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ABSTRACT

This case study examined three types of barriers that inhibit advances in academic careers by both women and minority group members. Specifically, it investigated: (1) structural barriers, formal and informal relationships important in gaining access to positions in academic settings and research and publication opportunities; (2) sociocultural barriers, language and communication patterns and role expectations that inhibit successful career trajectories; and (3) personal and psychological barriers, issues related to anomie as a result of being marginalized in departmental and other organizational settings. Women faculty (n=28) at a research university responded to a survey of their perceptions regarding themselves as teachers and scholars, the programs and institutions in which they worked, and faculty expectations and experiences in their roles. Additionally, open-ended interviews were conducted and two of these are detailed in this report. The study identified major sources of stress, areas of dissatisfaction, and issues of self-efficacy. It also found that in many cases respondents' perceptions of their relationships with chairs, colleagues, and students were positive and that the individuals had developed strategies to construct needed supports. Contains six tables and three figures. (DB)

University Women and Minorities:

A Case Study of Organizational Supports and Impediments for Faculty

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University Women and Minorities:

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The under-representation of women and minorities in higher education has been an area of concern for many years (Grant, Ward & Forshner, 1993). However, such concern has not led to successful strategies at the organizational level to correct the problem. For example, Matyas and Malcolm (1991) found in a survey of American colleges and universities that fewer than 10 percent of programs self-described as seeking to increase participation of under-represented groups provided opportunities specifically for the recruitment and retention of women students or faculty.

The lack of women and minority faculty in mathematics and the sciences in particular has consequences for students majoring in these fields as well as for incumbents in the faculty ranks. In a study of students' decisions to change major fields, Manis, Thomas, Sloat and Davis (1989) found that women choose to change majors out of science and engineering more often than men do, and that the early college experience of women tended to dampen their interest in the sciences. A hostile organizational climate and lack of female role models for students in the sciences as well as differences in communication styles between men and women contribute to inhospitable academic work environments for women (Brush, 1991; Seymour, 1992; Widnall, 1988). Not only are minority faculty less likely to hold positions as faculty members in higher education, they are also less likely to achieve tenure or hold the rank of full professor (NCES, 1991).

The case study reported here was designed to focus on three types of barriers that inhibit advances in academic careers by both women and minority group members. Specifically, we investigated: (1) structural barriers, those formal and informal relationships including mentor and collegial ties that seem particularly important in gaining access to positions in academic settings and to valuable research and publication opportunities; (2) sociocultural barriers, the language and communication patterns and role expectations that inhibit successful career trajectories for women and minorities; and, (3) personal and psychological barriers, issues related particularly to anomie as a result of being marginalized in departmental and other organizational settings.

The theoretical model that has guided our research in illustrated in Figures 1 through 3. Figure 1 illustrates the hypothesized relationships between supports and impediments, and traditional indices of success in academia (productivity and advancement). Success in these areas is expected to lead to general satisfaction with life (Deiner, 1984). Specific sources of supports and impediments are illustrated in Figure 2. Academic activities consist primarily of teaching, research and services. Scholarly achievement in these dimensions of academic life may be aided or inhibited by colleagues, administrators, department chairs, and students. Finally, life does not exist solely within the higher education institution. The extra-institutional environment is illustrated in Figure 3, with components of personal activities, family activities, and community activities.

The primary objectives of this case study were (1) to ascertain the perceptions of women and minority faculty members about the institution, their roles within the institution, and their performance of these roles, (2) to identify supports and impediments to the success and

development of women and minority faculty members, (3) to analyze the developmental processes and experiences of faculty as they progress through the initial activities of assistant professorship through their roles as senior scholars, and (4) to develop hypotheses regarding policy and practice related to the establishment of program climates which will contribute to the development of women and minority leaders, teachers, scholars, and researchers.

Method

This case study used a combination of two approaches to data collection. The first entailed a sample survey conducted with women and minority faculty members in the College of Education and the College of Arts and Sciences within a Research I university. A simple random sample of faculty members was drawn from the personnel files at the university and surveys were sent during the spring of 1997. The surveys were designed to obtain information on (1) faculty members' perceptions of themselves as teachers and scholars, (2) perceptions of the programs and institutions within which they conduct their lives as scholars, and (3) faculty expectations and experiences in their roles within the institution. In this paper, only the responses of women faculty are presented.

The second component entailed an intensive study of a subsample of the faculty members selected from the survey respondents. This subsample was studied using individual open-ended interviews. The open-ended interview component was designed to allow faculty to elaborate upon their survey responses and to provide a depth and context for the interpretation of the data.

Results

The results of this study are presented in four sections. First, a description of the demographic and professional characteristics of the respondents is presented. Second, an analysis of responses to individual survey items is given. This analysis addresses academic self-efficacy, relationships with students, faculty and chairpersons, satisfaction with academic life, and sources of stress. Third, summative scales created from each of these areas are analyzed and the relationships among these scales are described. Finally, an analysis of a set of interviews carried out with a subsample of the participants is presented.

Demographic and Professional Characteristics

Completed questionnaires were returned from 28 female respondents. Of these professors, 82% (n=23) were white, one was African-American, one was hispanic, and one was Asian. The remaining two respondents classified themselves as "Other." Fifteen respondents (56%) were married, four (15%) were divorced, six (22%) had not been married, and two (7%) were unmarried and living with a partner. Thirty-six percent of the respondents (n=10) reported having at least one child under the age of 16 who required child care. Seventy-one percent (n=20) of the respondents held a Ph.D. degree, and seven (25%) held master's degrees. A large range in time since degree was evident in this sample (the earliest degree was earned in 1964 and the latest in 1998). The respondents represented a variety of academic departments including fine arts (n = 7), education (n = 7), social sciences (n = 5), english (n = 3), foreign languages (n = 1), natural

sciences (n = 1), and philosophy (n = 1). Half of the respondents (50%, n = 14) were Assistant Professors at the time of the survey, eight were Associate Professors, and four held the rank of Professor.

Responses to Individual Items on the Survey

Survey items were presented in five major areas: academic self-efficacy, relationships with students, faculty and chairpersons, satisfaction with academic life, and sources of stress. Responses to these items were made on forced-choice Likert type scales.

Academic Self-Efficacy. Academic self-efficacy was measured using 33 items, with a seven-point response scale, ranging from 1 (Not at all Confident) to 7 (Completely Confident). The items represented activities in three major areas of academic work: research activities, teaching activities, and administrative activities. A summary of the responses to the academic self-efficacy items is presented in Table 1. This table presents the percentage of respondents who rated themselves at values of 5, 6, or 7 on the confidence scale.

In research activities, the overall level of confidence was quite low. Only 61% of the respondents rated themselves as confident in preparing conference papers, and only 79% were confident in attending conferences. Fewer than 50% of the respondents rated themselves as confident in generating research ideas (46%), reviewing journal articles (46%), and writing journal articles (36%). Even lower were the confidence ratings for administering research projects (32%), designing research studies (32%), and applying for research grants (14%).

Ratings of confidence in teaching activities were somewhat higher than those of research

activities. Seventy-nine percent of the respondents reported confidence in preparing lectures, and 68% expressed confidence in delivering them. However, fewer than two-thirds of the respondents reported confidence in advising students (either graduate students, 54%, or undergraduate students, 50%), preparing assignments (57%), or assigning grades (50%).

In administrative activities, 82% of the respondents expressed confidence in attending professional conferences, and 68% were confident in conducting correspondence. However, only 50% were confident in participating in departmental matters, and only 32% were confident in chairing academic committees.

Relationships on Campus. Respondents' perceptions of their relationships with students, other faculty, and department chairs were assessed by ratings of nine adjectives as descriptors of such relationships. For each adjective, respondents provided ratings on a four-point scale to indicate how often the adjective could be used to describe the relationship. The response scale ranged from 1 (Never) to 4 (Always). The responses to these items are summarized in Table 2. This table presents the percentage of respondents who indicated each adjective could "usually" or "always" be applied to the relationship.

The majority of the respondents reported that their relationship with students was supportive (93%), encouraging (89%), stimulating (86%), and casual (64%). However, fewer than half of the respondents characterized the relationships as close (39%). None of the respondents characterized the relationship as distant or strained.

In their relationships with other faculty, the majority of respondents reported the relationship as supportive (82%), encouraging (82%), casual (82%), and stimulating (68%). As with the

perceptions of relationships with students, only 36% described their relationships with other faculty as close. One-fourth of the respondents characterized the relationship as distant (25%) and 21% characterized it as competitive.

Relationships with department chairs were somewhat less positive. Although 79% of the respondents characterized their relationships with their chair as supportive, 71% as encouraging, and 68% as casual, only 43% reported the relationship as stimulating, and only 29% considered the relationship close.

Satisfaction with Academic Life. Nineteen items were used to assess faculty members' satisfaction with aspects of academic life. Responses were provided on a four-point scale of satisfaction, with a "does not apply" option. A summary of responses is provided in table 3. This table presents the percentage of respondents who reported satisfaction (ratings of 3 or 4) with each aspect of academic life.

In general, the satisfaction ratings were low. Although 75% of the respondents were satisfied with the types of teaching assignments they received (graduate vs. undergraduate), 71% were satisfied with their communication with the department chair, and 71% were satisfied with supportive colleagues, only 64% were satisfied with the amounts of teaching they were assigned, and only 54% were satisfied with their teaching assistants. Only 43% reported satisfaction with the fairness of the peer review process and only 36% reported satisfaction with guidelines for performance. Finally, fewer than one-third of the respondents were satisfied with the space provided for research (32%), research assistance (32%), interdepartmental cooperation (32%),

financial support for travel (29%), and the availability of formal mentors (18%).

Sources of Stress. Respondents were asked to rate the extent to which each of 18 items represented a source of stress for them during the current academic year. Responses were provided on a four-point scale, ranging from 1 (Not at All) to 4 (Extensive). A summary of the responses is provided in Table 4. This table provides the percent of respondents who rated each item as "somewhat" or "extensive" as a source of stress.

The most frequently identified sources of stress were time pressures (86%), lack of personal time (75%), and physical health (71%). In addition, more than half of the respondents identified managing household responsibilities (68%), research and publishing demands (64%), and the review/promotion process (54%) as significant sources of stress. However, more than one-third of the respondents reported sources of stress in teaching loads (46%), colleagues (46%), fund-raising expectation (43%), students (39%), and child care (39%). Also notable is that 29% of the respondents reported that discrimination was a source of stress to them.

Activities Outside Academia. Fifteen items identified activities associated with life outside of academia. For each item, two responses were requested. First, responses indicated the extent to which each item was personally important to them. These responses were made on a five-point importance scale, ranging from 1 (Very Unimportant) to 5 (Very Important). Secondly, respondents indicated how often they engaged in each activity, using a five-point frequency scale, ranging from 1 (Never) to 5 (On a daily basis). A summary of these responses is presented in Figure 4. This graph presents the mean response to each item on both the importance and the frequency scales. The most important items identified were child care, transportation, helping

children with homework, exercise, finances, and social relationships. Notably lower in importance were cleaning, lawn care, participation in political activities, and music activities. The items most frequently engaged in were food preparation, cleaning, exercise, financial activities, and participation in social relationships. These data are perhaps best considered in terms of the discrepancy between importance rating and frequency of activity. For example, the item "Child care" was rated as very important, but was not engaged in frequently. Items such as food preparation, cleaning, and social relationships evidence less discrepancy, on average, between the importance and frequency ratings.

Construction of Scales

The groups of items described above were combined into summative scales by calculating the mean response to the items comprising the scales. Such summative scales were used to provide overall indices of self-efficacy, quality of relationships on campus, satisfaction with academic life, and stress. For the relationship items, responses to the adjectives "competitive," "formal," "distant," and "strained" were reflected because these responses were inversely related to those of the other five adjectives. For activities outside of academia, discrepancy scores were calculated as the differences between ratings of importance and frequency for each item. To prevent positive and negative discrepancies from canceling each other, the item discrepancies were squared, and the root mean-squared discrepancy score was used as an index of overall discrepancy between perceived importance and frequency of engagement in activities. In addition to these scales, the subjective well-being scale developed by Diener (1984) was used.

This five-item scale measures perceptions of overall satisfaction with life (SWL).

The reliabilities of these summative scales were estimated using coefficient alpha as an index of internal consistency. These reliability estimates (Table 5) ranged from .60 (Relationships with students) to .91 (Administrative self-efficacy).

Correlations Between Scales

Pairwise correlations between the subscales are presented in Table 6. For the ratings of academic self-efficacy, the three confidence scales were positively correlated with each other, with correlations ranging from 0.37 (research confidence and teaching confidence) to .64 (research confidence and administrative confidence). For the three scales measuring relationships on campus, a strong correlation ($r = .79$) was seen between relationships with departmental chair and relationships with other faculty members. However, the other relationships between these measures were close to zero.

As might be expected, ratings of teaching confidences were positively correlated with relationships with students ($r = .37$). Further, ratings of administrative confidence were positively correlated with relationships with other faculty ($r = .25$) and relationships with department chair ($r = .26$). Finally, a positive correlation was seen between confidence in research and relationships with the departmental chair ($r = .31$).

Stress and satisfaction with academic life were inversely related to each other ($r = -.29$), and satisfaction with academic life was positively correlated with subjective well-being ($r = .34$). However, subjective well-being was not correlated with either stress ($r = -.09$) or the discrepancy

scores (r = -.06).

The stress scores were positively correlated with confidence in research (r = 0.32) and relationships with students (r = .39). Interestingly, satisfaction with academic life was not correlated with relationships with students (r = -.09) or with relationships with department chair (r = .19), but was correlated with relationships with other faculty members (r = .34). Additionally, the satisfaction scores were correlated with administrative activities (r = .42).

The discrepancy scores calculated on activities outside of academia were negatively correlated with all three confidence scales (with rs ranging from -.30 to -.47). That is, increased confidence in all three areas was associated with less discrepancy between importance and actual activities in life outside of the academy. Similarly, discrepancy scores were inversely related to relationships with students (r = -.33) and with department chair (r = -.40).

Finally, subjective well-being scores were positively correlated with teaching confidence (r = .40) and with relationships with students (r = .41). Interestingly, subjective well-being was not associated with relationships with either faculty (r =.10) or department chair (r = -.12).

Telephone Interviews

To augment the analyses of the survey responses, telephone interviews were conducted with a subsample of the survey respondents. The results of two of these telephone interviews are described next. These cases were documented to provide detailed life and career history profiles of individuals in the initial stages of their careers. We specifically were interested in three types of barriers that might inhibit the advancement in the academic careers of women and minorities.

We found three barriers to be especially important: (1) structural barriers, formal and informal relationships including mentor and collegial ties that are critical in gaining access to positions in academic settings and other opportunities, (2) sociocultural barriers, language and communication patterns and role expectations that place successful career trajectories for women and minorities in peril, and (3) personal and psychological barriers, issues related to anomie as a result of being marginalized in departmental and other settings. We were also interested in strategies women use to overcome the obstacles they encounter in their career mobility.

Case #1: Jackie, Assistant Professor of Sociology. The first interviewee, Jackie, is just finishing her first year at the university after completing her doctoral studies at the University of Maryland. As a new faculty member in a department staffed by senior professors with the exception of Jackie and another new colleague, Jackie feels some measure of stress related to her position as a novice: "It's been hard in a sense of coming here and I feel like I have no one else who really understands what I'm going through. But in many ways I have a very different set of skills and I do different kinds of research...[I don't] have someone who's been here longer than me who can really help me understand the ropes and things like that... Most of the faculty are male and being so senior, not necessarily engaging in day to day research anymore ...that's somewhat disappointing for me. Many days I just want someone to talk to. People are very friendly to me, but I feel like there's this one dimension that I don't quite have here..."

To compensate for the absence of support from others actively pursuing a research agenda and coping with their status as new professors at the university, Jackie has begun to reach out: "I've

been pretty aggressive about participating in the orientation events all year just to meet new people." Although she has not actively sought to engage with colleagues who hold similar research interests, Jackie is beginning to locate others on her campus who are conducting research agendas similar to hers: "There's one person in the economics department who's in family studies who I've been talking to on stuff, but not to the point of ælet's collaborate'." Because her work in sociology focuses on substantive issues in gender, Jackie has been contacting faculty in women's studies. Jackie's strategy is to make the connections with those whose intellectual interests parallel hers, no matter where they are situated in the university's departmental hierarchy.

With respect to her personal life, Jackie sees things with her male partner going well. A potentially major source of stress was averted when he was able to find a job. "It would have been a disaster" if he had not. Jackie sees that her life at home is critically important... "The last thing my advisor said to me when I packed and before I got in my car and moved here was that if somebody's moving with you, you have a sense of your family moving with you and you need to respect them in your relationships with them by protecting time during the week to spend with them. It does take a lot to find quality time to do that. And I was sort of surprised that he said that because he worked me like a dog when I was there." The fact that her partner was willing to take a position with less authority as well as a salary reduction may contribute to Jackie's sense of obligation to her partner.

However, personal issues remain for Jackie: My sister is pregnant and will have a baby next month. I never really thought about it as much as I have since she's been pregnant [asking

myself] æHow am I going to do this û how am I gonna have children and when am I gonna do that?' cause I just don't see how it will happen while I'm tying to get tenure... When I think about it, I start to like really freak out û like Oh My God, what am I going to do? Do I need to change careers if I want to attempt to have a family? People always say, you shouldn't have to worry, you have that extra year on the tenure clock. Well, that's just bull." Clearly, the issue of balancing academic career and family formation is a major source of anxiety for Jackie. She is aware of so-called "supports" offered by universities, particularly in the form of the mechanism of stopping the tenure clock. Apologists for the university argue that this strategy "doesn't really take away from your research." Jackie believes that at a research oriented institution such as the University of XXXXXXX this is not the case. Expectations for continuous and high volume research output in the form of funded research and published journal articles of high quality are expected.

In summary, while structural barriers have not been an issue for Jackie, who was supported by her male advisor in her job search and who still values collegial ties with other graduate students from her doctoral institution, some sociocultural barriers, particularly with respect to role expectations, threaten her reconciliation of personal and career issues. The senior women in her department have chosen not to have children, making her decision in that regard seem problematic. Jackie has, overall, successfully overcome a number of obstacles she has encountered by cultivating relationships with colleagues in other departments, strengthening her personal relationship with her partner and maintaining collegial ties with former doctoral student colleagues now at other institutions.

Case #2: Elaine, Assistant Professor of Business. Elaine, an Assistant Professor in Business Administration, is struggling to hold her academic life together. During the period of this study, she was in the last stages of her third year review and reappointment process. When we last spoke, things were not going well: "No matter what you do, it is not good enough. They pick it apart and because you are doing it for Black people or for women it is of no significance for them. This diversity and multiculturalism is a lip service thing. They're interested in money, ranking, positioning, and importance. If what you're doing doesn't contribute to that, then you are of no importance. Serving the community and improving the quality of African Americans through education is [perceived as] a joke."

Elaine's position in her department is jeopardized by her poor relationship with the chair, a woman who came to the university at the same time that Elaine was being hired by the out-going chair. The new chair has consistently made it clear to Elaine that she will not support her: "I won a teaching excellence award last year because I received a 4.8 and 5.0 teaching evaluation from the students but yet the chair evaluated me as ineffective and incompetent in my teaching. I'm going to use that in a law suit." It may be that Elaine's review process will turn out better than she believed at this point in the process. She has a strong relationship with the Dean, and others in the university have determined that the chair, a person with virtually no experience in higher education prior to her appointment at this university, is a difficult individual who is rapidly undermining the work of prominent academic officers outside her college.

A major source of strength for Elaine is her religious faith: "My pastor... said you can heal your heart by teaching others on how to endure hardship and how to learn to be positive." As an

active member of her church, Elaine has forged deep roots in her community. Much of her work revolves around community issues and she would find departing XXXXXXXX a hardship, hence her willingness to pursue a legal battle if necessary. In addition, Elaine's husband has a job he values and their adopted child is secure and happy in their new home. Indeed, the move to the university was not easy. Elaine was separated from her spouse for a period of time at this juncture and their young child was extremely anxious, convinced his parents were getting a divorce.

Clearly, academic women, especially as untenured assistant professors, face tremendous pressures to take on not only professional but also personal responsibilities of considerable complexity. Without the support of partners, colleagues and friends, particularly friends in the academy who can understand the problems and issues confronting the individuals in the professorate, especially women in such roles, the stressors are compounded by a sense of alienation and despair. Elaine, our second case example, was extremely anxious, but not in despair over her situation, buoyed by her faith, her family and at least one sympathetic departmental colleague.

Conclusions

The initial analyses of the data presented in this paper suggest, tentatively, that women faculty face a plethora of challenges in academia. Specifically, major sources of stress, areas of dissatisfaction, and issues of self-efficacy were identified. However, in many instances the

faculty members' perceptions of their relationships with chairs, colleagues, and students were positive ones. Further, the interviews illustrate that the faculty have developed strategies that allow them to construct supports needed to establish themselves.

Of course, much remains to be examined with these data. For example, the relationships between characteristics of the professional preparation of these scholars and their current perceptions of their activities have not been investigated. Additionally, relationships between aspects of their current academic assignments and their perceptions need to be examined.

At a practical level, the long-term goals of this project are intended to provide information that will contribute to the development of policies and practices that support women and minority scholars in major research universities. Such support will increase the core of women and minorities in higher education and in leadership positions. In addition, the results of this research will provide specific hypotheses regarding best practices for the support and development of women and minority scholars. Such hypotheses will be subject to verification or refutation based on new data that will be collected from additional research universities. Finally, the conceptualization and methodological tools developed for this investigation will provide further direction for future researchers addressing women and minorities' underrepresentation in higher education.

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Table 1
Percentage of Respondents Who Rated Themselves as Confident on Items of Academic Self-Efficacy.

Item	Percent Rating of Confidence
Research Activities	
Attending Conferences	79%
Preparing Conference Papers	61%
Collaborating & Consulting with Colleagues	50%
Generating Research Ideas	46%
Reviewing Journal Articles	46%
Writing Journal Articles	36%
Administering Research Projects	32%
Designing Research Studies	32%
Keeping Current with Literature	29%
Writing Book Reviews	21%
Applying for Research Grants	14%
Teaching Activities	
Preparing Lectures	79%
Developing Courses	75%
Delivering Lectures	68%
Marking Assignments	64%
Supervising Graduate Student Assistants	57%
Revising Teaching Strategies	57%
Preparing Assignments	57%
Advising Graduate Students	54%
Assessing Student Skills	54%
Advising Undergraduate Students	50%
Assigning Grades	50%
Devising Course Assignments	39%
Administrative Activities	
Attending Professional Conferences	82%
Conducting Correspondence	68%
Attending Departmental Meetings	64%
Participating on Committees	61%
Participating in Dept. Matters	50%
Consulting Professionally	32%
Chairing Academic Committees	32%
Organizing Professional Conferences	25%
Handling Media Involvement	14%
Developing Policy Documents	11%

Table 2
Descriptions of Relationships on Campus.

Item	Percent Rating Usually or Always
Relationship with Students	
Supportive	93%
Encouraging	89%
Stimulating	86%
Casual	64%
Close	39%
Formal	14%
Competitive	7%
Distant	0%
Strained	0%
Relationship with Other Faculty	
Supportive	82%
Encouraging	82%
Casual	82%
Stimulating	68%
Close	36%
Distant	25%
Competitive	21%
Formal	14%
Strained	11%
Relationship with Department Chair	
Supportive	79%
Encouraging	71%
Casual	68%
Stimulating	43%
Close	29%
Distant	21%
Formal	18%
Strained	14%
Competitive	14%

Table 3
Percentage of Respondents Reporting Satisfaction with Aspects of Academic Life.

Item	Percent Rating Satisfied
Types of Teaching (Undergraduate & Graduate)	75%
Communication with Department Chair	71%
Availability of Supportive Colleagues	71%
Amounts of Teaching	64%
Availability of Support Services	57%
Teaching Assistance	54%
Number of Committee Assignments	54%
Level of Competitiveness Among Faculty	50%
Periodic Departmental Evaluations	50%
Amount of Office Space	46%
Fairness of Peer Review Process	43%
Technical Support in Grant-Writing	39%
Availability of Informal Mentor(s)	39%
Clear Guidelines for Performance	36%
Amount of Research Space	32%
Research Assistance	32%
Interdepartmental Cooperation	32%
Financial Support for Travel	29%
Availability of Formal Mentor(s)	18%

Table 4
Percentage of Respondents Reporting Sources of Stress.

Item	Percent Rating Stressful
Time Pressures	86%
Lack of Personal Time	75%
My Physical Health	71%
Managing Household Responsibilities	68%
Research / Publishing Demands	64%
Review / Promotion Process	54%
Colleagues	46%
Teaching Load	46%
Fund Raising Expectations	43%
Child Care	39%
Students	39%
Faculty Meetings	36%
Committee Work	32%
Discrimination	29%
Children's Problems	25%
Care of Elderly Parent	14%
Marital Friction	11%
Long-distance Commuting	4%

Table 5
Estimates of Internal Consistency of Scales.

Scale	Coefficient Alpha
Research Confidence	0.86
Teaching Confidence	0.89
Administration Confidence	0.91
Relationships with Students	0.60
Relationships with Faculty	0.90
Relationships with Chair	0.93
Satisfaction	0.72
Stress	0.61
Discrepancy	0.74
SWB	0.79

Table 6

Correlations Between Scales.

	Confidence			Relationships						
	Research	Teaching	Admin	Students	Faculty	Chair	Satisfaction	Stress	Discrepancy	SWL
Teaching Confidence	0.37									
Administration Confidence	0.64	0.60								
Relationships with Students	0.10	0.37	-0.13							
Relationships with Faculty	0.07	-0.09	0.25	-0.11						
Relationships with Chair	0.31	0.12	0.26	0.01	0.79					
Satisfaction	0.20	0.19	0.42	-0.09	0.34	0.19				
Stress	0.32	0.04	-0.17	0.39	-0.14	-0.02	-0.29			
Discrepancy	-0.47	-0.30	-0.36	-0.33	-0.20	-0.40	0.12	-0.15		
SWL	0.24	0.40	0.22	0.41	-0.10	-0.12	0.34	-0.09	-0.06	
M	5.12	5.85	5.21	3.25	2.81	2.78	2.50	2.59	1.52	4.64
SD	1.12	0.84	1.20	0.31	0.49	0.70	0.37	0.47	0.58	1.05

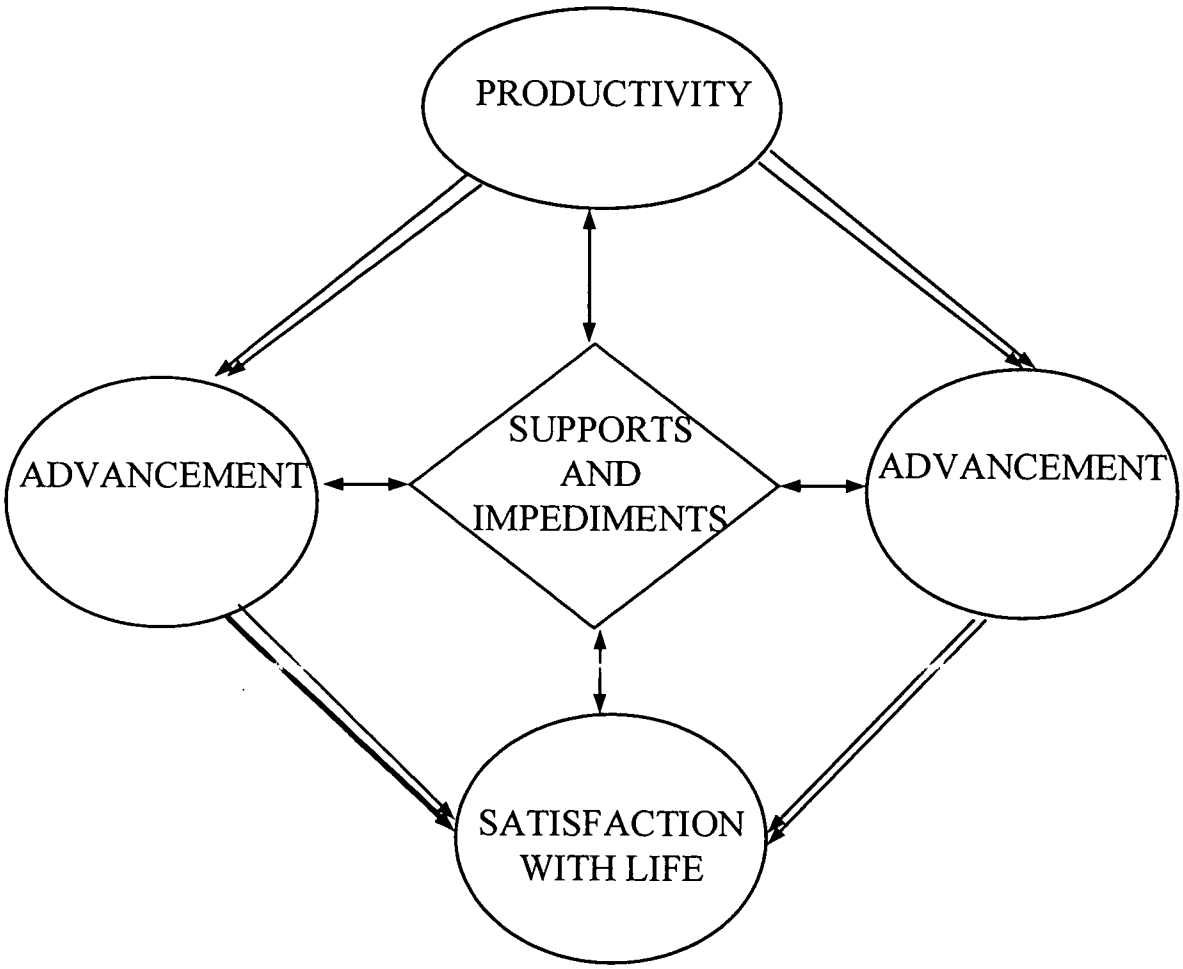

Figure 1. Hypothetical Relationship Between Supports and Impediments and Outcomes

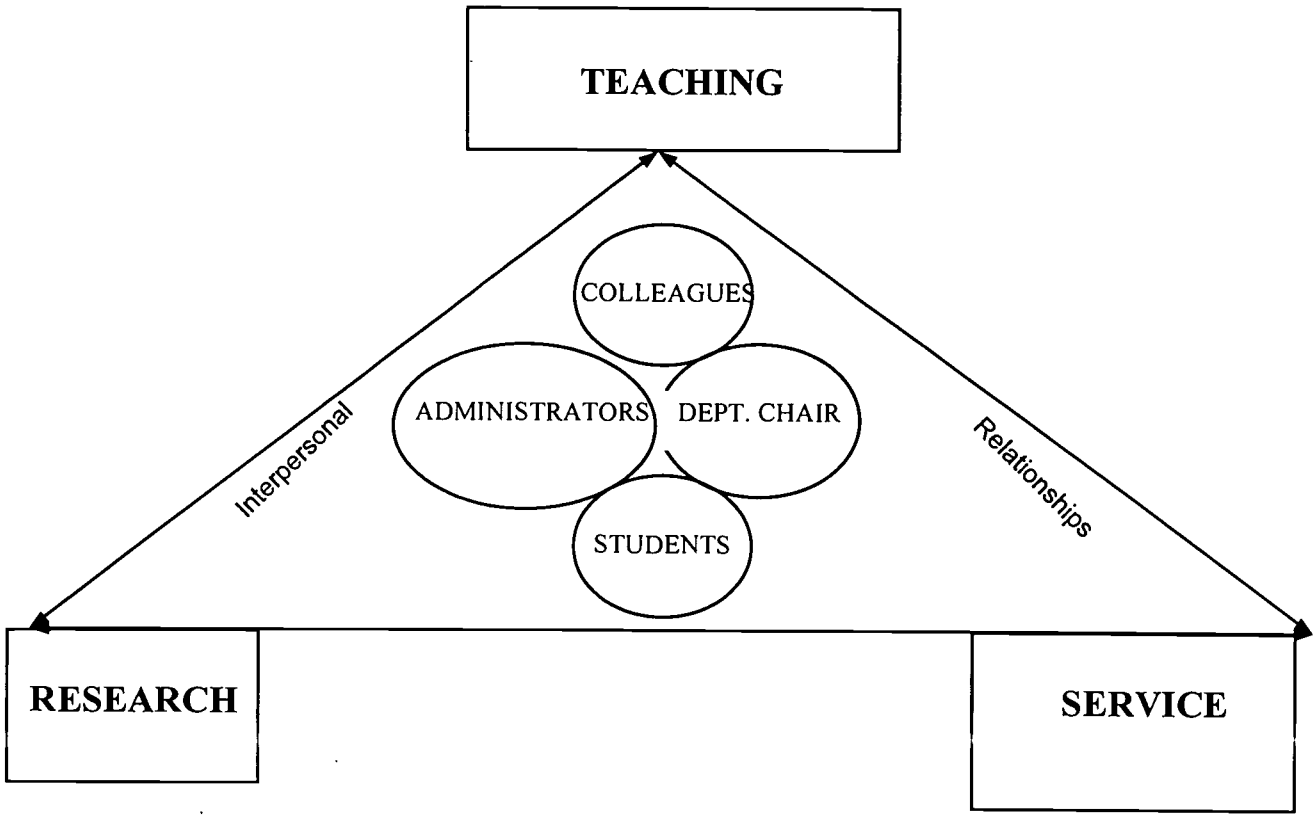

Figure 2. Activities of Scholarship and Sources of Supports and Impediments

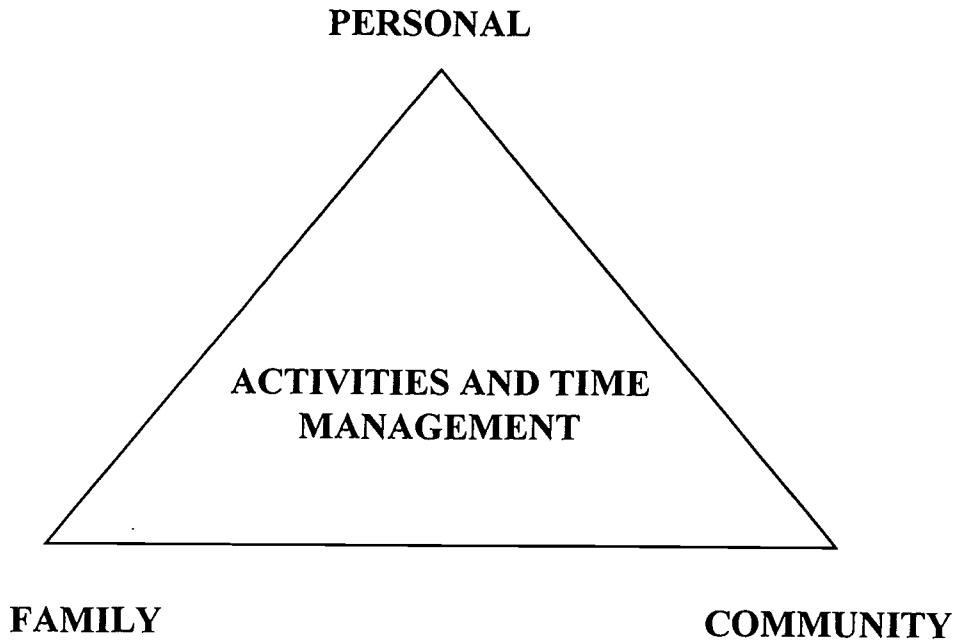

Figure 3. Component of Extra-Institutional Environment

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