

Conducting Salary Equity Analyses in Organizations

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Key Points

- Compensation is an area with great career opportunities for I/O psychologists
 - I/O psychology has typically ignored this field
 - I/O psychologists are uniquely qualified in this area
 - Job analysis (knowledge of jobs)
 - Statistics
 - Employment law
 - Motivation and other “human” issues
- Goal for today is to *familiarize* you with one aspect of compensation – salary equity analysis

Three Types of Salary Equity

- Job-based equity
 - External equity
 - Internal equity
- Group-based equity
 - Gender
 - Race
- Individual-based equity



External Equity

- How does our organization pay compared to other organizations (the external market)?
- Determined through salary surveys
- Goal is to pay enough to attract and retain desired employees



99	\$9.76	\$19.16	\$19.16	\$27.55	\$17.67	\$17.79	99
95							95
90		\$18.40	\$16.25	\$21.50	\$12.31	\$12.65	90
85	\$9.00	\$16.73					85
80				\$19.04	\$11.78	\$12.46	80
75	\$8.78	\$16.41	\$15.92	\$17.98			75
70		\$16.28			\$10.59	\$12.31	70
65	\$8.34	\$15.99	\$12.74	\$17.45		\$12.04	65
60					\$10.43		60
55		\$13.89	\$12.62	\$17.16		\$11.25	55
50	\$7.81	\$13.12		\$16.69	\$9.69	\$10.31	50
45			\$12.41				45
40	\$7.72	\$12.61		\$15.00	\$9.27	\$10.13	40
35		\$11.18					35
30	\$7.17		\$11.98	\$14.09	\$9.08	\$10.00	30
25		\$10.72		\$13.75		\$9.14	25
20	\$6.83	\$10.50	\$9.36				20
15		\$10.30		\$13.37		\$8.90	15
10	\$6.75		\$9.25		\$9.00		10
5		\$9.50		\$10.94		\$8.05	5
	Janitor	Painter	Mechanic	Buyer	Material Handler	Shipping Clerk	

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Internal Equity

- Jobs that are worth more should be paid more
- Jobs with similar worth are assigned to the same salary grade/band
- Worth determined by compensable factors
 - responsibility
 - complexity/difficulty
 - skill needed
 - physical demands
 - work environment



Factors	Points
Education (200 points possible)	
High school degree or less	40
Two years of college	80
Bachelor's degree	120
Master's degree	160
Ph.D.	200
Responsibility (300 points possible)	
Makes no decisions	75
Makes decisions for self	150
Makes decisions for 1-5 employees	225
Makes decisions for more than 5 employees	300
Physical Demands	
Lifts no heavy objects	30
Lifts objects between 25 and 100 pounds	60
Lifts objects more than 100 pounds	90

Gender and Race Equity in Salaries

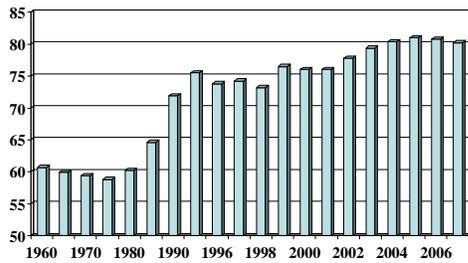
- Fairness in salaries *within* similar jobs
- Federal regulations
 - Executive Order 11246
 - Forbids discrimination by contractors with at least \$10,000 in federal contracts
 - Requires written affirmative action plans
 - Employers with 50 or more employees
 - Contracts of at least \$50,000
 - Created the Office of Federal Contract Compliance Programs (OFCCP)
 - Regulations require that federal contractors annually conduct salary equity analyses
 - In 2006, OFCCP issued guidelines on how these analyses should be conducted
 - Equal Pay Act of 1963
 - Civil Rights Act of 1964 (Title VII)
 - Adverse impact in salaries

Why The Concern?

- Women earn 80.2 cents on every dollar paid to men (BLS 2007 data)
- Wage gap also occurs for race

Race	Men	Women	Total	Gap
Asian	\$936	\$731	\$830	78.1%
White	\$788	\$626	\$716	79.4%
African American	\$600	\$533	\$569	88.8%
Hispanic/Latino	\$520	\$473	\$503	91.0%
	\$766	\$614	\$695	80.2%

The Wage Gender Gap (1960 - 2007)



More Sophisticated Analyses (Wall, 2000)

- Uncorrected Gap 23.5 cents
- Corrected for hours worked 16.2 cents
- Corrected for other factors 6.2 cents

Steps in a Salary Equity Analysis

- Create Similarly Situated Employee Groupings (SSEGs)
- Gather data (salary, gender, race, tenure, etc.)
- Control for variable factors (e.g., overtime, shift differentials)
- Determine if there are gender or race differences in average salaries that can't be explained by merit variables
 - Regression is used for large SSEGs (30 + 5)
 - Fisher's exact tests are used for smaller groups
- Further investigate any unexplained group differences
- Make salary adjustments if necessary

Goals in Creating SSEGs

- Narrow enough that similar jobs are kept together
 - Ideal comparison is by job title
 - Dissimilar jobs should never be combined
- Broad enough to allow for sufficient sample sizes for statistical analysis
 - 70% statistical coverage
 - Regression rules of at least 30 per SSEG and 5 members in each group to be compared
- Simplicity
 - Easy to explain to employees and the OFCCP
 - Consistent with how you compensation people and managers talk about comp

Building a Data Base Factors to Consider

- What is your compensation philosophy?
- Do you pay for:
 - Performance
 - Education
 - Previous experience
 - Time in company
- Do you have different pay systems for exempt and non-exempt employees?
- What data are available
 - Currently in HRIS
 - Could be easily attained
 - Could be attained with much time, effort, and expense

Building a Database Potential Variables

- Merit Information
 - Experience
 - Time in company
 - Time in grade
 - Time in current job
 - Previous relevant experience (use age as proxy?)
 - Previous salary
 - Career path data (internal promotion or external hire)
 - Performance ratings
 - One or two-year period
 - May interact with time in job
 - Training
 - Education
 - Certifications
 - Security clearances
 - Managerial, supervisory, or leadership responsibilities
- Market Information
 - Field of expertise/market factors
 - Line of business
 - Government contract provisions about pay
 - Economy during time of hire
 - Was employee part of a merger?

Running the Regression Analysis Considerations

- Number of employees in the analysis
 - Total number (30 is probably the minimum)
 - Number of employees in each group (5 is the minimum)
- Employee-to-variable ratio
 - Minimum is a ratio of 5:1
 - 10:1 is more comfortable
- Accuracy of information
- Missing information (e.g., education)
- Multicollinearity
- Balance of simplicity versus statistical power

Making Salary Adjustments

- Ensure that all potential merit variables or explanations have been explored
- Issues
 - Who gets an adjustment?
 - Only women and minorities?
 - Any employee who is significantly underpaid according to the regression model?
 - When do you give it?
 - Immediately or at the next salary cycle?
 - All at once or spread out over several years?
 - How do you explain the adjustment?

Determining the Cause of the Inequity

- Current salary
- Starting salary
 - Negotiation
 - Salary history
- Average annual increase
 - tenure
 - merit pay
 - cost of living
 - promotions
 - bonuses
 - union contract
- Performance rating
 - actual differences in performance
 - bias in the rating instrument
 - bias in the rating process
 - bias in using appraisal results to assign raises
- Promotion decisions

Questions



Contact Information

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The OFCCP Audit Process

- Desk Audit
 - Approximately 10% of contractors randomly receive a scheduling letter
 - Item 11 asks for compensation information
 - Average salary by gender and then by race for each “job group”
 - A “tipping test” is used to determine whether the OFCCP will require the contractor to submit further data
 - 12-factor mini-regression
 - One in 25 establishments will be asked to submit further data regardless of the “tipping test” results
- On-Site Audit
 - Depending on the results of the desk audit, the OFCCP may schedule an on-site audit

OFCCP and Compensation

- OFCCP selects approximately 10% of the federal contractor *establishments* to audit each year.
 - Multi-establishment contractors will likely have multiple audits
- Once selected, you have 30 days to produce the affirmative action plan and compensation data.
- OFCCP then conducts a desk audit of the compensation data.

OFCCP and Compensation

- Compensation audits proceed in the following order:
 - Step 1: Desk audit review of submitted compensation data
 - If “pattern” exists – proceed to the collection of more data
 - If no “pattern” exists – close compensation portion of review
 - 5% will go to step 2 even if no pattern exists (this is new)
 - Step 2: Request additional data and conduct preliminary regression analysis (12-factor mini-regression)
 - If “pattern” exists – proceed to the collection of more data
 - If no “pattern” exists – close compensation portion of review
 - Step 3: Conduct a full-blown regression analysis
 - On-site review of employment files
 - Interview managers and employees
 - Review job descriptions
 - Etc.

Item 11 Data

Grade	Male	Female	Mean Male Salary	Mean Female Salary	Difference	% Difference
10	22	104	\$36,867	\$34,682	\$2,184	6.3%
11	19	13	\$44,063	\$40,968	\$3,095	7.55%
12	42	30	\$41,037	\$39,536	\$1,501	3.8%
13	18	3	\$46,723	\$46,607	\$115	.25%
14	30	5	\$52,499	\$49,566	\$2,932	5.92%

Desk Audit Screening Procedure

- Determine percentage of SSEGs in which the average salary for women and men differs by at least 5%.
- Determine Coverage.
 - Determine the number of women that are in SSEGs favoring men by 5% and divide by total number of women.
 - Determine the number of men that are in SSEGs favoring women and divide by total number of men.
- Audit will continue if
 - The "male-advantaged" SSEGs contain at least 10% of the total number of women covered by the statistical analysis; AND,
 - The percentage of women covered in the "male-advantaged" SSEGs is at least 3 times the percentage of men in the "female-advantaged" SSEGs; AND
 - The total number of affected women is at least 30

OFCCP Desk Audit Review

Pay Division	Identified Group (Females)		Comparison Group (Males)		Pay Difference	Employees with Differences	
	Count	Average Salary	Average Salary	Count		Group	Count
Job 1	9	\$23,920	\$26,585	35	10.02%	Female	9
Job 2	19	\$22,841	\$23,585	16	3.15%	Female	19
Job 3	22	\$26,475	\$32,545	24	18.65%	Female	22
Job 4	8	\$28,453	\$28,458	22	0.02%		
Job 5	56	\$33,696	\$32,000	3	-5.30%	Male	3
Job 6	3	\$35,956	\$38,000	21	5.38%	Female	3
Job 7	2	\$43,956	\$46,521	85	5.51%	Female	2
Job 8	74	\$18,569	\$21,585	25	13.97%	Female	74
Job 9	2	\$21,293	\$20,112	12	-5.87%	Male	12
Job 10	12	\$87,585	\$89,562	14	2.20%	Female	12

Desk Audit Example

	Favoring Men	Favoring Women	No Difference	Total
Number of SSEGs	7	2	1	10
Number of Men	220	15	22	257
Number of Women	141	58	8	207
Percentage	$141 \div 207 = 68.1\%$	$15 \div 257 = 5.8\%$		
Ratio	$68.1 \div 5.8 = 11.74$			

Step 2: OFCCP's 12-Factor Mini-Regression

- If the contractor fails the 3-prong test, the OFCCP will then send the 12-Factor Mini-Regression letter.
- Standard letter will be issued requesting the following information:
 - Employee ID
 - Race
 - Sex
 - Annual Salary
 - Job Title
 - Grade/Band/SSEG
 - Time in Company (or hire date)
 - Previous Experience or Age
 - Time in Job
 - Location
 - Status (part-time or full-time)
 - FLSA Status (exempt or nonexempt)

OFCCP's 12 Factor Mini-Regression (continued)

- The OFCCP conducts simple regression analyses using the following variables (if provided):
 - Time in Company
 - Time in Job
 - Previous Experience/Age
- The OFCCP will potentially run the data three different ways:
 - Job Title
 - Overall Company
 - Cluster Analysis

Step 3: Full Blown Regression

- OFCCP will build a database of employee information.
- OFCCP will collect more data than was requested in the 12-factor letter.
- OFCCP will interview managers and employees.
