PENALTY ANALYSIS

Goal : Analyse what characteristics have the greatest effect on the overall appreciation about a product

Method :
For each characteristic
- Separate in 3 categories :
  o Just About Right (JAR) : the middle appreciation
  o Too much : group all the appreciations above the middle one
  o Not enough : group all the appreciations below the middle one
- Add another category :
  o Other : group Too much and Not enough
- For each group, compute the mean of the overall appreciation of the product
- Compute 3 penalties :
  o JAR mean – Too much mean
  o JAR mean – Not enough mean
  o JAR mean – Other mean, which is the real penalty

Way to use it :
If for example we have for the crunchiness of a nutritionnal product :

Too much penalty	0.713
Not enough penalty	1.648
Overall penalty	1.161

We can say that
- Having not enough of crunchiness has a greatest penalyzing effect on the overall appreciation than having too much crunchiness
- By finding for which characteristics the penalty is the biggest, we can conclude what characteristic should be specifically improved