

GENDER DIFFERENCES IN PERCEPTIONS OF ORGANIZATIONAL CLIMATE AMONG UNIVERSITY BUSINESS SCHOOL FACULTY

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ABSTRACT

This study examines perceptions of organizational climate among university business school faculty. Faculty members in business schools in public universities in two similar states were surveyed. Differences in the means of the 27 organizational climate variables between 127 men and 53 women faculty members were examined. In addition, factor analysis was used to examine the latent constructs that underlie the 27 indicators of organizational climate. The primary findings were that: (1) men and women college faculty members have different perceptions of specific indicators of organizational climate and (2) men and women appear to conceptualize the underlying latent factors of organizational climate differently.

INTRODUCTION

The term “organizational climate” has most frequently been used to describe the perceptions that organization members share of particular features, or fundamental elements, of their organizational work setting—both formal and informal [1] [3] [4] [8] [13] [14] [15] [16] [18]. Studies of organizational climate in university settings do not offer findings that are always in agreement, or even able to be directly compared due to the variety of measures used [2] [9] [19]. This literature finds both differences between men and women and differences between tenured and non-tenured women [2]. Males have higher satisfaction with their salary and benefits than females, and faculty who perceive a high level of justice in their organization report higher levels of satisfaction [9].

Based on the literature, we hypothesize that men and women college faculty members will have different perceptions of organizational climate; in particular, we hypothesize that men college faculty members will have more favorable perceptions of organizational climate than women college faculty members. Also based on the literature, we hypothesize that the gender differences in perceptions of organizational climate will be reflective of men and women college faculty conceptualizing climate in different ways; in particular, we hypothesize that the gender differences will be reflected in men and women college faculty members having different factor structures when the organizational climate variables are factor analyzed. Our two hypotheses may be summarized as follows:

Hypothesis 1: When the means of each organizational climate variable are compared, men college faculty members will have more favorable perceptions of organizational climate than women college faculty members.

Hypothesis 2: When the organizational climate variables are factor analyzed, men college faculty members will have different factor structures than women college faculty members.

METHODS

A survey was mailed to academics in departments/schools/colleges of business in public universities in two similar states. We obtained 205 useable surveys out of the 820 surveys mailed, and a total of 180 individuals completed all 27 of the organizational climate measures: 127 men and 53 women. The empirical results that we report in this paper are based on those 180 observations on the 27 organizational climate variables. We coded each of the 27 organizational climate variables with a 5-point Likert scale. Table 1 lists shortened versions of each of the 27 organizational climate variables.

RESULTS

Hypothesis 1: Comparison of Means

To test for the presence of overall gender differences in organizational climate, we used MANOVA, which tests the null hypothesis that the means of all 27 variables are jointly equal for men and women against the alternative hypothesis of unequal means. The multivariate F-test from the MANOVA equaled 1.877, which is statistically significant at $p < 0.01$. Therefore, looking across all 27 variables as a group, our results indicate that men and women have significantly different perceptions of organizational climate. It is therefore meaningful to examine each of the 27 variables separately in order to determine the nature of the gender differences in perceptions of organizational climate.

Table 1 presents comparisons of the means for each of the 27 organizational climate variables. There is no difference between men and women in their perceptions of the extent to which their department colleagues are supportive of them in their job (Variable 1). Men feel more secure than women by a statistically significant amount in expressing their views openly in their departments (Variable 2). There is no difference between men and women in their perceptions about receiving job information through formal channels (Variable 3). Men feel more than women by a statistically significant amount that their colleagues share information with them informally (Variable 4). There are no statistically significant differences between men and women in their perceptions that their rewards are based fairly on their contributions (Variable 5), that their department is culturally diverse (Variable 6), that their department chair supports their research (Variable 7), that their department chair treats everyone equitably (Variable 8), that their credibility has been undermined by their colleagues (Variable 9), and that everyone in their department is evaluated in the same way (Variable 10). On the other hand, women feel more than men by a statistically significant amount that there is an “old boy’s network” where they work (Variable 11). Women also feel more than men by a statistically significant amount that it is necessary for them to document everything that happens to them at work (Variable 12). There are no statistically significant differences between men and women in their perceptions that they can clearly identify the power base in their department (Variable 13), that they are aligned with the power base in their department (Variable 14), and that it is necessary to be aligned with the power base in order to succeed (Variable 15). However, men feel more than women by a statistically significant amount that they stay out of department politics (Variable 16). There are no statistically significant differences between men and women in their perceptions that they can say what they think without fear of retribution (Variable 17) and that they keep career successes to themselves (Variable 18). On the other hand, men feel more than women by a statistically significant amount that they have allowed others to receive credit for their work (Variable 19). There are no statistically significant differences between men and women in their perceptions that they have compromised their views in department votes (Variable 20), that their colleagues are cautious about what they say (Variable 21), and that their colleagues are committed to

achieving team goals (Variable 22). However, men feel more than women by a statistically significant amount that they have adequate time to pursue their research (Variable 23). There are no statistically significant differences between men and women in their perceptions that research monies are equitably distributed (Variable 24) and that faculty should spend time in their office each working day Monday through Friday (Variable 25). On the other hand, men feel more than women by a statistically significant amount that the best measures of faculty performance are research productivity, strong teaching evaluations, and demonstrated service (Variable 26). Finally, there is no statistically significant difference between men and women in the extent to which they are concerned about the appearance of doing work at home while others are working in the office (Variable 27).

Hypothesis 2: Comparison of Factor Analyses

Next, we used factor analysis to examine if the 27 organizational climate variables are indicators of a smaller number of underlying latent organizational climate constructs (common factors). Based on our literature review, we suspected that the factor structures for men and women might differ. To examine this possibility, we did our factor analyses separately for men and women. Scree plots indicated that a 2, 3, or 4 common factor solutions might be appropriate. The 2, 3, and 4 factor models consistently show that the factor loadings for men and women result in different factor structures. For brevity of presentation, here we report only the 4 factor solution in Table 2; men and women have different factor structures.

DISCUSSION

Our results indicate that men and women college faculty members have common perceptions of some aspects of organizational climate but have different perceptions of other aspects of organizational climate. On the one hand, men and women have similar perceptions in terms of the following aspects of organizational climate in their universities: their colleagues support them, they receive job information through formal channels, their rewards are based fairly on their contributions, their department is culturally diverse, their department chair supports them, their department chair treats everyone equitably, their credibility has been undermined by their colleagues, everyone in their department is evaluated in the same manner, they can clearly identify the power base in their department, they are aligned with the power base in their department, they need to be aligned with the power base to succeed, they can say what they think without fear of retribution, they keep career successes to themselves to avoid angering their colleagues, they have compromised their views on department votes to make their work easier, their colleagues are cautious about what they say, their colleagues are committed to achieving team goals, research monies are equitably distributed based on research product, they feel faculty should spend time in their office each working day Monday through Friday, and they are concerned about the appearance of working at home while others are working in the office.

On the other hand, men and women college faculty members have different perceptions in terms of the following aspects of organizational climate: women feel less secure than men in expressing their views openly, women feel less than men that their colleagues share information, women feel more than men that there is an “old boy’s network”, women feel more than men that they need to document everything, women feel less than men that they stay out of department politics, women feel less than men that they have allowed others to take credit for their work, women feel less than men that they have adequate time for their research, and women feel less than men that the best measures of faculty performance are research productivity, strong teaching evaluations, and demonstrated service.

These results are suggestive of the following general hypothesis concerning gender differences in perceptions of organizational climate on the college campuses in our sample. Women college faculty members perceive an “old boy’s network” operating on their campuses that their men colleagues do not perceive as strongly. Perhaps as a consequence, women feel that they need to document everything to a greater extent than their men colleagues. Furthermore, women feel more isolated than their men counterparts in that women feel more than men that their colleagues are not sharing information with them; furthermore, women are less secure than men in openly expressing their views. Perhaps to protect themselves, women feel more than men that they cannot afford to stay out of department politics. In addition, women feel more than men that they do not have adequate time for their research. Perhaps as a consequence, women are less likely than men to allow others to share in the credit for their work. Finally, women more than men are skeptical that the best measures of faculty performance are based on research productivity, teaching evaluations, and demonstrated service.

Our factor analyses confirm that men and women have different perceptions of organizational climate on the college campuses in our sample. Regardless of the number of common factors used, we find that the factor structures differ for men and women. Furthermore, we find that the correlations among the common factors differ in both sign and magnitude for men and women; thus, we find that the pattern of correlations among the organizational climate variables differ by gender.

Our findings are consistent with the literature that concludes factor scores obtained from factor analyses are not invariant across gender [6] [7]. Our findings do not support shared perceptions by men and women; it is not appropriate to ignore gender when factor analyzing indicators of organizational climate [12].

Our results may also be an indication of a fundamentally different experience of men and women in the academic workplace: “Many women continue to be excluded from the very activities that allow for full participation and growth, or productivity and change. These are, by and large, the informal activities of science—the heated discussion and debates in the laboratory, inclusion in the inner core of the invisible college, full participation in the social networks where scientists air ideas and generate new ones” [5]. The proportion of a group (e.g., women) in a department relates to the degree of perceived supportiveness of the working environment [17].

Perceptions of organizational climate and morale are important to the quality and vitality of the academic enterprise [11]. Establishing benchmarks for faculty worklife could be used in monitoring changes for the purposes of improving the climate and culture of the academy [10].

To summarize our primary findings, we find both (1) that men and women college faculty members have different perceptions of specific indicators of organizational climate and (2) that men and women appear to conceptualize the underlying latent factors of organizational climate differently. Our results suggest that researchers should exercise caution when attempting to create organizational climate constructs in mixed gender settings. Further research is needed to examine these differences in factor structure and their possible impact on outcomes like job satisfaction or productivity. Further research is also needed to explore possible causes for the observed differences in perceptions of organizational climate.

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Table 1

**Organizational Climate Variables:
Means and Differences in Means by Gender**

	Variable	Men Mean (std. dev.)	Women Mean (std. dev.)	Differ in Mean	t-statistic & p-value
1	My department colleagues are supportive of me in my job	2.70 (1.13)	2.70 (1.17)	.003	0.01
2	I am secure in expressing views openly in my department	3.02 (1.11)	2.72 (1.22)	.307	1.58*
3	I receive job information through formal channels	1.95 (1.15)	1.91 (1.06)	.047	0.27
4	My colleagues frequently share information informally	2.69 (0.97)	2.38 (1.04)	.308	1.84**
5	My rewards are based fairly on my contributions	2.07 (1.23)	2.04 (1.04)	.033	0.19
6	My department is culturally diverse	1.90 (1.16)	1.74 (1.16)	.162	0.85
7	My department chair supports my research efforts	2.66 (1.04)	2.66 (1.22)	.001	0.01
8	My department chair treats everyone equitably	2.47 (1.23)	2.40 (1.32)	.076	0.36
9	My credibility has been undermined by my colleagues	1.93 (1.30)	1.87 (1.35)	.061	0.28
10	Everyone in my department is evaluated in same manner	2.14 (1.22)	2.17 (1.17)	-.028	-0.15
11	There is an "old boy's network" where I work	1.77 (1.29)	2.49 (1.31)	-.719	-3.37***
12	It is necessary to document everything	1.72 (1.24)	2.17 (1.14)	-.453	-2.37***
13	I can clearly identify the power base in my department	2.55 (0.94)	2.68 (0.96)	-.128	-0.82
14	I am aligned with the power base in my department	1.98 (1.05)	2.06 (0.91)	-.072	-0.46
15	It is necessary to be aligned with the power base to succeed	1.80 (1.08)	1.77 (1.07)	.030	0.17
16	I stay out of department politics	2.22 (1.07)	1.92 (1.07)	.296	1.69**
17	I can say what I think without fear of retribution	2.53 (1.31)	2.32 (1.14)	.207	1.06
18	I keep career successes to myself	1.52 (1.15)	1.42 (1.01)	.105	0.61
19	I've allowed others to receive credit for my work	1.54 (1.23)	1.19 (1.09)	.355	1.91**
20	I've compromised my views on department votes	1.38 (1.08)	1.55 (1.17)	-.169	-0.91
21	My colleagues are cautious about what they say	1.93 (1.26)	1.77 (1.15)	.156	0.80
22	My colleagues are committed to achieving team goals	1.91 (1.21)	2.00 (1.32)	-.087	-0.41
23	I have adequate time to pursue my research	1.79 (1.23)	1.47 (1.22)	.316	1.58*
24	Research monies are equitably distributed	2.09 (1.12)	1.92 (1.00)	.170	1.00
25	I feel faculty should spend time in their office every day	1.88 (1.38)	1.70 (1.41)	.184	0.80
26	Evaluate research output, teaching evaluations, and service	2.86 (1.10)	2.49 (1.14)	.368	2.00**
27	I am concerned about the appearance of working at home	1.83 (1.22)	1.74 (1.23)	.091	0.45
	Sample Size	127	53		

Notes: Each variable is coded as follows:

- 0 = Strongly Disagree
- 1 = Disagree
- 2 = Neither agree nor disagree
- 3 = Agree
- 4 = Strongly Agree

t-statistics do not assume equal variances

* = p-value < .10 one-tail test with 178 degrees of freedom

** = p-value < .05 one-tail test with 178 degrees of freedom

*** = p-value < .01 one-tail test with 178 degrees of freedom

Table 2

**Factor Analysis of Organizational Climate Variables:
4 Factor Model by Gender**

	Variable	M 1	M 2	M 3	M 4	W 1	W 2	W 3	W 4
1	Department colleagues supportive	.504	.633	-.389	-.203	.498	.716	.126	-.438
2	Secure in expressing views	.412	.485	-.569	.232	.623	.334	-.321	-.607
3	Job information through formal channels	.040	.298	-.263	-.268	.211	.547	-.179	-.184
4	Colleagues share information	.954	.534	-.228	-.139	.727	.372	-.110	-.337
5	Rewards are based on my contributions	.222	.556	-.219	-.139	.350	.306	-.025	-.405
6	Department is culturally diverse	.068	.263	-.163	-.191	-.006	.126	-.166	-.013
7	Department chair supports my research	.491	.704	-.242	.024	.276	.733	-.220	-.379
8	Chair treats everyone equitably	.229	.767	-.219	.099	.198	.878	.174	-.393
9	Credibility undermined by my colleagues	-.250	-.529	.440	.109	-.256	.031	-.558	.267
10	Everyone evaluated in same manner	.311	.845	-.285	-.007	.485	.211	.582	-.263
11	“Old boy’s network” where I work	-.303	-.492	.353	.290	-.392	-.269	-.210	.298
12	Necessary to document everything	-.160	-.168	.490	.032	-.543	-.122	.007	.258
13	Can identify power base in department	-.046	-.237	.354	.240	.014	-.334	-.103	.033
14	Aligned with power base in department	.281	.573	.044	.263	.728	.071	.206	.024
15	Aligned with the power base to succeed	-.406	-.412	.584	-.010	-.574	-.184	-.521	.521
16	Stay out of department politics	-.295	-.146	.090	-.219	-.044	-.122	.452	.248
17	Say what I think without fear	.196	.517	-.594	.335	.797	.107	.123	-.339
18	Keep career successes to myself	-.296	-.377	.471	.316	-.238	-.335	-.134	.643
19	Others to receive credit for my work	-.060	-.129	.442	.193	-.185	-.380	.094	.564
20	Compromised views on department votes	-.320	-.122	.497	-.087	-.529	-.215	-.124	.652
21	Colleagues cautious about what they say	-.281	-.594	.499	-.028	-.248	-.262	-.260	.624
22	Colleagues committed to team goals	.250	.681	-.292	-.107	.419	.191	.263	-.392
23	Have adequate time for research	.093	.015	-.094	-.265	.088	.186	.273	-.287
24	Research monies equitably distributed	.199	.525	-.261	-.171	-.185	.379	.246	-.369
25	Faculty should spend time in office	-.003	.078	-.025	-.246	-.037	.088	.214	-.069
26	Research, teaching, and service	.163	.054	-.039	.549	.263	.212	.297	-.060
27	Concerned about working at home	.015	-.124	.438	.050	-.126	-.025	-.012	.656
	Sample Size	127				53			

Notes: Factor loadings are from maximum likelihood factor analysis with oblimin rotation, the factor loadings should be interpreted as the correlation of the variable with the underlying latent factor.

Goodness-of-fit:

Men: Chi-square = 309.227 df = 249 p < .01
 Women: Chi-square = 279.837 df = 249 p = .087

Correlation of Factor 1 with Factor 2:

Men = .338
 Women = .173

Correlation of Factor 1 with Factor 3:

Men = -.231
 Women = .089

Correlation of Factor 1 with Factor 4:

Men = .059
 Women = -.282

Correlation of Factor 2 with Factor 3:

Men = -.356
 Women = .046

Correlation of Factor 2 with Factor 4:

Men = -.071
 Women = -.311

Correlation of Factor 3 with Factor 4:

Men = .125
 Women = -.098