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ABSTRACT

This paper presents results of a study that examined the current climate for female community college faculty. Two decades ago, Hall and Sandler coined the phrase "chilly climate" symbolically to embody a pervasive and negative climate reported by girls and women in their educational surroundings. Research literature continues to report on the chilly climate for female college students, faculty, and administrators. This report addresses the dearth of information specifically regarding female faculty at community colleges. The authors designed analyses of the community college faculty set consisting of responses of 743 and 740 female faculty. Using the literature as a guide, the study isolated constructs measuring: (1) overall assessment of the climate; (2) satisfaction with salary; (3) satisfaction with students; (4) propensity to leave the college; (5) desire for more interaction with colleagues; and (6) discrimination. In 1974, 28% of full professors at two-year colleges were female, compared with 10% in all other institutions. In 1997-98, 38% of full professors at two-year colleges were female, compared with 19% at all other institutions. This indicates that there is still evidence of a chilly climate in two-year colleges, but that female faculty there fare better than their counterparts at four-year institutions. (Contains 43 references, 5 tables, and 2 figures.) (NB) .



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Feeling a Bit Chilly? Exploring the Climate for Female Community College Faculty

Two decades ago Hall and Sandler first coined the phrase "chilly climate" to symbolically embody a pervasive and negative climate reported by girls and women in their educational surroundings. The term has been subsequently and colloquially used as the barometric gender measure of women's classroom experiences and career advancement in postsecondary institutions. Hall and Sandler's (1982) groundbreaking, and now famous study, "Classroom Climate: A Chilly One for Women?" noted that the traditional practices of college professors provided a differential treatment of students by gender that favored men and marginalized women.

Other studies, both nationally and internationally, focusing on women's perceptions of their career development, barriers, and opportunities in the academy followed.

Discriminatory practices and attitudes toward women were documented and evidence of women's academic freedom and lower levels of advancement were shown to be more widespread than generally assumed. One of these studies also gave rise to the image of the "glass ceiling" as a composition of transparent barriers that prevent women from rising above a certain level in the institutional hierarchy (Morrison, White, Van Velsor, and The Center for Creative Leadership, 1987). A decade later additional vivid imagery was erected to provide a picture of decreasing opportunities for women as they struggle to progress to higher levels of administration, aptly termed the "academic funnel".

Despite the prevalence of research literature with clear evidence of a "chilly climate" for many female college students, faculty, and administrators, there has been little attention given to the investigation of the plight of female faculty at community colleges. This chapter provides both a literature review to highlight the conditions of women faculty working in



higher education institutions and empirical analyses of a national dataset of community college faculty to determine if similar conditions are prevalent for women faculty in two-year colleges. In this chapter, we ask: Is there a chilly climate at community colleges for female faculty?

Review of the Literature

Certain cultural myths are deeply embedded in the academy, which define women's personal and professional lives. According to Glazer-Raymo (1999), these myths reveal the difficulties that women scholars have faced in combining marriage, motherhood, and academic careers within a social climate of male dominance and assumed superiority. For instance, Glazer and Slater (1987) examined women's entry into academe from 1890 to 1940 and found that in order to counteract the myth of male superiority and innate suitability for academic life, women academics had to resort to "super performance" only to be recognized as equals of men in their professional roles. Barnard (1964) publicized the pervasive myth that women prefer teaching and service to research and scholarship, and may have inadvertently exacerbated the situation – and thus contributed to the chilling effect for women - by claiming that women naturally had noncompetitive natures and were uninterested in status and prestige. Shattering the myth that tenure policies are gender blind, Astin (1969) analyzed the results of a survey of women doctorates and found that sex discrimination and existing tenure politics affected women negatively and led to high attrition rates of female faculty. She also noted that many female academics juggled two lives, balancing the heavy demands of their professional careers alongside attending to their families.

Nearly twenty years later it was Gilligan's (1977) controversial study on women's psychological development and ways of making choices and decisions that boldly uncovered



that excluded the majority of the world population, including all women. In addition, Gilligan defined and acknowledged the ethics of caring and being responsive to the needs of others. She contended that men and women differ in how they make decisions and judgments. Gilligan opined that women have a moral context of choice, which acknowledges that the needs of individuals are not always abstracted from general rules and principles, but rather that moral choice must be determined inductively from the specific experiences each individual brings to a situation. Twombly (1995) and others have accepted and embraced the essential differences of males and females and have implied that the leadership qualities of women might even exceed those of men.

Expanding on Gilligan's work, Belenky, Clinchy, Goldberger, and Tarule's (1986) research analyzed perspectives on knowing (i.e., silence, received knowing, subjective knowing, procedural knowing, and constructed knowing). While these five perspectives were not necessarily perceived as distinctively female, Belenky et al. advanced the concept that women's ways of knowing and thinking had been masked or distorted historically by ignoring women in psychological studies, and thus presented a masculine view as representative of the general population. They advocated, instead, "women come to know through silence, through listening to the voices of others, through quest for the self, through the voice of reason, and through connecting all of the above" (cited in DiCroce, 1995, p. 81). As such, Belenky et al. presented an alternate image of women as focused on such characteristics as connectedness, cooperation, and working with others in "webs and nets" rather than in pyramids and hierarchical ladders – more typically male models of ascension.



Both Gilligan's and Belenky et al.'s findings laid the theoretical foundation for studies that followed examining women's and men's leadership styles. While the notion of a chilly climate was not embedded in either Gilligan's or Belenky et al.'s studies, the concept that there were different styles of leadership possible – and not just the rational, linear model favored by men – nonetheless tacitly acknowledged that a chilly climate exists for women in professional surroundings.

The Conditions of Women Faculty

In considering women faculty member's roles in higher education, it is clear that on average they spend more time teaching (58%) than men do (46%) and much less time in research (i.e., 16% for women and 27% for men, respectively) (Glazer-Raymo 1999).

However, it is difficult to ascertain if the differences are really due to personal preferences or to the types of postsecondary institutions in which more women are hired. It is important to point out that a research/teaching gap is likely a mute point in community colleges where teaching is the primary emphasis for all faculty and research and scholarship as traditionally exemplified in four-year institutions are minimally emphasized.

Additionally, as one considers the disciplines in which most women faculty are practicing, we find that they remain concentrated in the disciplinary areas of the humanities, social sciences, and education and are uncommon in law, medicine, mathematics, physics, biology, and other hard sciences (Hagedorn, Nora, & Pascarella, 1996). Female faculty in the hard sciences have reported professional climates to be especially chilly. For these women, it has been particularly difficult to achieve professional recognition in their male-dominated fields. These difficulties include having little to no mentoring for crucial career advancement, such as how to secure grants, set up research labs, hire research assistants, and garner other



important institutional support (Glazer-Raymo, 1999; Wilson, 1999). Vetter (1992, p. 4) states that, indeed, there is a "triple penalty of cultural, attitudinal, and structural impediments," which makes it much more difficult for women scientists to persevere in their professions.

These career impediments are aptly demonstrated in the recent highly publicized case of biology professor Nancy Hopkins at the Massachusetts Institute of Technology (M.I.T.) who complained in 1993 that she was a victim of unfair treatment when compared to her male colleagues. Six years later, her on-going complaints finally led to an internal study that documented gender bias against women in the School of Science. According to Hopkins, "Even though it seems like women have been talking about gender discrimination forever, the M.I.T. study broke new ground ... and found that the women came up short" (quoted in Wilson, 1999, p. A16). These recent findings have led other research institutions, such as the California Institute of Technology, Case Western Reserve University, Harvard Medical School, the University of Arizona, and the University of California at Los Angeles, to conduct gender equity studies of their own (Wilson, 1999).

Glazer-Raymo (1999) notes that "the politics of leadership takes on a different meaning when gender becomes part of the equation" (p. 24). Does this also mean then that the climate is chilled when women visibly indicate interest in upper level positions of leadership? In addition to retaining their faculty status, there are some women faculty who assume positions of administrative leadership, such as program coordinator and department chair. Among some of these women are those who also see these positions as opportunities to begin moving up the administrative career ladder into positions such as deans, vice presidents, and presidents. In many instances, assumptions about gender and power rise to the surface



when women indicate interest in and/or make such career moves. Townsend (1995) states that those with structural power – typically men since they dominate positions of power – often respond by creating or maintaining structural barriers to block women's movement into positions of power and authority, and thus exacerbate the already chilly climate by marginalizing women even more.

On the other hand, Townsend (1995) also contends that women fare better in community colleges than in four-year colleges and universities due primarily to their larger numbers overall and to the presence of female role models serving in positions of leadership, from department chairs to presidents. Frye (1995) states that several characteristics in the historical evolution of the two-year college created a favorable environment for women. Frye surmises that the multiplicity of the mission of the two-year college led to climates where students could exert significant influence on program decisions that may have had positive repercussions for female students. Also, he notes that the move to co-education was easier in two-year colleges and women were welcomed earlier into these institutions. The presence of women led to a need for more faculty, which in turn led to hiring women teachers as they were readily available. In the 1960s and 1970s, women began to increase their presence in the community college in much greater numbers so that by the end of the twentieth century, female students surpassed male students in sheer numbers and earned more associate degrees than their male peers (NCES, 2000). The history of the community college itself may well have stimulated the increasing presence of women in these institutions and mitigated against maintaining a chillier climate for women in contrast to the conditions for women in the fouryear sector.



Faculty Women of Color

A discussion of a chilly climate for women must include an acknowledgement that women of color may experience a double whammy related to gender and race/ethnicity. While Beverly Bower's chapter in this volume focuses on women faculty of color in substantially greater detail we would be remiss if we did not highlight several observations drawn from the literature on gender studies. For one thing, until the last decade most of the empirical research and literature on gender and discriminatory practices focused on only white women. Ignoring women's differences related to culture and race or ethnicity would be a glaring omission akin to that of Erikson's (1968) and others' male gendered psychological development studies of white men that assumed they represented all men as well as the entire population. A discussion of the chilly climate must also take into account that women of color may experience an even "chillier" climate due to their minority status.

In 1990 Derrick Bell, an African American professor at Harvard, brought national attention to the conditions of women faculty of color. Bell protested Harvard's failure to tenure an African American woman and ultimately resigned from the faculty rather than continue to be part of "politics of racial exclusion" (cited in Glazer-Raymo, 1999, p. 124). Scholars such as Romany (1997) criticized feminists for not being inclusive in their analyses of discriminatory practices that included women of color. Critical race feminists also rejected Gilligan's (1977) and other white women's research for failing to recognize the multiple experiences of women related to the crucial variables of race, ethnicity, and social class (Glazer-Raymo, 1999).

Research began to emerge in the 1980s that examined women of color in higher education not just as an aggregate group, but also as studies that focused on one distinct, culturally specific race/ethnic group (e.g., African American, Latina, Chicana, Native



American, Asian American). Researchers such as Weis (1985), Rendón (1982, 1992), Turner (1988), Amey (1999), Amey and Twombly (1992), Twombly (1995), Laden (1994, 1999), Laden and Turner (1995), Townsend (1995) and Laden and Hagedorn (2000) began to call more attention to issues of race, class, and gender related to racially and ethnically diverse students, faculty, and administrators in the community college. While the focus of this chapter is not specifically on women of color, we must acknowledge that the climate for all women may not be the same. Female faculty of color may have experiences that relegate them to the margins as both women and minority members, thus subjecting them to situations that may be even "chillier" than those experienced by white female faculty.

The State of Female Faculty at Community Colleges

In this section of the chapter we turn from a review of the literature to a targeted look at the climate of the community colleges for female faculty at the dawn of the 21st century. Specifically, we first provide general statistics concerning gender and two-year colleges as provided by the National Center for Education Statistics, the U.S. Department of Education, and the American Council for Education. Secondly, we specifically analyze a national data set of the responses of over 1,500 community college faculty to test for the presence of indicators of a "chilly climate" as well as to elucidate the nature of the situation reported by female faculty.

A National Picture of Community Colleges

Over 5.6 million people are enrolled in courses at one of the nation's 1,727 community college campuses (Digest, 2000). Although each campus naturally retains its individual personality and distinctive mission, a common thread runs through each of them – a quest for equality. Beyond the often-proclaimed mantra "education is the great equalizer," community colleges have been especially strident in their role of providing opportunities for



those with restrained options. Community colleges may especially appeal to women because they offer a number of programs and opportunities, including: convenient class schedules, early childhood programs with extended child care, welfare reform school-to-work programs, re-entry and single parent programs, women's centers offering women's studies, low tuition, and neighborhood locations. Understandably, the female student population at community colleges has soared to over 57% of the student body (as compared to 55.2% at four year institutions) (Digest, 2000).

Female representation is also significantly larger among the approximately 301,000 faculty at community colleges. Whereas only 36.3% of the nation's four-year faculty are female, at community colleges, the proportion is very close to half (48.7%) (Digest, 2000). If we examine gender proportions by full- or part-time faculty status, we find that at four-year institutions the full time faculty is 33% female, while at community colleges the proportion is 47.5%. Among part-time faculty, women constitute 45% of the faculty at four-year institutions and 49.2% at community colleges. With respect to ethnicity, community colleges and four-year institutions both have approximately equally low representation of faculty of color. At public four-year colleges only 18.4% of faculty are of ethnic backgrounds other than white, while the proportion at community colleges is even slightly less (17.4%) (Digest of Education Statistics, 2000). Turning to rank, we provide Table 1 for a comparison for the 1974-75 and 1997-98 academic years. Note that in the four-year sector, women are located primarily in the lecturer and assistant professor ranks with fewer obtaining tenure and promotion to associate professor and even less to full professor (Astin, Antonio, Cress, & Astin, 1997). Although women are clearly better represented in the higher ranks at two-year colleges than at other institutions, there are still vague signs of inequality. Further, while



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74.8% of the male faculty are tenured, only 68.1% of the female faculty in community colleges enjoy the same status (Digest, 2000). Tenure at community colleges is generally awarded after a shorter period of time than at four-year colleges and is based more on teaching and service (Townsend, 1995).

---- Insert Table 1 About Here -----

Taken together, the aforementioned statistics appear to paint a somewhat more favorable climate for female faculty in community colleges than at four-year universities, but it is important to note that salary differentials still exist. For the 1998-1999 academic year, the average salary for male full time community college faculty was \$48,961, while for their female counterparts it was \$45,457 (AAUP, 2001). This wage differential is much less than that which exists at four-year institutions. Using National Survey of Postsecondary Faculty dataset and following a set of 26 control variables, Hagedorn (2000) found that 73% of the women faculty at four-year colleges had a positive wage differential, indicating that they were paid less than what the male counterparts. The mean gender difference was \$8,681. Of course such differences should not be taken lightly as Hagedorn (1996) found in an earlier study using a separate national dataset that gender-based wage differentials for faculty contribute to women's intent to leave academia.

One reason for the lower gender-based wage differentials at community colleges may be due to the effect and efforts of collective bargaining. Castro (2000) found in her study that community college faculty indicated greater job satisfaction when their salaries were increased due to their unions' successful collective bargaining efforts. Townsend (1995) also noted that women have assumed leadership roles in the faculty unions, therefore, their very



presence at the bargaining table has heightened awareness of salary equity for all collective bargaining participants.

For a glimpse of women in upper levels of administration, we turn to a discussion of the community college presidency. Although there is disparity in proportion by gender among the nation's two-year college presidents, women fare better at community colleges when compared to their university counterparts. A very recent look at college presidencies by the American Council on Education (ACE) revealed that the number of women holding college presidencies has greatly increased during the last two decades (ACE, 2000). Whereas in 1986 only 9.5% of the four-year college campuses had women in the top post, by 1998 that number had increased to 19.3%. Community colleges follow the pattern of increasing number of women presidents as evidenced by the 1986 statistic of 5.8% of campuses having a woman in the senior administrative leadership position, which only two years later rose to 22.1% (ACE, 2000). According to the Director of the ACE Fellows Program and Associate Director of the Center for Institutional and International Initiatives, Marlene Ross, one out of every three new community college presidents hired between 1995 and 1998 was female (ACE News, 2000).

The aforementioned statistics appear to indicate signs of gender inequality, but on the other hand indicated that the climate at community colleges for female faculty may not be as chilly as that reported at four-year institutions. The warmer currents emanating from egalitarian missions and more diverse student and faculty populations may create more temperate climate than expected at other institutional types. To measure the climate, we performed a series of statistical tests with the community college faculty data set.



Test for a "Chilly Climate" Using the Faculty Data Set

To test for a chilly climate among female faculty, we designed analyses of the community college faculty data set consisting of the responses of 743 male and 740 female faculty. We began by comparing the demographics between men and women. A chi square test indicated no gender differences by ethnicity (χ^2 =4.256, df=5, p > .05) but that men were significantly older than women in the sample (χ^2 =44.117, df=5, p < .05). Figure 1 provides a graph by age that clearly displays that age differences are concentrated in the 45 to 64 age group. Whereas there is a larger proportion of men in the 55 to 64 age group, there are more women in all other age brackets. The age distribution of our sample is consistent with the national distribution by gender and age of instructional faculty in public 2-year colleges (U. S. Department of Education, 2000). The figure clearly indicates trends in hiring junior faculty (who tend to be younger), are more gender balanced. Further, it could be interpreted that in time as the older faculty retire, the distribution of men and women faculty by age will no longer exhibit differentials.

The last demographics compared were related to job experience. We compared both the numbers of years as a faculty member and the number of years at the present college with a one-way analysis of variance (ANOVA). The results indicated that men reported significantly more experience as a faculty member in general (f=17.826; df=1, 1468; p < .001) as well as the years at the present college (f=13.778; df 1, 1457; p<.001).

Insert Figure 1 About Here

With a better understanding of the demographic differences by gender, our next steps involved the construction of factors that would measure the climate as reported by faculty.



Using the literature as a guide, we isolated constructs measuring: 1) overall assessment of the climate, 2) satisfaction with salary, 3) satisfaction with students, 4) propensity to leave the college 5) desire for more interaction with colleagues, and 6) discrimination.

Overall assessment of the climate was measured by a seven item standardized scale measuring campus assessments of various components of faculty life. Both satisfaction with salary and satisfaction with students consisted of the faculty member's response to the item "how would you rate your salary" and "how would you rate your relations with students," respectively. Propensity to leave the college was operationalized by summing faculty responses to five categories in response to: "In five years (2005), you might be considering the following positions. Do they appear attractive to you at this time?" Desire for more interaction with colleagues was measured by a single item, in which faculty reported preferring more interaction with colleagues. Finally, to measure discrimination, we used the Likert scaled item "Claims of discriminatory practices against women and minority faculty and administrators have been greatly exaggerated." Table 2 provides a listing of the specific items as well as the alpha coefficient for the satisfaction scale.

Insert Table 2 About Here

To test if men and women perceive their climate differently, we designed a multivariate analysis of covariance (MANCOVA) to test for differences by gender as well as ethnicity. Although our hypotheses centered on gender differences rather than differences by ethnicity, we included ethnicity as a dependent variable because we wanted to test for interactive effects (i.e., is the climate more uncomfortable for female faculty of color than white female faculty). We used the MANCOVA rather than the simpler multivariate analysis



of variance (MANOVA), because we wanted to control for differences in age and level of faculty experience that we found to be significantly different by gender. More specifically, the MANCOVA increases the sensitivity of the test of main effects and interactions by reducing the error term and also adjusts the means of the dependent variables to a level consistent with values if the subjects had been similar on the covariates (Tabachnick & Fidell, 1996). Our statistical analyses tested the null hypothesis that perceptions of climate do not differ by gender or ethnicity. The MANCOVA statistical method was appropriate with these data because the sample sizes of men and women were approximately equal and there were no signs of non-normality within the variables that we intended to use. To further test for the suitability of MANCOVA, we first checked the correlations between the dependent variable (gender) and the identified covariates (age, time as a faculty member, and years worked at the college). Covariates should be correlated with the dependent variable but not with each other. Table 3 provides the correlations between these variables and indicates that due to the very high level of correlation between time as a faculty member and years at the college (r = .842, p<.0001), it would be inappropriate and needless to use both variables as covariates. Further, age is also correlated with both experience variables (r= .490 and .483, p < .001). Because the use of correlated covariates does not adjust the means of the dependent variables in any significant way, we determined that age would serve as the single covariate in the final analysis. The final equation had two dependent variables (gender and ethnicity), five dependent variables (overall assessment of climate, satisfaction with salary, satisfaction with students, propensity to leave, and discrimination) and one covariate (age).

The multivariate test of the main effects indicated that there were significant differences by age, gender and minority/non-minority status (see Table 4) without a

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significant interaction between gender and ethnicity. However, we immediately noted that the eta² in all cases was negligible indicating that statistical significance should be weighed against practical considerations. The significant main effects indicated a need to examine the univariate results.

Insert Tables 3 and 4 About Here

Moving to the tests of between subjects effects (univariate analysis), Table 5 reveals that the only independent variable with significant differences by gender or ethnicity was discrimination. Females and faculty of color were statistically more likely to disagree that claims of discriminatory practices against women and minorities had been greatly exaggerated than were men or white faculty. Figure 2 displays the estimated marginal means (adjusted by the covariate) of the item and clearly shows that while women more strongly disagreed with the statement, faculty of color were in even greater disagreement than their white counterparts.

Insert Figure 2 About Here

Conclusions

Using this national dataset of community college faculty, we could find only a slight gender effect on measures pertaining to the perception of a chilly climate. It may be that the mission of equality has pervaded the faculty climate and has positively affected it. It appears that female faculty do not report higher levels of dissatisfaction or a greater propensity to leave academe. Further, it appears that for this sample of community college faculty, females perceive the climate similarly as their male counterparts. However, we did find statistical



evidence of difference in perceptions of discrimination reported significantly higher by women than by men and even statistically higher by women faculty of color. Thus, we do find some evidence that women of color perceive a different (chillier?) climate than white women. However, all of our findings on faculty of color must be weighed against the smaller number of faculty of color (11% of the sample) as compared to the entire sample. We caution, however, that although the majority of our news is positive, the finding on discrimination should not be taken too lightly or as it may indicate undercurrents of attitudes or events that we could not capture or measure in the items included in the questionnaire. We call for additional research to add a more qualitative component to our analyses to better understand the climate for women faculty, especially women of color, and to provide a thick description of the working conditions perceived by all female faculty.

Further, it is imperative to stipulate that we performed a secondary data analyses on an existing dataset and hence our analyses suffers from a common malady of virtually all secondary studies; specifically we investigated a question which the designers of the questionnaire may not have previously considered. Accordingly, we were limited to the items included in the national survey administered to community college faculty. The questionnaire did not include items capable of measuring advancement to administration or involvement in decision-making; both important constructs to the measurement of a "chilly climate." Thus, our analyses lacked an important independent variable, a measure of the existence of a "glass ceiling." Therefore, future community college research is needed to include the measures of climate that could not be included in our analyses.

Returning to our original question: is there a chilly climate at community colleges for female faculty? Certainly no analyses can categorically negate or affirm the climate at all

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campuses, but our test of a national dataset does provide some evidence that the climate at the average community college may be warmer than that at the average four-year institution. On the other hand, our analyses in no way indicate that community colleges are havens where female faculty are free from the confines of "glass ceilings", "academic funnels", or discrimination. We conclude with the knowledge that we continue to live in a gendered world (Wood, 1997), but that the gender politics may be a shade softer at community colleges where equality is a part of the institutional mission.

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Table 1. Proportion of Female Faculty by institutional type (Percent)

	1974-75		1997-98		
Rank	Two year	All	Two year	All	
	college	Institutions	college	Institutions	
Full Professor	28.2	10.1	37.6	18.7	
Associate Professor	32.4	17.3	47.8	34.6	
Assistant Professor	42.0	27.9	. 52.8	46.8	
Instructor	50.0	48.0	53.7	58.6	
Lecturer	2.5	41.4	55.6	55.6	

Adapted from the AAUP Salary Surveys for 1974-75 and 1997-98.



Table 2. Items and Constructs

Construct	Items		
Overall Satisfaction	Satisfaction with administrators		
and Climate	Satisfaction with degree of autonomy		
Alpha=.8206	Satisfaction with general working environment		
	Satisfaction with relations with colleagues		
	Satisfaction with opportunities to be creative		
	Satisfaction with feelings about living up to greatest potential		
	My work at this institution provides me continuing professional		
	stimulation and growth.		
Satisfaction with	How would you rate the following at this college: Your salary		
Salary	(1=excellent to 4=poor)		
Satisfaction with	How would you rate the following at this college: Relations with		
students	students (1=excellent to 4=poor)		
Propensity to leave	Attractive: A school outside the United States		
	Attractive: Any position outside this college		
	Attractive: A position in a professional association		
	Attractive: A non-teaching, non-academic position		
	Attractive: Retired/not in labor force		
Discrimination	Claims of discriminatory practices against women and minority		
_	faculty and administrators have been greatly exaggerated.		



Table 3 Correlations of Items and Constructs

			2	r	4	٨	9	7	×
		•	1	,	-)			
1	Gender	1.000	.014	.007	.043	.220**	131**	110	**/60'-
2.	Overall Satisfaction	.014	1	.334**	018	.046	*750	.085**	990.
3.	Satisfaction w/Salary	200	.334**	1.0001	.040	002	018	057*	0
4	Desire > Interaction	.043		040	1.000	970.	078**	044	
5.	Discrimination	.220**		002	970.	1.000	074**	027	ı
9	Age	131**		018	0:-	074**	1.000	١٠,	4.
7.	Yrs as a faculty member	110**	**580	*1057*	7 00'-	027	.490**	1.000	t
∞ ∞	Years at the college	**/60'-	**990	081**	'	022	.483**	بحا	1.000
١.									

* p< .01



Table 4. Multivariate Tests of Main Effects

Source of Variance	Wilk's Lambda	df ₁	df ₂	Multivariate F	Eta ²
Age (covariate)	.990	6	1311	2.208*	.010
Gender	.981	6	1311	4.182*	.019
Minority	.976	6	1311	5.348*	.024
Gender * Minority (Interaction)	.998	6	1311	0.410	.002



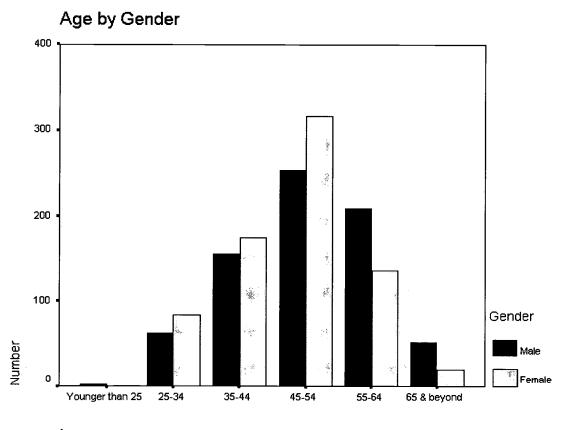
^{*} p < .05 ** p< .01

Table 5 Analysis of Covariance of Gender and Ethnicity with Age as Covariate

Dependent Variable	Source	SS	df	MS	F	Eta ²
Gender	Overall Satisfaction	.105	1	.105	.214	.000
	Propensity to Leave	3.536	1	3.536	.709	.001
	Satisfaction with salary	.0056	1	.0056	.008	.000
:	Satisfaction with students	.119	1	.119	.474	.000
:	Desire for more interaction	.0016	1	.0016	.068	.000
	Discrimination	25.024	1	25.024	23.992**	.018
Faculty of Color	Overall satisfaction	.167	1	.167	.342	.000
	Propensity to Leave	2.549	1	2.549	.511	.000
	Satisfaction with salary	1.995	1	1.995	2.785	.000
	Satisfaction with students	.0068	1	.0068	.272	.000
	Desire for more interaction	.265	1	.265	1.108	.001
	Discrimination	27.488	1	27.488	26.355**	.020



Figure 1.

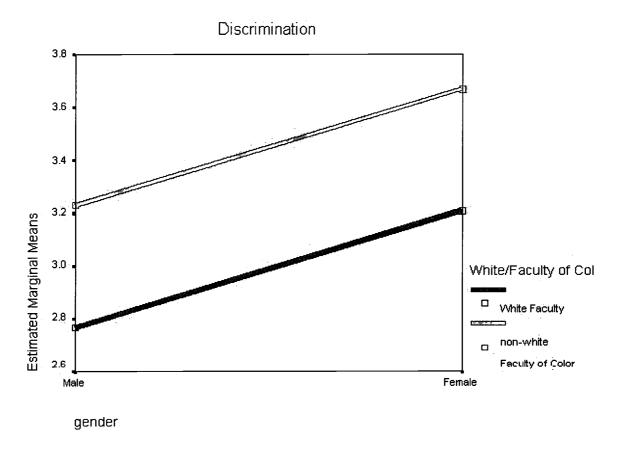


Age group



Figure 2.

Estimated Marginal Means



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