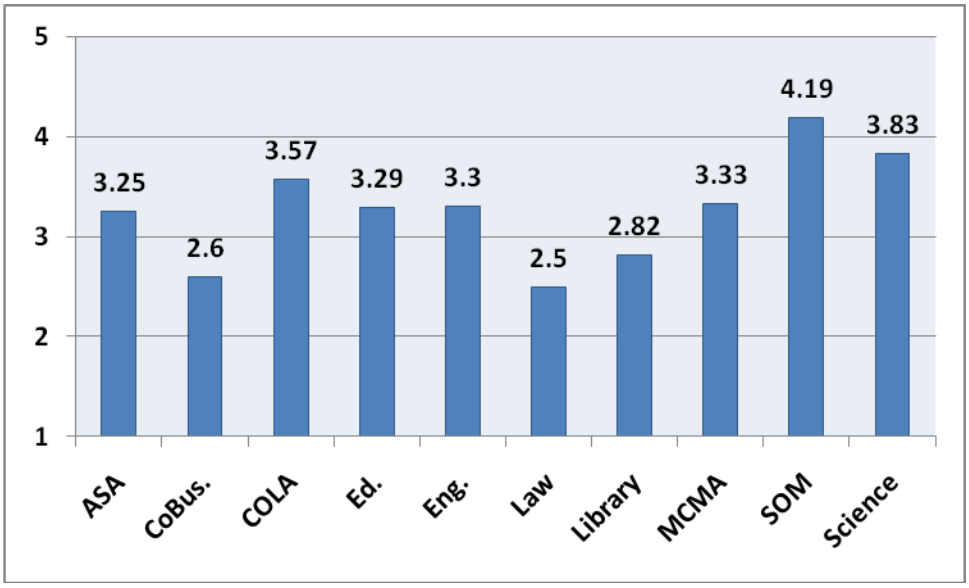

Figure 4.7. **Graph comparing across college on importance of professional stature as a motivator to seek external funding**

Table 4.8. **ANOVA comparing across ranks on importance of intellectual challenge as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	1.949	2	.525	.592
Error	567.882	306		

Table 4.8 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of intellectual challenge as a motivation to seek external funding. The ANOVA revealed that there were statistically significant differences between ranks, F (2, 306) =.525, p = .592, suggesting that all ranks of faculty members view intellectual challenge as equally important in regard to external funding. No post-hoc tests were necessary.

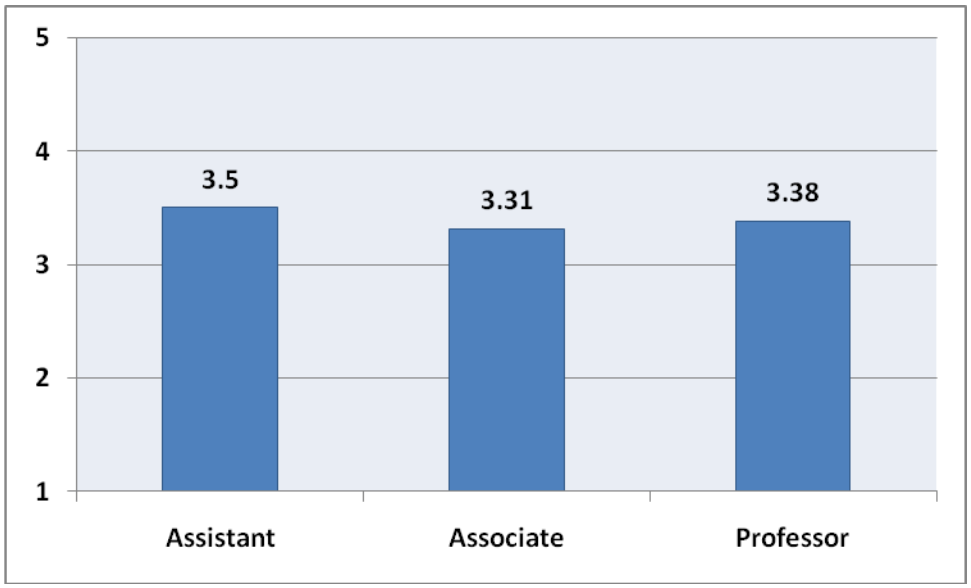

Figure 4.8. **Graph comparing across ranks on importance of intellectual challenge as a motivator to seek external funding**

Table 4.9. **ANOVA comparing across college on importance of intellectual challenge as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	57.837	10	3.371	<.001
Error	514.722	300		

Table 4.9 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to identify how faculty members from each college differ on their views of the importance of intellectual challenge as a motivator to find external sources of funding. The ANOVA indicated that there were statistically significant differences between scores across college of appointment, F (10, 300) = 3.371, p < .001.

A Tukey's HSD post-hoc test was conducted to identify which specific colleges differed, revealing that CoBus. faculty (M = 2.22, SD = 1.481) rated intellectual challenge's importance lower than SOM faculty (M = 4.07, SD = 1.039), p = .013, and Science faculty (M = 3.87, SD = 1.042), p = .042. The Tukey's HSD also indicated that Law faculty (M = 1.50, SD = .577) considered intellectual challenge less important to external fund seeking than did SOM faculty (M = 4.07, SD = 1.039), p = .013, and Science faculty (M = 3.87, SD = 1.042), p = .032.

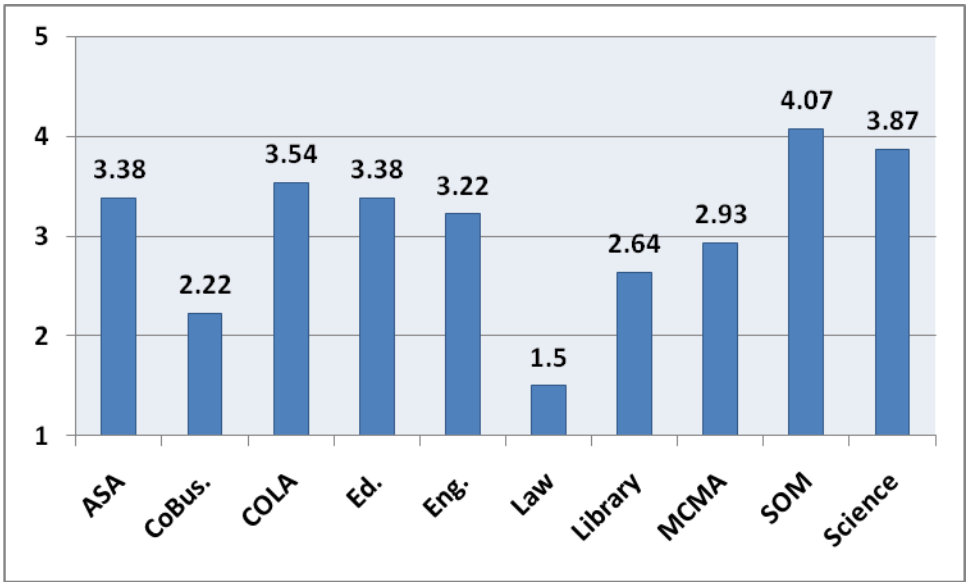

Figure 4.9. **Graph comparing across college on importance of intellectual challenge as a motivator to seek external funding**

Table 4.10. **ANOVA comparing across ranks on importance of working closely with students as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	2.171	2	.566	.568
Error	590.440	308		

Table 4.10 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of working closely with students as a motivator to look for outside sources of funding. The ANOVA revealed that there were no statistically significant differences between ranks, F (2, 308) = .566, p = .568. No post-hoc tests were conducted because there were no significant differences.

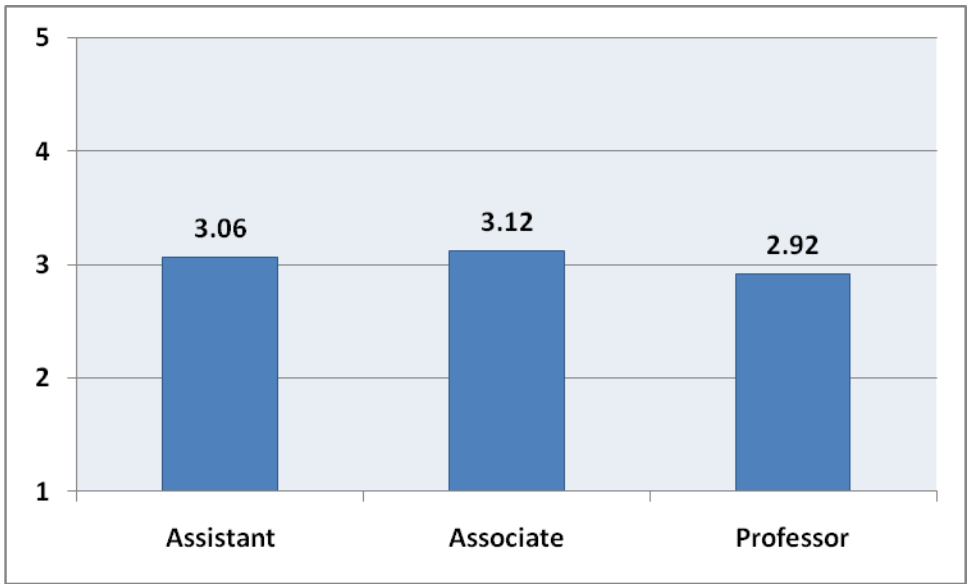

Figure 4.10. **Graph comparing across ranks on importance of working closely with students as a motivator to seek external funding**

Table 4.11. **ANOVA comparing across college on importance of working closely with students as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	68.897	10	3.966	<.001
Error	524.643	302		

Table 4.11 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed the importance of working closely with students. The results of the ANOVA indicated that there were statistically significant differences between colleges, F (10, 302) = 3.966, p < .001.

A Tukey's HSD post-hoc test was conducted to identify specific differences. It indicated that Engineering faculty (M = 3.90, SD = 1.287) were more motivated to seek external funding by working closely with students than were both professors in Law (M = 1.25, SD = .500), p = .031, and professors in Library (M = 1.82, SD = 1.079), p = .015. Library faculty may not have the opportunity to work with students as regularly as faculty from programs with advisees in their respective programs, and these results fit that model.

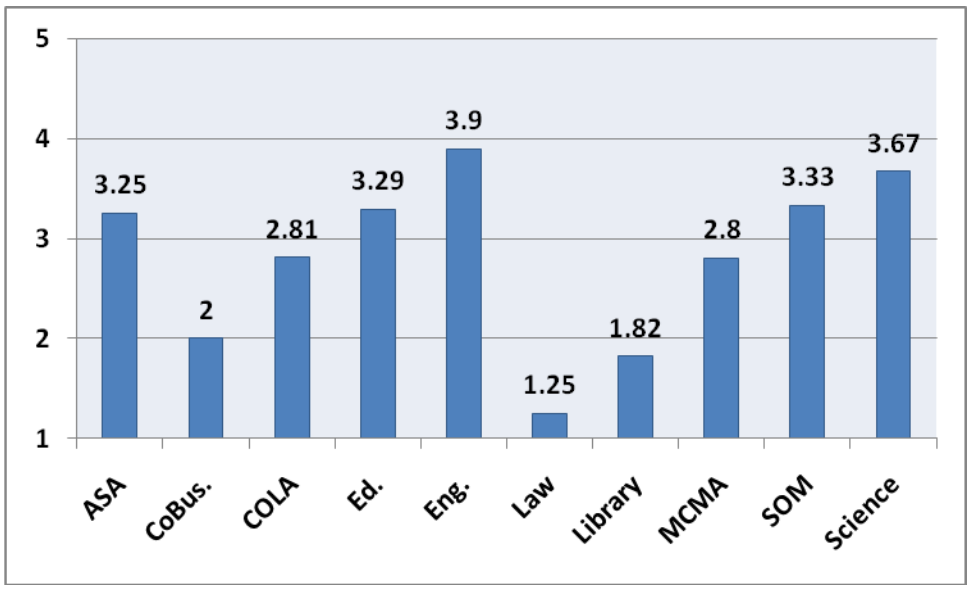

Figure 4.11. **Graph comparing across college on importance of working closely with students as a motivator to seek external funding**

Table 4.12. **ANOVA comparing across ranks on importance of college/dept. encouragement as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	9.581	2	2.794	.063
Error	529.791	309		

Table 4.12 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of college/dept. encouragement as a motivator for external funding. The ANOVA indicated that there were no significant differences between faculty ranks, F (2, 309) = 2.794, p = .063. No post-hoc tests were conducted.

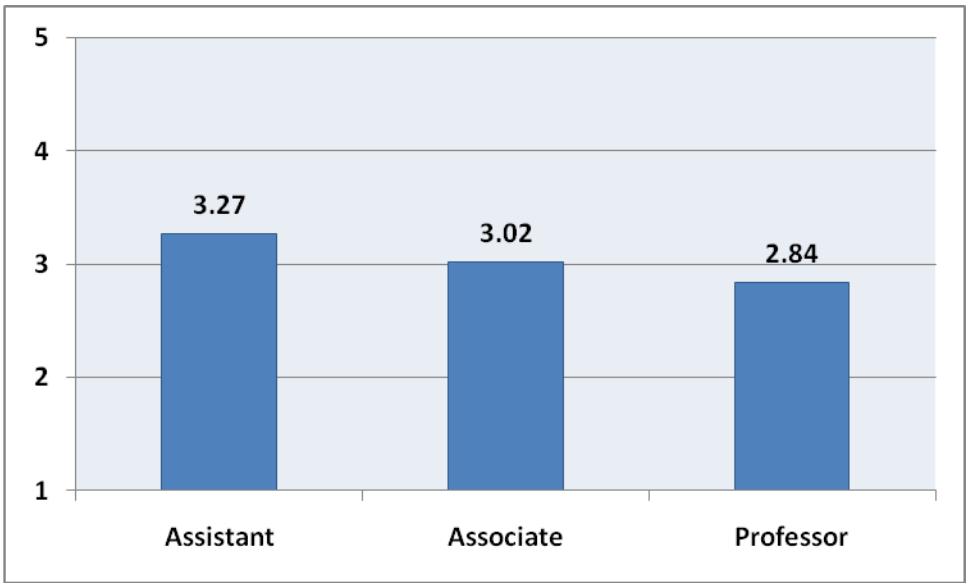

Figure 4.12. **Graph comparing across ranks on importance of college/dept. encouragement as a motivator to seek external funding**

Table 4.13. **ANOVA comparing across college on importance of college/dept. encouragement as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	34.094	10	2.044	.029
Error	505.282	303		

Table 4.13 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from different colleges viewed the importance of college/dept. encouragement as a motivator for external funding. The ANOVA indicated that there were statistically significant differences between colleges, F (10, 303) = 2.044, p = .029.

A Tukey's HSD post-hoc test was conducted to identify specific differences. It indicated that CoBus. faculty (M = 2.11, SD = 1.364) were less motivated to seek external funding by college/dept. encouragement than were SOM faculty (M = 3.48, SD = 1.156), p = .038. There were no other differences between faculty opinions based on college of appointment.

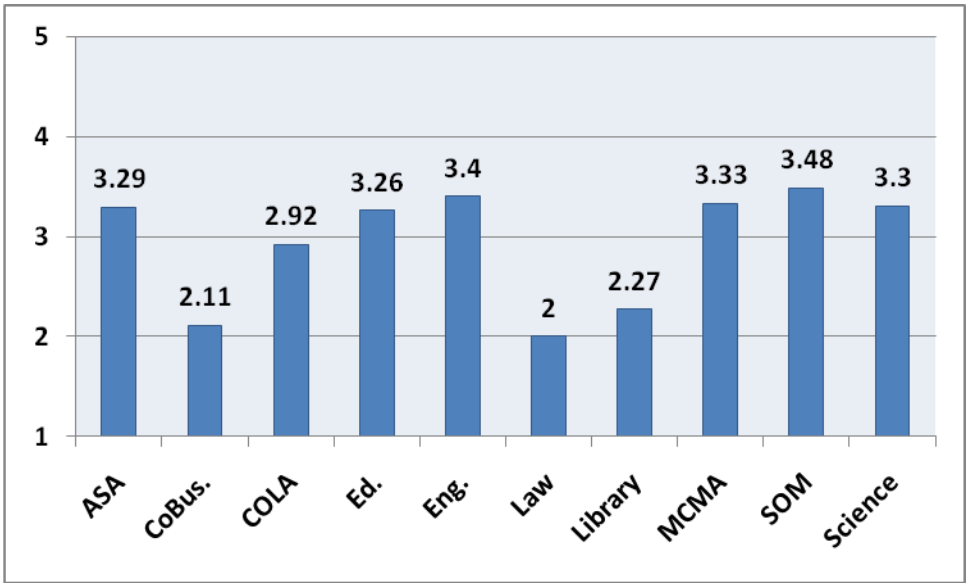

Figure 4.13. **Graph comparing across college on importance of college/dept. encouragement as a motivator to seek external funding**

Table 4.14. **ANOVA comparing across ranks on importance of salary support as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	12.716	2	3.073	.048
Error	639.255	309		

Table 4.14 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of salary support as a motivator for external funding. The ANOVA indicated that there were significant differences between faculty ranks, F (2, 309) = 3.073, p = .048.

A Tukey's HSD post-hoc test was conducted to identify specific differences. It indicated that Assistant Professors (M = 3.54, SD = 1.295) were more motivated to find external funding by salary support than were Professors (M = 3.48, SD = 1.434), p = .045. There were no other differences between ranks.

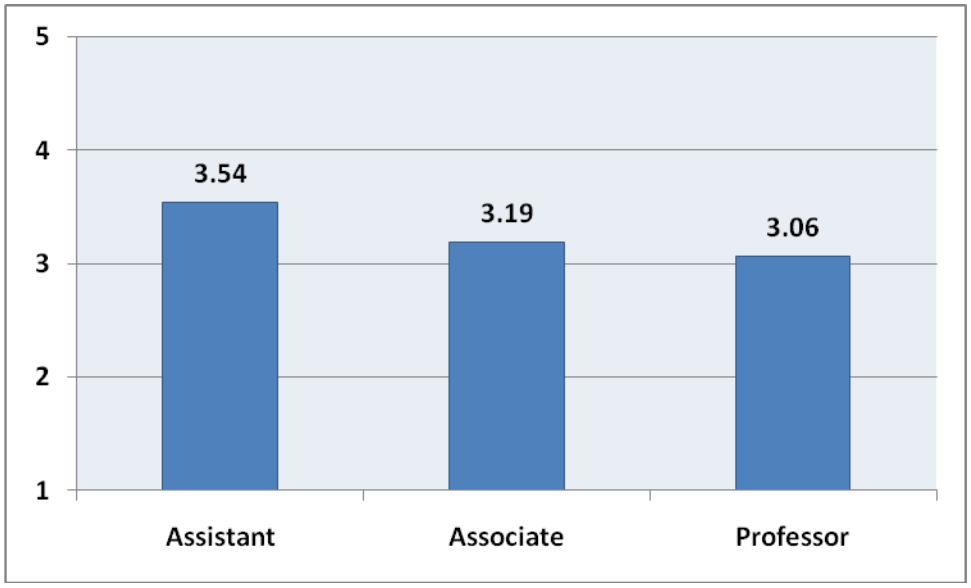

Figure 4.14. **Graph comparing across ranks on importance of salary support as a motivator to seek external funding**

Table 4.15. **ANOVA comparing across college on importance of salary support as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	40.774	10	2.004	.033
Error	616.350	303		

Table 4.15 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from different colleges viewed the importance of salary support as a motivator for external funding. The ANOVA indicated that there were statistically significant differences between faculty based on college of appointment, F (10, 303) = 2.004, p = .033.

A Tukey's HSD post-hoc test was conducted to identify specific differences. It indicated that Engineering faculty (M = 4.20, SD = 1.135) were more motivated to seek external funding due to salary support than were Library faculty (M = 2.18, SD = 1.722), p = .048. That was the only significant difference between specific groups, suggesting all others value salary support similarly.

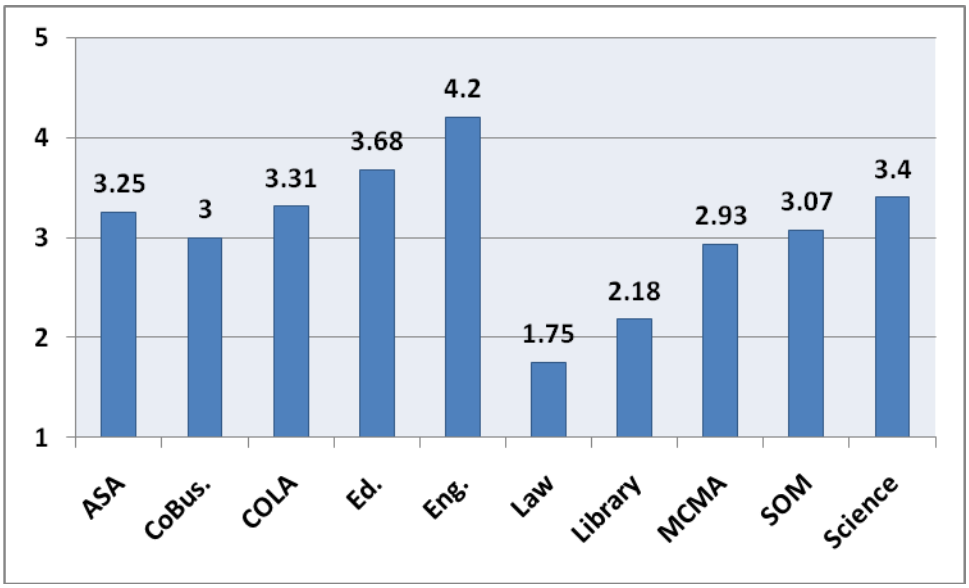

Figure 4.15. **Graph comparing across college on importance of salary support as a motivator to seek external funding**

Table 4.16. **ANOVA comparing across ranks on importance of support for students as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	11.779	2	2.926	.055
Error	619.880	308		

Table 4.16 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of support for students as a motivator to seek external funding. The ANOVA indicated that there were no significant differences between faculty ranks, *F* (2, 308) = 2.926, *p* = .055. No post-hoc test was needed due to the lack of significant differences.

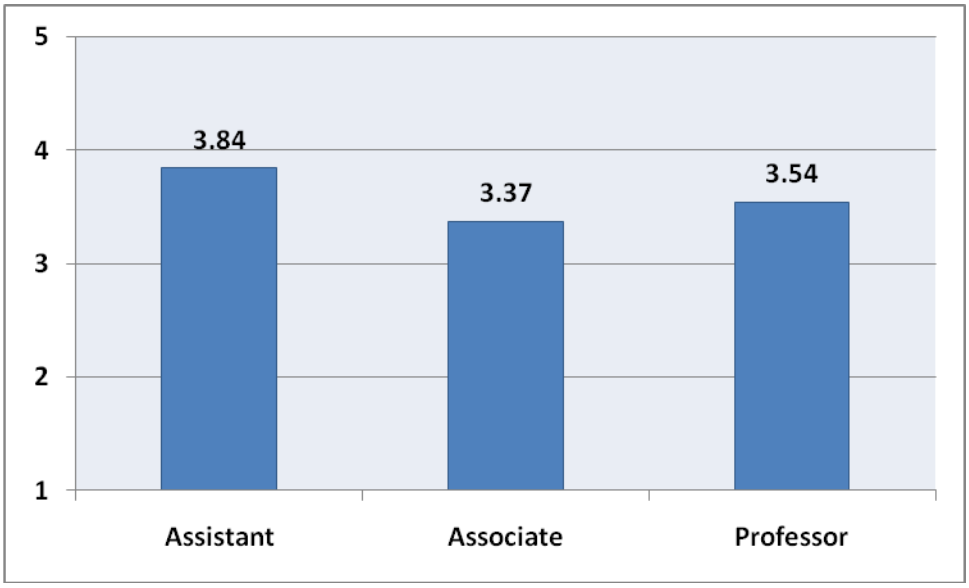

Figure 4.16. **Graph comparing across ranks on importance of support for students as a motivator to seek external funding**

Table 4.17. **ANOVA comparing across college on importance of support for students as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	79.877	10	4.368	<.001
Error	552.296	302		

Table 4.17 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from different colleges viewed the importance of support for students as a motivator for external funding. The ANOVA indicated that there were statistically significant differences between faculty based on their college, F (10, 302) = 4.368, p < .001.

A Tukey's HSD post-hoc test was conducted to identify specific differences. It indicated that Library faculty once again rate students as a weak motivator, which is logical given the lack of library students. No other significant differences between groups were found, although with more participants it is likely that Law faculty would also have been found statistically less motivated. No other statistically significant differences between college of appointment were found.

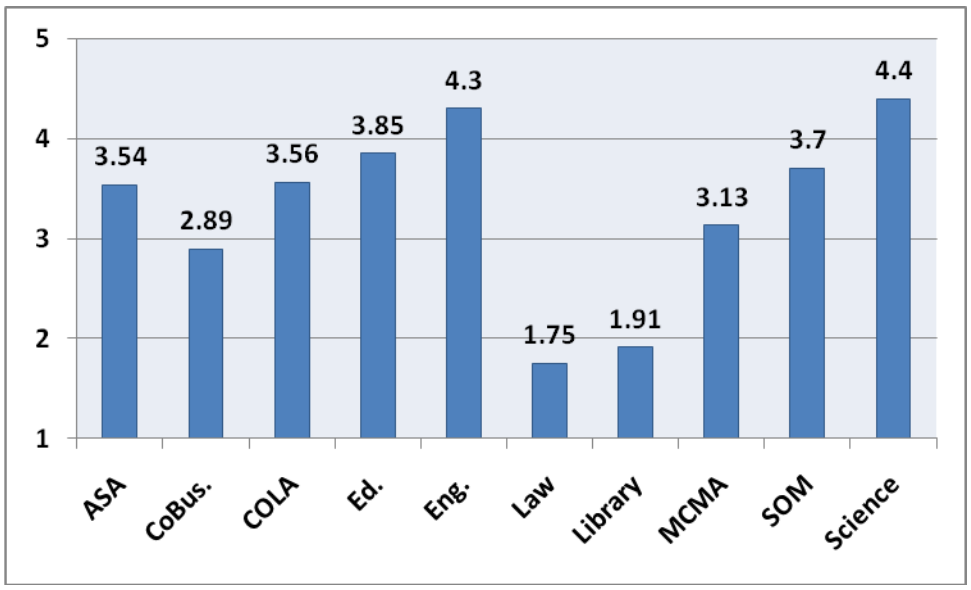

Figure 4.17. **Graph comparing across college on importance of support for students as a motivator to seek external funding**

Table 4.18. **ANOVA comparing across ranks on importance of funding being essential to a research agenda as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	5.293	2	1.195	.304
Error	681.801	308		

Table 4.18 Interpretation: Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members rated the importance of funding being essential to a research agenda as a motivator to seek external funding. The ANOVA indicated that there were no significant differences between faculty ranks, F (2, 308) = 1.195, p = .304. No post-hoc test was conducted.

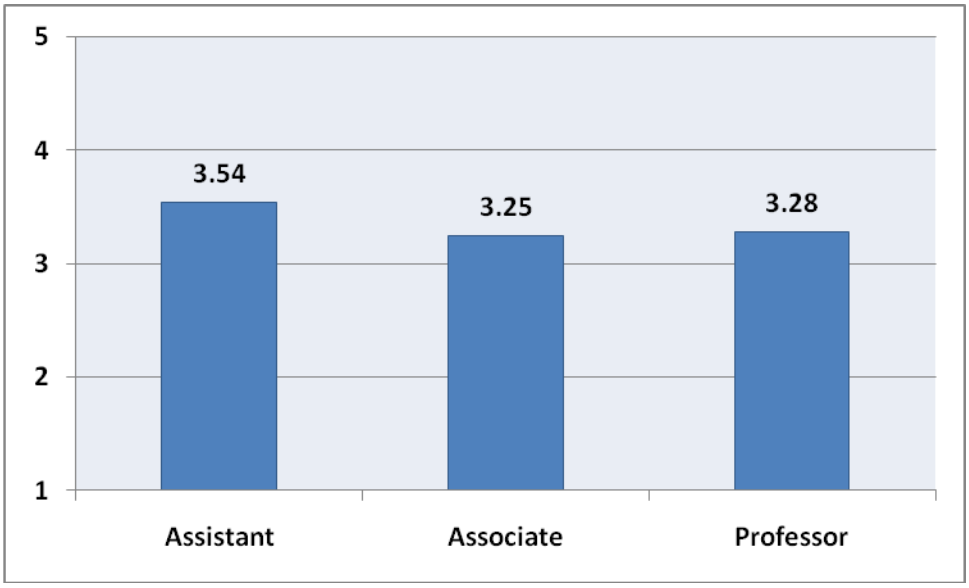

Figure 4.18. **Graph comparing across ranks on importance of funding being essential to a research agenda as a motivator to seek external funding**

Table 4.19. **ANOVA comparing across college on importance of funding being essential to a research agenda as a motivator to seek external funding**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	105.618	10	5.433	<.001
Error	587.117	302		

Table 4.19 Interpretation: Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from different colleges viewed the importance of funding being essential to a research agenda as a motivator for external funding. The ANOVA indicated that there were statistically significant differences between faculty based on their college, F (10, 302) = 5.433, p < .001.

A Tukey's HSD post-hoc test was conducted to identify specific differences between groups and identified two particular colleges that stood out from the rest. Library faculty (M = 1.64, SD = 1.120) rated the importance of funding being essential to a research agenda as significantly less important than COLA (M = 3.22, SD = 1.483), p = .021, Engineering (M = 3.8, SD = 1.619), p = .019, SOM (M = 4.41, SD = 1.010), p <.001, and Science (M = 4.13, SD = 1.224), p <.001. On the other side of the spectrum, SOM faculty (M = 4.41, SD = 1.010) rated its importance higher than faculty from ASA (M = 3.04, SD = 1.398), p = .023, CoBus. (M = 2.44, SD = 1.667), p = .013, COLA (M = 3.22, SD = 1.483), p = .008, Education (M = 3.15, SD = 1.438), p = .022, Law (M = 1.75, SD = 1.500), p = .019, and Library (M = 1.64, SD = 1.120), p = <.001.

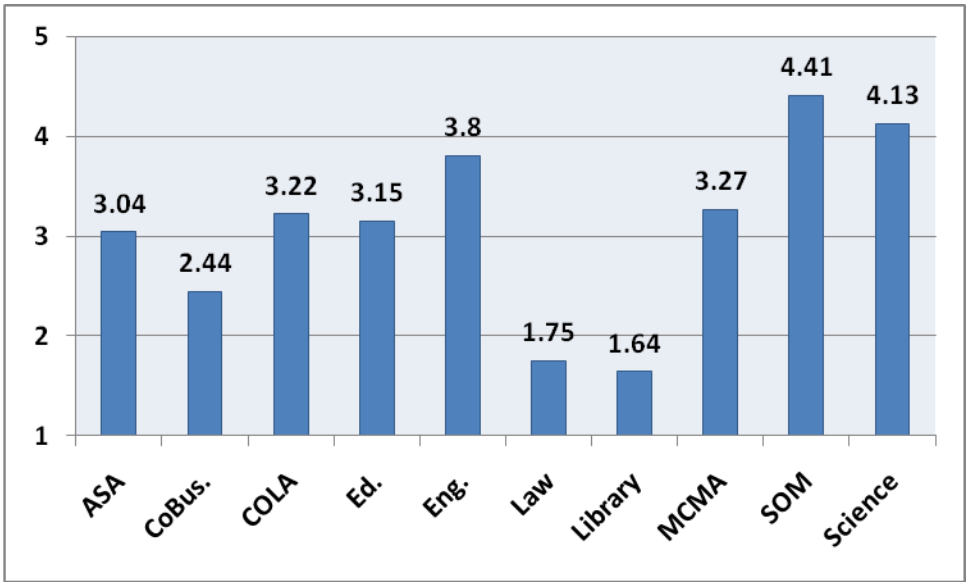

Figure 4.19. **Graph comparing across college on importance of funding being essential to a research agenda as a motivator to seek external funding**

Question 5

During the past five years, have you been funded (as PI/PD or co-PI/PD) by any of the following external sources?

Question 6

During the past five years, have you been awarded (as PI/PD or co-PI/PD) any of the following types of external funding?

Table 5.1. **Sources of external funding and external funding awards**

External funding/awards sources	***Category***	***Percentage of Respondents***
Question 5: External funding sources	Federal	13%
	State	6%
	Industry	4%
	Foundation	4%
	Other	6%
	None	68%
Question 6: External funding awards	Research grant	31%
	Teaching grant	4%
	Fellowship	3%
	Service grant	3%
	Other	4%
	None	55%

Table 5.1. Interpretation: This table indicates that a very small total percentage of respondents reported receiving external sources of funding. Research grants and federal funding were the only two regular sources of external funding that faculty reported receiving, with 31% and 13%, respectively, getting funding from those sources. Participants also listed various other specific sources of funding in the tables below.

Table 5.2. **Open-ended responses for the Question 5 (Sources of external funding)** ***Other*** **category**

Internal
Professional Organizations
American College of Surgeons
visiting fellowships from foreign institutes
family support organizations
Non for profit (Nature Conservancy)
test publisher
international associations
Professional Association
Department
International Body
University
Private Corporation
SIU research support
national council on ed for cer arts
professional organization
in past 5 years, I have 100% assignment as department chair which has limited research and funding quests
Endowed Chair
Institutional - grant for updating our computer lab
non-profit but not a foundation
local service organization
university, professional organization
at previous university and in professional art life received multiple grants
Internal Seed Grant
International Grant
fellowship at a private university
NSF
SIU
I was funded at another university
Community based not for profit agencies
internal to SIUC
self-financed & sabbatical
Foreign governments, small businesses
none
Polish government stipend
university
Internal
SIUC seed grant
National Geographic Society
Private donations

Table 5.2. Interpretation: While the respondents reported a variety of different sources of external funding, some categories are constructed to allow some generalization and better understanding of external funding. The three largest categories of respondents reported being funded 1) internally by a university (*N* = 14), most of whom received funding from SIUC; 2) by some form of professional organization or association to which the respondents may belong (*N* = 8); and 3) internationally, be it from international organizations, associations, or foreign governments. The other categories were less prominent and include: personal (*N* = 3), non-for-profit (*N* = 3), departmental (*N* = 3), and private corporations (*N* = 3) categories.

Table 5.3. **Open-ended responses for the Question 6 (Sources of external funding awards) *Other* Category**

travel grant
Department
Consulting fees
Research Support in kind
Instrumentation Grant
Professional Development by Adobe
Endowed Chair
Computer lab upgrades - technology grant
materials funding
Think tank support (salary and other)
Awards
International development Grant
Infrastructure grant for new lab facilities
NSF, three years
Contract for evaluation services
State grant
none
equipment
Hosted a foreign exchange student.
Gifts in Kind
proceeding grant
SIUC seed grant

Table 5.3. Interpretation: Regarding external funding awards, most awards come in form of different grants (*N* = 7), which is followed by less numerous departmental (*N* = 2), evaluation and consulting sources (*N* = 2), and other (*N* = 10). In summary, as far as *Other* sources of external funding and external funding awards are concerned, internal sources (e.g., university) and grants are the most frequent sources listed.

Question 7

If you have NOT had any external funding support during the past five years, what is/are the reason(s)?

Table 6.1. **Reasons for lack of external funding**

Item	***Percentage of Respondents***
I do not need external funding to do my research	20%
Limited external funds are available in my field of study	33%
I applied for external funding, but proposal(s) was/were unsuccessful	25%
I am in-between projects	2%
I did not have time to write proposals	8%
The proposal process is too difficult to navigate	0%
Sufficient support is available on campus	0%
Other	12%

Table 6.1 Interpretation: Respondents were very clear about reasons for a lack of external research support. Three identified items stood out most clearly, *I do not need external funding to do my research*, *Limited external funds are available in my field of study*, and *I applied for external funding, but proposals were unsuccessful*. Virtually none of the other items were indicated as limits for research funding. Participants also indicated multiple *Other* reasons why funding was not obtained (Table 7.2.). Two consistently mentioned reasons were a lack of support on campus and being a new faculty member.

Note that the frequencies in Table 7.1. were derived based on a fraction of the respondents for whom the listed options were applicable. A majority of the respondents (85%), however, did not find any of these options relevant and chose not to reply.

Table 6.2. **Open-ended responses for the Question 7 (Reasons for lack of external funding)** ***Other*** **category**

family support organization funding assists my research
Seeking external grants is not typical nor an expectation in Business Schools
First faculty job, new faculty
There is very little coordinated support for anything arts related in ORDA
There is no support on campus for my research. There is also little time for me to do the research that I do. My department/school and our dean is not supportive nor do they understand my research. Unlike my male colleagues who only have to teach 1 or 2 classes.
An unsupported administrative assignment buried me in endless tedious clerical chores. A waste of a PhD- never again!
Insufficient institutional support for my college
first year at SIUC
New faculty - will be applying once pilot data collected
This is only my second year, and I have proposals submitted.
I moved to administration, and my research program is on the back burner.
No Incentive for the hard work
No campus support
Little reward or pressure for writing grants
Most of your questions are not geared to the humanities: we don't need a lot of funds to do our work. And there aren't a lot of external funds available.
I have received funding, but grants are not essential for my research.
our research project in the library and arts are not seen in the eyes of many of the grants of campus. It's a shame because our research is just as important
I am a new faculty navigating my way into the system. spent time on the SEED grant and was unsuccessful. Have applied externally since
In first year as professor, worked on others' grants as grad student
I would not have time to manage a grant if I got one.
I have had external funding
need grant writing assistance
Do you mean "insufficient" support above? I would check that. My department had a part-time grant facilitator for a time, which was most helpful.
Just started tenure-track position
new faculty: started in spring 2009
Just began as an assistant professor. My dissertation work was related to my teaching position at a university in China, so in that regard the university funded my research.

Table 6.2. Interpretation: The table contains most frequently mentioned *Other* reasons for not receiving any external funding during the past five years. Most respondents (*N* = 9) said they are new faculty members who are, presumably, still setting into the system. Second largest reason for not having been externally funded is the lack of institutional-administrative support and incentive (*N* = 6). The rest of the responses (*N* = 11) include reasons such as lack of time, lack of recognition for certain types of research, and not having a need or skills to write grants.

Question 8

Do you feel that your research activities are valued…

Table 7.1. **Research activity valuation**

Level	*M*	*SD*	*No*	*Somewhat*	*Yes*
Question 8.1: In your department or center?	2.44	0.71	13%	30%	57%
Question 8.2: In your college?	2.43	0.70	12%	33%	55%
Question 8.3: By the administration?	2.08	0.74	24%	45%	31%
Question 8.4: On the campus?	1.98	0.71	27%	49%	24%
Question 8.5: By your students?	2.26	0.74	18%	38%	44%

Table 7.1 Interpretation: A majority of faculty reported that their research activities are valued at the department (*M* = 2.44, *SD* = .71) and college (*M* = 2.43, *SD* = .70) level, but fewer indicated that their research activities were valued at the administrative (*M* = 2.08, *SD* = .74) and campus (*M* = 1.98, *SD* = .71) levels. Roughly 25% of respondents felt their research activities were not valued by the administration or on campus. This may suggest a positive climate towards research in more narrow scopes, but also that research is considered less valued in the broader scope on campus.

Table 7.2. **ANOVA comparing across ranks on departmental perceptions of value**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	3.645	2	3.634	.028
Error	158.977	317		

Table 7.2 Interpretation: This ANOVA was used to see if faculty members believe their departments value their research differently based on rank (question 8.1). Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members viewed research activity valuation by their department differently. The ANOVA revealed that there were significant differences in perceptions of value based on the rank of the faculty member, F (2, 317) = 3.634, p = .028.

A Tukey's HSD post-hoc test was conducted to identify which specific ranks were significantly different from one another. Assistant Professors (M = 2.30, SD = .736) felt that their departments valued their research significantly less than did Professors (M = 2.56, SD = .647), p = .020. No other statistically significant differences between ranks were found.

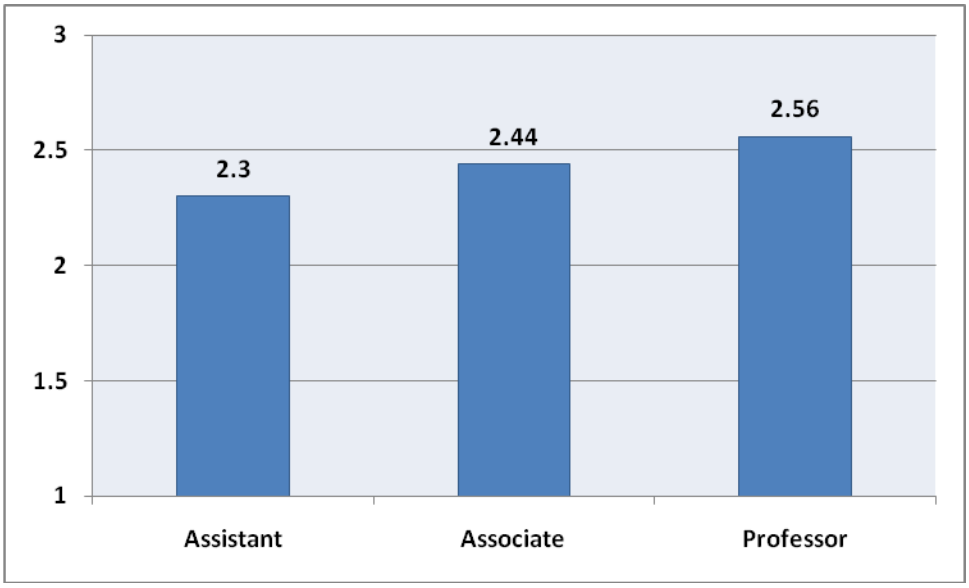

Figure 7.2. **Graph comparing across ranks on departmental perceptions of value**

Table 7.3. **ANOVA comparing across college of appointment on departmental perceptions of value**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	6.191	10	1.228	.272
Error	157.258	312		

Table 7.3 Interpretation: This ANOVA was used to see if faculty members from different colleges believe their departments value their research differently (question 8.1). Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed research activity valuation by their department differently. The ANOVA revealed that there were no statistically significant differences in perceptions of value based on the college appointment of the faculty member, F (10, 312) = 1.228, p = .272. No post-hoc tests were conducted because no significant differences existed.

This result suggests that faculty members view research activity valuation by their respective departments similarly, with no statistically significant differences between faculty views across different colleges.

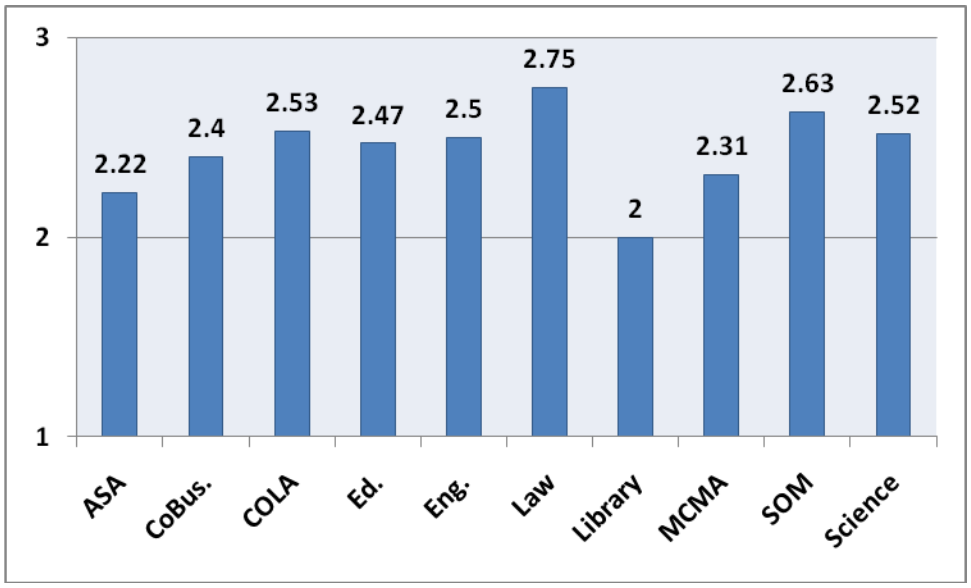

Figure 7.3. **Graph comparing across college of appointment on departmental perceptions of value**

Table 7.4. T-test comparing across external funding reception on departmental perceptions of value

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Department perceptions	2.48	2.39	321	1.199	.232

Table 7.4 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not on their views on how departments view the value of research (question 8.1). The t-test suggests that there were no statistically significant differences in perceptions of value based on the external funding reception of the faculty member, $t(321) = 1.199$, $p = .232$.

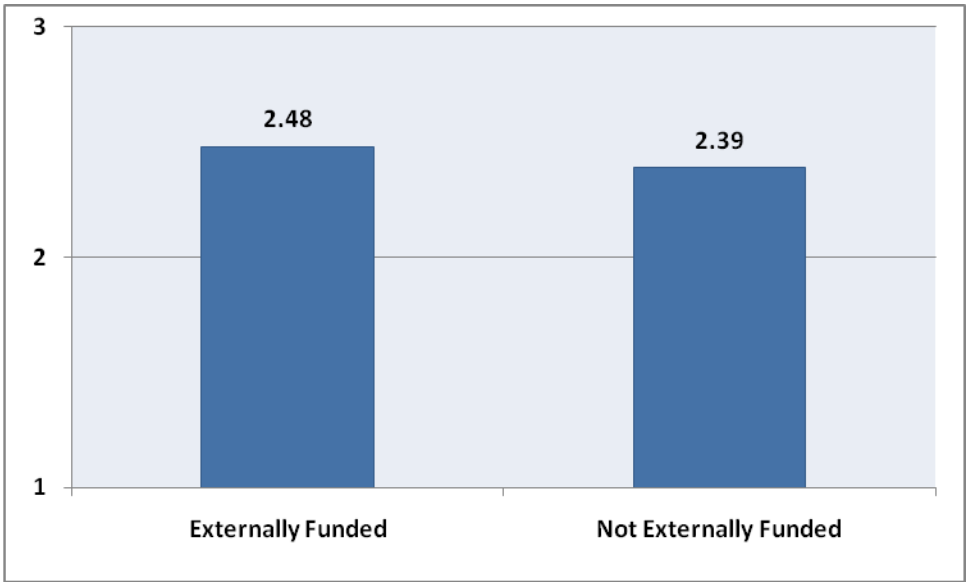

Figure 7.4. **Graph comparing across external funding reception on departmental perceptions of value**

Table 7.5. **ANOVA comparing across ranks on college perceptions of value**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	.721	2	.741	.477
Error	153.712	316		

Table 7.5 Interpretation: This ANOVA was used to see if faculty members of different ranks believe their colleges value their research uniquely (question 8.2). Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members viewed research activity valuation by their college. The ANOVA revealed that there were no statistically significant differences between faculty members of different ranks in perceptions of research activity valuation at the college level, F (2, 316) = .741, p = .477. No post-hoc tests were conducted because no significant differences existed.

This result suggests that faculty members view research activity valuation by their respective colleges the same, regardless of personal rank. Neither Associate nor Assistant level professors feel under-valued by their college in comparison to Professor level faculty members.

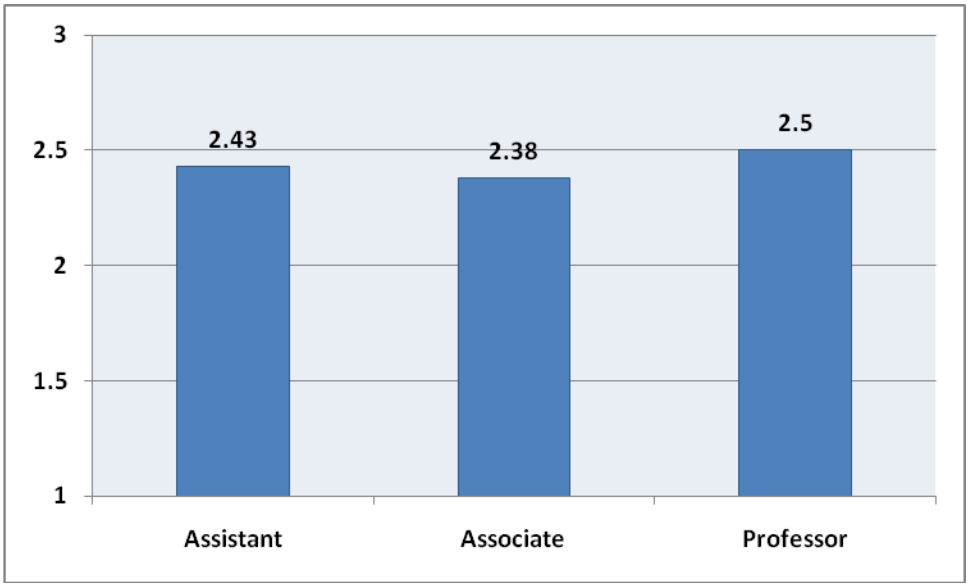

Figure 7.5. **Graph comparing across ranks on college perceptions of value**

Table 7.6. **ANOVA comparing across college of appointment on college perceptions of value**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	7.141	10	1.501	.138
Error	147.990	311		

Table 7.6 Interpretation: This ANOVA was conducted to compare faculty members from separate colleges on the value their respective college places on faculty research (question 8.2). Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed research activity valuation by their college differently. The ANOVA revealed that there were no statistically significant differences in perceptions of value based on the college appointment of the faculty member, F (10, 311) = 1.501, p = .138. No post-hoc tests were conducted because no significant differences existed.

This result suggests that colleges across campus all value the research conducted by their faculty similarly, as no faculty members from specific colleges reported that their research was under-valued compared to those from other colleges.

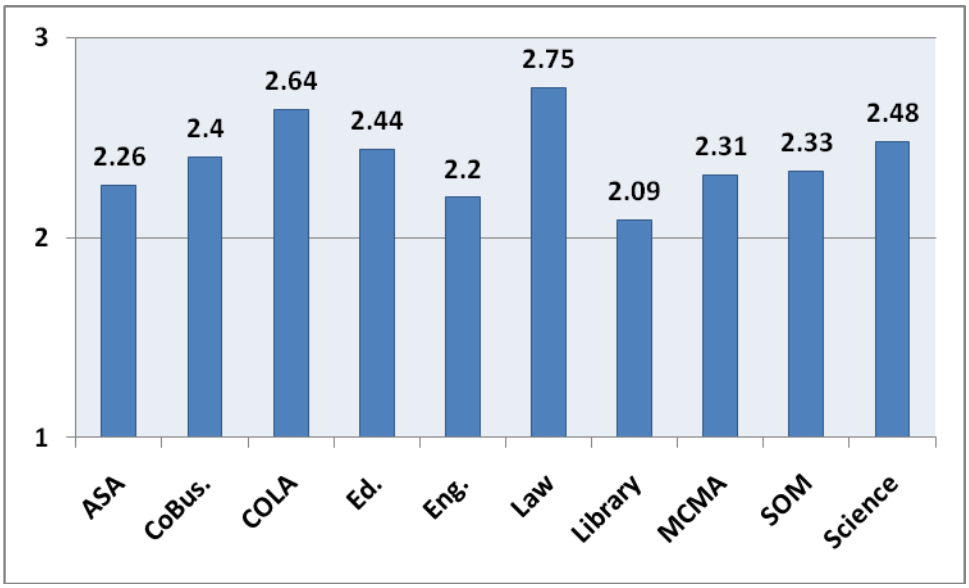

Figure 7.6. **Graph comparing across college of appointment on college perceptions of value**

Table 7.7. T-test comparing across external funding reception on college perceptions of value

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
College perceptions	2.45	2.42	320	.314	.754

Table 7.7 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on how colleges view the value of research (question 8.2). The t-test suggests that there were no statistically significant differences in perceptions of value based on the external funding reception of the faculty member, $t(320) = .314$, $p = .754$.

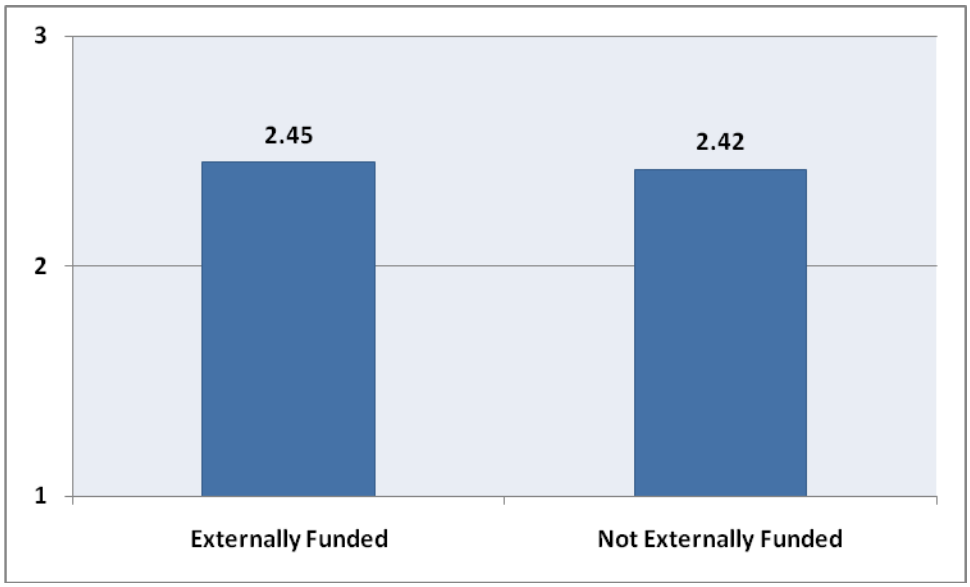

Figure 7.7. **Graph comparing across external funding reception on college perceptions of value**

Table 7.8. **ANOVA comparing across ranks on administrative perceptions of value**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	1.071	2	.987	.374
Error	171.986	317		

Table 7.8 Interpretation: This ANOVA was used to see if faculty members of different ranks believe the administration values their research in different ways (question 8.3). Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to compare how faculty members view research activity valuation by administration. The ANOVA revealed that there were no statistically significant differences between faculty members of different ranks in perceptions of research activity valuation at the administrative level, F (2, 316) = .741, p = .477. No post-hoc tests were conducted because no significant differences existed.

The results of this ANOVA suggest that faculty members feel the administration values faculty research consistently, without consideration for the faculty member's rank.

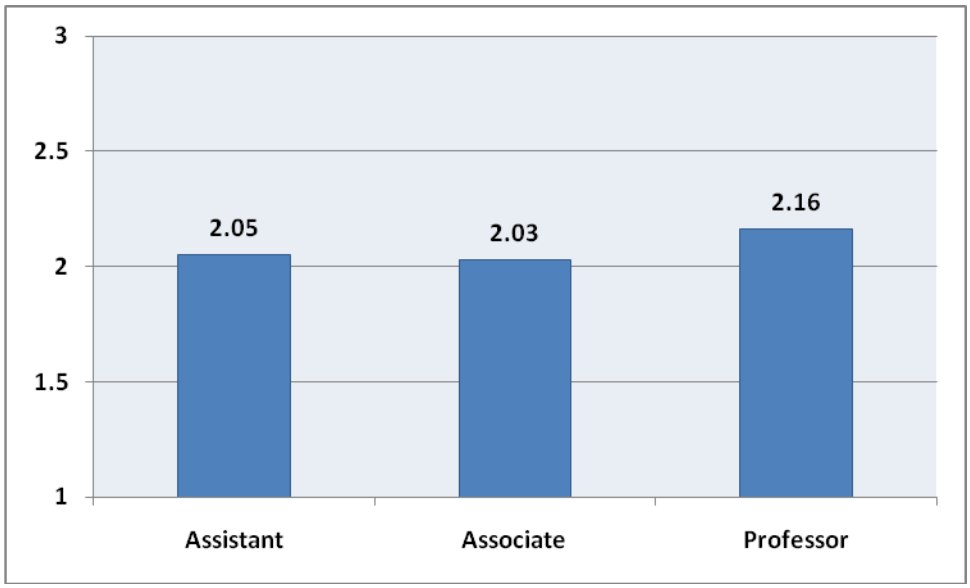

Figure 7.8. **Graph comparing across ranks on administrative perceptions of value**

Table 7.9. **ANOVA comparing across college of appointment on administrative perceptions of value**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	3.647	10	.664	.758
Error	171.418	312		

Table 7.9 Interpretation: This ANOVA was conducted to compare faculty members from separate colleges on their perceptions of the value that the administration places on their research (question 8.3). Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed research activity valuation by the administration differently. The ANOVA revealed that there were no statistically significant differences in perceptions of value based on the college appointment of the faculty member, F (10, 312) = .664, p = .758. No post-hoc tests were conducted because no significant differences existed.

The results of this ANOVA suggest that the administration values the research conducted by faculty the same, regardless of a faculty's members college of appointment.

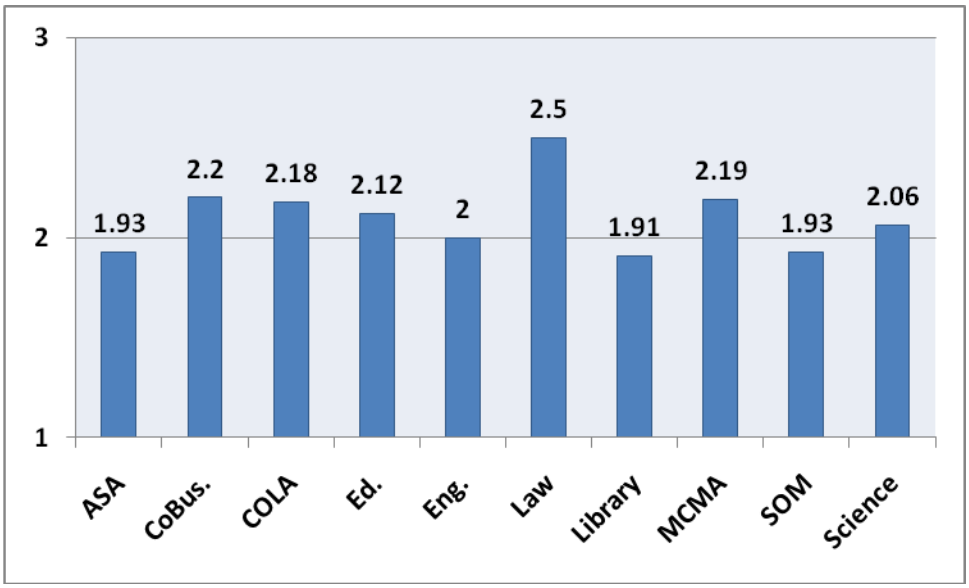

Figure 7.9. **Graph comparing across college of appointment on administrative perceptions of value**

Table 7.10. T-test comparing across external funding reception on administrative perceptions of value

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Administration perceptions	2.04	2.12	321	-.906	.365

Table 7.10 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on how the administration views the value of research (question 8.3). The t-test suggests that there were no statistically significant differences in perceptions of value based on the external funding reception of the faculty member, $t(321) = -.906$, $p = .365$.

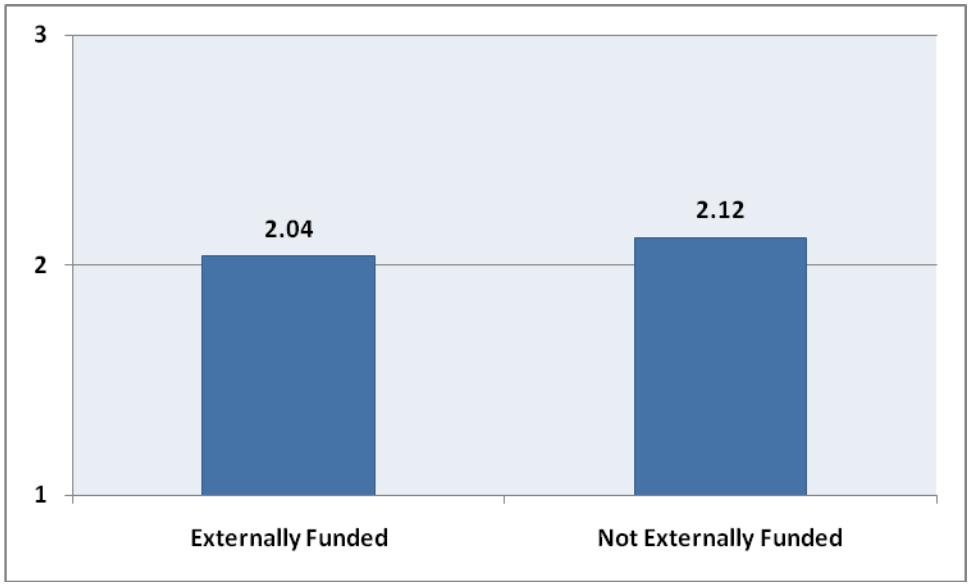

Figure 7.10. **Graph comparing across external funding reception on administrative perceptions of value**

Table 7.11. **ANOVA comparing across ranks on campus perceptions of value**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	2.584	2	2.572	.078
Error	158.262	315		

Table 7.11 Interpretation: This ANOVA was conducted to determine whether subsequent ranks of faculty members believe the campus values their research differently (question 8.4). Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to compare how faculty members view research activity valuation by the campus at large. The ANOVA revealed that there were no statistically significant differences between faculty members of different ranks in perceptions of research activity valuation at the administrative level, F (2, 315) = 2.572, p = .078. No post-hoc tests were conducted because no significant differences existed.

The results of this ANOVA suggest that faculty members believe the campus at large values faculty research consistently, regardless of the rank of the faculty.

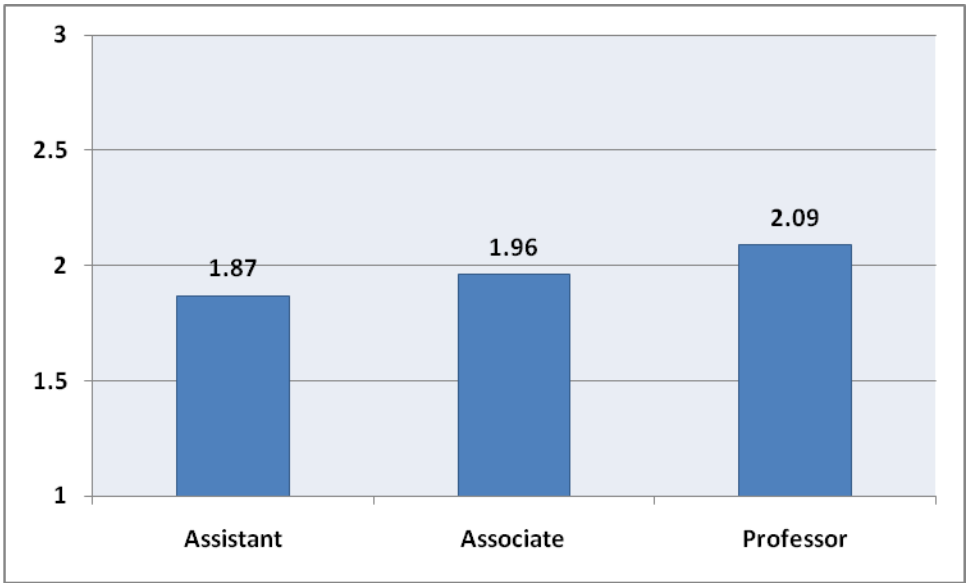

Figure 7.11. **Graph comparing across ranks on campus perceptions of value**

Table 7.12. **ANOVA comparing across college of appointment on campus perceptions of value**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	2.048	10	.395	.949
Error	160.799	310		

Table 7.12 Interpretation: This ANOVA was conducted to compare faculty members from separate colleges on their perceptions of the value that the campus places on their research (question 8.4). Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed research activity valuation by the campus differently. The ANOVA revealed that there were no statistically significant differences in perceptions of value based on the college appointment of the faculty member, F (10, 310) = .395, p = .949. No post-hoc tests were conducted because no significant differences existed.

The results of this ANOVA suggest that although there are small reported differences in how the campus at large values the research conducted by faculty, these values are not different enough to achieve statistical significance. As such, the campus at large views faculty research similarly, no matter the college for which a faculty member is currently working.

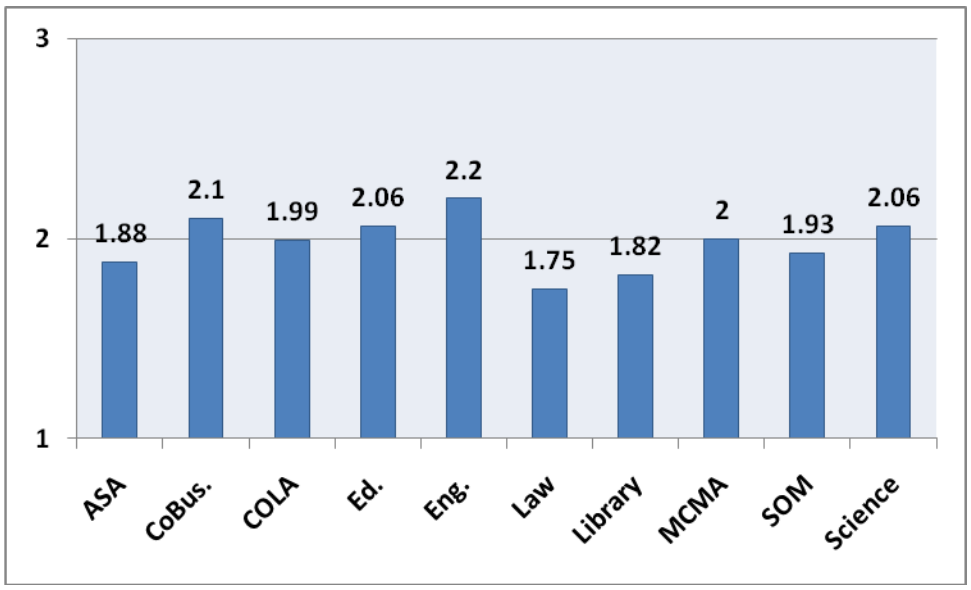

Figure 7.12. **Graph comparing across college of appointment on administrative perceptions of value**

Table 7.13. T-test comparing across external funding reception on campus perceptions of value

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Campus perceptions	1.98	1.97	319	.100	.920

Table 7.13 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on how the 'campus' views the value of research (question 8.4). The t-test suggests that there were no statistically significant differences in perceptions of value based on the external funding reception of the faculty member, $t(319) = .100$, $p = .920$.

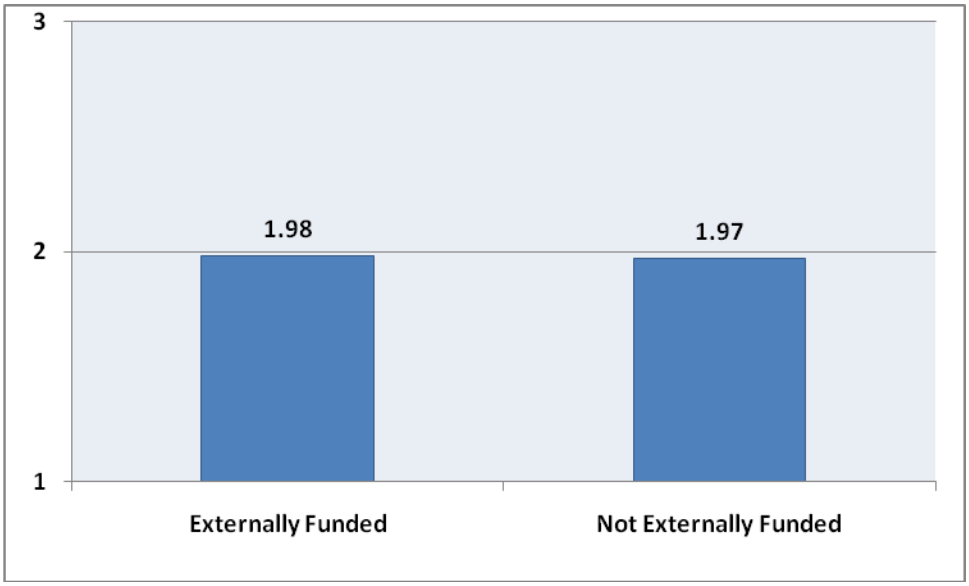

Figure 7.13. **Graph comparing across external funding reception on campus perceptions of value**

Table 7.14. **ANOVA comparing across ranks on student perceptions of value**

Source	*Sum-of-Squares*	*df*	*F*	*p*
Rank	4.216	2	3.870	.022
Error	169.402	311		

Table 7.14 Interpretation: This ANOVA was used to see if faculty members believe their students value their research differently based on rank (question 8.5). Comparisons were made across three faculty member ranks (Associate Professor, Assistant Professor, Professor) to see how those faculty members viewed research activity valuation by their students differently. The ANOVA revealed that there were significant differences in perceptions of value based on the rank of the faculty member, F (2, 311) = 3.870, p = .022.

A Tukey's HSD post-hoc test was conducted to identify which specific ranks were significantly different from one another. Assistant Professors (M = 2.09, SD = .772) felt that their students valued their research significantly less than did Professors (M = 2.35, SD = .721), p = .034. No other statistically significant differences between ranks were found.

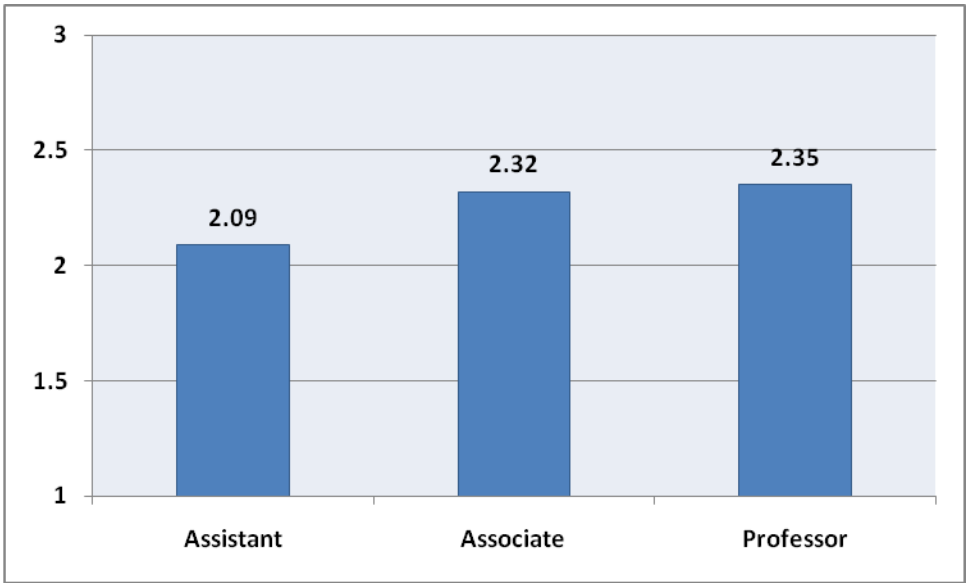

Figure 7.14. **Graph comparing across ranks on student perceptions of value**

Table 7.15. **ANOVA comparing across college of appointment on student perceptions of value**

Source	*Sum-of-Squares*	*df*	*F*	*p*
College of appointment	16.184	10	3.122	.001
Error	158.605	306		

Table 7.15 Interpretation: This ANOVA was conducted to compare faculty members from separate colleges on their perceptions of the value that students place on faculty research (Question 8.5.). Comparisons were made across ten college appointments (Education, MCMA, ASA, Engineering, SOM, CoBus, Law, Science, COLA, and Library) to see how faculty members from each college viewed research activity valuation by students differently. The ANOVA revealed that there were statistically significant differences in perceptions of value based on the college appointment of the faculty member, F (10, 306) = 3.122, p = .001.

A Tukey's HSD post-hoc test was conducted to identify which specific college appointments were significantly different from one another. Faculty from Law (M = 1.75, SD = .500) believed students valued faculty research less than faculty from Science (M = 2.68, SD = .599), p = .010. No other significant differences between colleges of appointment were found. The significant difference between Law and Science faculty suggests that Science students value faculty research much more than do Law students. Changes may need to be implemented to lessen or eliminate this difference.

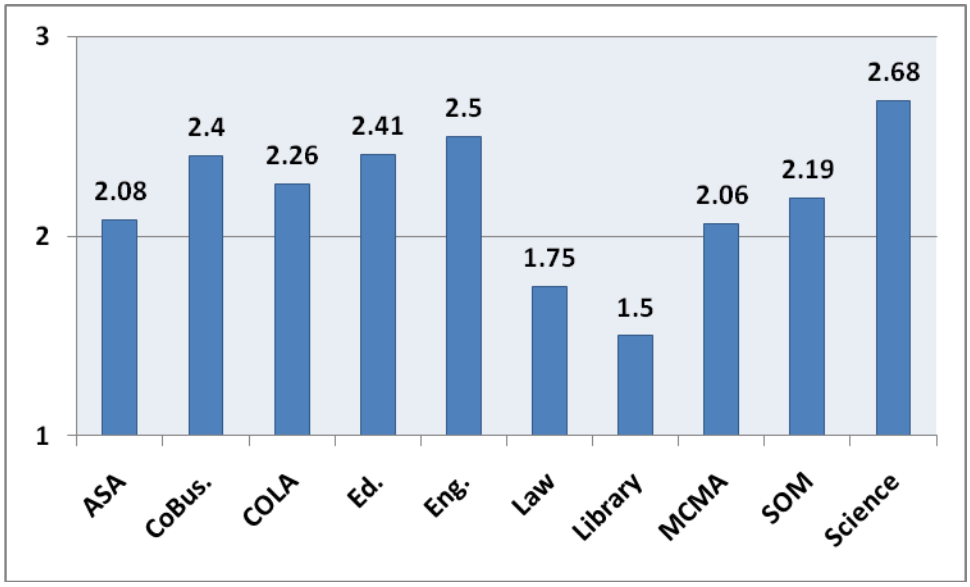

Figure 7.15. **Graph comparing across college of appointment on administrative perceptions of value**

Table 7.16. T-test comparing across external funding reception on student perceptions of value

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Student perceptions	2.32	2.20	315	1.411	.159

Table 7.16 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on how students views the value of research (question 8.5). The t-test suggests that there were no statistically significant differences in perceptions of value based on the external funding reception of the faculty member, $t(315) = 1.411$, $p = .159$.

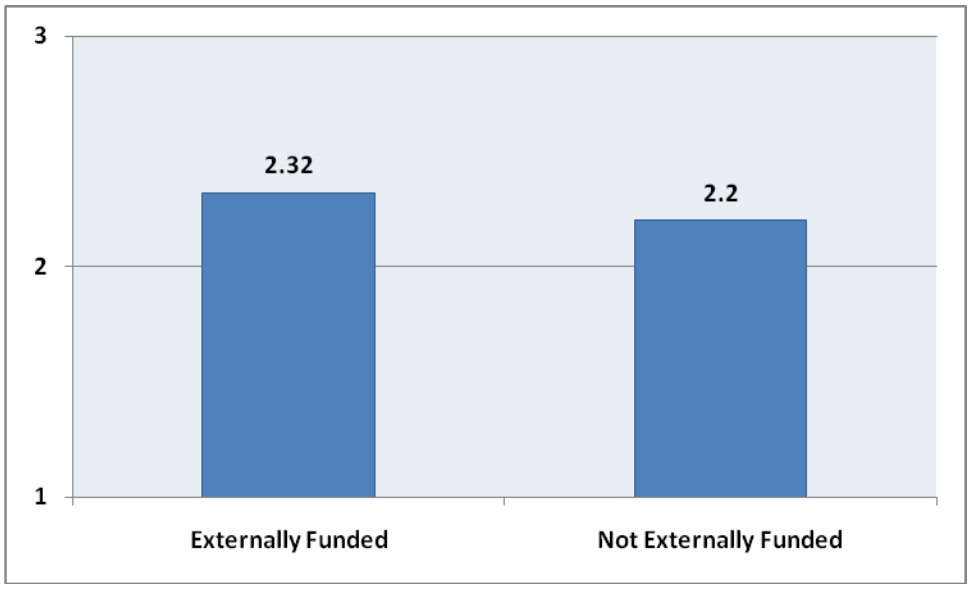

Figure 7.13. **Graph comparing across external funding reception on student perceptions of value**

Question 9

SIUC is a Research University (high research activity) in the Carnegie classification. On a scale from 1 "Too little" to 5 "Too much", how do you evaluate the balance the university places on instructional and research emphases in SIUC's mission?

Table 8.1. **Teaching versus research emphasis**

Emphases	***M***	***SD***	***Too Little***		***Balanced***		***Too Much***
Emphasis on research	3.15	1.12	8%	18%	38%	22%	14%
Emphasis on teaching	2.97	1.14	10%	23%	37%	19%	11%

Table 8.1 Interpretation: These results indicate a good balance between research and instructional emphases in SIUC's mission. A large portion of respondents rated each emphasis as balanced (38%, 37%). Much smaller percentages indicated too much or too little emphasis on either research or teaching.

Table 8.2. T-test comparing across external funding reception on the balance between research and teaching emphases

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Research emphasis	2.90	3.42	315	-4.232	.000

Table 8.2 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on how the university places an emphasis on research (Question 9.1). The t-test suggests that there were statistically significant differences in the way faculty members view this balance, $t(315) = -4.232$, $p < .001$.

Specifically, faculty members who have not been funded by external sources scored the university's focus on research higher than those who have been externally funded. Given the anchors of the scale, ("Too little", and "Too much"), this suggests that faculty members who are not funded believe the university places too much emphasis on research.

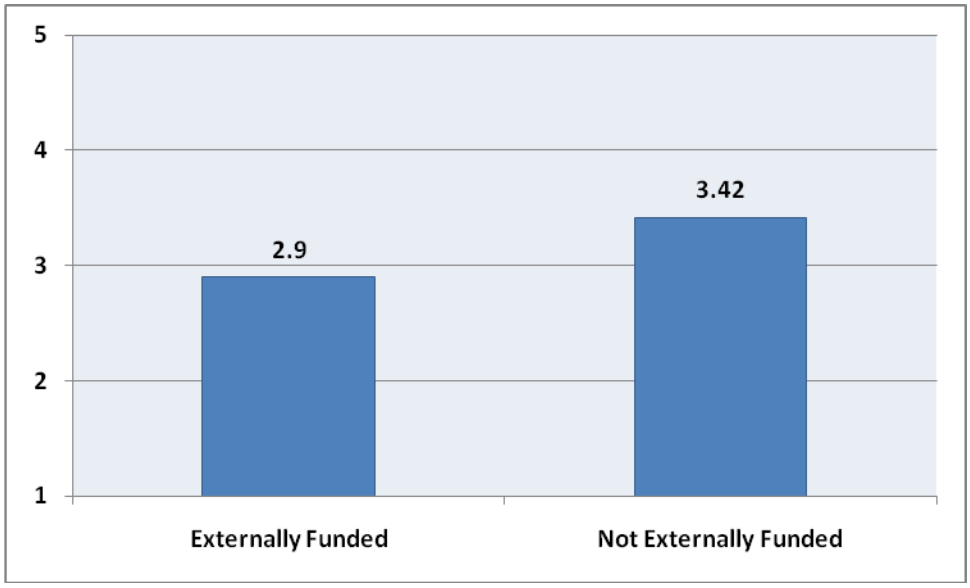

Figure 8.2. **Graph comparing across external funding reception on research emphasis**

Table 8.3. T-test comparing across external funding reception on the balance between research and teaching emphases

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Teaching emphasis	3.22	2.70	319	4.135	.000

Table 8.3 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on how the university places an emphasis on teaching (Question 9.2). The t-test suggests that there were statistically significant differences in the way faculty members view this balance, $t(319) = 4.135$, $p < .001$.

Similarly to the last table, faculty members who have not been funded by external sources scored the university's focus on teaching lower than those who have been externally funded. Faculty members who are funded externally related that the university places too much emphasis on teaching.

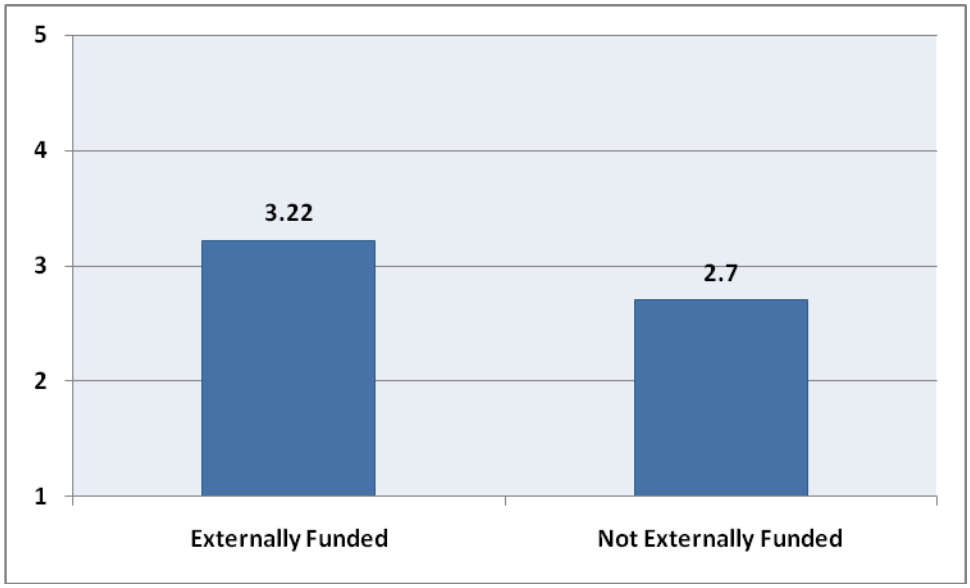

Figure 8.3. **Graph comparing across external funding reception on teaching emphasis**

Question 10

Do you feel that any of the following limits your personal research productivity? If so, rate all that apply from 1 "Least limiting" to 5 "Most limiting".

Table 9.1. **Limitations to research productivity**

Limits	*M*	*SD*	*Least Limiting*		*Neither*		*Most Limiting*	*N/A*
Too much teaching/advising	3.52	1.29	8%	13%	20%	25%	26%	8%
Too much service/committee work	3.44	1.29	9%	14%	21%	25%	25%	6%
Cumbersome internal procedures (e.g., ORDA, Accounting, Services)	3.33	1.37	12%	14%	19%	20%	23%	12%
Inadequate library resources	2.74	1.39	23%	21%	19%	16%	14%	7%
Inadequate funding for travel	3.65	1.29	9%	9%	18%	27%	30%	7%
Lack of reward systems	3.34	1.38	12%	16%	17%	21%	25%	9%
Inadequate facilities (space, instrumentation)	2.93	1.45	20%	18%	12%	20%	16%	14%
Lack of internal research funding mechanisms	3.01	1.33	17%	18%	21%	23%	14%	7%
Lack of support for research assistants and post-docs	3.34	1.37	11%	17%	16%	23%	25%	8%
None of the above limit my research productivity	1.80	1.16	7%	1%	3%	0%	1%	88%
Other	4.41	1.08	1%	0%	1%	2%	7%	89%

Table 9.1 Interpretation: Participants rated many of the identified issues as substantial limits to productivity, although none of the scores showed that any single issue was extremely limiting. Three of the most limiting factors identified were *Too much teaching/advising* (*M* = 3.52, *SD* = 1.29), *Too much service/committee work* (*M* = 3.44, *SD* = 1.29), and *Inadequate funding for travel* (*M* = 3.65, *SD* = 1.29). Respondents indicated a fair balance between teaching and research in the previous question, but suggested here that teaching commitments do interfere with research activities. One item which was clearly less limiting than others, *Inadequate library resources* (*M* = 2.74, *SD* = 1.39), demonstrates that the library is supporting research on campus effectively. Respondents also listed numerous specific reasons their research is limited, although no common themes were identified.

Table 9.2. **Open-ended responses for the Question 10 (Limitations to research productivity)** ***Other*** **category**

Research environment, as viewed by funding agencies
Our college does not have an internal research support system such as people to help develop budgets or be able to answer methodology questions - or even how to go about applying for an NIH grant
The profound attrition through line loss had made every non-research aspect of the job more cumbersome and time consuming, dramatically impacting time for research.
Related to advising, I teach in a graduate program with too many graduate students and too few faculty to advise them -- a situation exacerbated by recent faculty attrition and the hiring freeze.
Ability to recruit high quality graduate students and post-docs to SIU-SM
Mentoring Asst and Assoc Profs
Human resources, animal care services, administration and building and grounds support are all essential weak links that undermine any effort to perform serious research at SIU Springfield
Too much competition for too few dollars. Also, too much time spent on doctoral students
Lack of effective mentoring/support in my area for grant preparation
Long processes for purchasing some pieces of equipment significantly slowed down my projects
limited number of potential collaborators
Lack of local colleagues with shared interests.
No accommodation is given for the realities of families.
Small size of overall research limits opportunities for collaboration and access to expertise
Too much clinical time.
Lack of support for dealing with cumbersome external procedures
Lack of even the most basic support for research
Increase graduate assistants and internal funding opportunities
physical plant, expensive and slow
I don't think my research is valued by students or faculty
12 month contract
Performing high quality research is time consuming and financially disadvantageous. In addition, it becomes hard to compete with the private-practice oriented surgeons. There should be a system in place that matches the academic salary portion with the
Devaluing non-mainstream projects
I do not have a program to support my research. I am in a science/teaching college/department. I should be in a performing arts department.
lack of mentoring available at SIU in my field
exorbitant animal per diem costs
crumbling infrastructure
Lack of computer and statistical software support
Inability to accept self funded grad students in Ag
My experience is that the university places FAR too little value on Creative activities vs Research Activities
my program chair in the medical school has very little respect for my research even though I have publication in journals with 20% acceptance rates, am invited to write articles and give presentations nationally & internationally.
inadequate start-up funds
Lack of true collaborative spirit
The staff (no names mentioned) at ORDA are particularly frustrating. Particularly in the MTA and RA department and with grant preparations. In addition, the vivarium and physical plant operations make it extremely difficult to get research done. They seem

Table 9.2. Interpretation: A substantial proportion of *Other* reasons limiting research productivity (*N* = 7) falls into the category dealing with a lack of research support, which manifests itself in forms of the lack of internal research support system, mentoring, and/or helpful staff (e.g., ORDA staff). The second largest category (*N* = 6) entails the lack of time to perform high quality research. The lack of time comes in form of having to do other responsibilities, most conspicuous of which is teaching. The third category (*N* = 5) includes faculty who experienced funding issues, most frequently lack of funded graduate students to help with research. Lack of both the supportive infrastructure (*N* = 4) and collaborators (*N* = 4) were the last two clear categories. The remaining faculty (*N* = 5) provided different reasons not belonging to any distinct category.

Table 9.3. T-test comparing across external funding reception on teaching/advising as a limit to research productivity

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Too much teaching	3.44	3.60	297	-1.060	.290

Table 9.3 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on how teaching and advising limit their research (Question 10.1). The t-test suggests that there were no statistically significant differences in the way faculty members are limited, $t(297) = -1.060$, $p = .290$.

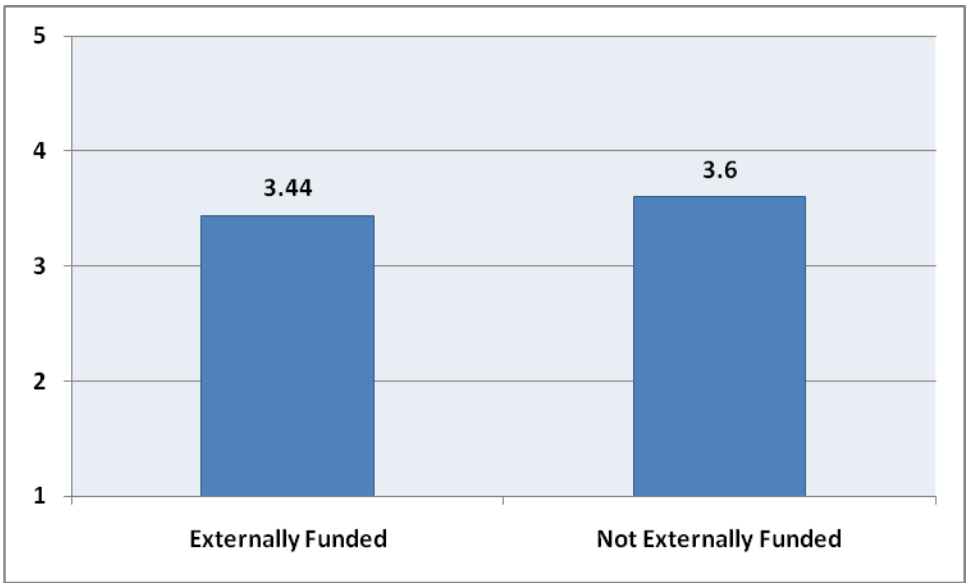

Figure 9.3. **Graph comparing across external funding reception on teaching and advising as a limit to research**

Table 9.4. T-test comparing across external funding reception on service/committee work as a limit to research productivity

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Too much service	3.36	3.52	302	-1.083	.280

Table 9.4 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on how service and committee work limit their research (Question 10.2). The t-test suggests that there were no statistically significant differences in the way faculty members are limited, $t(302) = -1.083$, $p = .290$.

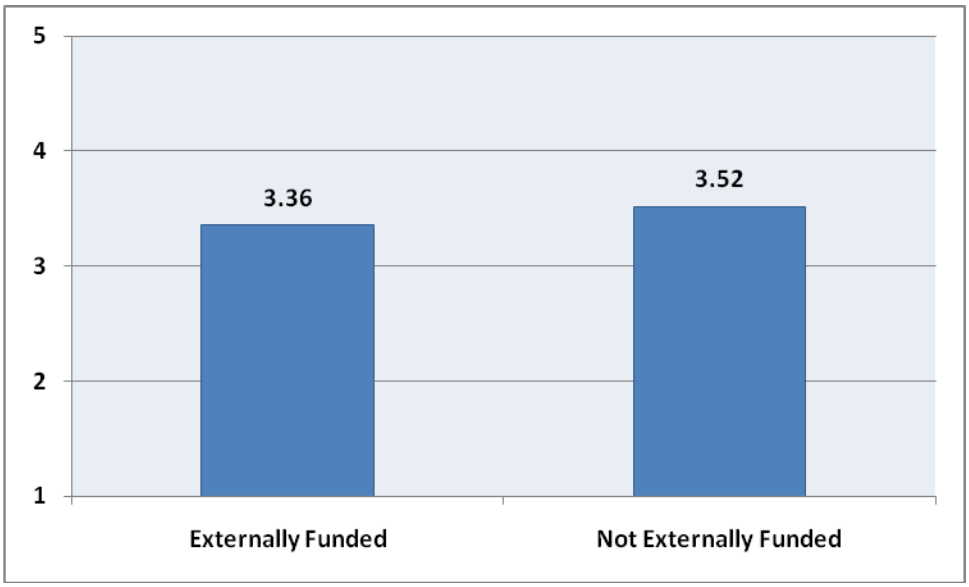

Figure 9.4. **Graph comparing across external funding reception on service and committee work as a limit to research**

Table 9.5. T-test comparing across external funding reception on internal procedures as a limit to research productivity

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Internal procedures	3.40	3.24	284	.975	.330

Table 9.5 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on how cumbersome internal procedures limit their research (Question 10.3). The t-test suggests that there were no statistically significant differences in the way faculty members are limited, $t(284) = .975$, $p = .330$.

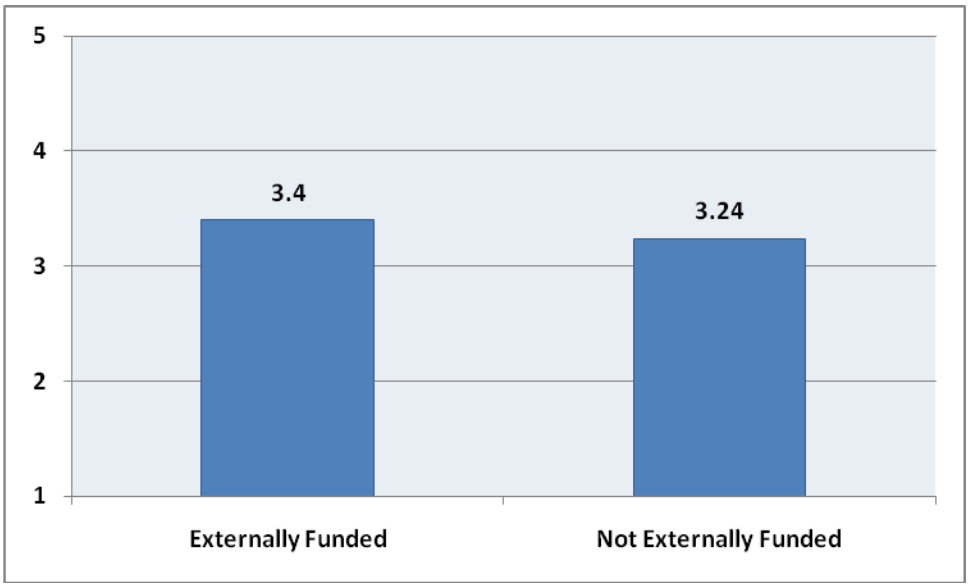

Figure 9.5. **Graph comparing across external funding reception on internal procedures as a limit to research**

Table 9.6. T-test comparing across external funding reception on inadequate library resources as a limit to research productivity

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Library resources	2.90	3.42	298	2.757	.007

Table 9.6 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on how inadequate library resources limit their research (Question 10.4). The t-test suggests that there were statistically significant differences in the way faculty members are limited, $t(298) = 2.757$, $p = .007$.

This t-test suggests that faculty members who have not received external funding believe the library and its inadequate resources is a more limiting factor to research productivity than those who have external funding sources.

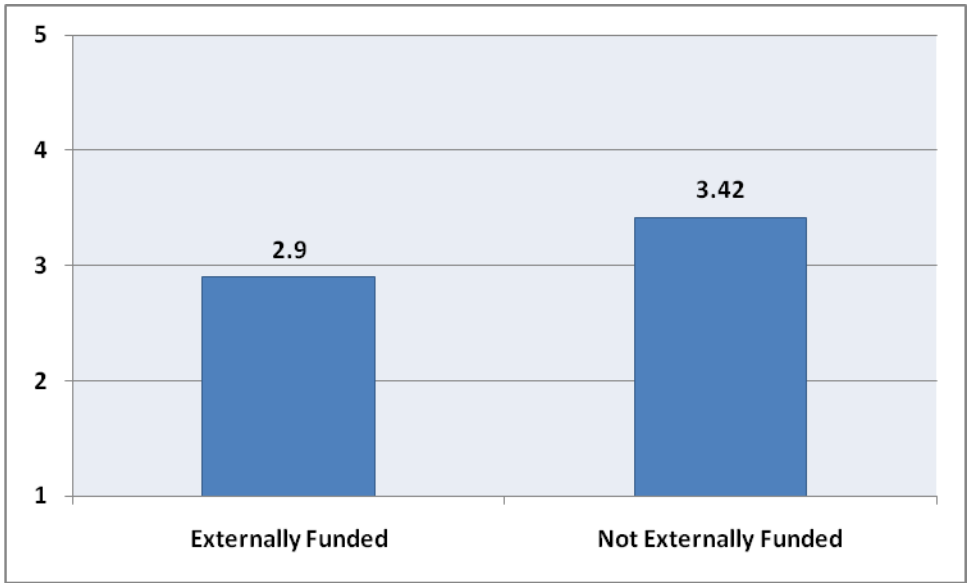

Figure 9.6. **Graph comparing across external funding reception on library resources as a limit to research**

Table 9.7. T-test comparing across external funding reception on inadequate travel funding as a limit to research productivity

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Travel funding	2.74	3.14	301	-2.546	.110

Table 9.7 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on how inadequate travel funding limits their research (Question 10.5). The t-test suggests that there were substantial differences, there no statistically significant differences in the way faculty members are limited, $t(301) = 2.548$, $p = .110$.

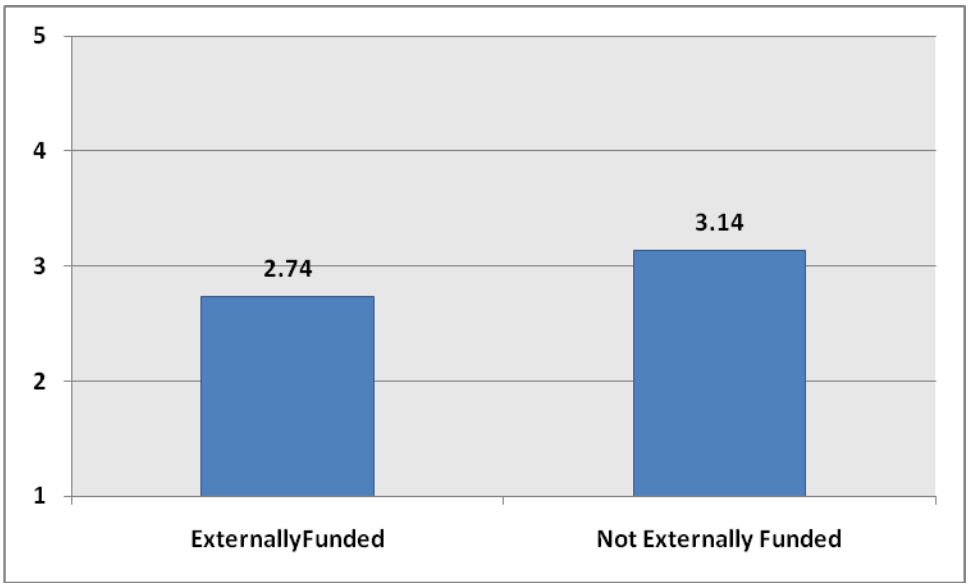

Figure 9.7. **Graph comparing across external funding reception on library resources as a limit to research**

Table 9.8. T-test comparing across external funding reception on a lack of reward systems as a limit to research productivity

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Lack of rewards	3.47	3.84	294	.500	.617

Table 9.8 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on how a lack of reward systems limits their research (Question 10.6). The t-test suggests there were no statistically significant differences in the way faculty members are limited, $t(294) = .500$, $p = .617$.

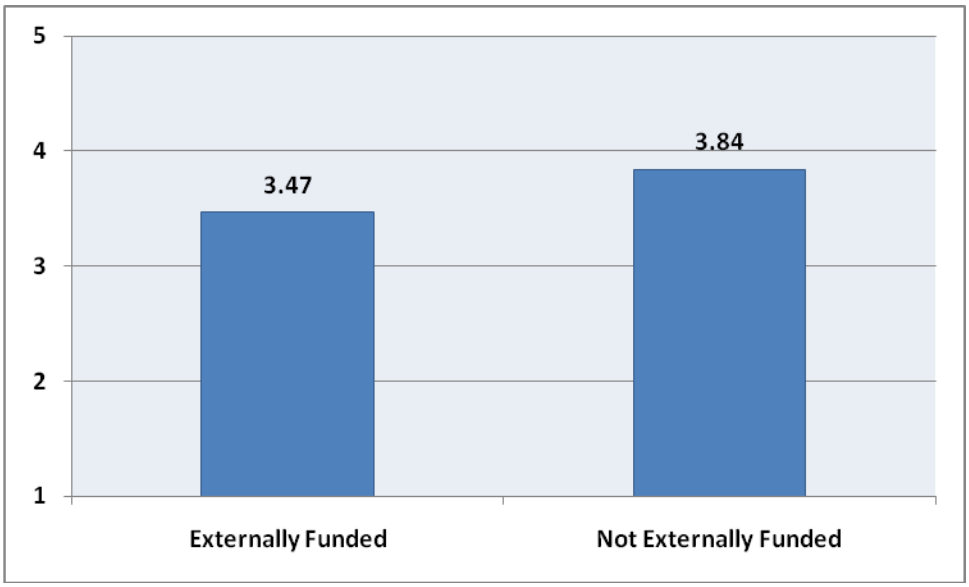

Figure 9.8. **Graph comparing across external funding reception on a lack of reward systems as a limit to research**

Table 9.9. T-test comparing across external funding reception on inadequate facilities as a limit to research productivity

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Inadequate facilities	2.95	2.89	278	.350	.727

Table 9.9 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on how inadequate facilities limit their research (Question 10.7). The t-test suggests there were no statistically significant differences in the way faculty members are limited, $t(278) = .350$, $p = .727$.

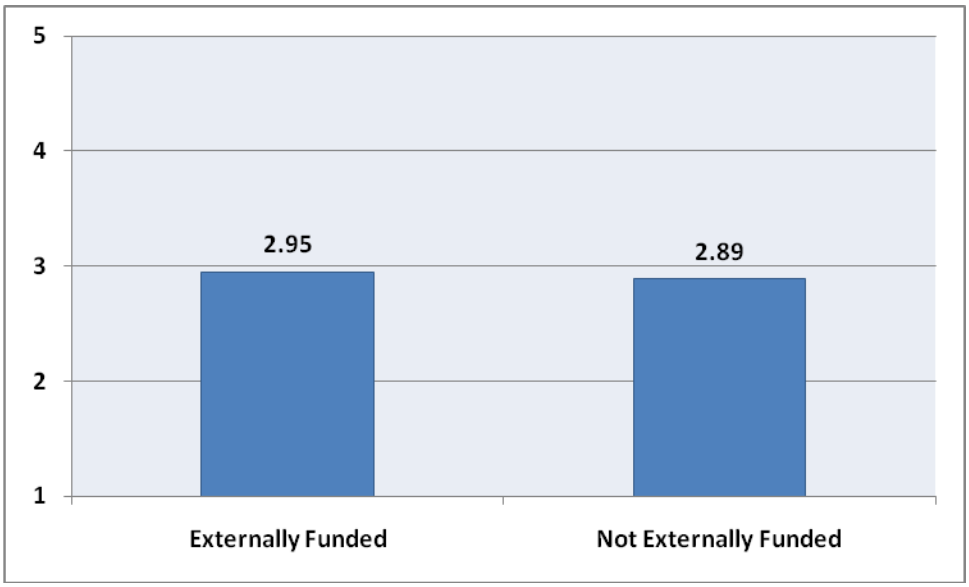

Figure 9.9. **Graph comparing across external funding reception on inadequate facilities as a limit to research**

Table 9.10. T-test comparing across external funding reception on a lack of internal research funding mechanisms as a limit to research productivity

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Internal research funding	3.00	3.02	298	-.137	.891

Table 9.10 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on how a lack of internal research funding mechanisms limit their research (Question 10.8). The t-test suggests there were no statistically significant differences in the way faculty members are limited, $t(298) = -.137$, $p = .891$.

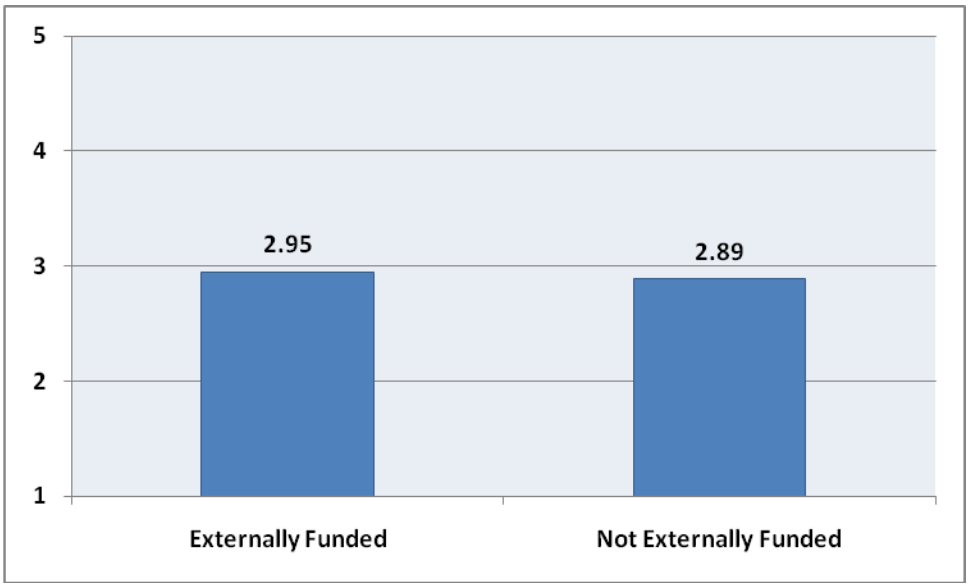

Figure 9.10. **Graph comparing across external funding reception on a lack of internal research funding mechanisms as a limit to research**

Table 9.11. T-test comparing across external funding reception on a lack of support for research assistants and post-docs as a limit to research productivity

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Lack of support	4.12	4.01	295	-.615	.539

Table 9.11 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on how a lack of support for research assistants and post-docs as a limit to their research (Question 10.9). The t-test suggests there were no statistically significant differences in the way faculty members are limited, $t(295) = -.615$, $p = .539$.

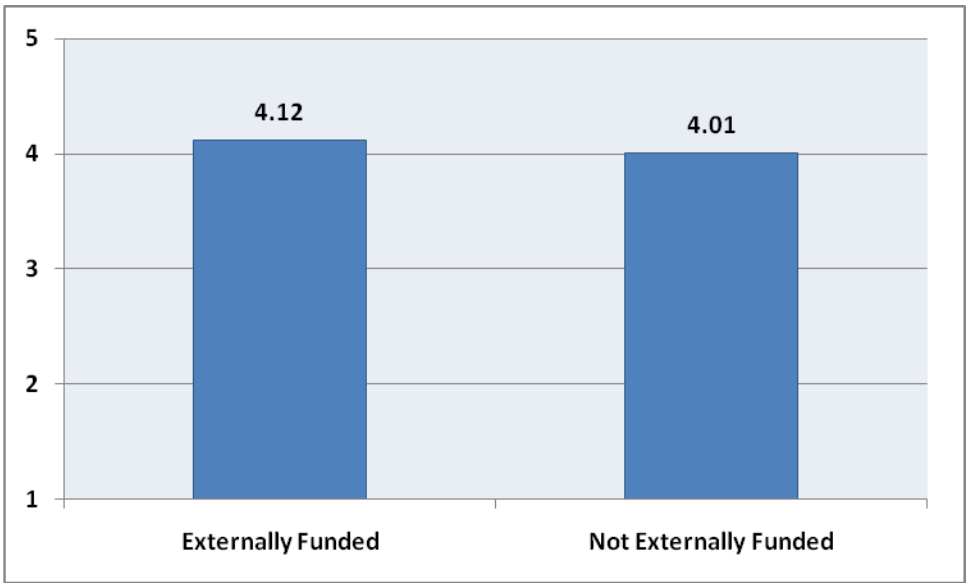

Figure 9.11. **Graph comparing across external funding reception on a lack of support for research assistants and post-docs as a limit to research**

Question 11

Would any of the following internal mechanisms encourage you personally to do more research? If so, rate all that apply from 1 "Least encouraging" to 5 "Most encouraging".

Table 10.1. **Internal mechanisms to encourage research**

Internal Mechanisms	*M*	*SD*	*Least Encouraging*		*Neither*		*Most Encouraging*	*N/A*
Direct financial rewards from the university	3.97	1.25	7%	7%	13%	23%	45%	5%
Release time from teaching	4.26	1.15	4%	5%	10%	19%	56%	6%
More research assistants or post-docs	4.07	1.14	4%	6%	13%	23%	43%	11%
Proposal-writing assistance	3.09	1.45	19%	13%	18%	18%	20%	12%
More workshops on funding opportunities	2.48	1.27	26%	23%	21%	12%	8%	11%
Enhanced web-based communication	2.51	1.32	26%	21%	18%	13%	8%	14%
Improved internal grants management software	2.70	1.44	25%	16%	17%	13%	13%	16%
None of the above would encourage me to do more research	2.50	1.69	6%	1%	2%	0%	3%	88%
Other	4.48	1.27	1%	0%	0%	0%	8%	91%

Question 10.1. Interpretation: Three internal mechanisms were particularly salient to faculty members as factors which would encourage them to do more research, *Direct financial rewards from the university* (*M* = 3.97, *SD* = 1.25), *Release time from teaching* (*M* = 4.26, *SD* = 1.15), and *More research assistants or post-docs* (*M* = 4.07, *SD* = 1.14). These three mechanisms could be focused on in order to improve faculty research productivity, whereas *Other* factors listed in the survey were less important to respondents. One consistent mechanism emerged, however; there are various problems with ORDA (e.g., the ORDA staff should be more helpful).

Table 10.2. **Open-ended responses for the Question 11 (Internal mechanisms to encourage research) *Other* category**

Mentoring from other disciplines would be extremely helpful
Despite its rhetoric, the university does not support creative activity as research; at a faculty seed grant session, Pru Rice and other presenters paid only minimal attention to the arts.
A recognition by ORDA and other administrative bodies on this campus that scholarship comes in many forms and that there is not a one size fits all way to recognize scholarship and creative activity. I feel the sciences get the most rewards and attention
release from service
I found the research assistance from ORDA to be disappointing. The last time I requested assistance to find grants pertinent to my field. The ORDA representatives duplicated the list of funding sources I gave them so they would know what not to include.
ORDA is a joke. I have colleagues at other university who have their grants written by ORDA-like offices. I can't even get them to answer simple questions about timelines and submission procedures.
More access to journals. More core facilities.
other externally funded faculty
Evidence, by administration, of actual interest in scholarly activity (apart from $$$ brought in).
Its discouraging to see that those with the largest salaries do the least research. Researchers never get comparable increases in base salary for their accomplishments without a competing job offer. In addition we need mechanisms to obtain summer salary.
Being able to do research along a more reasonable timetable.
more support staff to manage department responsibilities
Better merit system - larger raises for research productivity.
recognition within my college / department for research
wireless internet connections throughout the campus
Too many road block from persons who don't understand research.
Value placed on FUNDED research by College
Information technology is inefficient, slow, and has inadequate band width for manuscript drafts and data, particularly web mail
help from ORDA with budgets and submission
Improved support at ORDA would have encouraged me to continue grant writing. It may be better now, but six years ago when I last wrote a grant, my co-PI and I were treated with disrespect and made to sit and wait great lengths of time for signatures when
reliable accounting services providing ACCURATE and up to date budgetary information in a user friendly format
Higher public awareness of the importance of research, with funds available to promote physicians who are actively participating in clinical studies to improve patient outcomes. We need to advocate a campaign that ties in hand in had patient outcomes and r.
supportive atmosphere for interdisciplinary work
More colleagues with which to collaborate
updated computers/software
Increased computer and statistical support
more travel funding for conferences
vision by administration
Going paperless
Looking for grant opportunities and deadline to complete the proposal
more graduate students who want to work in my field (they are not coming to SIUC)
Better and more helpful ORDA staff!!!!!!!!!!

Table 10. 2. Interpretation: Once again, most faculty members (*N* = 10) mentioned that more supportive administration (e.g., more responsive and helpful ORDA) would provide an internal mechanism to encourage research. More specifically, faculty seek from administration a greater recognition for their research, more respect, and help with administrative protocols. A closely related category encompasses a need for a greater awareness and valuing of research in general. For these respondents (*N* = 5), being recognized by their departments, seeing more interdisciplinary collaboration, and getting a better support for creativity would be encouraging. The next most encouraging internal mechanism can be instituted by providing better information technology as respondents in this category (*N* = 4) expressed frustrations with computers and internet connection. Finally, higher salaries and better funding (*N* = 3), more graduate students and colleagues (*N* = 3), more time to do research (*N* = 3), and other (*N* = 3) would also create internal mechanisms to encourage more research.

Table 10.3. T-test comparing across external funding reception on direct financial rewards from the university asan encouraging factor for research

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Direct financial rewards	3.92	3.99	305	-.072	.943

Table 10.3 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on direct financial rewards from the university as encouragement for research (Question 11.1). The t-test suggests there were no statistically significant differences in the way faculty members are encouraged, $t(305) = -.072$, $p = .943$.

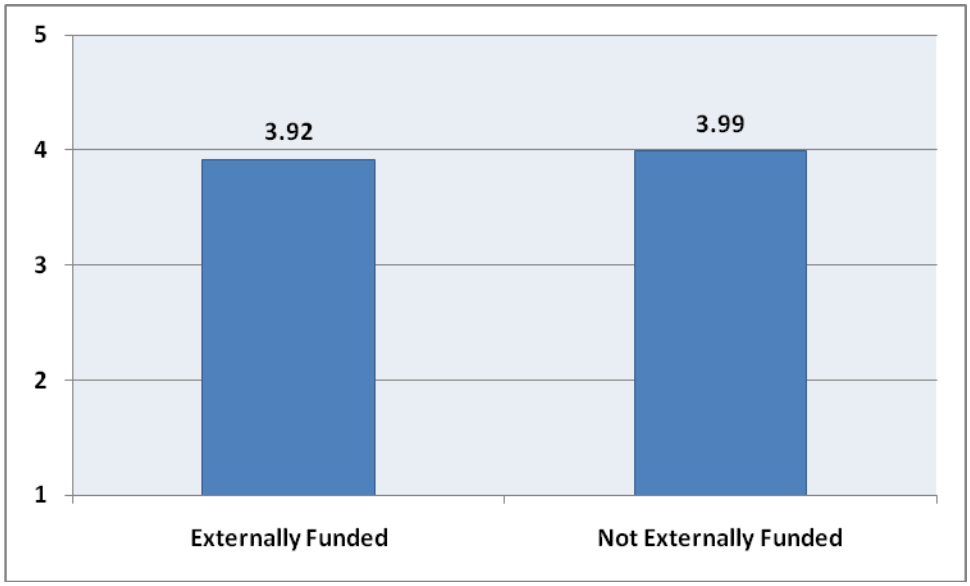

Figure 10.3. **Graph comparing across external funding reception on a direct financial rewards as encouragement for research**

Table 10.4. T-test comparing across external funding reception on release time from teaching as an encouraging factor for research

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Release time	4.22	3.99	303	1.085	.279

Table 10.4 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on release time from teaching as encouragement for research (Question 11.2). The t-test suggests there were no statistically significant differences in the way faculty members are encouraged, $t(303) = 1.085$, $p = .279$.

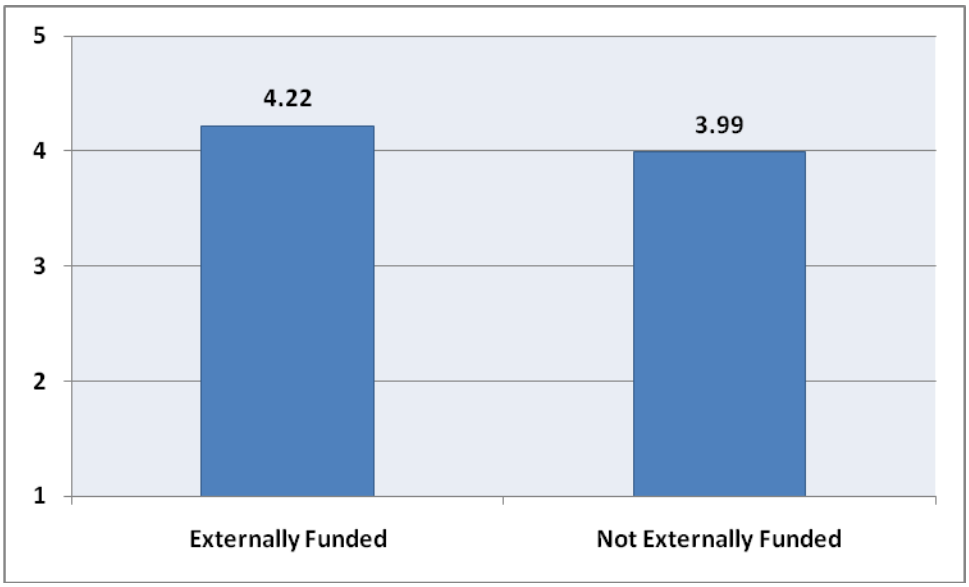

Figure 10.4. **Graph comparing across external funding reception on release time from teaching as encouragement for research**

Table 10.5. T-test comparing across external funding reception on having more research assistants or post-docs as an encouraging factor for research

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Research Assistants/post-docs	4.12	4.01	288	.812	.418

Table 10.5 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on having more research assistants or post-docs as encouragement for research (Question 11.3). The t-test suggests there were no statistically significant differences in the way faculty members are encouraged, $t(288) = .812$, $p = .418$.

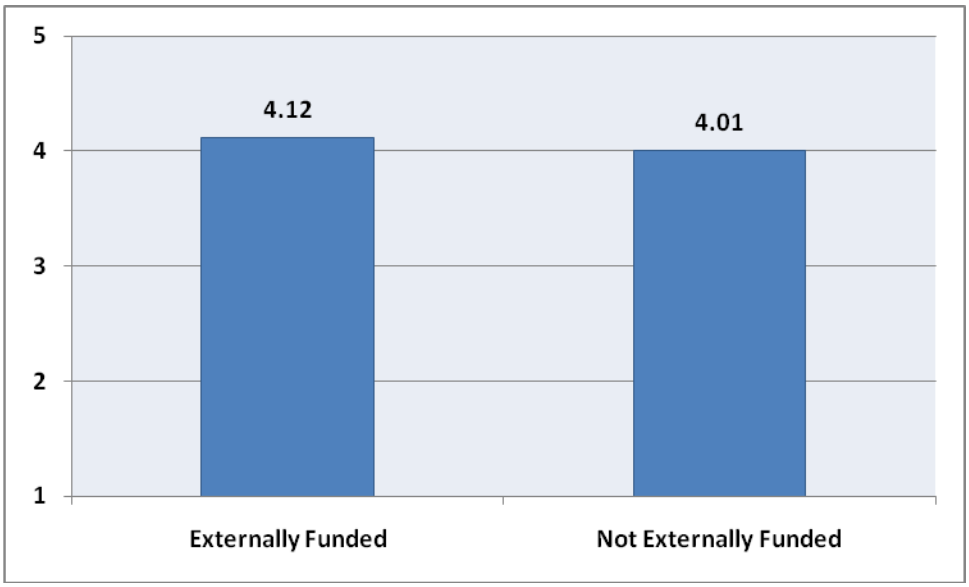

Figure 10.5. **Graph comparing across external funding reception on having more research assistants/post-docs as encouragement for research**

Table 10.6. T-test comparing across external funding reception on having proposal writing assistance as an encouraging factor for research

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Proposal writing assistance	2.99	3.20	284	-1.212	.227

Table 10.6 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on proposal writing assistance as encouragement for research (Question 11.4). The t-test suggests there were no statistically significant differences in the way faculty members are encouraged, $t(284) = -1.212$, $p = .227$.

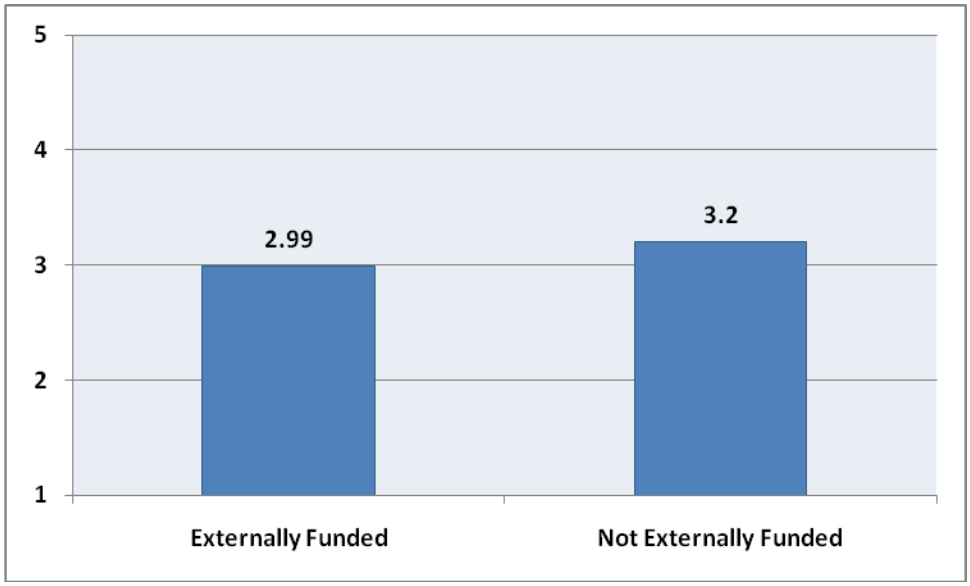

Figure 10.6. **Graph comparing across external funding reception on proposal writing assistance as encouragement for research**

Table 10.7. T-test comparing across external funding reception on having more workshops on funding opportunities as an encouraging factor for research

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Funding workshops	2.44	2.52	288	-.532	.595

Table 10.7 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on having more workshops on funding opportunities as encouragement for research (Question 11.5). The t-test suggests there were no statistically significant differences in the way faculty members are encouraged, $t(288) = -.532$, $p = .595$.

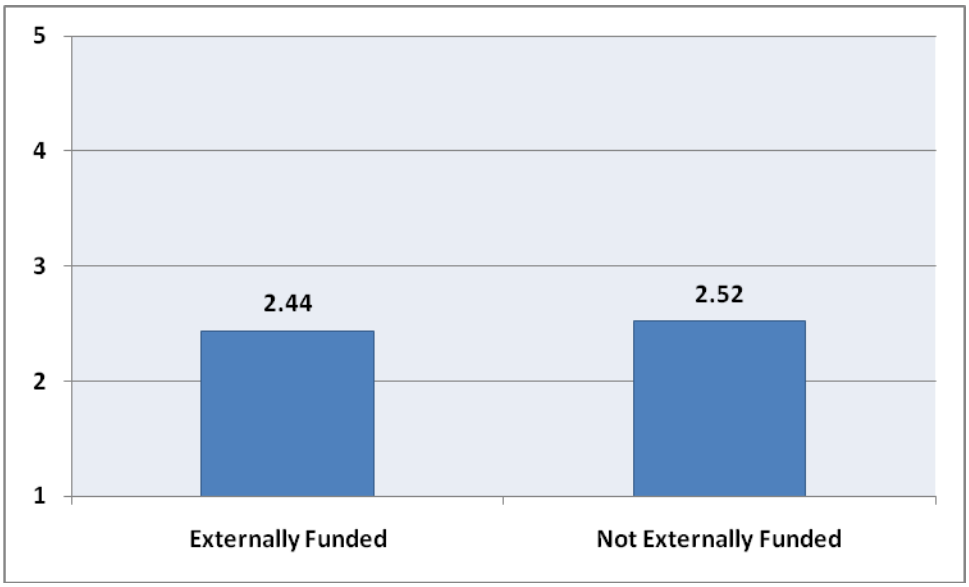

Figure 10.7. **Graph comparing across external funding reception on having more workshops on funding opportunities as encouragement for research**

Table 10.8. T-test comparing across external funding reception on enhanced web-based communication as an encouraging factor for research

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Web-based communication	2.56	2.44	276	.769	.442

Table 10.8 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on having enhanced web-based communication as encouragement for research (Question 11.6). The t-test suggests there were no statistically significant differences in the way faculty members are encouraged, $t(276) = -.769$, $p = .442$.

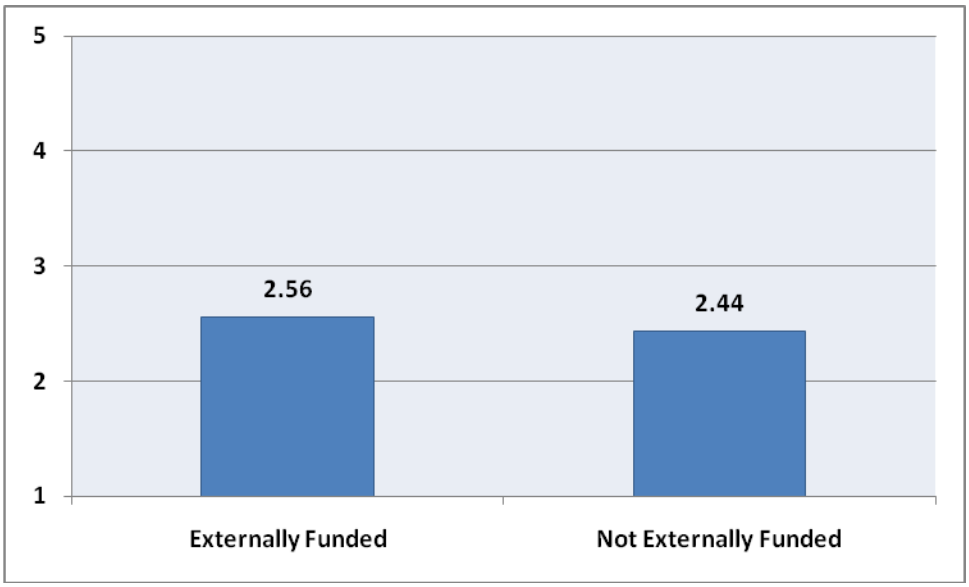

Figure 10.8. **Graph comparing across external funding reception on enhanced web-based communication as encouragement for research**

Table 10.9. T-test comparing across external funding reception on improved internal grant management software as an encouraging factor for research

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Grant management software	2.82	2.56	270	1.533	.126

Table 10.8 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on improved internal grant management software as encouragement for research (Question 11.7). The t-test suggests there were no statistically significant differences in the way faculty members are encouraged, $t(270) = 1.533$, $p = .126$.

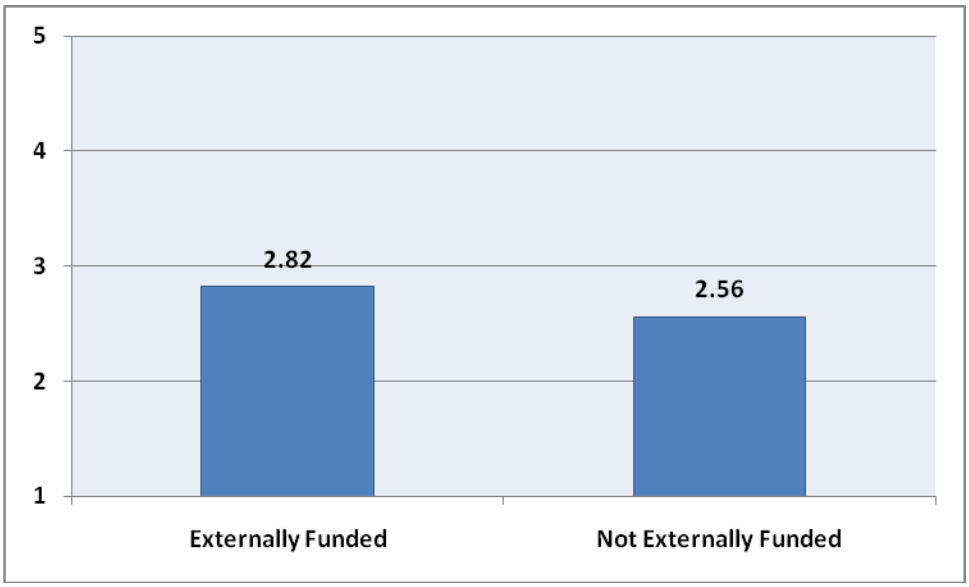

Figure 10.8. **Graph comparing across external funding reception on improved internal grant management software as encouragement for research**

Question 12

Would any of the following internal mechanisms motivate you personally to work harder to seek external funding for your research? If so, rate all that apply from 1 "Least motivating" to 5 "Most motivating".

Table 11.1. **Internal mechanisms to motivate external fund seeking**

Internal Mechanisms	*M*	*SD*	*Least Motivating*		*Neither*		*Most Motivating*	*N/A*
Direct financial awards from the university	3.95	1.29	7%	7%	12%	18%	43%	13%
Release time from teaching	4.11	1.27	6%	7%	8%	17%	50%	12%
More research assistants or post-docs	3.83	1.30	7%	10%	10%	23%	36%	14%
Bridge funding (funding between major grants)	3.26	1.40	13%	12%	15%	21%	20%	19%
Proposal-writing assistance	3.07	1.42	18%	13%	19%	19%	18%	13%
More workshops on funding opportunities	2.38	1.28	28%	22%	18%	11%	7%	14%
Enhanced web-based communication	2.36	1.30	29%	19%	17%	11%	7%	17%
Improved internal grants management software	2.60	1.39	25%	16%	18%	13%	10%	18%
None of the above would encourage me to work harder on for external funds	2.32	1.61	8%	1%	3%	0%	3%	85%
Other	4.76	0.75	0%	0%	0%	0%	5%	95%

Table 11.1 Interpretation: The data here demonstrate that the same factors which faculty members reported would motivate research productivity would also motivate external fund seeking. *Direct financial awards from the university* (*M* = 3.95, *SD* = 1.29), *Release time from teaching* (*M* = 4.11, *SD* = 1.27), and *More research assistants or post-docs* (*M* = 3.83, *SD* =1.30) are again the three most consistently rated as most motivating. *Bridge funding* (*M* = 3.26, *SD* = 1.40) and *Proposal-writing assistance* (*M* = 3.07, *SD* = 1.42) are other factors which were considered motivating. Improvements with ORDA were also regularly mentioned in faculty members' open-ended suggestions.

Table 11.2. **Open-ended responses for the Question 12 (Internal mechanisms to motivate external fund seeking) *Other* category**

I am already very active with respect to grantmanship, but I have had to limit the number of proposals I submit because of inadequate research space. We don't have enough room to house animals for conducting research, and so I would estimate that 50% of
Dedicated sessions about grants in the arts, presented by people who actually know something about them.
release from service
More research support. More research cores. More graduate student state slots.
Recognition by dean that STEM education/pedagogy research is research and not considered teaching
Encouragement to seek external funding: I have been actively discouraged from seeking funding by an administrator in my college.
A university that didn't presume that faculty aren't already working as much as they conceivably can.
release time from administrative duties
help from ORDA with proposal budgets and submission
Less paperwork, remove inept people from ORDA
Improved support at ORDA would have encouraged me to continue grant writing. It may be better now, but six years ago when I last wrote a grant, my co-PI and I were treated with disrespect and made to sit and wait great lengths of time for signatures when
Promotion of work on campus as a mechanism to attract interdisciplinary collaborators
again, vision by administration
Paperless
Listen to what the faculty's needs are
my work doesn't depend on, nor is significantly enhanced by external funding

Table 11.2. Interpretation: Most faculty in this category (*N* = 7) feels that more supportive and responsive ORDA would motivate greater external funding seeking. Having more time for research and less extraneous duties would be motivating as well (*N* = 3). Finally, a number of respondents (*N* = 7) expressed different motivating factors not belonging to any established categories.

Table 11.3. T-test comparing across external funding reception on direct financial rewards from the university as a motivator to seek external funding

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Direct financial rewards	3.92	3.99	281	-.459	.647

Table 11.3 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on direct financial rewards from the university as a motivator to seek funding (Question 12.1). The t-test suggests there were no statistically significant differences in the way faculty members are motivated, $t(281) = -.459$, $p = .647$.

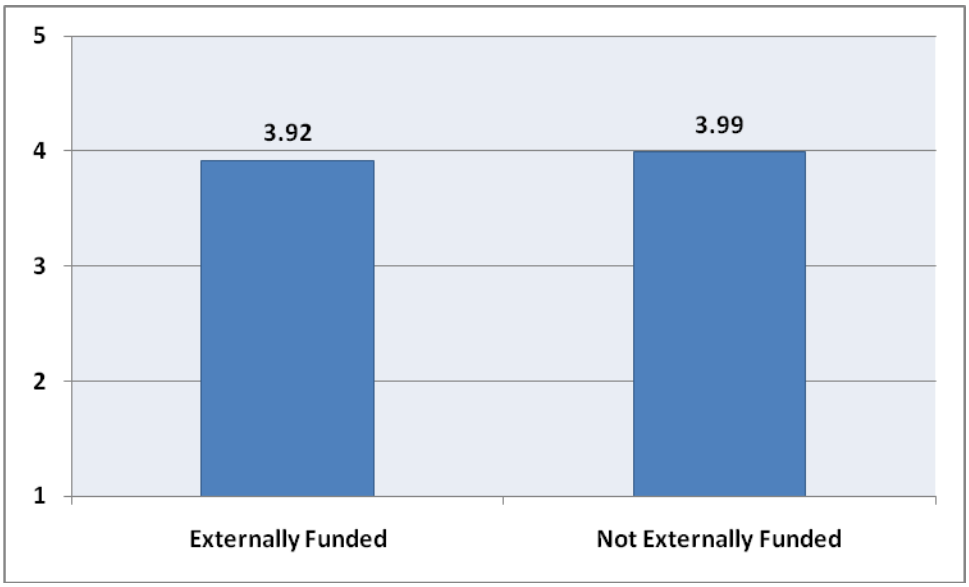

Figure 11.3. **Graph comparing across external funding reception on direct financial rewards from the university as a motivator to seek external funding**

Table 11.4. T-test comparing across external funding reception on release time from teaching as a motivator to seek external funding

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Release time from teaching	4.22	3.99	282	1.510	.132

Table 11.4 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on release time from teaching as a motivator to seek funding (Question 12.2). The t-test suggests there were no statistically significant differences in the way faculty members are motivated, $t(282) = -1.510$, $p = .132$.

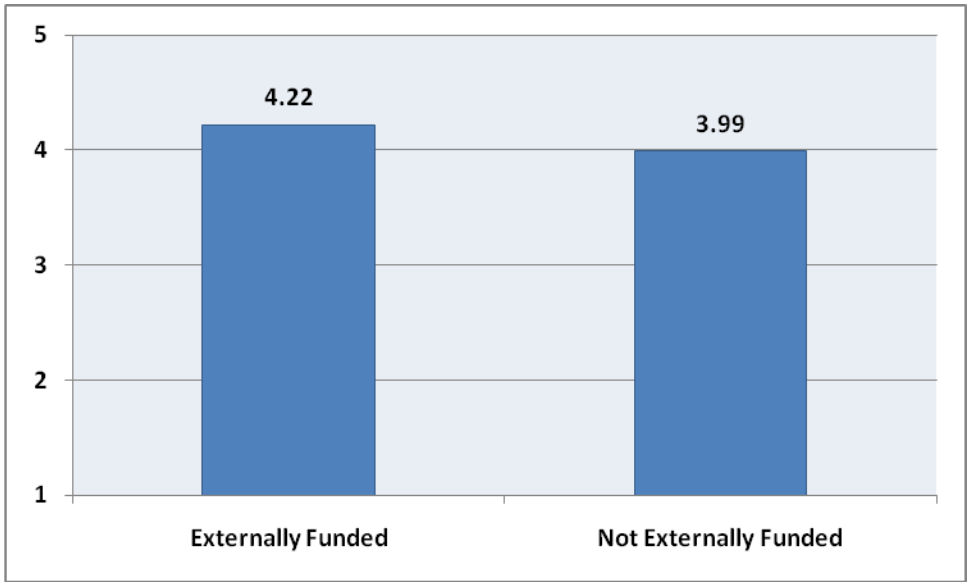

Figure 11.4. **Graph comparing across external funding reception on release time from teaching as a motivator to seek external funding**

Table 11.5. T-test comparing across external funding reception on having more research assistants or post-docs as a motivator to seek external funding

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Research assistants/post-docs	3.93	3.72	276	1.351	.178

Table 11.5 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on having more research assistants or post-docs as a motivator to seek funding (Question 12.3). The t-test suggests there were no statistically significant differences in the way faculty members are motivated, $t(276) = 1.351$, $p = .178$.

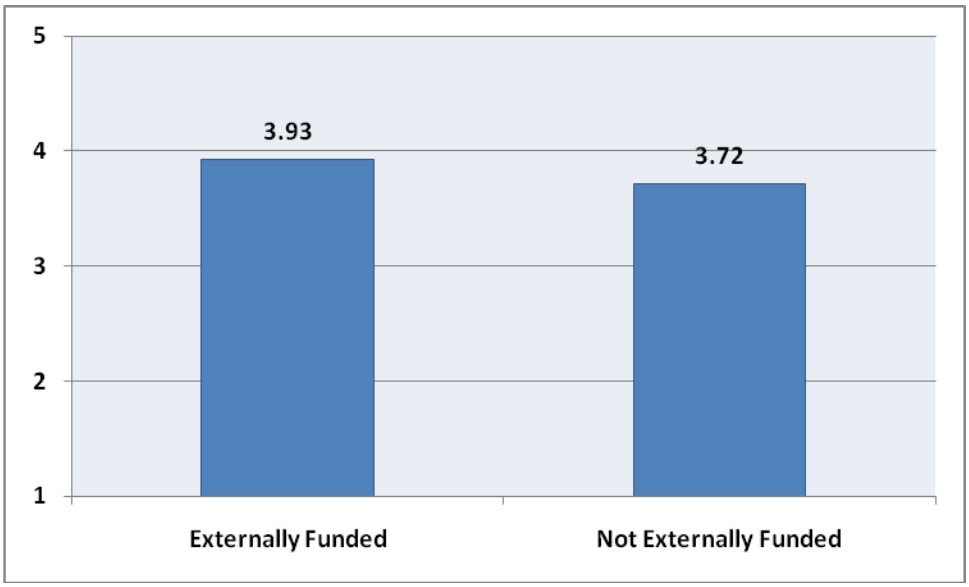

Figure 11.5. **Graph comparing across external funding reception on having more research assistants or post-docs as a motivator to seek external funding**

Table 11.6. T-test comparing across external funding reception on bridge funding as a motivator to seek external funding

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Bridge funding	3.50	2.98	260	2.996	.003

Table 11.6 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on bridge funding as a motivator to seek funding (Question 12.4). The t-test suggests there were statistically significant differences in the way faculty members are motivated, $t(260) = 2.996$, $p = .003$.

Specifically, faculty members who have been externally funding reported that bridge funding would motivate them to seek external funding more than faculty members who did not report being externally funded.

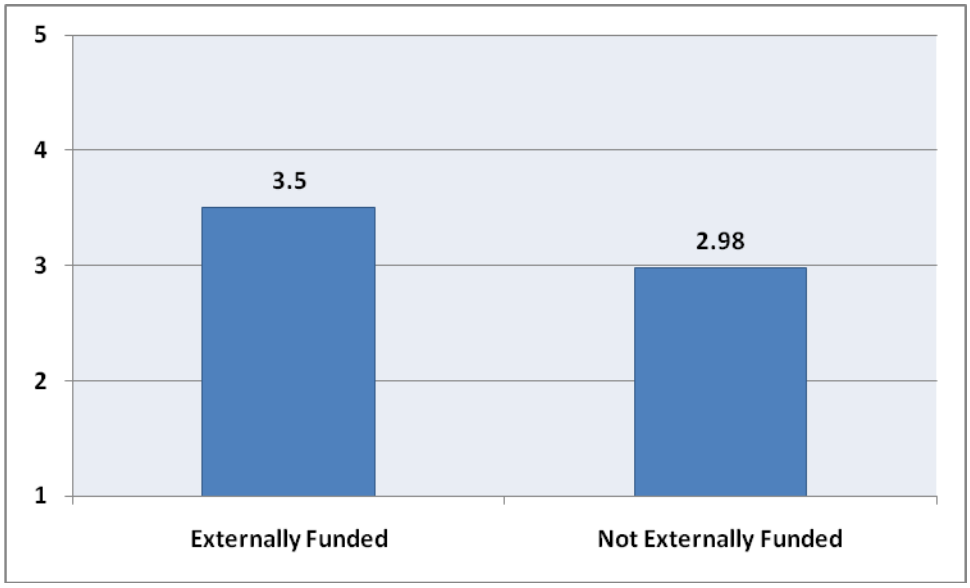

Figure 11.6. **Graph comparing across external funding reception on bridge funding as a motivator to seek external funding**

Table 11.7. T-test comparing across external funding reception on proposal-writing assistance as a motivator to seek external funding

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Proposal-writing assistance	2.95	3.21	281	-1.527	.128

Table 11.7 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on proposal-writing assistance as a motivator to seek funding (Question 12.5). The t-test suggests there were no statistically significant differences in the way faculty members are motivated, $t(281) = -1.527$, $p = .128$.

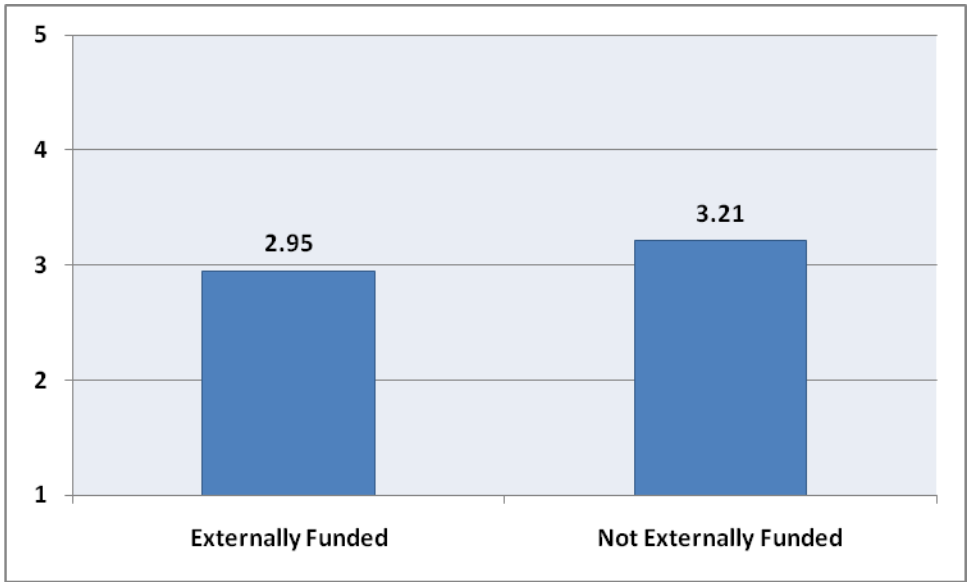

Figure 11.7. **Graph comparing across external funding reception on proposal-writing assistance as a motivator to seek external funding**

Table 11.8. T-test comparing across external funding reception on having more workshops on funding opportunities as a motivator to seek external funding

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Funding workshops	2.90	3.42	278	-.816	.415

Table 11.8 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on having more workshops on funding opportunities as a motivator to seek funding (Question 12.6). The t-test suggests there were no statistically significant differences in the way faculty members are motivated, $t(278) = -.816$, $p = .415$.

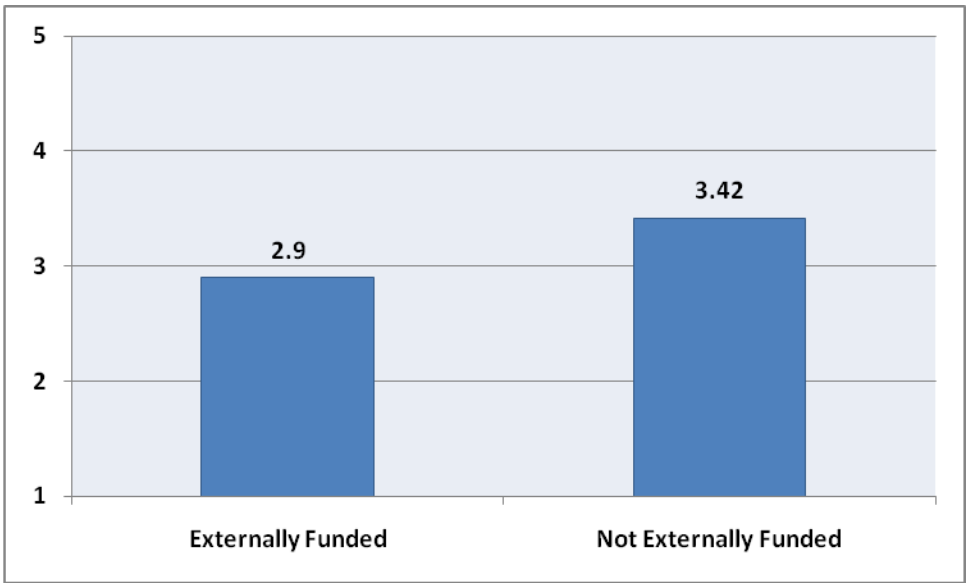

Figure 11.8. **Graph comparing across external funding reception on having more workshops on funding opportunities as a motivator to seek external funding**

Table 11.9. T-test comparing across external funding reception on enhanced web-based communication as a motivator to seek external funding

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Web-based communication	2.46	2.26	266	1.386	.167

Table 11.9 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on enhanced web-based communication as a motivator to seek funding (Question 12.7). The t-test suggests there were no statistically significant differences in the way faculty members are motivated, $t(266) = 1.386$, $p = .167$.

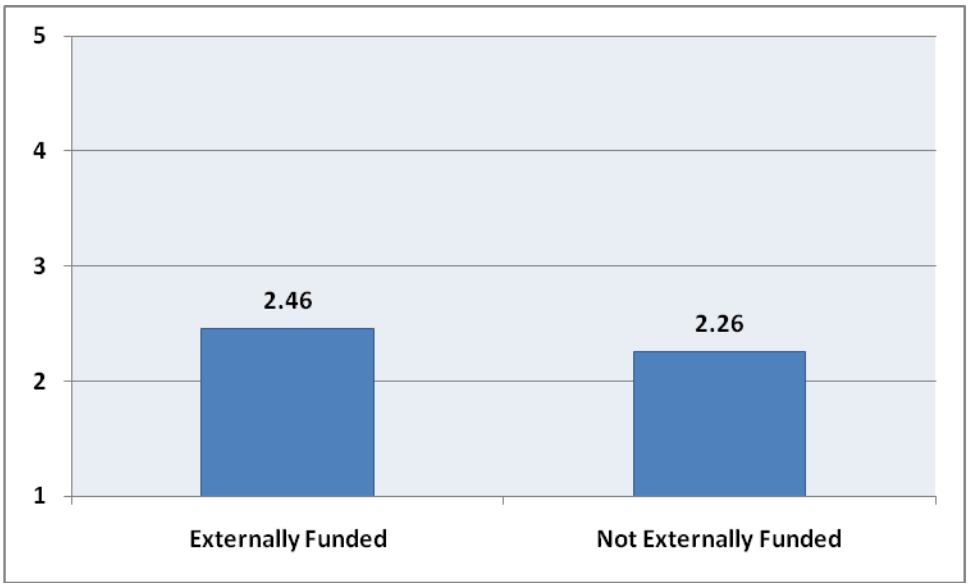

Figure 11.9. **Graph comparing across external funding reception on enhanced web-based communication as a motivator to seek external funding**

Table 11.10. T-test comparing across external funding reception on improved internal grant management software as a motivator to seek external funding

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Grant management software	2.72	2.46	263	1.480	.140

Table 11.10 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their views on improved grant management software as a motivator to seek funding (Question 12.8). The t-test suggests there were no statistically significant differences in the way faculty members are motivated, $t(263) = 1.480$, $p = .140$.

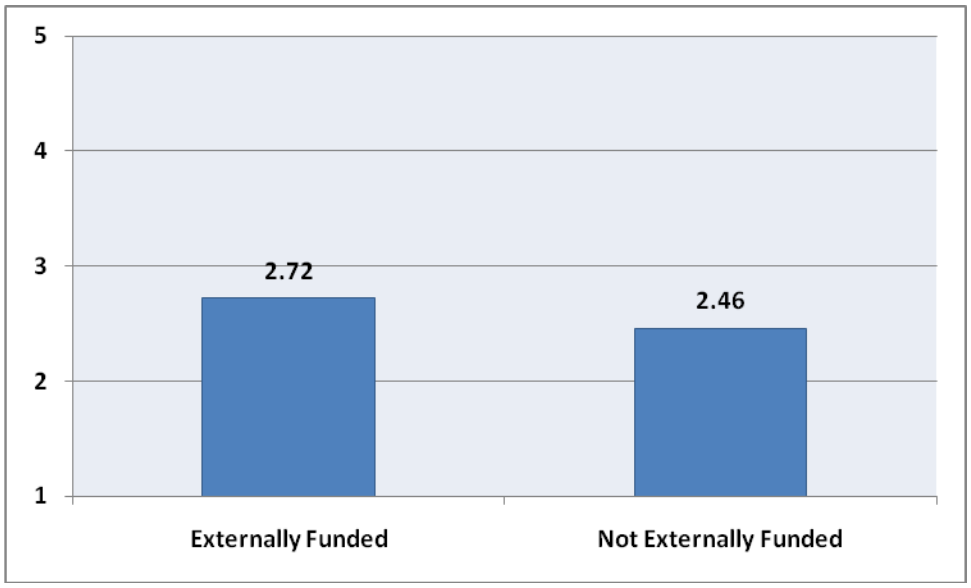

Figure 11.10. **Graph comparing across external funding reception on improved internal grant management software as a motivator to seek external funding**

Question 13

During the past five years, have you used any of the following institutional research support facilities ("shops")?

Table 12. **Use of institutional research support facilities**

	Category	***Percentage of Respondents***
Use of institutional research support facilities ("shops")	Central Research Shop	3%
	Integrated Microscopy and Graphics Expertise (IMAGE)	9%
	Laboratory Animal Program (Vivarium)	2%
	Mass Spectrometry Facility	0.5%
	Nuclear Magnetic Resonance Facility (NMR)	0%
	None	86%

Table 12 Interpretation: Very few faculty members indicated using any of the 5 listed institutional research support facilities. The Integrated Microscopy and Graphics Expertise (IMAGE) was most used with 9% of respondents having utilized the facility. This may suggest that the awareness of these facilities is low, or simply that for a majority of faculty members they are unneeded.

Question 15

Are you affiliated with an SIUC research center?

Question 16

If you are NOT affiliated with a center, would you like to be? Do you feel that such an affiliation would enhance your research endeavors?

Table 13.1. **Research center affiliation**

	Response	***Percentage of Respondents***
Affiliated with an SIUC research center	Yes	16%
	No	84%
If not, would you like to be	Yes	26%
	No	25%
	Unsure/no opinion	49%

Table 13 Interpretation: A large majority of respondents are not associated with a SIUC research center (84%). Those who identified themselves as unaffiliated responded to a second question asking if they would like to become affiliated. A large portion was unsure or had no opinion (49%), but 25% of faculty also indicated they would like to be affiliated and that it would enhance their research endeavors.

Table 13.2. T-test comparing across external funding reception on SIUC research center affiliation

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Research center affiliation	1.80	1.84	322	-.924	.356

Table 13.2 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their affiliation with SIUC research centers (Question 15). The t-test suggests there were no statistically significant differences in affiliation, $t(322) = -.924$, $p = .356$.

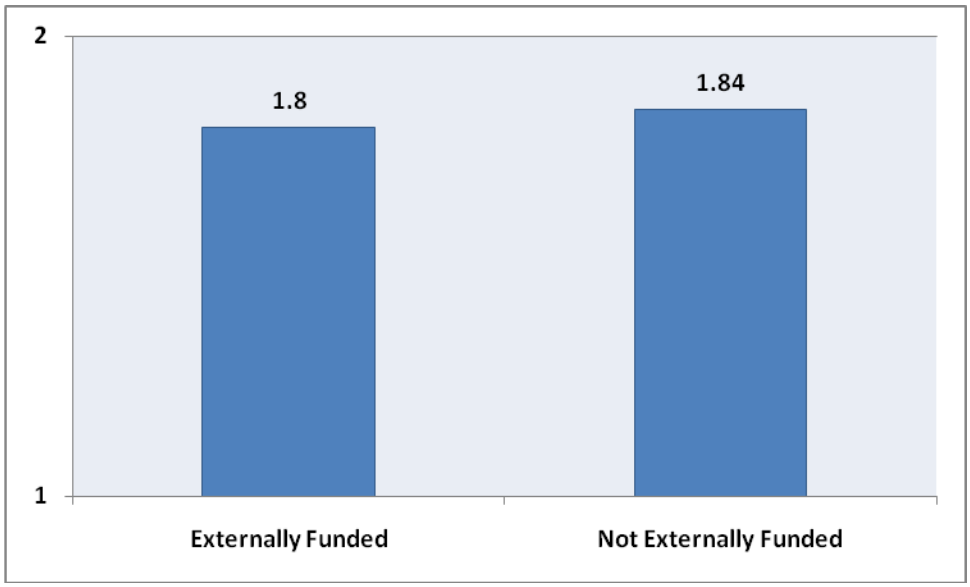

Figure 13.2. **Graph comparing across external funding reception on SIUC research center affiliation**

Table 13.3. T-test comparing across external funding reception on desire to be affiliated with an SIUC research center

	Mean Externally Funded	Mean Not Externally Funded	*df*	*t*	*p*
Desire for research center affiliation	1.84	1.96	322	-.938	.349

Table 13.3 Interpretation: This t-test was used to determine whether or not faculty members who have received external funding in the past differed from those who have not in their desire to be affiliated with an SIUC research center (Question 16). The t-test suggests there were no statistically significant differences in desire for affiliation, $t(322) = -.938$, $p = .349$.

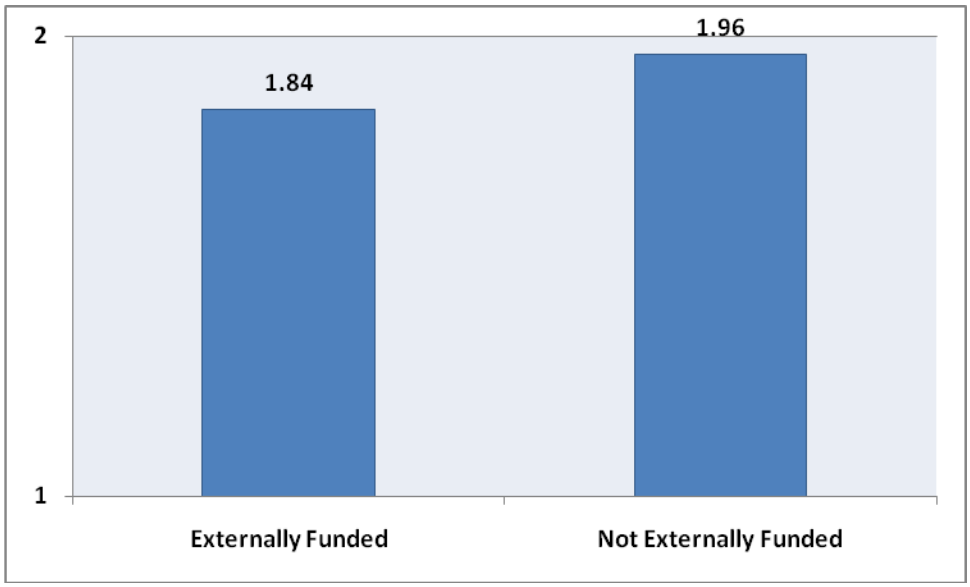

Figure 13.3. **Graph comparing across external funding reception on desire to be affiliated with an SIUC research center**

Question 14, 17, 18 (Demographics)

Gender, rank, and appointment

Table 14. **Demographics**

Variable	***Category***	***Percentage of Respondents***
Gender	Male	63%
	Female	34%
	Prefer not to respond	3%
Rank	Assistant Professor	33%
	Associate Professor	34%
	Professor	33%
Tenure/tenure-track line or appointment	Agriculture	24%*
	ASA	8%
	CoBuS	3%
	COLA	24%
	Education	11%
	Engineering	3%
	Law	1%
	Library	3%
	MCMA	5%
	SoM	8%
	Science	10%

Table 14 Interpretation: Two-thirds of respondents were male, while ranks (i.e., assistant professor, associate professor, and professor) were equally represented. College of Liberal Arts, Education, and Science were most represented colleges. The data collected from this survey does not reveal whether female faculty members are less numerous due to the gender structure of the SIUC faculty body, response bias, or smaller number of female faculty engaged in research activities than male faculty.

*Please note that the numbers for Agriculture are inflated due to a sampling error. Respondents who chose not to indicate their college of appointment were assigned into Agriculture as a default as a function of the survey software.

Appendix A - Research Climate Faculty Survey

For the last ten years, the Office of the Vice Chancellor for Research (OVCR) and the Office of Research Development and Administration (ORDA) have worked to raise the visibility of and support for research, scholarship, and creative activity (hereafter "research" broadly construed) at SIUC. This has been aided by the importance accorded to research in the 2004 campus vision/planning document *Southern at 150*.

At this point, we would like to get a sense of the "campus climate" for research among faculty. To that end, we are asking for your help in responding to the questions in this survey. It should take you approximately ten minutes to complete the survey. As you will see from the questions, our interests are in both externally funded and non-funded research activities, its dissemination, and its integration with student teaching and mentoring. We hope that your responses will provide us with insight into ways we can make the campus research enterprise more successful.

The survey is being administered by Applied Research Consultants (ARC), a research firm housed within the Department of Psychology. Your responses are completely confidential and the OVCR/GD will be provided with only aggregate data, not individual survey responses. Furthermore, when fewer than five participants respond in a category, data will not be presented for that specific category, and will instead be aggregated to a higher level.

NOTE: OVCR/GD has been informed by the Chair of the Human Subjects Committee that this survey and its goals do not meet the regulatory requirements for Human Subjects approval.

1. On a scale from 1 "*Not important*" to 5 "*Very important*", please indicate how important your research activities are to your overall sense of professional accomplishment/satisfaction.

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5

2. On a scale from 1 "*Not important*" to 5 "*Very important*", how important to you are the following among your research activities?

	1	2	3	4	5
Publishing books	○	○	○	○	○
Publishing articles	○	○	○	○	○
Presenting at international venues	○	○	○	○	○

Presenting at national venues	○	○	○	○	○
Juried exhibits, performances	○	○	○	○	○
Supervising students	○	○	○	○	○
Collaborative work	○	○	○	○	○
Interdisciplinary work	○	○	○	○	○
Foreign travel	○	○	○	○	○
Attending professional meetings	○	○	○	○	○

3. On a scale from 1 "*Not important*" to 5 "*Very important*", how important are the following as motivations for your research activities?

	1	2	3	4	5
Personal passion for research	○	○	○	○	○
Success in tenure/promotion	○	○	○	○	○
Professional stature	○	○	○	○	○
Intellectual challenge	○	○	○	○	○
Working closely with students	○	○	○	○	○
Department merit pay system	○	○	○	○	○
College/Dept. encouragement	○	○	○	○	○

4. On a scale from 1 "*Not important*" to 5 "*Very important*", how important are the following as motivations for your seeking external funding?

	1	2	3	4	5
Personal passion for research	○	○	○	○	○
Success in tenure/promotion	○	○	○	○	○
Professional stature	○	○	○	○	○
Intellectual challenge	○	○	○	○	○
Working closely with students	○	○	○	○	○
College/Dept. encouragement	○	○	○	○	○

Salary support	○	○	○	○	○
Support for students	○	○	○	○	○
Essential to research agenda	○	○	○	○	○

5. During the past five years, have you been funded (as PI/PD or co-PI/PD) by any of the following external sources? Check all that apply.

- ☐ Federal
- ☐ State
- ☐ Industry
- ☐ Foundation
- ☐ Other

If you selected "Other" for question 5, please elaborate in the box below.

6. During the past five years, have you been awarded (as PI/PD or co-PI/PD) any of the following types of external funding? Check all that apply.

- ☐ Research grant
- ☐ Training grant
- ☐ Fellowship
- ☐ Service grant
- ☐ Other

If you selected "Other" for question 6, please elaborate in the box below.

7. If you have NOT had any external funding support during the past five years, what is/are the reason(s)? Check all that apply. Please leave it blank if this does not apply to you.

- ☐ I do not need external funding to do my research
- ☐ Limited external funds are available in my field of study
- ☐ I applied for external funding, but proposal(s) was / were unsuccesful
- ☐ I am in-between projects
- ☐ I did not have time to write proposals
- ☐ The proposal process is too difficulat to navigate
- ☐ Sufficient support is available on campus
- ☐ Other

If you selected "Other" for question 7, please elaborate in the box below.

8. Do you feel that your research activities are valued . . .

	No	Somewhat	Yes
In your department or center?	○	○	○
In your college?	○	○	○
By the administration?	○	○	○
On the campus?	○	○	○
By your students?	○	○	○

9. SIUC is a Research University (high research activity) in the Carnegie classification. On a scale from 1 "*Too little*" to 5 "*Too much*", how do you evaluate the balance the university places on instructional and research emphases in SIUC's mission?

	1	2	3	4	5
Emphasis on research	○	○	○	○	○
Emphasis on teaching	○	○	○	○	○

10. Do you feel that any of the following limits your personal research productivity? If so, rate all that apply from 1 "*Least limiting*" to 5 "*Most limiting*". Please select N/A if this is not an issue for you.

	1	2	3	4	5	N/A
Too much teaching/advising	○	○	○	○	○	○
Too much service/committee work	○	○	○	○	○	○
Cumbersome internal procedures (e.g., ORDA, Accounting Services)	○	○	○	○	○	○
Inadequate library resources	○	○	○	○	○	○
Inadequate funding for travel	○	○	○	○	○	○
Lack of reward systems	○	○	○	○	○	○
Inadequate facilities (space, instrumentation)	○	○	○	○	○	○
Lack of internal research funding mechanisms	○	○	○	○	○	○
Lack of support for research assistants and post-docs	○	○	○	○	○	○

None of the above limit my research productivity	○	○	○	○	○	○
Other	○	○	○	○	○	○

11. Would any of the following internal mechanisms encourage you personally to do more research? If so, rate all that apply from 1 "*Least encouraging*" to 5 "*Most encouraging*". Please select N/A if this is not an issue for you.

	1	2	3	4	5	N/A
Direct financial awards from the university	○	○	○	○	○	○
Release time from teaching	○	○	○	○	○	○
More research assistants or post-docs	○	○	○	○	○	○
Proposal-writing assistance	○	○	○	○	○	○
More workshops on funding opportunities	○	○	○	○	○	○
Enhanced web-based communication	○	○	○	○	○	○
Improved internal grants management software	○	○	○	○	○	○
None of the above would encourage me to do more research	○	○	○	○	○	○
Other	○	○	○	○	○	○

12. Would any of the following internal mechanisms motivate you personally to work harder to seek external funding for your research? If so, rate all that apply from 1 "*Least motivating*" to 5 "*Most motivating*". Please select N/A if this is not an issue for you.

	1	2	3	4	5	N/A
Direct financial awards from the university	○	○	○	○	○	○
Release time from teaching	○	○	○	○	○	○
More research assistants or post-docs	○	○	○	○	○	○
Bridge funding (funding between major grants)	○	○	○	○	○	○
Proposal-writing assistance	○	○	○	○	○	○
More workshops on funding opportunities	○	○	○	○	○	○
Enhanced web-based communication	○	○	○	○	○	○
Improved internal grants management software	○	○	○	○	○	○

None of the above would encourage me to work harder for external funds	○	○	○	○	○	○
Other	○	○	○	○	○	○

13. During the past five years, have you used any of the following institutional research support facilities ("shops")? Check all that apply.

- ☐ Central Research Shop
- ☐ Integrated Microscopy and Graphics Expertise (IMAGE)
- ☐ Laboratory Animal Program (Vivarium)
- ☐ Mass Spectrometry Facility
- ☐ Nuclear Magnetic Resonance Facility (NMR)

14. In which college is your primary tenure/tenure-track line or appointment?

Agriculture

15. Are you affiliated with an SIUC research center?

- ○ Yes
- ○ No

16. If you are NOT affiliated with a center, would you like to be? Do you feel that such an affiliation would enhance your research endeavors?

- ○ Yes
- ○ No
- ○ Unsure/no opinion

17. Are you:

- ○ Male
- ○ Female
- ○ Prefer not to respond

18. What is your rank?

- ○ Asst. Professor
- ○ Assoc. Professor
- ○ Professor