Analysis Representation Related to the Activities Relative Values Evaluated Using the Method Job Evaluation through the Load

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Abstract

The results obtained on the relative values for their work evaluated by applying a new job evaluation methods are analyzed in this paper. The research aims to identify whether job evaluation methodology through the tasks ensures relevant data on the relative values of activities. Demonstrating the relevance of data obtained support the further step, namely the job evaluation, on the premise - that assessed the relative values for stations to be correct, it is necessary to advance the tasks to be effectively evaluated. Study is applied in three areas of activity of human resources, financial, production accounting and ointments. I used two samples of professionals (occupants of positions evaluated) and lay persons from different companies. Analyses show that the methodology for assessing the tasks get good results in evaluation activities as a result we can say that the relative values for the right job will be evaluated.

Keywords: *evaluation method, job evaluation, tasks, company analysis, results.*

JEL classification: J33, M52

1. Introduction

We begin by presenting some definitions aimed to capture the essential characteristics of the job evaluation process. Chisu (2005, p. 127) - method by which the comparison of the relative contribution of each after the company's objectives. Munson (1963, p. 60) - to rationalize and accept the distribution of wages. Analyzing the definitions, we can identify the essential element of the process, namely determining the relative value of jobs.

Orient research in this area as a result of the objectives to be met by carrying out such a process, we can consider them to be true virtues of organizational ethics. Lytle (1946, p. 287), lists some of these objectives: a means of ensuring a fair remuneration, the process is not influenced by differences of race, creed, color, age or gender specific employees, sending a message to employees about what is important for business today and in the future.

Following the increase objectivity of the process, we identified a new job evaluation methodology called "the remote tasks." An analysis of the results achieved through new methods of evaluation, is discussed in this article.

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2. Method of job evaluation by task

A brief method for assessing the burden is initially needed to be done. The proposed evaluation method takes place from a prior evaluation and ranking of activities. Comparison takes place only between the activities of the same area (human resources, financial accounting, production, and so on). For each occupation, can only be selected criteria to ensure a real differentiation between the activities performed. An alternative to hierarchy is to achieve a comparison of activities without using criteria. The method is similar to that of comparison, the difference consisting in its application to the tasks, not jobs.

For each criterion, all specific activities are ranked an occupation. It answers the question: activity X is more important than work only in terms of criterion Y on Z? Subsequently, the coefficients are established importance of each criterion. To do this, choose activities that came first for each criterion, assess, and pass the award rates of importance. In this way, different weights are assigned according to each occupation separately. To understand why this approach can use an example - will give accountants relative importance between the necessary knowledge and working conditions, clearly different from the relative importance that chemists would give it between the two criteria, assuming that they would work in a toxic environment. Finally, the hierarchy of activities is achieved, given the importance and assessments of each criterion. Specifications mentioned in this passage does not apply to an alternative whereby the hierarchy is achieved by a direct comparison between tasks without using criteria.

After obtaining this information, you can proceed to determine the average pay for a person occupying a certain position.

The job evaluation through the tasks we used the following criteria:

1. Knowledge and skills (practical knowledge structured in stages),
2. Skills (innate abilities)
3. The difficulty of solving problems,
4. Responsibility - The consequences of poor implementation activities
5. Exercise, working conditions and risks.

In addition to the five factors mentioned above, the tasks were ordered by a so-called "general criteria". The evaluation was carried out with any of the criteria, with the specific request made by subjects to order the activities in order of importance, as they see it. Therefore, the term "general criteria" found in this work stands without using assessment criteria.

3. Defining the population and sampling

If we consider that the implementation of job evaluation methodology through the tasks it is intended that the application to be able to assess any post, regardless of the business or geographical area, then we define people as all existing jobs in a global time.

Area due to stretching of the population, the complexity of the methodology, the need to provide advice on how to work with the software used

and time limitations, the sample was limited to three areas of activity the financial accounting, human resources and production, and geographical area in Romania. If in areas such as financial accounting and human resources, selected stations consist of support activities that take place in a similar way regardless of the economic branch that supports for the production there was no such opportunity. However, the reasons invoked earlier, had restricted area. In this case we opted for drug manufacturing and more specifically for the production of ointments. Please note that selected production stations can not be treated as national or international level with other jobs because of technological and organizational features specific ointments and suppositories section of the company's antibiotics.

Selected items were:

1. In financial accounting - chief accountant and three posts of accountants that are distinguished by the complexity of the activities carried out.
2. HR - human resources specialist, human resources assistant, recruitment specialist, inspector human resources, payroll administrator.
3. In production - department manager, technologist and six operator stations, stations that are distinguished by the complexity of the tasks performed.

Selection of stations was made from the original setting of the activities will be evaluated and later to determine which jobs belong to those duties. A final check of the representativeness of the activities for selected items has been made.

Stations were used to assess the selection of a number of people to express their opinion. For each area have selected two groups of people. A group considered to be specialists, and was made up of employees who have performed activities evaluated and a group of lay persons, composed of persons who have not fulfilled those responsibilities. Selecting two groups aimed at refutation or confirmation that the nature of the subject influence the final results.

The number of participants for each of the three areas was:

1. Human resources - a total of five professionals and four lay persons.
2. For financial accounting specialists group consisted of three employees, while the group was of five lay persons.
3. For the production ointments, three employees of the ointments and suppositories of a polling group formed by specialists, and other 4 people lay group formed.

In statistical terms, the number of opinions collected, can be considered to be insufficient to determine the correct values and then work stations under study. The small number of real situations, however close we encountered in practice. An evaluation of positions within any company is facing some problems in the number of employees that can be used in the process. The small number of staff that may be involved may be due either to natural causes (some areas are represented by a small number of employees), either because of inability to involve all staff in a particular field may be multiple causes: the costs of closure, inexperienced staff, employees who do not know than their share of work, employees recognized as "opportunistic", which aim to deliberately overstate the position.

4. Representativeness relative values of activities

Relative values of the positions being determined by weighting the averages of each activity, consider it necessary to determine to what extent the values obtained on each business environments or not representative. To this end we used the coefficient of variation, which is calculated as the ratio between standard deviation and arithmetic mean. Depending on results, media can be considered as strictly representative - a V in the range [0, 17%), moderate representative - for v in the range (17%, 35%], broadly representative - for a V in the range (35%, 50%] and unrepresentative in other situations (Jaba, 2000, p.153).

Values for each activity, the views actually expressed by a number of subjects, we considered of interest as any average coefficient of variation has a value of less than 50% and thus can be considered as representative within the meaning wide.

After calculations, we found that not all environments have the condition to be representative at least in the broad sense, and therefore an analysis of the distribution of these results, the criteria fields and function of sample composition (the professionals and lay total) we considered necessary. Distribution results can be viewed in Tables 1, 3 and 5. The percentages show the ratio of the number of activities whose average is at least representative in the broad sense and the total number of activities.

Analyzing the data obtained in Table 1, the following observations can be derived:

Amplitude recorded between values obtained on each criterion are high. The highest magnitude recorded for the entire sample (61.82% - 16.67% = 45.15%) and lowest in the specialists (78.18% - 49.09% = 29.09%).

Some criteria record high scores, whether they are determined by professionals, lay persons or the whole sample. Such factors are "skills", "difficulty of solving problems" and "general".

Table 1: Analysis of each criterion values obtained media representation of activities for the entire sample, the non-specialists and specialists

Criterion	[0 - 50] / [0 - ∞) TOTAL	[0 - 50] / [0 - ∞) NESP	[0 - 50] / [0 - ∞) SP
Skills (innate abilities)	61.82%	61.82%	70.91%
Knowledge and skills (practical knowledge structured in stages)	34.55%	29.09%	76.36%
The difficulty of solving problems	47.27%	47.27%	78.18%
Exercise, working conditions and risks	18.18%	21.82%	49.09%
General (ordering activities without criteria)	41.82%	60.00%	63.64%
Responsibility - The consequences of poor implementation activity	16.67%	24.07%	64.81%

A number of criteria very large variations between the values obtained by professionals and lay persons total. Factors that we can fit in this category are "responsibility - the consequences of poor implementation of the activity," "exercise, working conditions and risks" and "knowledge and skills (practical knowledge structured in stages)."

The results obtained by specialists are much better than those obtained by non-specialists and all. But the results are affected by data collection methodology applied to different specialized production personnel, to other categories of subjects. For this reason, an analysis of data unless the production is required. The results are presented in production eliminate Table 2.

Table 2: Analysis of each criterion values obtained media representation of activities for the entire sample, the non-specialists and specialists, excluding production

Criterion	[0 - 50] / [0 - ∞) TOTAL	[0 - 50] / [0 - ∞) NESP	[0 - 50] / [0 - ∞) SP
Skills (innate abilities)	52.94%	58.82%	52.94%
Knowledge and skills (practical knowledge structured in stages)	38.24%	35.29%	61.76%
The difficulty of solving problems	44.12%	47.06%	64.71%
Exercise, working conditions and risks	2.94%	2.94%	17.65%
General (ordering activities without criteria)	50.00%	70.59%	41.18%
Responsibility - The consequences of poor implementation activity	21.21%	36.36%	42.42%

Analyzing the results in Table 2, may be submitted the following findings:

Remove field production led to a significant decrease of the results obtained by specialists, however overall they remain significantly better compared with values obtained by non-specialists and the total.

Factors whose values are obtained by specialists higher than those obtained by the layman's "knowledge and skills", "exercise, working conditions and risks", "difficulty of solving problems" and "responsibility". The first two recorded large differences.

The only criterion of five job evaluation factors, which measure different characteristics and has a lower value results obtained by non-specialists is the "skills". But the difference is reduced to below 6%.

The criterion of "general" is discordant note to other factors. In the layman, share activities with an average representative at least in the broad sense, is 70.59%, while the specialists, the share drops to 41.18%. We believe very good results recorded in the non-specialists as determined by an opinion formed on the mental level, generally valid, which takes the form of stereotypes. This is a possible explanation of why for Financial Accounting (80%) and HR (63%) are scored much higher on general criteria in the field of production compared to non-specialists (43%), where opportunities for training stereotypes in the population are much lower (see Table 3). Another cause of very good results can just due to ignorance of activities by non-specialists. They are focusing only after the

information content of activities, while scientists have equated their task experiences. Relatively weak result obtained by the criterion of "general" (compared with other criteria, except factor 'exercise, working conditions and risks "), can be explained by the halo effect. We as professionals have been reported in the overall assessment of the activities to a limited number of factors were also different from one specialist to another. Issued hypothesis is supported by correlations between the factor "general" and other criteria.

Table 3: Analysis of the distribution media for each field of activity values obtained in the entire population of non-specialists and specialists

Field	[0 - 50] / [0 - ∞) TOTAL	[0 - 50] / [0 - ∞) NESP	[0 - 50] / [0 - ∞) SP
Production ointments	39.68%	38.89%	100.00%
Human Resources	37.72%	47.37%	41.23%
Financial Accountant	31.46%	34.83%	53.93%

Another point of interest is the media representative activities obtained in each area. Analyzing the data presented in Table 3, the following observations can be drawn:

First, substantial variations occur between the results obtained in each area. The largest amplitude is found in the sample of experts, which is of 58.77% (100% - 41.23%). Amplitude size is explained by the data collection method applied different sample production specialists. The smallest amplitude is 8.22% (39.68% - 31.46%) and reflected in the entire sample studied.

Secondly there is significant variation between the results obtained on each field (in total, experts and laymen). The largest amplitude is recorded in production between professionals and lay persons (100% - 38.89 = 61.11%) and lowest in the human resources (47.37 to 37.72 = 9.65%). If for the production amplitude is explained by way of data collection, however, for financial accounting, where we can find all the high amplitude (53.93% - 31.46% = 22.47%), most likely explanation is the similarity of activities, regardless of company where accounts are held. Domain knowledge by financial and accounting professionals can not be invoked because, if the sample human resources specialists results are lower quality, the results obtained lay. We believe that the results obtained on human resources due to differences in how to do different activities, and missing all activities by all professionals involved. In support of the hypothesis before I made a series of calculations presented in Table 4. Data included in this table expresses only options for HR professionals within a single company (3 subjects).

Table 4: Analysis of each criterion values obtained media representation of activities in the human resources specialists within a company

Criterion	[0 - 50] / [0 - ∞) SP, ATB
Skills (innate abilities)	68.42%
Knowledge and skills (practical knowledge structured in stages)	63.16%
The difficulty of solving problems	63.16%
Exercise, working conditions and risks	15.79%
General (ordering activities without criteria)	68.42%
Responsibility - The consequences of poor implementation activity	50.00%
MEDIA	54.87%

Analyzing the data in Table 4 one can see a substantial improvement in the percentage averages at least broadly representative on human resources, from 41.23% to 54.87%. The percentage obtained is higher than for financial and accounting field. The results may improve further if the factor "physical effort, working conditions and risks" should be removed. Another important aspect to be mentioned is very good result obtained on grounds of "general". Percentage of 68.42% fall in first place this factor, along with "skills". In conclusion criterion "general" can get very good results especially in the specialists from the same company. Analyzing media representation relative values obtained for each activity on each criterion and the field can find a large dispersion of results. If the factor "physical effort, working conditions and risks" financial accounting, the total and average representative lay there, however all the criteria on the production ointments obtained on the sample of experts, results of 100%. Other conclusions that can be drawn from the data presented in Table 5 are:

Variability of results is influenced by the evaluation criteria, the fields and the nature of the subjects selected samples that were collected.

Amplitude recorded between experts and lay persons is 95% (100% -5%), obtained from factor "Responsibility", the production. The results are influenced, in this case and the different methodology used to collect data on production specialists. If Outside of this area, recorded the maximum amplitude is 54% (87% - 33%) of the sample of professionals and lay persons from the financial accountant, who expressed their opinion on the criterion of "knowledge and skills". Minimum magnitude of the results obtained by specialists and laymen sample is 5%, and human resources are on the field on two different criteria, "the difficulty of solving problems" (63% -58%) and "knowledge and skills" (42% -37%).

The highest amplitude recorded as a result of the influence of the field of activity is obtained on the basis "exercise, working conditions and risks", the sample of experts, and has a value of 84% (100% -16%). If the exception results in the production group of specialists, the maximum amplitude down to 52% (52% - 0%), obtained the same criterion, but the sample of non-specialists. The smallest

amplitude, recorded as a result of influence the industry, we find the criterion of "knowledge and skills" in the entire sample of subjects studied in total and is 13% (42% - 29%), while he lay sample is 14%, the skill factor (67% -53%).

Table 5: Analysis of the distribution of each criterion and field activities according to their media representative, population-wide, non-specialists and specialists

Criterion	Field	[0 - 50] / [0 - ∞) TOTAL	[0 - 50] / [0 - ∞) NESP	[0 - 50] / [0 - ∞) SP
Skills (innate abilities)	Financial Accountant	53%	53%	60%
Skills (innate abilities)	Production ointments	76%	67%	100%
Skills (innate abilities)	Human Resources	53%	63%	47%
Knowledge and skills (practical knowledge structured in stages)	Financial Accountant	33%	33%	87%
Knowledge and skills (practical knowledge structured in stages)	Production ointments	29%	19%	100%
Knowledge and skills (practical knowledge structured in stages)	Human Resources	42%	37%	42%
The difficulty of solving problems	Financial Accountant	33%	27%	73%
The difficulty of solving problems	Production ointments	52%	48%	100%
The difficulty of solving problems	Human Resources	53%	63%	58%
Exercise, working conditions and risks	Financial Accountant	0%	0%	20%
Exercise, working conditions and risks	Production ointments	43%	52%	100%
Exercise, working conditions and risks	Human Resources	5%	5%	16%
General (ordering activities without criteria)	Financial Accountant	53%	80%	40%
General (ordering activities without criteria)	Production ointments	29%	43%	100%
General (ordering activities without criteria)	Human Resources	47%	63%	42%
Responsibility - The consequences of poor implementation activity	Financial Accountant	14%	14%	43%
Responsibility - The consequences of poor implementation activity	Production ointments	10%	5%	100%
Responsibility - The consequences of poor implementation activity	Human Resources	26%	53%	42%

Amplitude obtained as a result of factors influence the assessment was calculated on the financial accounting sample lay between factors "General

(ordering activities without criteria)" and "exercise, working conditions and risks" and the value is 80 % (80% -0%). Minimum amplitude is found on the 0:01 ointments production, the sample of experts. The following minimum level of amplitude, is 42% (58% -16%) and record on human resources specialist sample between the criteria "the difficulty of solving problems" and "exercise, working conditions and risks"

Conclusions

Analyzing the representativeness of the activities measured values obtained, we find:

Share media activities which are at least broadly representative of the total average is higher for evaluation using evaluation criteria for the sample compared to the sample by non-specialists. We find the opposite situation when not using the evaluation criteria.

When using only specialists in one institution, one can see a substantial improvement in the percentage averages at least broadly representative compared with the initial results obtained by total professionals.

Variability of results (average number of total media representative) is influenced by the evaluation criteria, the fields for which the assessment is made and the nature of the subjects selected samples that were collected. Evaluation factors have the greatest impact on variations in results. For this reason we believe need to select the specific factors given field of activity. Those criteria which perform badly on average representativeness criterion as "exercise, working conditions and risks" for financial accounting and human resources areas, must be removed or have resorted to reducing their share in the final calculation of relative values stations. Amplitude due to the subjective nature and scope of activity obtained similar results with 54% and 52% for and maximum levels of 5% or 13% minimum, regardless of sample results by production professionals. If the nature of the subject we are concerned rather with an experimental basis, because the empirical application by default will require staff within the areas assessed, particularly in order to win the trust of employees in the evaluation process, in turn, impact on the outcome domain is particularly important in this research, because a very large variability may indicate a risk that the method had failed in some areas. Extensive further research will highlight several areas where the risk is real.

Given that there have been no subsequent phases of discussion among evaluators, in order to reach common views and subjects were selected from different companies, we can consider the results more than satisfactory for a methodology which is the first research phases.

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