The University of Oklahoma
2007 Faculty Climate Survey
Summary Report

University of Oklahoma
National Science Foundation Grant No. 0620102
NSF ADVANCE PAID
Acknowledgements

This report was prepared by Lauren V. Blackwell & Lori Anderson Snyder from the Department of Psychology at the University of Oklahoma. We would like to thank our ADVANCE PAID Grant Team for their assistance with planning and conducting the survey. We would also like to thank the administration and faculty of the colleges who donated their time and opinions to help us conduct this research.

ADVANCE PAID Grant Team:
Catherine Mavriplis (former PI, formerly of Cooperative Institute for Mesoscale Meteorological Studies; presently Professor of Engineering, University of Ottawa)
Sheena Murphy (Co-PI, Physics)
Teri J. Murphy (former co-PI, formerly of Mathematics at the University of Oklahoma; presently Mathematics, University of Northern Kentucky)
Lori Anderson Snyder (Co-PI, Psychology)
Georgia Kosmopoulou (Senior Personnel, Economics)
Kelly Damphousse (Co-PI, Associate Dean of College of Arts and Sciences, Sociology)
Lauren V. Blackwell (Graduate Assistant, Psychology)
xueqi Zhou (Graduate Assistant, Economics)
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Executive Summary

Background

In an attempt to address concerns regarding the experiences of faculty at the University of Oklahoma, in particular women and ethnic/racial minorities, a longitudinal climate survey of the university faculty was developed as part of a larger effort funded by the National Science Foundation (NSF) ADVANCE PAID grant to improve aspects of the policies, procedures, and work climate. Of particular interest to the grant was the experience of women in STEM disciplines (i.e., Science, Technology, Engineering, and Mathematics). Permission of 5 college deans at the university (i.e., College of Arts & Sciences, College of Atmospheric & Geographic Sciences, College of Earth & Energy, College of Engineering, and the Michael F. Price College of Business) was obtained to allow a survey of those faculty members. This report summarizes the results of the first of two climate surveys that are to be conducted two years apart.

Issues addressed in this survey include job satisfaction, organizational climate perceptions, faculty turnover intentions and organizational commitment, satisfaction with current policies, intention to take on leadership positions, and organizational support for family friendliness. Analyses revealed that there were statistically significant differences in the reported levels of satisfaction with university policies and other aspects of the work environment, and organizational climate perceptions between demographic groups (notably, between men and women and between race/ethnic groups), indicating that groups differ on their work experiences and the impact these experiences have on observed outcomes. STEM women reported the greatest frequency of experiencing overt discrimination and the lowest level of perceived support for family friendliness. STEM respondents of color reported more positive work experiences and satisfaction with university policies than the other groups, especially those of color in non-STEM areas. It is hoped that the information contained in the survey will further our understanding of the work climate at the university and serve to justify policy changes within the university.
General Conclusions

Faculty Work Experiences by Gender

- More than half of both men and women were less than satisfied with various aspects of their jobs.
- On average, respondents indicated that the organizational climate was mildly supportive.
- While the majority of faculty was satisfied with the clarity of tenure requirements, fewer than half of both men and women reported satisfaction with other university policies such as FMLA, tenure clock stoppage, childcare resources, spousal hiring procedures, leadership and diversity training, and support for minority and women faculty.
- A large majority of men and women felt that they do not have substantial decision-making influence, and were not satisfied with the transparency of decision-making policies.
- Women reported significantly less support for family friendliness, and about 20% more women than men cite a work-family imbalance as a primary motivator to turnover.
- 10% of STEM women reported experiencing overt discrimination in all possible discrimination categories (e.g., salary, promotion, access to resources). STEM women reported experiencing discrimination with the greatest frequency, higher than that of non-STEM women, and both STEM and non-STEM men.
- STEM women reported the lowest level of support for family friendliness of the four groups, and were less likely to have a spouse/partner than non-STEM women and all of the men.

Faculty Work Experiences by Race/Ethnicity

- Respondents of color reported receiving fewer research and teaching awards (but more service awards), and were less likely to report being viewed by the department as more or much more productive than the department average in comparison with Caucasian/white respondents.
- A lower percentage of respondents of color reported being “satisfied” or “very satisfied” with university policies on mentoring, leader training, diversity training, support for minorities/women, and clarity of tenure requirements than Caucasian/white respondents.
- When examining perceived decision-making influence, a smaller percentage of respondents of color than Caucasian/white respondents reported at least a substantial amount of influence regarding department curriculum decisions, for selecting new graduate students or residents/fellows, for determining who gets tenure, for deciding the future direction of the department, and for affecting the overall department culture or climate.
- For STEM by self-identification as a person of color interactions, differences were found between the groups for subtle and overt discrimination, classes taught, and satisfaction with university policies, with those in non-STEM areas self-identifying as persons of color experiencing the highest levels of discrimination and lowest levels of satisfaction with policies.
- The data shows STEM respondents of color often reporting more positive work experiences and greater satisfaction than the other groups, especially those of color in non-STEM areas.
Motivation and Previous Research

It is nothing new that the experience of women and faculty members of color often differs from that of men and Caucasian/White faculty members. The differences may seem minor at the outset, but they may accrue over time to create wide gaps between groups. The National Science Foundation (NSF) has helped to assess and improve the experiences of faculty members belonging to these traditionally marginalized demographic groups through funding of a series of NSF ADVANCE grants. As a continuing part of this attitude of improvement, the ADVANCE PAID grant team at the University of Oklahoma has committed to promoting institutional change at the university and other universities of the Big XII conference. Previous ADVANCE grant surveys of faculty at other large public universities have found differences between gender and racial/ethnic groups on many variables including job satisfaction, organizational climate perceptions, and other work experiences (AdvanceVT, 2005; Stewart, Malley, & Stubbs, 2002; 2004) and have taken issue with changing existing policies and practices at those universities to better the work experiences for members of targeted groups. For example, the improvements made by the ADVANCE program at the University of Michigan has increased the number of women hired annually for science and engineering faculty positions three-fold over a 5 year period (Industrial Engineer, 2006). The current grant aims to adapt best practices developed by previous ADVANCE grants to better the climate at OU by assessing and targeting women and ethnic minority faculty, especially in the STEM disciplines (i.e., Science, Technology, Engineering, & Mathematics). One step in this process was a faculty climate survey of current OU faculty members across multiple colleges, of which the results and implications of the survey data are presented in this summary report. The proposed date of the next survey is Fall 2009.

Women continue to be underrepresented within the STEM areas (NCES, 2001), though this number has been improving over the years. There is a recognized ‘leaky pipeline’ that affects women through undergraduate to graduate school and into their careers, which results in women consistently ‘leaking’ out of STEM areas at different points in the academic path due to a ‘chilly climate’ for women, cultural pressure to conform to traditional gender roles, and the absence of female scientists as role models and mentors (Blickenstaff, 2005). Women across the board are still subjected to sex discrimination in university settings (Goltz, 2005), and are paid less than men (Toutkoushian, 2007). There are also issues related to racial/ethnic diversity in faculty settings. For example, often a faculty member of color is the sole member of their racial/ethnic group in a department and inherently becomes a ‘token’ individual, which can create problems including lack of a mentor and acknowledged and unacknowledged racism (Johnson-Bailey, Cervero, & Baugh, 2004). Acts of gender and racial/ethnic discrimination have been linked to negative psychological, emotional, and behavioral outcomes. For example, gender discrimination undermines women’s psychological well-being (Swim, Hyers, Cohen, & Ferguson, 2001), and has been linked to increased stress and feelings of anger (Feagin & Sikes, 1994; King, 2005) as well as lowered self-esteem (Crocker & Major, 1989). Discrimination may also create a hostile work environment for the target of the negative or discriminatory events and policies (Glisson & James, 2002). Discrimination causes frustration, stress, and feelings of
anxiety, all of which have been related to lower job satisfaction (i.e., an employee’s level of positive affect towards a job or job situation) (Spector & Jex, 1998). Previous research has demonstrated a relationship between experiencing discrimination in the workplace with decreased job satisfaction and satisfaction with an individual’s chosen profession (Foley & Kidder, 2002; Sanchez & Brock, 1996; Valentine, Silver, & Twigg, 1999). In the example of balancing work and family, research has found that faculty members have gone so far as to strategically minimize or hide family commitments to avoid biased behaviors from others on the job, with women more often reporting those types of behaviors (Drago et al., 2006). These psychological and behavioral responses may cause women or racial/ethnic minority faculty members to turnover or leave the institution (Johnsrud & Rosser, 2002). It is important to note that faculty members are often satisfied with the job itself (i.e., conducting research, teaching & mentoring students), but the environment and/or policies and procedures at the institution are often the driving force behind the decision to leave.

Previous researchers have stated the benefits of diversity in higher education settings (e.g., Milem & Hakuta, 2000), but these benefits cannot be fully realized in the continued presence of discrimination, be it subtle or blatant behaviors by others in the job environment or discriminatory policies and procedures by the organization. In accordance with a proposed ongoing evaluation of the climate and satisfaction of the OU faculty, a longitudinal survey was developed to measure the variables of interest 2 years apart to identify areas of improvement as well as areas that need further attention. Previous surveys conducted by other ADVANCE universities and the OU 2001 CAS survey were used as a foundation from which to build this survey. The longitudinal data collection method will allow us to determine changes in policies and practices that occurred over the time of the grant project. Targeted outcome variables include job satisfaction, organizational climate perceptions, organizational commitment and turnover intentions, satisfaction with OU policies, perceived decision-making influence, leadership intention, service activity, perceived research productivity when comparing oneself with colleagues, teaching activity, awards, advising and mentoring, perceived university support for family friendliness, and experienced subtle and overt discrimination.
Method

Respondent Demographics and Procedure

An online survey was administered to the faculty and staff of several colleges within the University of Oklahoma. The survey was part of a larger grant initiative to assess and improve aspects of the work climate, policies, and procedures at the university. Employee participation in the survey was approved by the deans of five colleges (i.e., College of Arts & Sciences, College of Atmospheric & Geographic Sciences, College of Earth & Energy, College of Engineering, and the Michael F. Price College of Business), through whose administrative assistants a notification of the upcoming survey was announced to employees via email. After the initial email asking for input in a “Faculty Climate Survey”, a second email providing a link to the online survey was sent. This was followed by a third participation reminder email sent shortly before the time window to complete the survey was closed. The time window to complete the survey was approximately one month. Upon accessing the online survey, respondents were provided with an information sheet informing them of the nature and purpose of the survey, and assuring their anonymity and confidentiality. After removing incomplete surveys, a total of 219 employees at the five colleges with the respective deans’ permission completed the survey, with a final response rate of 29%.

Information was also gathered about the sample’s demographics. The sample was 61% male (see Figure 1), with race/ethnicity as follows: 77.2% Caucasian/White, 6.4% Asian/Pacific American, 3.2% Hispanic/Latino/ Mexican American, 1.4% African American/Black, .9% Native American/Alaskan Native, 4.1% Multiracial, and 3.2% indicated “Other” (see Figure 2). Ten percent of respondents answered in the affirmative when asked if they identified themselves as a person of color. This is in relatively good comparison to the tenured/tenure track university faculty as a whole.

![Figure 1. Respondent college distribution by gender](image1)

![Figure 2. Distribution of respondent race/ethnicity group membership](image2)
who are 70.6% male, 10.7% Asian, 2.3% African America, 2.6% Hispanic and 2.6% Native American. For the variable of job classification, 31.1% were full professor, 26.5% were associate professor, 27.4% were assistant professor, while the remaining 10% were adjunct, renewable term faculty, or research staff. Finally, 41.1% of respondents reported membership in one of the STEM fields (STEM = Science, Technology, Engineering, and Mathematics), a variable that was a focus of the grant (see Figure 3). See Appendix A for a description of the measures used in the survey.

Analyses & Results

General Results
To see the means and standard deviations as well as all significant correlations between the study variables, see Table 1.

Regression Analyses. Regression analyses were used to examine which were significant predictor variables and how much the predictor variables explain the variation in the outcome variables. Only the variables that significantly impacted the outcome variable are listed, and the predictor variables are presented in order of strength of impact on the preceding outcome variable. Considering how policies feed into the outcome variables indicated by the regression analyses, it is important to increase satisfaction with university policies to increase positive work outcomes and perceptions.

Outcome: Turnover Intentions ($R^2 = .38$)
- Satisfaction with university policies
- Organizational climate perceptions

Outcome: Organizational Commitment ($R^2 = .37$)
- Satisfaction with university policies
- Organizational climate perceptions

Outcome: Job Satisfaction ($R^2 = .54$)
- Satisfaction with university policies
- Organizational climate perceptions
- Experiencing overt discrimination
- Decision-making influence
- Support for family friendliness having a somewhat significant impact

Comparisons between Groups
There were several statistically significant differences of note between colleges, gender groups, STEM membership groups, ethnic groups, job tenure status, and age groups (split into
individuals below and above or equal to 40 years of age according to the standards of the EEOC). The following results were found using independent sample t-tests and analysis of variance procedures. For ease of reading, only the significant differences between respective groups have been reported below.

**By College.** When comparing the 5 colleges, there were no significant differences on the outcome variables.

**By Job Tenure Status.** Respondents identifying themselves as a tenure/tenure-track professor when compared to faculty members that were non-tenure/tenure-track status (i.e., renewable ranked and unranked term, adjunct, lecturer, and research staff) reported greater research productivity, greater decision-making influence, and greater service involvement (see Figure 4). This pattern of results is a logical outcome due to the demands of a tenure or tenure-track position. Respondents in these positions are expected to engage in more research productivity than other faculty positions that are focused more on teaching activities.

![Figure 4. Differences on outcome variables by job tenure status](image)

**By Age.** The tests for differences between age group was initiated by a split breaking the sample into significantly younger (age: $M=33.20, SD=7.10$) and older (M=51.66, SD=8.06) age groups. Examination of the means tests indicated that those in the younger group reported significantly lower service activities, lower intention to take on leadership roles (marginal statistical significance), lower perceived decision-making influence, and higher reported subtle discrimination (marginal) (see Figure 5). The findings related to service and leadership are to be somewhat expected, as junior faculty have fewer service expectations and leadership

![Figure 5: Differences on outcomes by age](image)
opportunities in academic settings are often tied to the length of employment. The younger faculty may have reported more subtle discrimination due to the nature of a job of college professor, which values experience and knowledge gained over time. Tests examining differences on reported frequency of overt discrimination found no significant differences between age groups.

By STEM Membership. Respondents identifying themselves as being a member of one of the STEM fields reported teaching significantly fewer classes over the previous 4 semesters (Mean=5.16 classes, Standard Deviation=2.63), a greater number of years since in current rank (M=7.3 years, SD=6.33), and having worked at OU for a longer length of time (M=12.15 years, SD=9.4) than respondents identifying themselves as non-STEM (M=6.52 classes, SD=2.96; M=4.91 years, SD=4.44; M=9.0 years, SD=8.27).

By Gender. Women reported a more negative organizational climate, lower organizational commitment, greater frequency of overt discrimination, less support for family friendliness, and were advisers to more students (average of 24 students to men’s 13 students) and younger than men in the sample (average of 43 years to men’s 48 years) (see Figures 6 & 7).

When examining specific items within the scales, there were several items of commonality between the genders. An almost equivalent percentage of all men and women sampled (52% & 53%, respectively) reported that they were “satisfied” or “very satisfied” with opportunities for promotion. The overall scores for job satisfaction indicated again that men and women were “satisfied” or “very satisfied” with their jobs at the university in equal numbers (44% & 44%), less than half of each group. Nineteen percent of men and 24% of women reported that they felt their department viewed them as “below” or “far below” the departmental average of productivity. Men also reported receiving slightly more awards than women in the areas of teaching, research and service. When asked about decision-making influence within one’s department, 23% of women and 25% of men indicated that felt they had at least a “substantial” influence in determining the future direction of the department, while only 16% of women and 22% of men felt that they had at least a “substantial” amount of influence in affecting the overall department culture or climate. Approximately 30% of women and 40% of men reported they were “satisfied” or “very satisfied” with the transparency of decision-making policy. Only one-third of both men and women reported satisfaction with policies pertaining to mentoring relationships.

Areas in which the genders differed were primarily related to work/life balance. Eighty-nine percent of men and 78% of women reported having a spouse or partner, with 72% of men and 94% of women reporting that their spouse or partner works outside the home. Regarding turnover intentions, 59% of women reported they “agreed” or “strongly agreed” with the
statement that their partner’s career has a strong influence on whether they chose to stay at OU, while only 45% of men responded similarly. Women reported a significantly lower perceived support for family friendliness. This is important to note because 32% of women also reported that they “agreed” or “strongly agreed” with the statement “Imbalance between my work and personal life is a primary reason I would consider leaving OU”. Compare this to only 21% of men who responded to this item in the same way. A quarter of women and a fifth of men reported deciding not to ask for modified duties although they were eligible (see Table 2 for a breakdown of motivating reasons). The majority of men and women reported less than satisfied responses to items asking about various university policies (see Table 3 for percentage of respondents reporting satisfaction with various university policies).

<table>
<thead>
<tr>
<th>Table 2. Reasons for failing to request modified duties</th>
<th>Men (n=23)</th>
<th>Women (n=19)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unaware of modified duties</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Told modified duties unavailable</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Advised by colleagues not to</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Put an undue burden on others</td>
<td>12</td>
<td>13</td>
</tr>
<tr>
<td>Lead to a heavier load</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Lead to adverse career impact</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

By Race/Ethnicity. Race/ethnicity was examined with two methods. The first asked respondents whether they identified themselves as a person of color (10% responded in the affirmative), while the second asked participants to identify the ethnic group with which they identified (with nearly 20% responding as non-Caucasians). The methods revealed some significant differences, with individuals identifying themselves as people of color reporting a over twice the amount of overt discrimination (i.e., faculty of color reported that they had experienced discrimination in 3.3 areas relative to 1.6 areas (see Appendix A) reported by their non-color counterparts.). Faculty of color also reported a higher rank when comparing themselves to colleagues with the same perceived productivity level. Examining the data by the second method in which the data is separated by different ethnic group is more difficult due to the small numbers of respondents in some of the groups. Nevertheless, analyses showed differences in job satisfaction, climate, turnover intentions, satisfaction with university policies,
and subtle and overt discrimination when comparing all ethnic groups to each other. There was also a marginal significant difference in regards to the amount of support for family friendliness. Those identified as “African American/Black” consistently reported the most negative outcomes (i.e., lowest job satisfaction, most negative perceptions of organizational climate, highest turnover intentions, lowest satisfaction with university policies, and highest experienced overt and subtle discrimination), while those identified as “Asian/Pacific American” consistently reported the most positive outcomes (i.e., highest job satisfaction, most positive perceptions of the organizational climate, lowest turnover intentions, highest satisfaction with university policies, and lowest experienced overt and subtle discrimination) (see Figures 8 & 9).

Using the dichotomous variable of color identification (whether or not the respondent self-identified as a person of color) permitted a more detailed look into the survey which would otherwise be precluded by the low response levels in some racial/ethnic groups. Fifty-three percent of Caucasian/white respondents report that they were “satisfied” or “very satisfied” with promotion opportunities, while a comparable number (46%) of respondents of color reported the same. The groups were even closer when examining the overall job satisfaction (44% to 41%). A greater percentage of Caucasian/white respondents indicated receiving more research and teaching awards, while respondents of color reported receiving more service awards. This discrepancy may be related to the difference in satisfaction with promotion opportunities because research and teaching awards are weighted more heavily in promotion decisions, compared to service awards. Also of note is the perceived research productivity viewed by the department when comparing the respondent to the department average. Almost 39% of respondents of color reported being viewed as “more productive” or “much more productive” than the department average, compared to 48% of Caucasian/white respondents reporting the same. Finally, more respondents of color than Caucasian/white indicated that a primary reason for leaving the university would be a negative climate (42% v. 64%).

There were also differences when examining satisfaction with university policies and perceived decision-making influence. A lower percentage of respondents of color reported being “satisfied” or “very satisfied” with university policies on mentoring, leader training, diversity training, support for minorities/women, and clarity of tenure requirements than Caucasian/white respondents (see Table 3). This was also true when examining perceived decision-making influence: only 23% reported at least a substantial amount of influence regarding department curriculum decisions, 27% for selecting new graduate students or residents/fellows, 14% for determining who gets tenure, 14% for deciding the future direction of the department, and 14%
for affecting the overall department culture or climate. This compares to 31%, 37%, 27%, 26% and 21% for the Caucasian/white group reporting a substantial influence in these areas. The one exception was decision-making influence on teaching assignments (respondents of color = 32%, Caucasian/white= 25%).

<table>
<thead>
<tr>
<th>Table 3. % satisfied w/ policy</th>
<th>Men</th>
<th>Women</th>
<th>Caucasian/White</th>
<th>Respondents of Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>FMLA</td>
<td>44%</td>
<td>41%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Tenure Clock Stoppage</td>
<td>37%</td>
<td>44%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Childcare Resources</td>
<td>14%</td>
<td>37%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Spousal Hiring Procedures</td>
<td>37%</td>
<td>42%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Mentoring Relationships</td>
<td>45%</td>
<td>38%</td>
<td>43%</td>
<td>33%</td>
</tr>
<tr>
<td>Leadership Training</td>
<td>26%</td>
<td>23%</td>
<td>26%</td>
<td>23%</td>
</tr>
<tr>
<td>Diversity Training</td>
<td>38%</td>
<td>15%</td>
<td>31%</td>
<td>21%</td>
</tr>
<tr>
<td>Support for Minority &amp; Women Faculty</td>
<td>38%</td>
<td>36%</td>
<td>37%</td>
<td>33%</td>
</tr>
<tr>
<td>Clarity of Faculty Tenure Requirements</td>
<td>59%</td>
<td>70%</td>
<td>64%</td>
<td>48%</td>
</tr>
<tr>
<td>Transparency of Decision-Making</td>
<td>38%</td>
<td>32%</td>
<td>36%</td>
<td>30%</td>
</tr>
</tbody>
</table>

**Interactions between STEM Membership & Gender, Race/Ethnicity**

One area the grant was specifically interested in examining was the experience of women and minority group members in STEM areas relative to the rest of the faculty. The next set of results reports the interacting effects the demographic variables had on the outcome variables.

**STEM Membership & Gender.** There was a significant interaction between gender and STEM membership when considering the frequency of overt discrimination such that women in the STEM areas reported the highest level of overt discrimination, while men in STEM areas reported the lowest. When examining the types of discrimination more closely, there were some notable differences. More STEM women reported discrimination across the areas than the other groups, with 10% of STEM women reporting discrimination experiences in all 10 categories (i.e., hiring, promotion, salary, resource allocation, access to technology, access to administrative staff, support and collaboration for research/grants, graduate student or fellow assignments, teaching preferences or load, and teaching release time). Additionally, half of STEM women surveyed reported discrimination in salary (see Table 4 for a breakdown of overt discrimination experienced by STEM membership & gender).

It was found that STEM men reported the greatest institutional support for family friendliness, while STEM women reported the lowest (see Figure 10). Significant differences were also found for other outcomes: non-STEM women taught the most classes (M=6.73, SD=3.20), STEM women taught the least (M=5.00, SD=2.50), with men in both categories falling in the middle (STEM men: M=5.20, SD=2.68; non-STEM men: M=6.27, SD=2.72).
Upon closer examination of the measures by STEM and gender, several points are notable. STEM women were less likely to have a spouse or partner compared to non-STEM women, and to both STEM and non-STEM men (see Figure 11). This is important in light of the fact that the sample’s STEM women respondents reported the lowest level of perceived family support, and the well-documented observation that women feel like they must make a choice between family and career, especially in typically male-dominated science fields. A full 2/3rds of non-STEM women reported that their partner/spouse’s career has influence on whether they choose to stay at OU, while only 35% of STEM women reported the same. Also, 55% of STEM women reported a negative climate as the primary reason they would consider leaving OU, compared to the next highest group, non-STEM women at 44% and both groups of men at levels even lower.

### Table 4. Percent experiencing overt discrimination in 10 academic areas

<table>
<thead>
<tr>
<th></th>
<th>STEM Women</th>
<th>STEM Men</th>
<th>Non-STEM Women</th>
<th>Non-STEM Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiring</td>
<td>30%</td>
<td>4%</td>
<td>21%</td>
<td>9%</td>
</tr>
<tr>
<td>Promotions</td>
<td>35%</td>
<td>9%</td>
<td>29%</td>
<td>11%</td>
</tr>
<tr>
<td>Salary</td>
<td>50%</td>
<td>23%</td>
<td>38%</td>
<td>22%</td>
</tr>
<tr>
<td>Resource Allocation</td>
<td>35%</td>
<td>13%</td>
<td>28%</td>
<td>22%</td>
</tr>
<tr>
<td>Access to Technology</td>
<td>15%</td>
<td>4%</td>
<td>14%</td>
<td>9%</td>
</tr>
<tr>
<td>Access to Admin Staff</td>
<td>15%</td>
<td>9%</td>
<td>12%</td>
<td>11%</td>
</tr>
<tr>
<td>Research/Grants Support</td>
<td>30%</td>
<td>6%</td>
<td>19%</td>
<td>7%</td>
</tr>
<tr>
<td>Grad Student Assignments</td>
<td>20%</td>
<td>7%</td>
<td>21%</td>
<td>13%</td>
</tr>
<tr>
<td>Teaching Preferences/ Load</td>
<td>35%</td>
<td>17%</td>
<td>24%</td>
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<tr>
<td>Teaching Release Time</td>
<td>15%</td>
<td>11%</td>
<td>19%</td>
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</tr>
<tr>
<td>IN ALL TEN CATEGORIES</td>
<td>10%</td>
<td>0%</td>
<td>7%</td>
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### Table 5. Percent satisfied with university polices

<table>
<thead>
<tr>
<th></th>
<th>STEM Women</th>
<th>STEM Men</th>
<th>Non-STEM Women</th>
<th>Non-STEM Men</th>
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<tbody>
<tr>
<td>FMLA</td>
<td>35%</td>
<td>20%</td>
<td>24%</td>
<td>28%</td>
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<tr>
<td>Tenure Clock Stoppage</td>
<td>30%</td>
<td>17%</td>
<td>28%</td>
<td>20%</td>
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<tr>
<td>Childcare Resources</td>
<td>5%</td>
<td>4%</td>
<td>0%</td>
<td>7%</td>
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<tr>
<td>Spousal Hiring Procedures</td>
<td>25%</td>
<td>23%</td>
<td>28%</td>
<td>24%</td>
</tr>
<tr>
<td>Mentoring Relationships</td>
<td>25%</td>
<td>30%</td>
<td>31%</td>
<td>43%</td>
</tr>
<tr>
<td>Leadership Training</td>
<td>25%</td>
<td>16%</td>
<td>9%</td>
<td>15%</td>
</tr>
<tr>
<td>Diversity Training</td>
<td>10%</td>
<td>14%</td>
<td>9%</td>
<td>32%</td>
</tr>
<tr>
<td>Women/Minority Faculty Support</td>
<td>35%</td>
<td>14%</td>
<td>28%</td>
<td>22%</td>
</tr>
<tr>
<td>Education Benefits for Partner</td>
<td>0%</td>
<td>3%</td>
<td>2%</td>
<td>9%</td>
</tr>
<tr>
<td>Clarity of Faculty Tenure Requirements</td>
<td>70%</td>
<td>52%</td>
<td>55%</td>
<td>56%</td>
</tr>
<tr>
<td>Transparency of Decision-Making</td>
<td>25%</td>
<td>32%</td>
<td>33%</td>
<td>39%</td>
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</tbody>
</table>
STEM women received the fewest research awards, but reported the largest percentage of teaching awards. STEM women also reported the lowest level of perceived research productivity as viewed by the department compared to the department average, again showing an emphasis on women as teachers and not researchers, even in the sciences. Interestingly, these trends did not necessarily coincide with levels of satisfaction with university policies, where the percentage of STEM women satisfied with university policies was sometimes more than or equal to the percentage of men (see Table 5). Note that across the groups and for the majority of the university policies, the percent of employees satisfied with the policies is usually less than a 3rd of all respondents.

**STEM Membership & Race/Ethnicity.** There were several differences when examining the interaction of STEM membership and race/ethnic group membership (note that there were no respondents who identified as STEM and African American/Black). These analyses used the dichotomous variable of respondent self-identification as a person of color. Significant differences were found between the 4 groups for subtle and overt discrimination, classes taught, and satisfaction with university policies (see Figure 12).

The data also revealed some other findings, which had more practical than statistical significance. STEM respondents identifying themselves as persons of color had the highest level of satisfaction with policies addressing leadership training, diversity training, minority/women support, and transparency of decision-making, while those within the non-STEM fields identifying as persons of color report the lowest level of satisfaction. STEM respondents of color also reported the highest receipt of service and teaching awards, while non-STEM respondents of color reported less than half that number. Interestingly, the results seem to indicate that, for faculty members of color, being in a STEM discipline may actually be beneficial and lead to more positive work experiences than those outside the STEM areas.
References


Sanchez, J.I., & Brock, P. (1996). Outcomes of perceived discrimination among Hispanic


Table 1. Significant Correlations between Study Variables

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<td>17. # of Classes Taught</td>
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</table>

Note. A positive correlation sign indicates that as one variable increases the other variable is also increasing, while a negative correlation sign indicates that as one variable increases the other variable is decreasing. The larger the absolute value of the correlation, the stronger the relationship between the variables. Total sample size = 219. M=mean; SD=standard deviation. All values included in the table were significant at p<.05 level; blanks indicate a non-significant correlation. Gender: 0=female, 1=male. Color Identification: 0=not self-identified as a person of color, 1=self-identified as a person of color. STEM: 0=non-STEM, 1=STEM area. <sup>a</sup>denotes variable was measured using a 5 point Likert scale. <sup>b</sup>denotes variable was measured by summing activities to create a frequency index.
Appendix A

2007 University of Oklahoma Faculty Climate Survey – Description of Measures

**Job Satisfaction.** A shortened form (7 items) of the measure developed by Schriesheim and Tsui (1980) was used to assess job satisfaction (alpha = .81). Respondents were asked to use a 5-point Likert scale (1=“very dissatisfied”, 5=“very satisfied”) to identify the extent to which they are satisfied with their work, supervisor, interpersonal relationships, and other job opportunities.

**Organizational Climate.** This scale was also based on items that were developed for a similar grant at another university (University of Rhode Island ADVANCE Academic Work Environment Survey, 2004). Respondents were presented with ten pairs of words (e.g., friendly & hostile, cooperative & competitive) and asked to choose a number (1 to 5) on the continuum to indicate the nature of the work environment in their department. For example, 1 means that the climate is friendly, 3 is neutral, and 5 means the environment is hostile. Cronbach’s alpha was .92 for this scale.

**Turnover Intentions.** Turnover intentions were measured with a nine-item, 5-point Likert scale adapted from Hom and Griffeth (1991) (alpha = .95). Items assessed the extent to which respondents agree (1=”strongly disagree”, 5=”strongly agree”) with statements like “I am thinking about leaving the university” and “I intend to ask people about new job opportunities”, as well as an item assessing the frequency they think about leaving the university.

**Affective Organizational Commitment.** An established subscale of a larger organizational commitment scale was used to measure affective organizational commitment (Meyer, Allen, and Smith, 1993). Six items assessed the extent to which respondents agree (on 5-point Likert scale, 1=”strongly disagree”, 5=”strongly agree”; alpha = .92) to statements describing a sense of belonging and emotional attachment felt towards the university.

**Subtle Discrimination.** A 20-item measure of subtle discrimination was developed for the survey based on Benokraitis and Feagin’s (1986) work. The authors’ work carefully defined and parsed out subtle discriminatory behaviors from more blatant and covert behaviors using previous research to create a descriptive outline of the various types of subtle discrimination. Items were derived from the different types so that the range of situations and behaviors could be measured specifically in a workplace environment. Items included “I have been included in informal social interactions at work” and “I have been ignored in a group or meeting.” The response scale used a 5-point Likert scale asking respondents to indicate how often they experienced behaviors of this type from their supervisors and again from their colleagues, with higher scores indicating a greater frequency of experiencing subtle discrimination. The supervisor and colleague items were combined into one scale, which had good reliability (alpha = .90).

**Overt Discrimination.** This scale was based on items that were a part of a similar grant at another university (University of Rhode Island ADVANCE Academic Work Environment Survey, 2004). An frequency index of the occurrence of discrimination was measured by asking respondents to indicate if they had experienced discrimination in ten different areas important in the professional academic arena including salary, teaching load, promotion opportunity, and access to resources.
**Research Productivity.** The scale was based on items that were developed for a similar grant at another university (University of Rhode Island ADVANCE Academic Work Environment Survey, 2004). Research productivity (e.g., patents, dissertations chaired, and book chapters, articles, grant proposals written and/or published) was a 2-item measure (5-point Likert scale; alpha = .65), which assessed the extent to which respondents perceived that they are productive compared to colleagues at in the same area and rank and also compared to their department’s average.

**Teaching Involvement.** Teaching involvement consisted of a free-response item asking respondents to indicate how many courses they had taught in the past four semesters.

**Advising.** This set of items using a free-response format, assessed the number of undergraduates, master students, doctoral students, post-docs and faculty members respondents officially or informally advised or mentored.

**Service.** Service was assessed with 4 free-response items asking respondents to indicate the number of committees on which they serve and chair in a typical year, and a separate item asking how many hours per week they devoted to these activities (University of Rhode Island ADVANCE Academic Work Environment Survey, 2004). Cronbach’s alpha was .73.

**Intention to Take on Leadership Roles.** The intention to take on leadership roles was assessed through 4 items asking respondents to indicate on a 5-point Likert scale how willing they were to take on various leadership tasks (e.g., lead a departmental initiative, take on an higher level administrative position) (1=”not at all willingly”, 5=”very willingly”; alpha = .88) (University of Rhode Island ADVANCE Academic Work Environment Survey, 2004).

**Awards.** Items asked respondents to indicate if they had been nominated in the past 5 years for awards in the areas of research, service, teaching, and other.

**Policy Satisfaction/Use.** Fourteen items were developed which asked respondents to indicate their level of satisfaction (response choices ranged from 1=”very dissatisfied” to 5=”very satisfied”; alpha = .84) with the programs and policies related to their position as a faculty member, as well as whether or not they had used the policy or program during their time at OU. Items included Family Medical Leave Policies, spousal hiring procedures, and tenure clock stoppage.

**Decision-Making Input.** A set of items adapted from the University of Michigan ADVANCE Survey of Academic Climate and Activities (2005) assessed the amount of influence the respondents felt best represented the level of influence they felt they have over various matters in their respective departments (alpha = .87). Response choices ranged from 1=”no influence” to 5=”substantial influence”. Areas included department curriculum decisions, receiving research space and resources, and selecting department chairs.

**Support for Family Friendliness.** Thirteen items asked respondents to what extent they agreed or disagreed with statements regarding how supportive the university is in matters of balancing their work and family lives (1=”strongly disagree”, 5=”strongly agree”). The scale, which was adapted from the work of Thompson, Beauvais, and Lyness (1999), had a Cronbach’s alpha was .88.

**Demographics.** Information about traditional demographic variables of age, sex, race/ethnicity, and disability status was gathered. College within the university, years at the university, and tenure or tenure-track status was also assessed. A demographic of particular interest to the grant was membership in one of the STEM fields (STEM = Science, Technology, Engineering, and Mathematics), which was also assessed.