

University of Illinois at Chicago

Faculty Salary Equity Study

October 2001

I. Introduction

In keeping with University policy, faculty salaries and annual increases are to be based upon merit, rewarding individual achievement in the area of teaching, research, and service as compared to others in department or discipline. While salary recommendations are primarily formed in each faculty member's academic unit, the University and the campus has the responsibility to ensure that individual assessments and recommendations are neutral with respect to gender and race/ethnicity. With this in mind, in March 2001 the University of Illinois Board of Trustees called for a systematic annual study of faculty salaries to ensure that salaries are not influenced by illegal factors. To this end, President Stukel called for standardized usage by the campuses of a salary regression analysis of non qualitative, nonperformance based variables found in comparing faculty in a consistent manner across the campus and within each academic unit. UIC however expanded the study group to include clinical and research faculty. In light of the different salary structure in the College of Medicine, it was decided to perform a separate analysis for faculty of that College including the sites of Peoria, Rockford and Urbana. The study summarized below presents the first study of this type performed at the Chicago campus. Generally, it was based upon the October 2001 payroll for all Colleges except Medicine where year-to-date gross earnings for 2001 were used. Because there was no salary increase program the subsequent year, an analysis of 2002 was not done. Importantly, the study concludes that neither race nor gender systemically affected faculty salaries at UIC.

II. General Description of the Study

The regression analysis divides the study into two main parts: group analysis and individual analysis. The first examines the effect of variables on salaries within defined

groups, i.e., professors, associate professors, assistant professors and research faculty. The variables used for all ranks and each specific rank are shown in Tables 1 through 3. It also examines all faculty ranks together, Table 4, and research faculty, Table 5. Another part applies the variables to each individual faculty member without race/ethnicity or gender variables resulting in a comparison of the individual's actual but normalized salary to a "predicted" salary outcome.

III. Group Analysis

The limited purpose of this analysis is to determine systematic differences between groups of faculty members as they relate to the variables used in the study, identifying the impact of each variable on the members of the group as a whole. Of primary concern is whether the factor gender or race/ethnicity appears to have a relationship of some kind to faculty salaries. Tables 1A through Table 5A below present the variables used by separate ranks for all colleges except the College of Medicine. An asterisk marks variables determined to significantly impact salary when $p < .05$. Tables 1B through 5B presents the same for the College of Medicine including the sites of Urbana, Peoria and Rockford. It should be noted that because the analyses by separate ranks use some variables that could not be included in the analysis of all faculty combined, these analyses of faculty offer more complete indications of the influences related to salaries than does the analysis of all faculty combined.

The dependent variable used in the analysis for all the Colleges, except Medicine, was a salary value normalized to nine-month, 100% FTE; the contrast group was the first department in the alphabetical listing, the Department of Accounting. Variables used are limited to those available in campus databases or other records held at the campus level and are significant if $p < .05$.

For the College of Medicine, the dependent variable used was a salary value normalized to an eleven-month, 100% FTE, as based upon total income paid to the faculty member including salary and earned bonuses. The contrast group for the College of Medicine was the Department of Medical Education.

Professor: neither gender nor race/ethnicity appeared to influence salary outcome. Variables considered to significantly impact salary outcome are indicated by an asterisk below. For example, the professors on campus had six variables which significantly

impacted their salaries: administrator of unit, library faculty, MD degree, number of departments holding appointments, year of hire, and years from first hire to reach rank of Professor. In contrast, professors in the College of Medicine were significantly impacted by only two variables: administrator of unit and years from first hire to reach rank of professor.

Table 1A. All Colleges (except Medicine)

Professor	n=418	Significance
*(Constant)		0.0053
*Administrator of unit 1=yes		0.0000
African American		0.3729
Asian/Pacific Islander		0.3585
Clinical Faculty		0.2807
Hispanic		0.8385
Less than 100% FTE		0.5432
*Library faculty 1=yes		0.0000
Male		0.5864
*MD degree 1=yes		0.0041
Non tenured appointment		0.2174
*Number of departments		0.0000
Other professional degree 1=yes		0.2288
PhD degree 1=yes		0.2800
*Year of hire		0.0017
Years at UIC to reach Associate Professor		0.8990
*Years at UIC to reach Professor		0.0003
Years since highest degree		0.1231

Table 1B. College of Medicine

Professor	n=171	Significance
(Constant)		0.4931
*Administrator of unit 1=yes		0.0000
African American		0.2635
Asian/Pacific Islander		0.4572
Clinical Faculty		0.9245
COM variable or bonus compensation		0.6085
COM WSVA compensation		0.3731
Hispanic		0.9265
Less than 100% FTE		0.4974
Male		0.2827
MD degree 1=yes		0.1125
Non tenured appointment		0.6068
Number of departments		0.4368
Other professional degree 1=yes		0.5333
PhD degree 1=yes		0.0554
Waived tenure eligibility		0.3618
Year of hire		0.4690
*Years at UIC to reach Professor		0.0415
Years at UIC to reach Associate Professor		0.0810
Years since highest degree		0.6796

Associate Professor: neither gender nor race/ethnicity appeared to influence salary outcome. Variables considered to significantly impact salary outcome were: administrator of unit, clinical faculty (borderline significant -- .052), library appointment, MD degree, number of departments holding appointments, PhD degree, year of hire. In regards to the College of Medicine, 3 factors significantly impacted salary: administrator of unit, bonus compensation, MD degree.

Table 2A. All Colleges (except Medicine)

Associate Professor	n=368	Significance
*(Constant)		0.0004
*Administrator of unit 1=yes		0.0000
African American		0.3107

Table 2B. College of Medicine

Associate Professor	n=193	Significance
(Constant)		0.1107
*Administrator of unit 1=yes		0.0345
African American		0.5342

Asian/Pacific Islander	0.1871
Clinical Faculty	0.0519
Hispanic	0.6603
Less than 100% FTE	0.1224
*Library faculty 1=yes	0.0000
Male	0.9052
*MD degree 1=yes	0.0354
Nontenured	0.6377
*Number of departments	0.0083
Other professional degree 1=yes	0.4600
*PhD degree 1=yes	0.0005
Waived tenure eligibility	0.3963
*Year of hire	0.0001
Years at UIC to reach Associate Professor	0.7427
Years at UIC to reach Professor	0.4718
Years since highest degree	0.3863

Asian/Pacific Islander	0.6255
Clinical Faculty	0.8859
*COM variable or bonus compensation	0.0377
COM WSVA compensation	0.5823
Hispanic	0.7217
Less than 100% FTE	0.1453
Male	0.7963
*MD degree 1=yes	0.0142
Nontenured appointment	0.4755
Number of departments	0.5722
Other professional degree 1=yes	0.8393
PhD degree 1=yes	0.1981
Waived tenure eligibility	0.8108
Year of hire	0.0918
Years at UIC to reach Professor	0.4336
Years at UIC to reach Associate Professor	0.9783
Years since highest degree	0.5217

Assistant Professor: neither gender nor race/ethnicity appeared to influence salary outcome. Variables considered to significantly impact salary outcome were: administrator of unit, clinical faculty, less than 100% FTE, library appointment, nontenured, PhD degree, year of hire, and years since highest degree. For the College of Medicine, only four factors consistently impacted salary: bonus compensation, MD degree, other professional degree, and years at UIC to reach Associate Professor.

Table 3A. All Colleges (except Medicine)

Assistant Professor	n=365	Significance
*(Constant)		0.0005
*Administrator of unit 1=yes		0.0000
African American		0.3856
Asian/Pacific Islander		0.6708
*Clinical Faculty		0.0017
Hispanic		0.2702
*Less than 100% FTE		0.0331
*Library faculty 1=yes		0.0000
Male		0.8747
MD degree 1=yes		0.8406
*Nontenured		0.0076
Number of departments		0.2644
Other professional degree 1=yes		0.4668
*PhD degree 1=yes		0.0086
*Year of hire		0.0001

Table 3B. College of Medicine

Assistant Professor	n=186	Significance
(Constant)		0.1427
Administrator of unit 1=yes		0.4940
African American		0.2360
Asian/Pacific Islander		0.9228
Clinical Faculty		0.4020
*COM variable or bonus compensation		0.0034
COM WSVA compensation		0.3595
Hispanic		0.4612
Less than 100% FTE		0.2538
Male		0.0796
*MD degree 1=yes		0.0605
Nontenured appointment		0.7052
Number of departments		0.3456
*Other professional degree 1=yes		0.0009
PhD degree 1=yes		0.9426

Years at UIC to reach Associate Professor	0.6282
*Years since highest degree	0.0000

Waived tenure eligibility	0.1049
Year of hire	0.1375
*Years at UIC to reach Associate Professor	0.0009
*Years since highest degree	0.0153

Combined Ranks: neither gender nor race/ethnicity appeared to influence salary outcome. Numerous factors were considered to significantly impact salary outcome: administrator of unit, associate professor, clinical faculty, full professor, library faculty, MD degree, number of departments, research faculty, year of hire, years since highest degree, and years from first hire to reach rank of Professor. Again the College of Medicine had fewer variables which significantly impacted salaries: bonus compensation, PhD degree, years from first hire to reach rank of associate professor, and years from first hire to reach rank of professor.

Table 4A. All Colleges (*except Medicine*)

Combined ranks	n=1198	Significance
*(Constant)		0.0000
*Administrator of unit 1=yes		0.0000
African American		0.2284
Asian/Pacific Islander		0.0938
*Associate Professor		0.0000
*Clinical Faculty		0.0312
*Full Professor		0.0000
Hispanic		0.5510
Less than 100% FTE		0.8069
*Library faculty 1=yes		0.0000
Male		0.9696
*MD degree 1=yes		0.0000
Nontenured appointment		0.5234
*Number of departments		0.0000
Other professional degree 1=yes		0.6177
PhD degree 1=yes		0.1152
*Research Faculty		0.0188
Waived tenure eligibility		0.2260
*Year of hire		0.0000
Years at UIC to reach Associate Professor		0.4954
*Years at UIC to reach Professor		0.0000
*Years since highest degree		0.0002

Table 4B. College of Medicine

Combined ranks	n=624	Significance
*(Constant)		0.0000
*Administrator of unit 1=yes		0.0000
African American		0.5576
Asian/Pacific Islander		0.5750
Associate Professor		0.4598
Clinical Faculty		0.0705
*COM variable or bonus compensation		0.0004
COM WSVA compensation		0.1612
Hispanic		0.4625
Less than 100% FTE		0.4892
Male		0.1559
MD degree 1=yes		0.1473
Nontenured appointment		0.5945
Number of departments		0.2043
Other professional degree 1=yes		0.1431
*PhD degree 1=yes		0.0001
*Research Faculty		0.0008
Waived tenure eligibility		0.5802
*Year of hire		0.0000
*Years at UIC to reach Associate Professor		0.0001
*Years at UIC to reach Professor		0.0355
*Years since highest degree		0.0202

Research Faculty: neither gender nor race/ethnicity appeared to influence salary outcome. The variable significantly impacting salaries of this group was limited to having a medical degree for faculty outside the College of Medicine. Inside Medicine, however, the sole variable of significant impact was years since highest degree.

Table 5A. All Colleges (except Medicine)

Research faculty	n=47	Significance
(Constant)		0.3287
African American		0.7407
Asian/Pacific Islander		0.7939
Hispanic		0.7377
Less than 100% FTE		0.5797
Male		0.6684
*MD degree 1=yes		0.0000
Other professional degree 1=yes		0.6917
PhD degree 1=yes		0.2269
Year of hire		0.3841
Years since highest degree		0.6535

Table 5B. College of Medicine

Research faculty	n=74	Significance
(Constant)		0.0724
African American		0.4547
Asian/Pacific Islander		0.1452
COM variable or bonus compensation		0.9109
Hispanic		0.9437
Less than 100% FTE		0.9217
Male		0.4498
MD degree 1=yes		0.7221
Nontenured		0.5889
Number of departments		0.2678
PhD degree 1=yes		0.0897
Years to reach Associate Professor		0.1296
*Years since highest degree		0.0014

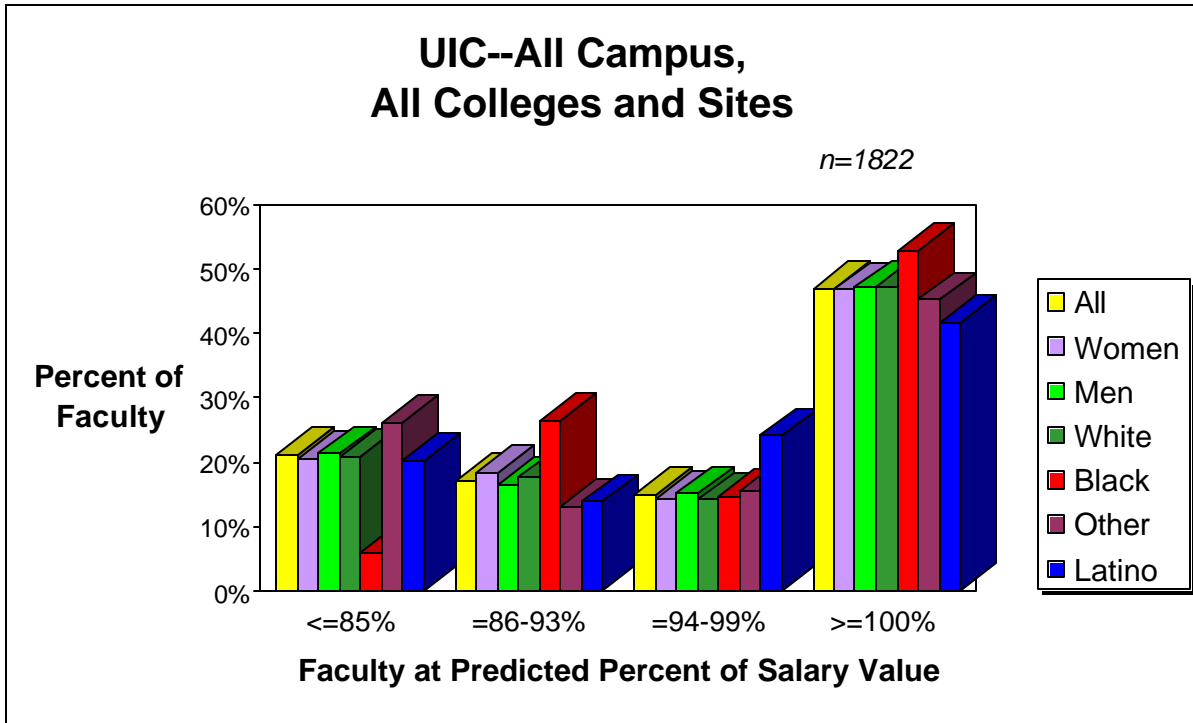
IV. Individual Analysis

As noted above, according to the variables applicable to the rank of the individual faculty member, the regression analysis predicted a salary. The predicted salary was then compared to the actual salary. With the exclusion of race/ethnicity and gender, all of the variables that could be included in the overall analysis were used to predict what the faculty member's salary should be if salaries were based only on the variables included in the analysis. If a faculty member's actual salary differs substantially from the predicted salary, further review would be necessary to determine if factors other than merit influenced salary decisions.

The individual analysis was prepared by department and college for each dean. Faculty were arranged in ascending order according to the percent earned of predicted salary. For summary purposes, faculty were compared for overall group representation [Table 6A. UIC—All Campus, All Colleges and Sites; Table 6B. UIC Campus (excluding College of Medicine); and Table 6C. College of Medicine, All Campuses].

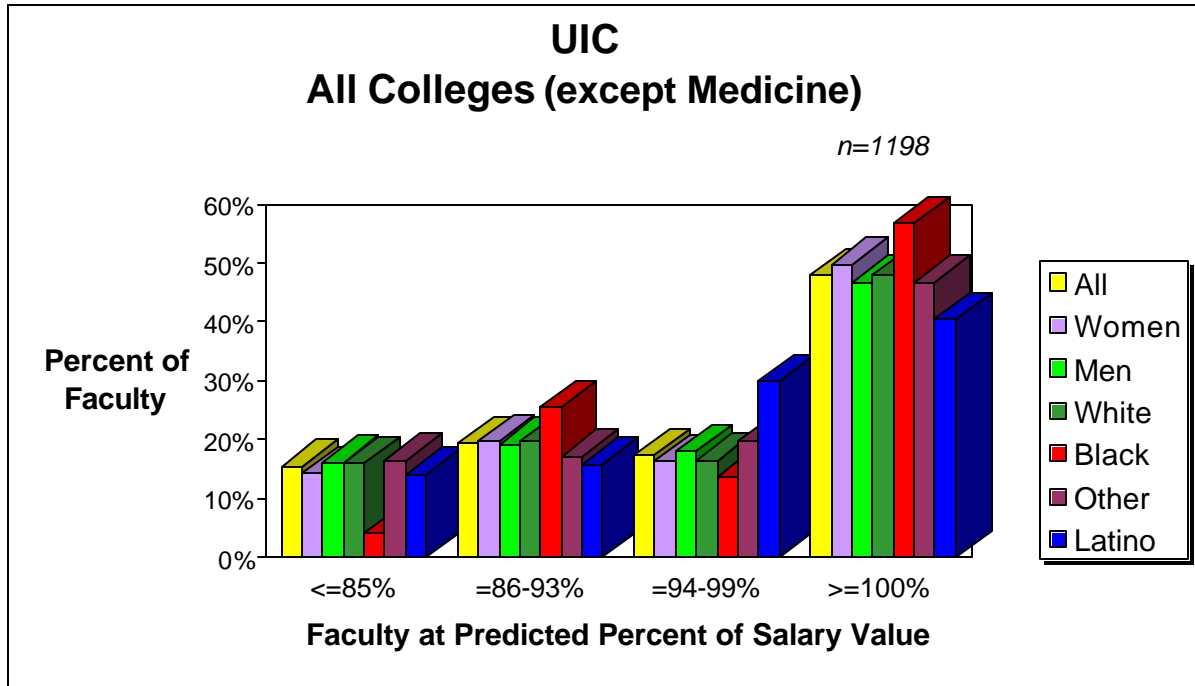
Results:

Table 6A. UIC--All Campus, All Colleges and Sites



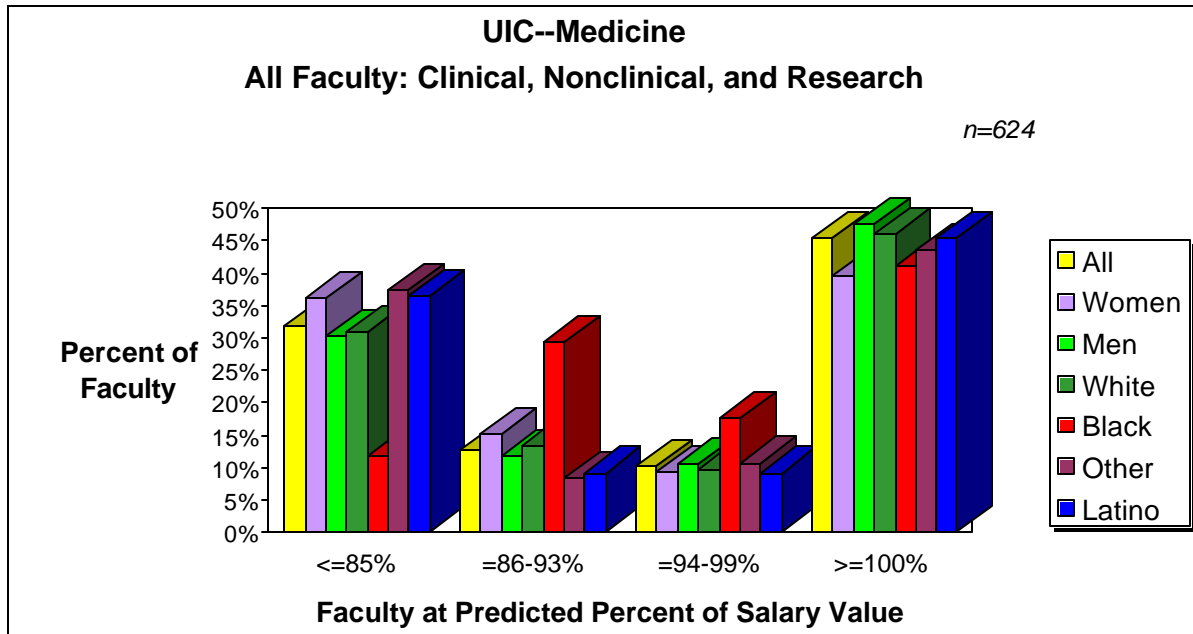
		All (n=1822)	Women (n=594)	Men (n=1228)	White (n=1392)	Black (n=68)	Other (n=283)	Latino (n=79)
n=1822	Total	100%	100%	100%	100%	100%	100%	100%
n=384	<=85%	21%	21%	21%	21%	6%	26%	20%
n=311	=86-93%	17%	18%	16%	18%	26%	13%	14%
n=271	=94-99%	15%	14%	15%	14%	15%	16%	24%
n=856	>=100%	47%	47%	47%	47%	53%	45%	42%

Table 6B. UIC Campus (excluding College of Medicine)

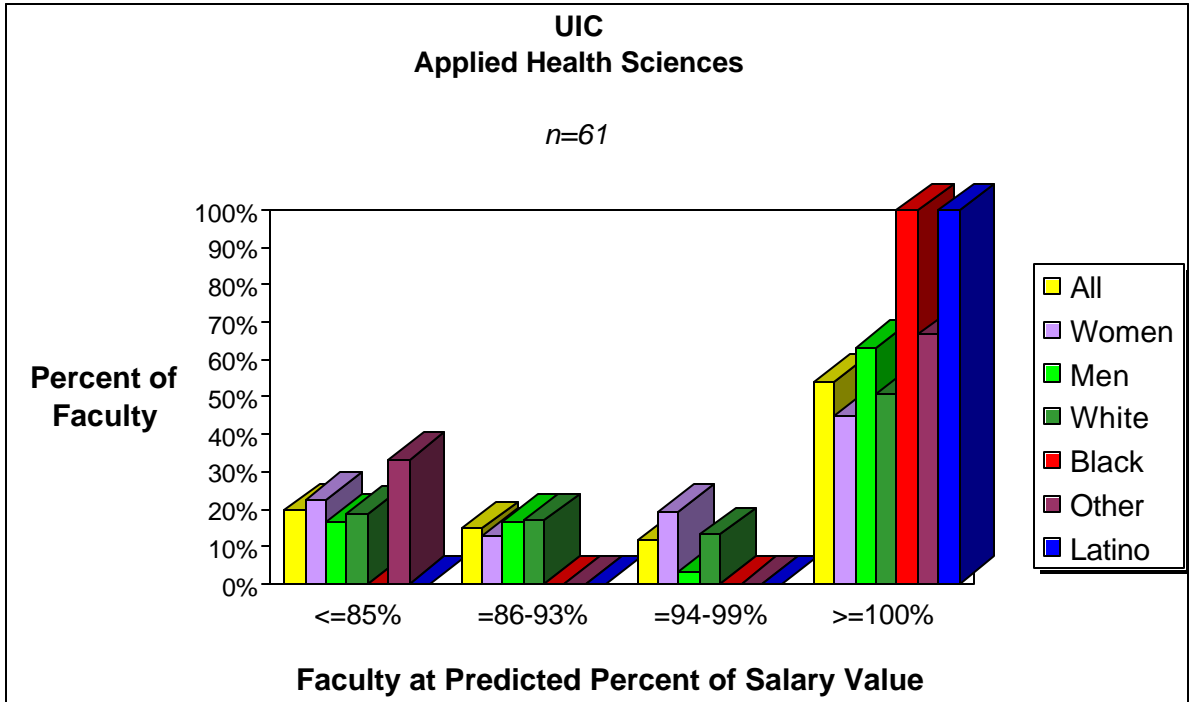


		All (n=1198)	Women (n=422)	Men (n=776)	White (n=938)	Black (n=51)	Other (n=152)	Latino (n=57)
n=1198	Total	100%	100%	100%	100%	100%	100%	100%
n=185	<=85%	15%	14%	16%	16%	4%	16%	14%
n=232	=86-93%	19%	20%	19%	20%	25%	17%	16%
n=208	=94-99%	17%	16%	18%	16%	14%	20%	30%
n=573	>=100%	48%	50%	47%	48%	57%	47%	40%

Table 6C. College of Medicine, All Campuses

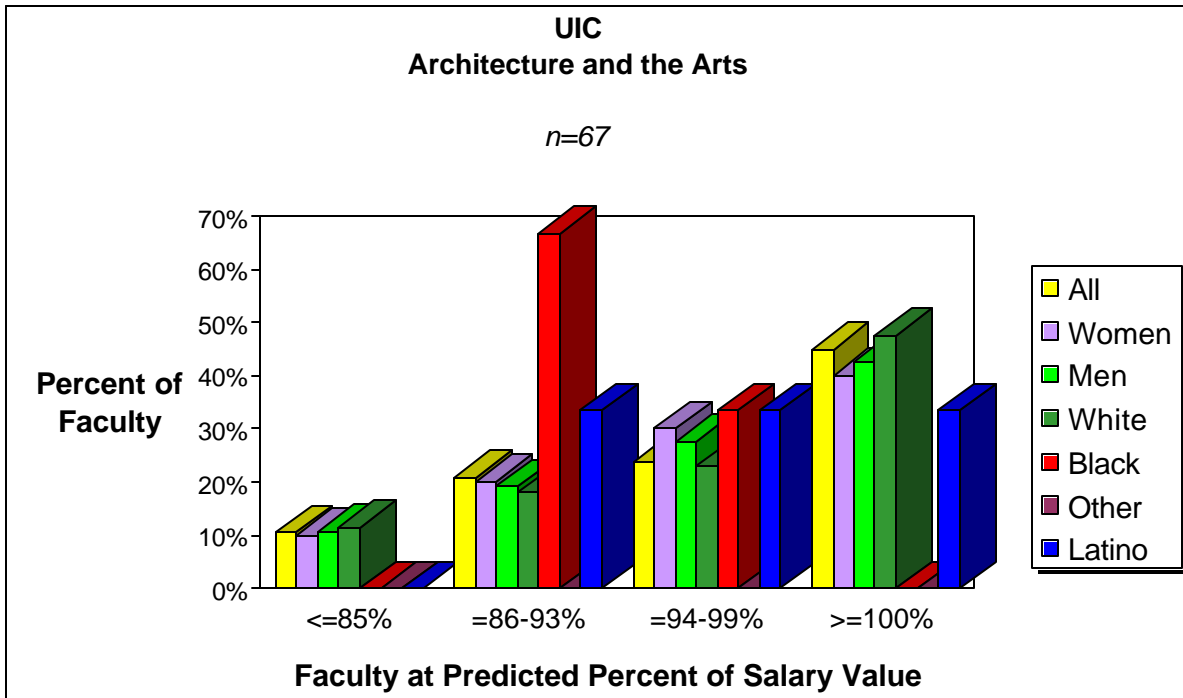


		All (n=624)	Women (n=172)	Men (n=452)	White (n=454)	Black (n=17)	Other (n=131)	Latino (n=22)
n=624	Total	100%	100%	100%	100%	100%	100%	100%
n=199	<=85%	32%	36%	30%	31%	12%	37%	36%
n=79	=86-93%	13%	15%	12%	13%	29%	8%	9%
n=63	=94-99%	10%	9%	10%	10%	18%	11%	9%
n=283	>=100%	45%	40%	48%	46%	41%	44%	45%

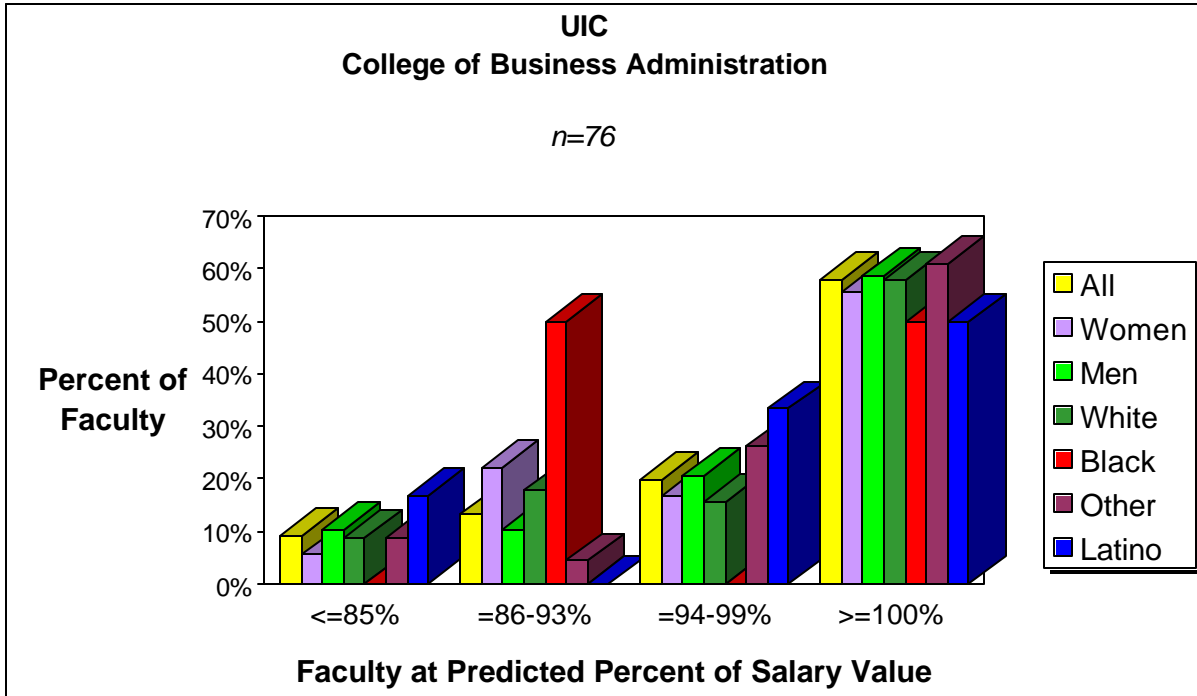


		All (n=61)	Women (n=31)	Men (n=30)	White (n=53)	Black (n=1)	Other (n=6)	Latino (n=1)
n=61	Total	100%	100%	100%	100%	100%	100%	100%
n=12	<=85%	20%	23%	17%	19%	0%	33%	0%
n=9	=86-93%	15%	13%	17%	17%	0%	0%	0%
n=7	=94-99%	11%	19%	3%	13%	0%	0%	0%
n=33	>=100%	54%	45%	63%	51%	100%	67%	100%

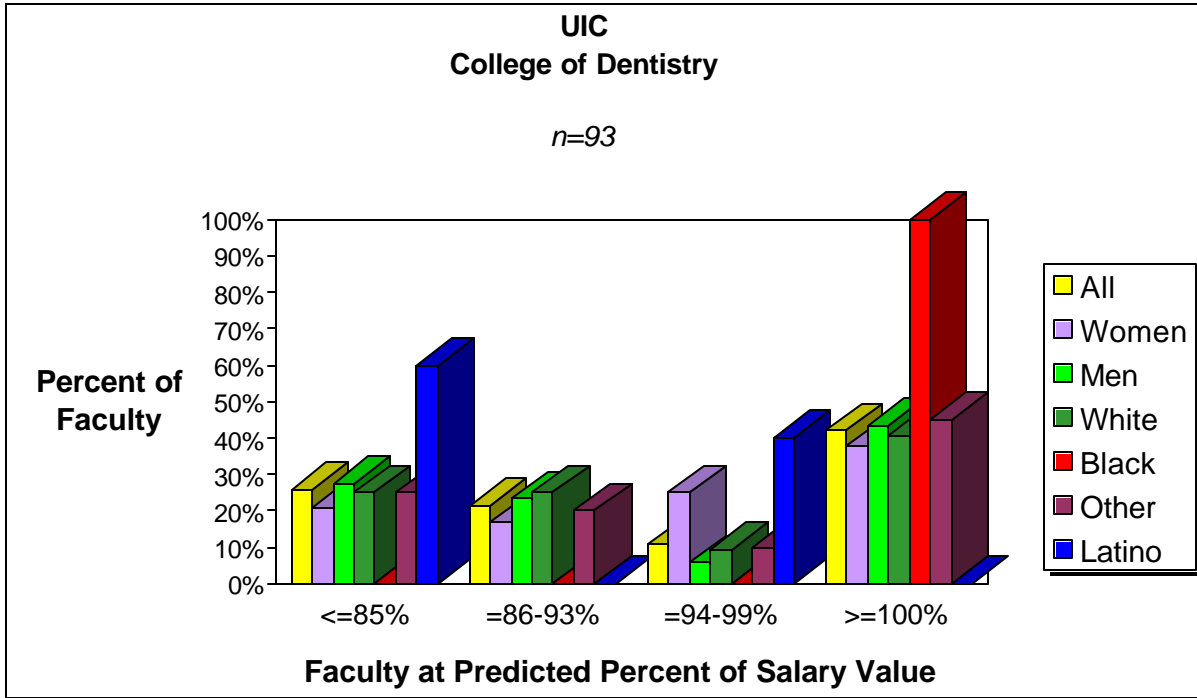
By College:



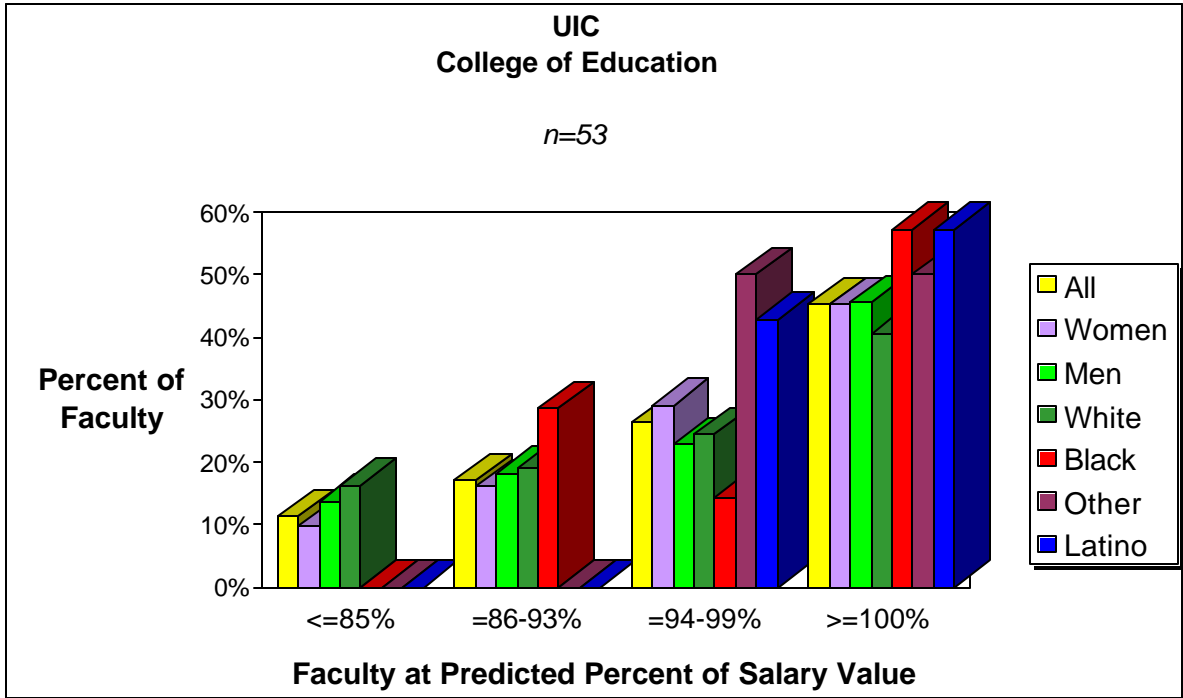
		All (n=67)	Women (n=20)	Men (n=47)	White (n=61)	Black (n=3)	Other (n=0)	Latino (n=3)
n=67	Total	100%	100%	100%	100%	100%	100%	100%
n=7	<=85%	10%	10%	11%	11%	0%	0%	0%
n=14	=86-93%	21%	20%	19%	18%	67%	0%	33%
n=16	=94-99%	24%	30%	28%	23%	33%	0%	33%
n=30	>=100%	45%	40%	43%	48%	0%	0%	33%



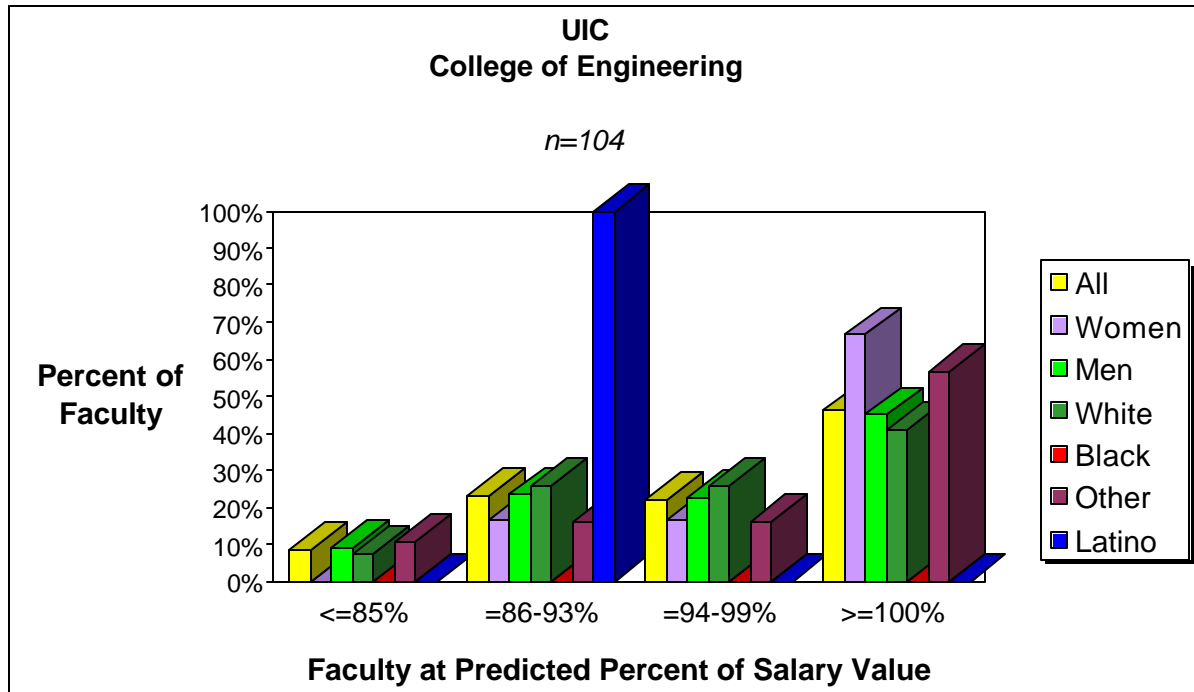
		All (n=76)	Women (n=18)	Men (n=58)	White (n=45)	Black (n=2)	Other (n=23)	Latino (n=6)
n=76	Total	100%	100%	100%	100%	100%	100%	100%
n=7	<=85%	9%	6%	10%	9%	0%	9%	17%
n=10	=86-93%	13%	22%	10%	18%	50%	4%	0%
n=15	=94-99%	20%	17%	21%	16%	0%	26%	33%
n=44	>=100%	58%	56%	59%	58%	50%	61%	50%



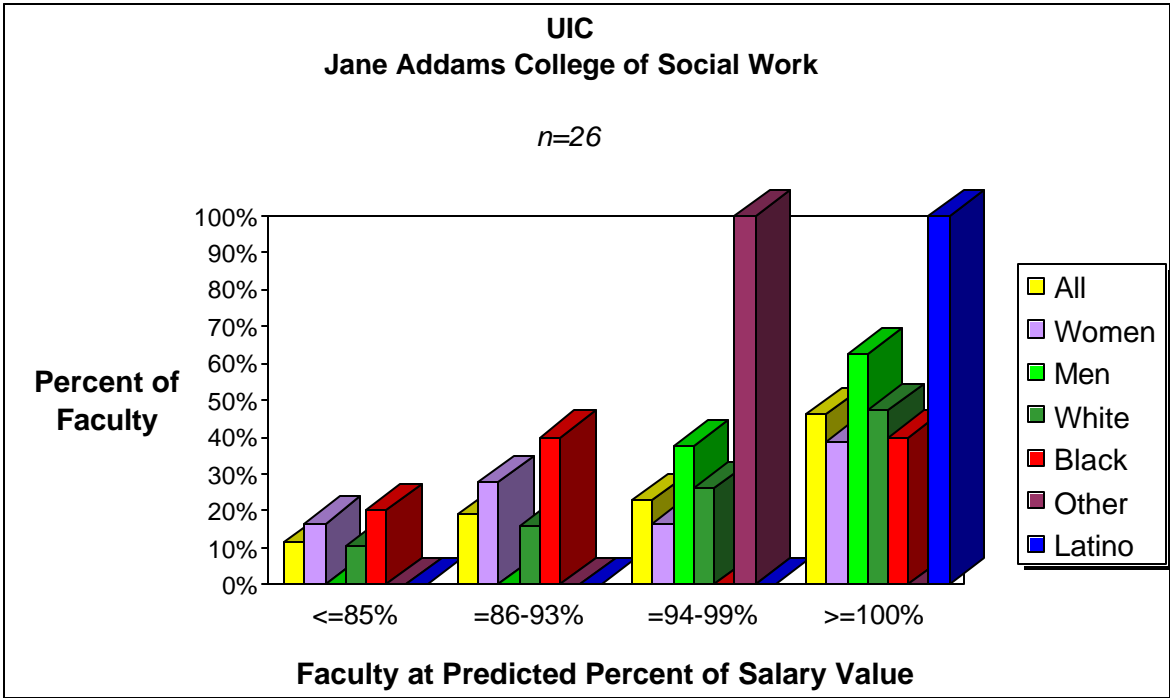
		All (n=93)	Women (n=24)	Men (n=69)	White (n=64)	Black (n=4)	Other (n=20)	Latino (n=5)
n=93	Total	100%	100%	100%	100%	100%	100%	100%
n=24	<=85%	26%	21%	28%	25%	0%	25%	60%
n=20	=86-93%	22%	17%	23%	25%	0%	20%	0%
n=10	=94-99%	11%	25%	6%	9%	0%	10%	40%
n=39	>=100%	42%	38%	43%	41%	100%	45%	0%



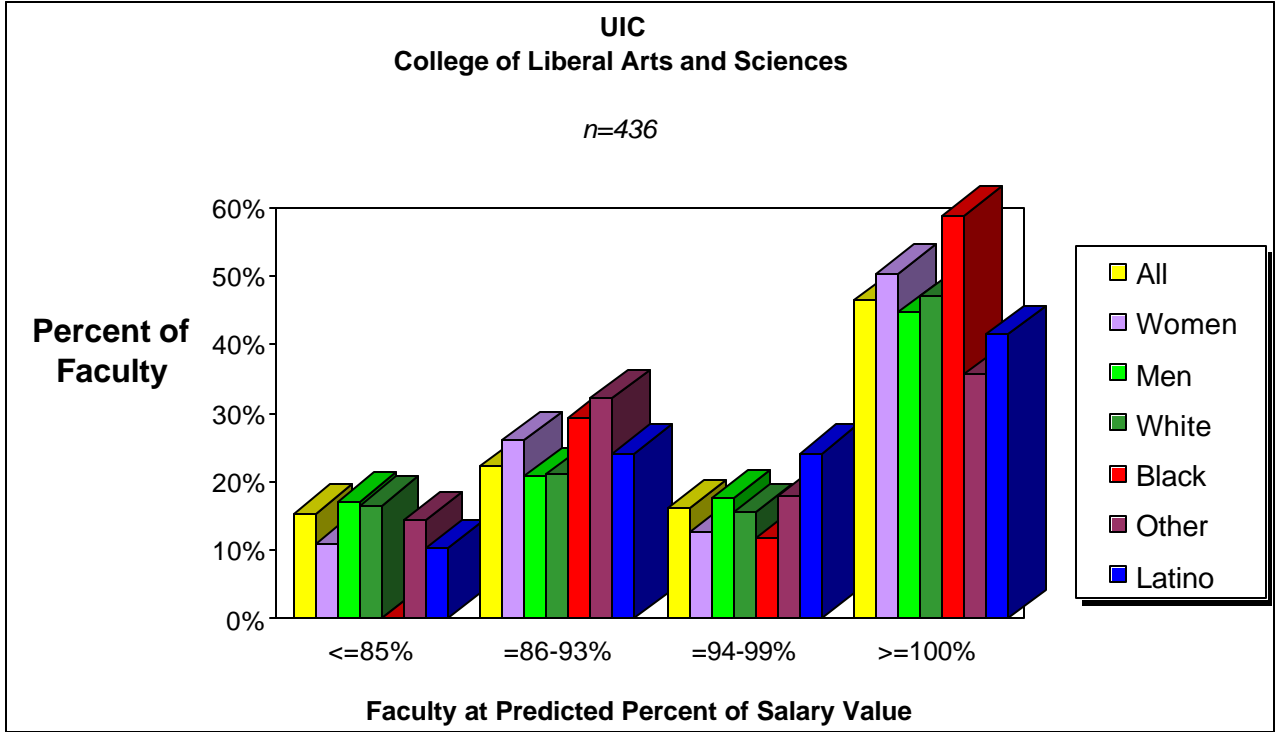
		All (n=53)	Women (n=31)	Men (n=22)	White (n=37)	Black (n=7)	Other (n=2)	Latino (n=7)
n=53	Total	100%	100%	100%	100%	100%	100%	100%
n=6	<=85%	11%	10%	14%	16%	0%	0%	0%
n=9	=86-93%	17%	16%	18%	19%	29%	0%	0%
n=14	=94-99%	26%	29%	23%	24%	14%	50%	43%
n=24	>=100%	45%	45%	45%	41%	57%	50%	57%



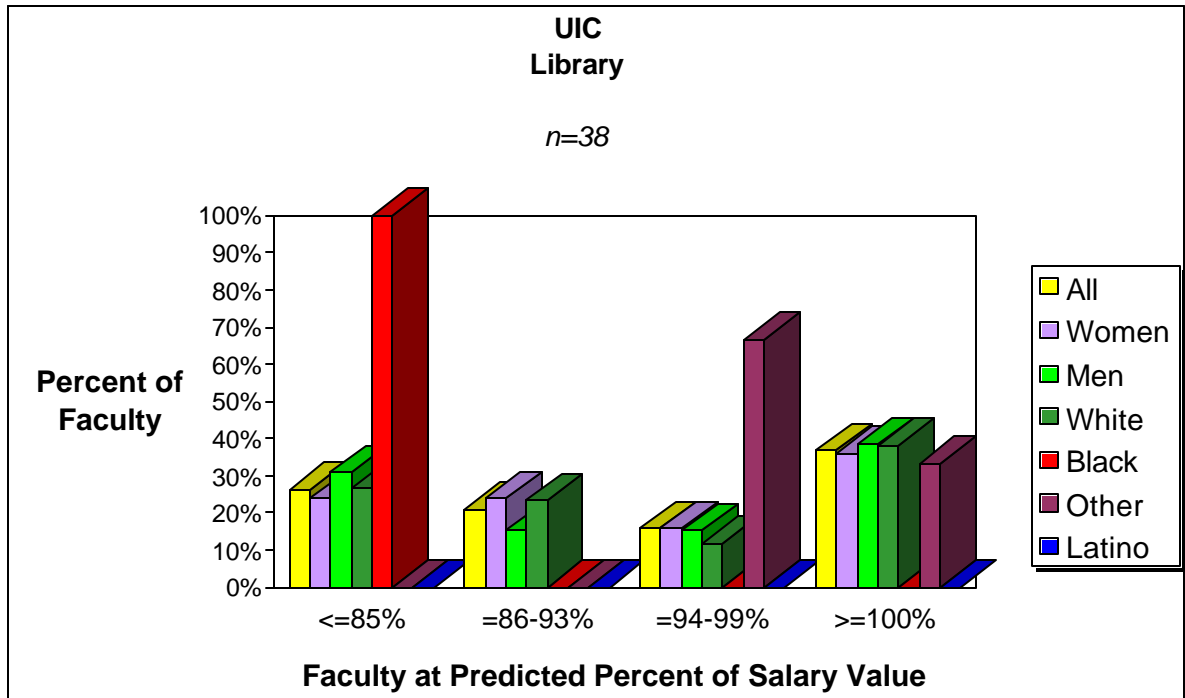
		All (n=104)	Women (n=6)	Men (n=98)	White (n=66)	Black (n=0)	Other (n=37)	Latino (n=1)
n=104	Total	100%	100%	100%	100%	100%	100%	100%
n=9	<=85%	9%	0%	9%	8%	0%	11%	0%
n=24	=86-93%	23%	17%	23%	26%	0%	16%	100%
n=23	=94-99%	22%	17%	22%	26%	0%	16%	0%
n=48	>=100%	46%	67%	45%	41%	0%	57%	0%



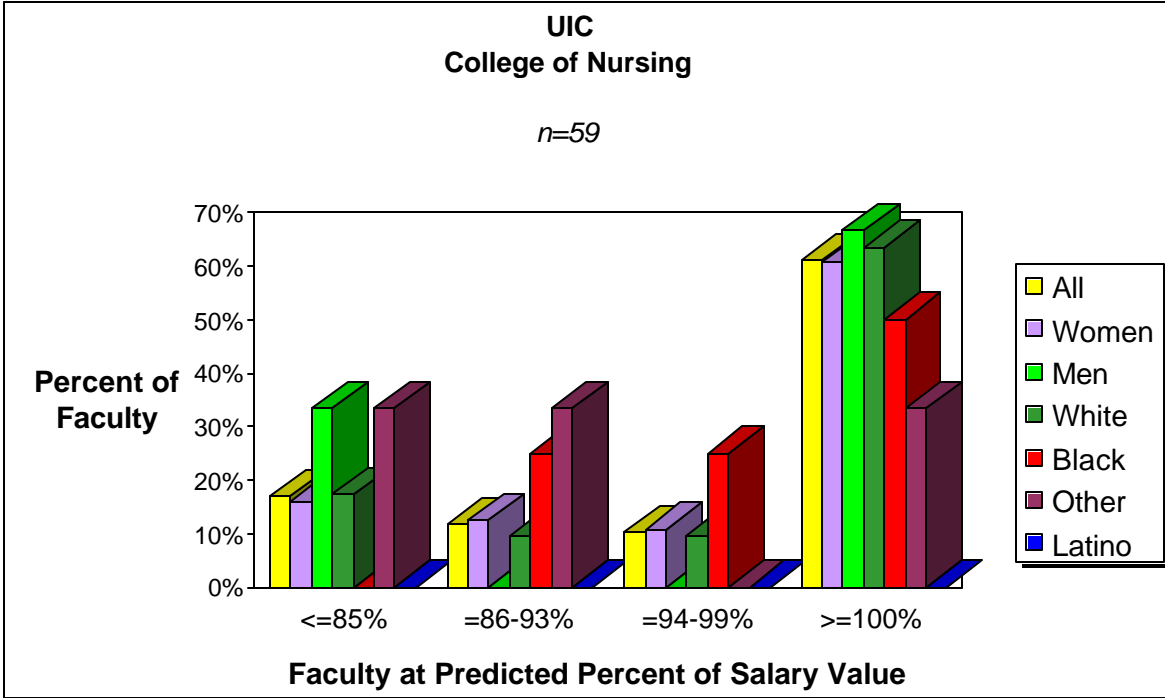
		All (n=26)	Women (n=18)	Men (n=8)	White (n=19)	Black (n=5)	Other (n=1)	Latino (n=1)
n=26	Total	100%	100%	100%	100%	100%	100%	100%
n=3	<=85%	12%	17%	0%	11%	20%	0%	0%
n=5	=86-93%	19%	28%	0%	16%	40%	0%	0%
n=6	=94-99%	23%	17%	38%	26%	0%	100%	0%
n=12	>=100%	46%	39%	63%	47%	40%	0%	100%



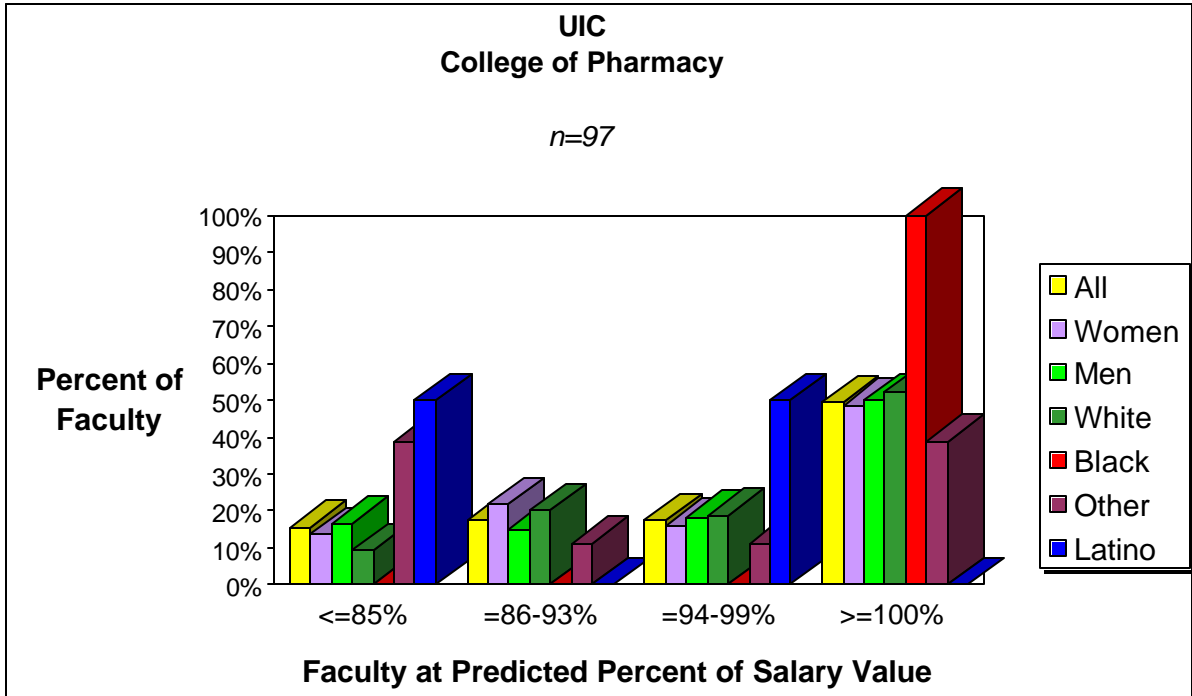
		All (n=436)	Women (n=127)	Men (n=309)	White (n=362)	Black (n=17)	Other (n=28)	Latino (n=29)
n=436	Total	100%	100%	100%	100%	100%	100%	100%
n=67	<=85%	15%	11%	17%	17%	0%	14%	10%
n=97	=86-93%	22%	26%	21%	21%	29%	32%	24%
n=70	=94-99%	16%	13%	17%	15%	12%	18%	24%
n=202	>=100%	46%	50%	45%	47%	59%	36%	41%



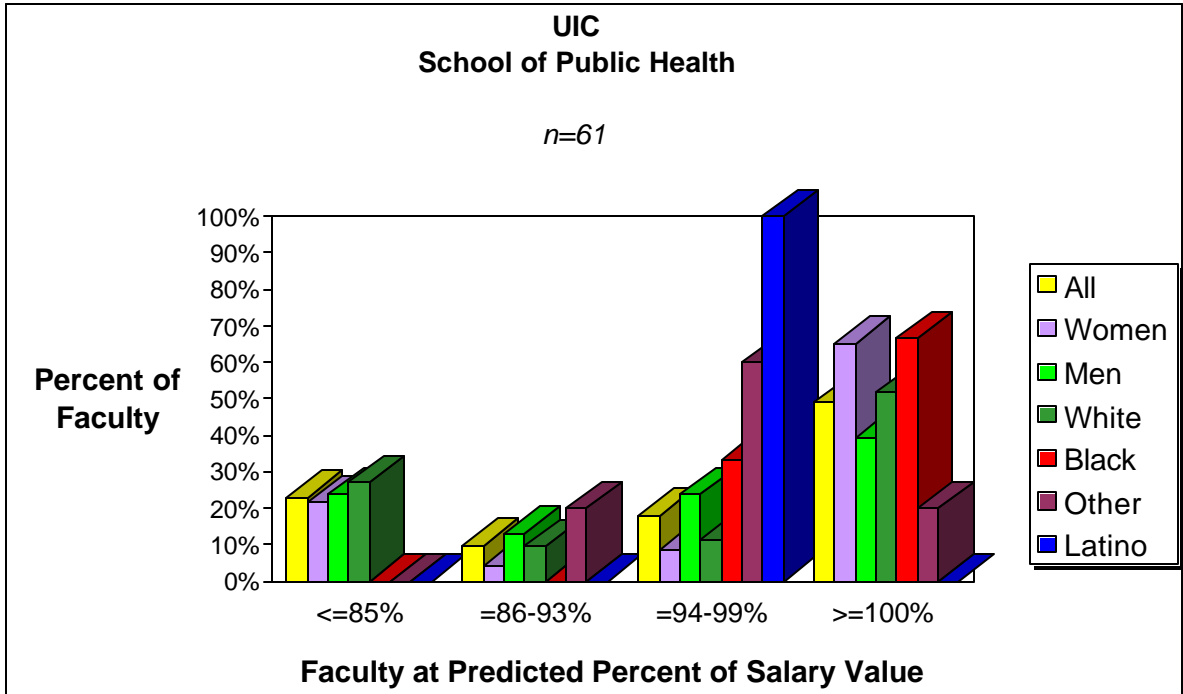
		All (n=38)	Women (n=25)	Men (n=13)	White (n=34)	Black (n=1)	Other (n=3)	Latino (n=0)
n=38	Total	100%	100%	100%	100%	100%	100%	100%
n=10	<=85%	26%	24%	31%	26%	100%	0%	0%
n=8	=86-93%	21%	24%	15%	24%	0%	0%	0%
n=6	=94-99%	16%	16%	15%	12%	0%	67%	0%
n=14	>=100%	37%	36%	38%	38%	0%	33%	0%



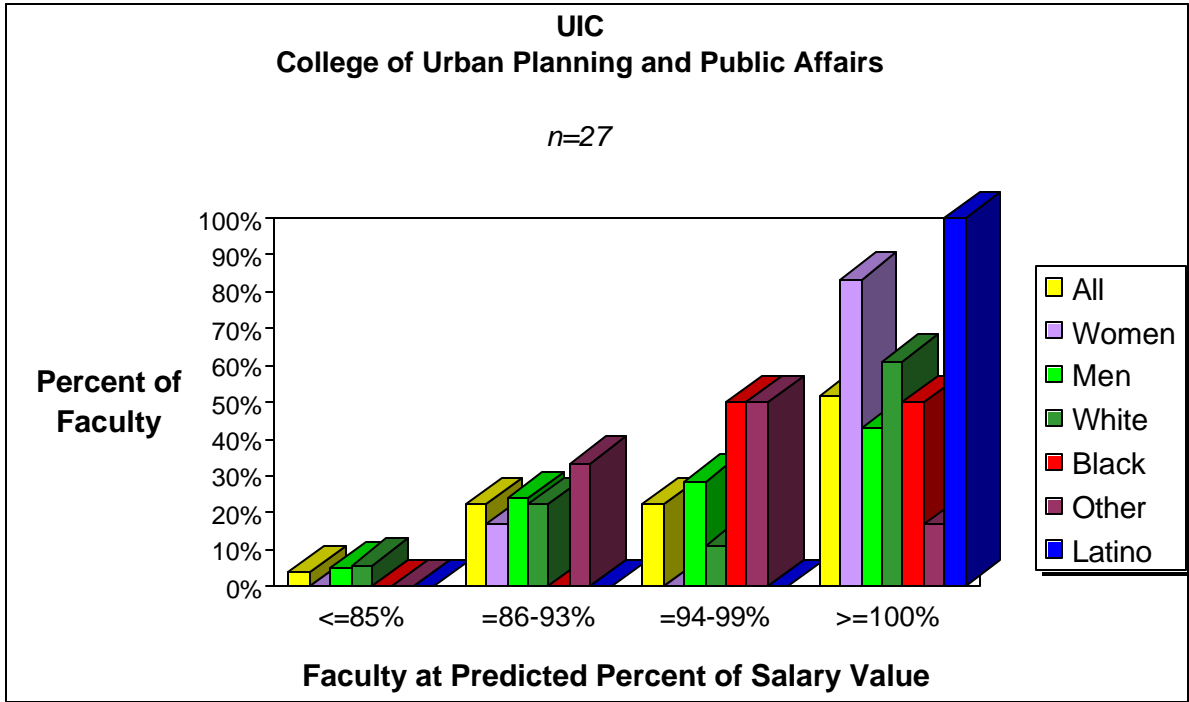
		All (n=59)	Women (n=56)	Men (n=3)	White (n=52)	Black (n=4)	Other (n=3)	Latino (n=0)
n=59	Total	100%	100%	100%	100%	100%	100%	100%
n=10	<=85%	17%	16%	33%	17%	0%	33%	0%
n=7	=86-93%	12%	13%	0%	10%	25%	33%	0%
n=6	=94-99%	10%	11%	0%	10%	25%	0%	0%
n=36	>=100%	61%	61%	67%	63%	50%	33%	0%



		All (n=97)	Women (n=37)	Men (n=60)	White (n=75)	Black (n=2)	Other (n=18)	Latino (n=2)
n=97	Total	100%	100%	100%	100%	100%	100%	100%
n=15	<=85%	15%	14%	17%	9%	0%	39%	50%
n=17	=86-93%	18%	22%	15%	20%	0%	11%	0%
n=17	=94-99%	18%	16%	18%	19%	0%	11%	50%
n=48	>=100%	49%	49%	50%	52%	100%	39%	0%



		All (n=61)	Women (n=23)	Men (n=38)	White (n=52)	Black (n=3)	Other (n=5)	Latino (n=1)
n=61	Total	100%	100%	100%	100%	100%	100%	100%
n=14	<=85%	23%	22%	24%	27%	0%	0%	0%
n=6	=86-93%	10%	4%	13%	10%	0%	20%	0%
n=11	=94-99%	18%	9%	24%	12%	33%	60%	100%
n=30	>=100%	49%	65%	39%	52%	67%	20%	0%



		All (n=27)	Women (n=6)	Men (n=21)	White (n=18)	Black (n=2)	Other (n=6)	Latino (n=1)
n=27	Total	100%	100%	100%	100%	100%	100%	100%
n=1	<=85%	4%	0%	5%	6%	0%	0%	0%
n=6	=86-93%	22%	17%	24%	22%	0%	33%	0%
n=6	=94-99%	22%	0%	29%	11%	50%	50%	0%
n=14	>=100%	52%	83%	43%	61%	50%	17%	100%