

Chapter 5

Phase Five: Determining Total Value

Key points made in this chapter

Determining total job value:

- is the result of a job's ranking against each factor and the weight assigned to each factor
- involves a weighting process which can be based on geometric or arithmetic progression
- must avoid gender bias

Total value results from ranking and comparing jobs, then adding the weights associated with each factor. The evaluations do not in themselves give points; weighting the factors does. Both the evaluations and factor weights are needed. The following section provides guidance for effective, gender-neutral weighting of the job evaluation factors.

Weighting

The issue of weighting is an important element of the evaluation process. It will have an impact on the total value of jobs and, as with all other stages discussed, cannot be gender-biased.

Weighting refers to the importance, or *weight*, given to the factors used to measure jobs.

The weighting process attaches points to each level of a factor. Each job is rated as being at a particular level on each factor. Once the weight for the factor is known, the points for each level of a factor can be known, and it is possible to determine the total points for a job. For example, for one factor, Level 4 may have a point score of 100 for any job that was rated at that level, while another factor may be assigned a point value of only 39 at level 4 because the factor was given a lower weight. Please see the following figure for an example of weights and corresponding points.

Weighting can dramatically change the final evaluation outcome. The weighting process can be done either at the same time as the factors are developed, or after the jobs have been evaluated against the factors. It is another area where the organization must avoid letting gender bias creep in. More is said about this shortly.

1. Weighting Methodologies

Once an organization has decided how many points it will use in its job evaluation system, it must decide how to divide the points: first, between the various factors it has chosen and, second, within factors.

Example of Weighted Factors with Corresponding Points							
		Points per Level					
Factors by Criterion	Weight	One	Two	Three	Four	Five	Six
Skill:	30%						
Job knowledge	10%	10	40	70	100		
Interpersonal Skill	9%	9	36	63	90		
Communication Skill	6%	6	19.5	33	46.5	60	
Physical Skill	5%	5	16	28	39	50	
Effort:	15%						
Mental Effort	8%	8	26	44	62	80	
Physical Effort	7%	7	28	49	70		
Responsibility:	40%						
For Others	10%	10	28	46	64	82	100
For Financial Impact	15%	15	40	65	90	115	150
For Quality	15%	15	40	65	90	115	150
Working Conditions:	15%						
Physical	8%	8	26	44	62	80	
Psychological	7%	7	28	49	70		
Total Weight:	100%						

For example, organization X has decided that its system will be based on 1000 points. It must then decide what percentage to assign to each factor. For some organizations, it may be clear that the skill required to do the job is more valuable than the effort involved. Thus the criterion of skill may get 40% of the weight available, mental effort and physical effort combined receive 15%, responsibility 35%, and working conditions 10%.

The next step is to decide how many points to assign to each level. (See Matrix Presentation on p. 83, which illustrates possible levels.)

There are several ways to assign points, but only two — geometric and arithmetic — will be discussed in the Guide.

a) **Arithmetic Progression**

An **arithmetic** design would increase the points in a fixed amount, for example:

Skill	Levels				
	1	2	3	4	5
Job knowledge	10 points	20 points	30 points	40 points	50 points

(*Note:* this is called formula two in the software program available on disk.)

b) **Geometric Progression**

A **geometric** system might increase the points by the same percentage for each level. For example, by 50%:

Skill	Levels				
	1	2	3	4	5
Job knowledge	10 points	15 points	23 points	34 points	51 points

(*Note:* this is called formula three in the software program.)

Arithmetic is the more common approach to weighting. This Guide uses arithmetical formula, one that is fairly simple to explain and apply, and that makes good sense. In both cases, the first level is set equal to the percent weight assigned to this factor. In this example 10% = 10 points.

Before starting to assign weight, you will need to know:

- the total number of points being used
- the total number of factors
- the number of levels for each factor (these may vary between factors)

Assume that the system is using 1000 points and there are 12 factors. First, proportion the weight between factors. In this example, say that job knowledge is worth 15% of the total points, and has five levels. Regardless of the number of levels in a factor, the formula for assigning weight to the levels is the same:

- the highest level (in this case, Level 5) is the percent of weight for the factor (15%) multiplied by the total number of points for the system (1000):
 $15\% \times 1000 = 150$ points for Level 5
- the lowest level (Level 1) is the value of the highest level (150) divided by 10:
 $150 / 10 = 15$ points for Level 1

Once the upper and lower values have been determined, the intermediate levels need to have their value assigned. Use the formula to determine the fixed amount between points:

- value of the highest level (150) - the lowest level (15)
 (total number of levels (5) -1)

$$\begin{aligned}
 &= \frac{(150-15)}{(5-1)} \\
 &= \frac{135}{4} \\
 &= 34
 \end{aligned}$$

(*Note:* this is called formula one in the software program.)

The resulting values are:

	Level 1	Level 2	Level 3	Level 4	Level 5
Points	15	49	83	116	150

On a larger scale, with more factors, the example could look like this:

Skill		Levels				
		1	2	3	4	5
Job Knowledge	15%	15	49	83	116	150
Communication	10%	10	40	70	100	
Dexterity	5%	5	16	28	39	50
Versatility	5%	5	20	35	50	

The advantage of this method is that it distributes points proportionately across the levels.

(*Note:* decimal points will be rounded up or down.)

2. Avoiding Gender Bias When Weighting Factors

Weighting, which determines the relative value of each factor in a job evaluation system, can have a dramatic impact on the total value assigned to jobs. The *Act* does not mention weighting, but that does not mean it can be ignored. As the Guide has shown, the evaluation process will clearly be biased if any of its elements are biased. A weighting process that favours one sex over the other will lead to a final assessment of value that is gender-biased.

In general, similar principles apply to weighting as apply to choosing factors: it should appropriately reflect an organization’s values, and should aim to eliminate gender bias. This does not mean, however, that an organization can ignore gender bias throughout the evaluation process and expect to eliminate it with weighting. Bias must be minimized or eliminated at each stage. Bias at any point will cause problems later in the process, and bias in weighting can exacerbate problems caused by bias at other stages, such as overlapping factors (see Chapter 2).

Similarly, minimizing bias at any stage will have a beneficial effect on what has gone before and what comes after. Job information must be accurate, complete, and inclusive of the full range of work in the organization; factors must capture and value work in a fair and neutral manner and must be weighted in a bias-free manner.

Examples of biased weighting would include weighting one factor higher than another even though the element of work being measured is equivalent, or weighting a factor very low even though the element it measures is of key importance to the organization. In the first scenario, imagine two factors that measure working conditions, named *physical elements* and *psychological elements*. The level of disagreeableness is roughly equivalent in both factors. However, *physical elements*, which is more commonly a feature of men's work in the organization, is rated higher than *psychological elements*, more commonly a feature of women's work. The result, therefore, will be biased.

In the second scenario, if a service organization, for example, were to indicate in its mandate that quality service is a top priority, yet weight the factor that values service to customers at only four percent, it might need to re-examine that weighting. If the weight is low compared to other factors, and the jobs that scored highest on this factor tend to be female-dominated, the result may well be sex-biased.

3. Determining whether the Weighting Process Minimizes Gender Bias

Some practical questions to ask:

- Is there a gender trend to the ranking of factors by weight, i.e., higher weights to factors that favour one sex?
- Is a gender trend determining which factors have a level with zero points?
- If certain factors can be considered equivalent elements, but focus on different requirements, e.g., physical and psychological conditions, is there a gender trend to the weighting with one getting higher weight than the other?
- Does the weighting compound or minimize the effect of any potential overlap between factors?
- Do the weights and weighting hierarchy reflect the organizational context, including the mandate, mission statement and other communications material that indicate the organization's values? For example, if the organization has a mandate to provide quality service or care, and these factors are present, are they also given an appropriately high weight?