

AN EMPIRICAL INVESTIGATION OF THE EXPECTANCY THEORY AMONG ROMANIAN EMPLOYEES

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Abstract

The paper aims to evaluate the level of overall motivation among Romanian employees from different types of companies and different sectors of activity and to enhance the main motivational factors from the perspective of Vroom's expectancy theory testing the assumptions that each of the five components-expectancy, extrinsic instrumentality, intrinsic instrumentality, extrinsic valence and intrinsic valence has a direct impact on employee motivation and revealing the differences among employees concerning the motivation level and its drivers. In order to do that, national representative sample of 301 Romanian employees has been used applying the regression analysis and Kruskal-Wallis and Mann-Whitney non-parametric tests in order to highlight the empirical results.

The results show that from all five components, three of them best explain the process of motivating employees- intrinsic valence, expectancy and extrinsic instrumentality.

Significant differences have been found regarding the main motivational factors by regions of development, company size, activity sector, salary and professional status.

Keywords: expectancy theory, employee motivation, regression analysis, non-parametric tests, Romania

JEL Classification: J28, C20, C83, O15

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Introduction

Motivation can be defined as an internal, individual, introspective process that energizes, directs and supports certain behaviour. Motivation is a personal „force” that determines a certain behaviour, and, when we refer, for example, to the job-rooting method for motivating employees, we understand the activation of this force.

The motivation consists in correlating the needs, aspirations and interests of the staff within the public institution with the achievement of the objectives and the exercise of assigned tasks, competencies and responsibilities.

Motivation, ethical and satisfaction (fulfilment) of the needs of employees have been subject of many studies in the field.

Most of the time, researchers start a study thinking of a few narrow targets as an area of coverage but, after the topic research develops and shapes, researchers realize that both the goal and the research may be general. The same has happened with many of the labor and labour relations research.

The theory of expectation, developed by Victor Vroom, is a very complex motivational model, which is based on an „innocent scam”. According to the theory of expectation, motivation depends on the intensity of the desire and the probability of its fulfilment. The theory of expectation is complex because each action is taken appropriately with each of the different effects, some desirable, and other unexpected effects. For example, if people work correctly and overtime, they do it for different reasons (Vroom, 1964; Van Eerde and Thierry, 1966):

- for a higher reward;
- to be remarked and promoted;
- because they can afford to give less time to the family (they are not married, have no children, etc.);
- can gain in value (through professional development and the growth of experience) and the acquisition of a job requiring higher experience and qualification.

For one person, promotion can be an unimportant and uninteresting problem, a big salary and a new qualification. Instead, decisive motivational factors may be appealing, even though it substantially reduces time for family or social life. On the contrary, for other person, family life and participation in social life are essential, compared to increasing gain, obtaining a new qualification, or promotion. These are considered to be peripheral as importance, because they usually require the performance of overtime. The first person will be motivated to work „hard”, also making extra hours, while the other person will not have the same reasoning. The theory of expectation is difficult to apply, but it provides some guidance elements for managers. It suggests that managers need to recognize the fact that: employees work for a variety and extremely indefinite reasons, these expected reasons, and achievements (effects)

can change over time. It is necessary to show employees quickly how they can achieve the effects, or the achievements they want.

In this context, the paper aims to contribute to the national literature aiming to evaluate the level of overall motivation among Romanian employees from different types of companies and different sectors of activity and to enhance the main motivational factors from the perspective of Vroom's expectancy theory verifying also if the main components of the modified theory taking into account extrinsic and intrinsic elements could have a positive impact on the employee motivation. In order to do that, a national representative sample of 301 Romanian employees has been used in the analysis.

Furthermore, based on the main drivers of employee motivation highlighted by the Vroom theory, the paper investigated potential statistical differences by several demographic variables using specific statistical tests.

The paper aims to offer comprehensive responses to the following questions: what are the main drivers in enhancing the overall motivation level of Romanian employees? Which kind of determinants of motivation according to Vroom's theory are more influential for the Romanian employees? There are significant differences between the opinions of employees from different companies or different sectors of activity regarding the degree of satisfaction and the main factors? What kind of statistical differences in opinions can be revealed among the main determinants of work motivation?

In order to respond to such questions, the paper is structured as follows: in the literature review section, the paper presents an overview of the most relevant studies in the field, both at national and international level, while the next section was dedicated to the methodology and the data.

The section of empirical results was structured into three distinct sub-sections: sample profile reflecting the main features of interviewed employees and also two sub-sections highlighting the most important motivational factors of Vroom theory, and analysing the main differences between several demographic variables regarding those factors. The paper ends with the main conclusions.

1. Literature review

In the last decades, the most applied motivational theories have been Maslow theory, Herzberg theory and Vroom theory, but unlike the first two, the expectancy theory studies the drivers behind individuals' decision making, assuming that the effort leads to performance. The expectancy theory involves three main elements: *expectancy (E)*, *instrumentality (I)* and *valence (V)* and the interactions of such elements will lead to motivation force based on the equation proposed by Chiang and Jang (2008, p. 314):

$$\text{Motivation force} = \text{Expectancy} * \text{Instrumentality} * \text{valence} \quad (1)$$

Expectancy (E) is seen as the conviction that performance could be obtained if the effort is applied. Instrumentality (I) refers to the perspective of rewards when the conditions of performance are achieved. Valence (V) is more related to rewards (Regis, Falk & Dias 2008) while motivation force refers to a force that leads an individual towards certain behavioural alternatives (Ghoddousi et al., 2014). Instrumentality and valence concern outcomes, and both have two kind of components: intrinsic and extrinsic.

To our knowledge, there are few studies analysing the motivation determinants among Romanian employees and even fewer revealing some results regarding the expectancy theory validity especially for the Romanian case. Here, we can mention the studies of Casuneanu (2010, 2011), Alexandru and Casuneanu(2011), Suciu, Mortan and Lazar (2013), Suciu, Mortan and Veres (2012), Analoui(2000), Baciu(2018), Tampu(2016) and Cristescu, Stanilă and Andreica (2013).

The paper of Casuneanu (2010) revealed that job stability occupies the first place in employee preferences together with the salary, confirming that money is not everything in terms of work motivation, while according to Casuneanu (2011), the most important motivating factors were found to be job authority, responsibility and autonomy, job stability and professional development. Testing empirically the Herzberg theory in their papers, Alexandru and Casuneanu(2011) emphasized that achievement, company policy and administration together with interpersonal relationship were considered to be the main drivers of motivation among Romanian employees.

Suciu, Mortan and Lazar (2013) investigated the importance of performance evaluation from the perspective of work motivation, testing based on Vroom theory, how performance influenced the level of expectancy for the Romanian civil servants from the North-West Region revealing that there is a direct relationship between these two components and its turn influenced their work motivation.

Suciu, Mortan and Veres (2012) proved that the probation period is crucial for the future job of civil servants in Romanian local public institutions (city halls) influencing their expectancy level and furthermore their work motivation.

Analoui(2000) aims to investigate what motivates senior managers from Eastern European countries using the results among 23 Romanian organizations and proving that “recognition and appreciation”, “salary and remuneration”, “promotional status”, and “job satisfaction” are the key factors among Romanian managers.

Baciu (2018) used the Vroom theory to analyse the work motivation of civil servants in the Cluj-Napoca Hall revealing that although there are positive influences, the level of work motivation is medium.

Tampu(2016) investigated based on a survey of Romanian employers what are the main factors of motivation focusing on dimensions such as extrinsic versus intrinsic motivation, job’s attitude, job satisfaction, rewards and incentives.

Cristescu, Stanilă and Andreica (2013) investigated the employee motivation in central and local public administration suggesting that there needs to exist a combination of extrinsic (premiums, bonuses, non-monetary benefits) and intrinsic factors (satisfaction and professional fulfilment, good relationships with the local community) in order to increase the work motivation among civil servants.

2. Methodology and data

2.1. The purpose of the study

The main objective of the paper is to evaluate the level of overall motivation among Romanian employees from different types of companies and different sectors of activity and to enhance the main motivational factors from the perspective of Vroom's expectancy theory testing also the assumptions that each of the five components-expectancy, extrinsic instrumentality, intrinsic instrumentality, extrinsic valence and intrinsic valence have a positive effect on employee motivation. In order to do that a national representative sample of 301 Romanian employees was used into the analysis.

2.2. Research Methods

The starting point in the investigation of the main drivers of work motivation was the study of Chiang and Jang (2008), according to which the expectancy theory was adapted by dividing instrumentality and valence into extrinsic instrumentality, intrinsic instrumentality, extrinsic valence, and intrinsic valence in order to capture the impact of intrinsic/extrinsic components.

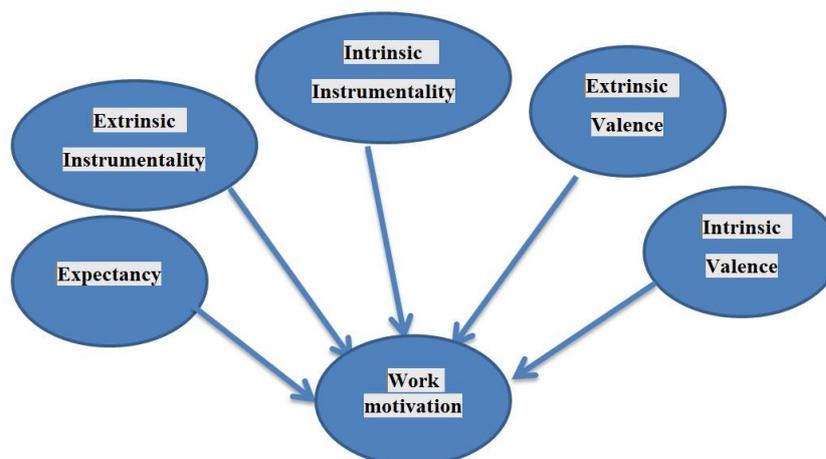


Figure 1: The model of the constructs of work motivation

Source: Chiang & Jang (2008)

The study aims to test the assumptions that each of the five components-expectancy, extrinsic instrumentality, intrinsic instrumentality, extrinsic valence and intrinsic valence have a positive effect on employee motivation. Therefore, the following hypotheses will be tested:

- H1: Expectancy has a positive effect on construction workers' motivation.
- H2: Extrinsic instrumentality has a positive effect on construction workers' motivation.
- H3: Intrinsic instrumentality has a positive effect on construction workers' motivation.
- H4: Extrinsic valence has a positive effect on construction workers' motivation.
- H5: Intrinsic valence has a positive effect on construction workers' motivation.

From the five component of expectancy theory, expectancy, extrinsic instrumentality, intrinsic instrumentality was measured using four items, while extrinsic and intrinsic valence were measured using five items. For work motivation there were used four items. The items were rated using a 5 point Likert scale where 1=very dissatisfied and 5=very satisfied. In order to analyse the responses of items descriptive statistics were used (mean and standard deviation). Comparisons of the main motivational factors of Vroom theory according to several demographic and employment variables were captured using Kruskal-Wallis and Mann-Whitney non-parametric tests.

Following Cohen and Cohen (1983), we have applied multiple regression models to reveal the factors with a relevant role on increasing the level of satisfaction of Romanian employees. The Statistical Package for Social Sciences version 22.0 (SPSS) was used to analyse the data from the questionnaires.

The empirical research was carried out on a sample of 301 individuals with ages between 15-64 years old having the statute of employee from micro-enterprises (21.9%), small enterprises (32.9%), medium enterprises (23.6%) and large companies (21.6%) conducted in March 2018. The sample obtained was considered to be representative at the national level. The study has been conducted on a nationally representative sample of 301 people. The data collection was carried out at the level of 22 counties plus Bucharest, aggregating a total of 84 sampling points at national, urban and rural level. The study was conducted in the face-to-face mode.

3. Empirical results

3.1. Sample profile

Most of the Romanian employees included in the survey belonged to Bucharest-Ilfov (20.9%) respectively to North-West and Centre (13%), the majority of them working in services (44.1%) and manufacturing industry (24%). An overwhelming proportion of workers

come from the urban environment (69.7%).Most of the respondent companies are SMEs and have up to 250 employees.

The individual characteristics revealed the following: 53.5% of interviewed employees were male, 32.2% of respondents declared to have between 36 and 45 years old and only 7% of employees have less than 26 years old or more than 55 years old, about 45% of respondents declared to complete their education at the age 17-19 years and only 30% of investigated employees declared to have a job experience of more than 10 years. More than half of interviewed employees (64.5%) declared to earn less than 2500 lei while only 27% of them stated that their salary ranges between 2500 lei and 5000 lei.

The structure of the sample by the professional status pointed out that only 21.3% were higher education specialists and 40% of employees were qualified workers. From public institutions, we have only 11.6% of employees while a very small percentage of employees hold a high-rank or senior management position (head of the department, head of office).

3.2. Shedding light on main determinants of work motivation among Romanian employees

The average level of work motivation was quantified to be 4.56, meaning that people tend to be satisfied and very satisfied with their jobs. Analysing the mean scores of Vroom's theory components, it can be highlighted that the highest levels of satisfaction were achieved by intrinsic and extrinsic valence, individuals being more motivated by a higher level of responsibility, control, usage of their skills and feelings of accomplishment and also by pay increases and bonuses and a good salary. At the opposite side, people tend to be sceptical regarding their level of expectancy and they don't believed that if they increased their effort, the performance, the productivity or the level of accomplishment will improve.

Table 1: Descriptive statistics of Vroom theory elements

	Mean	Std. Deviation
expectancy	3.8771	1.18947
extrinsic_instrumentality	4.0033	1.09087
intrinsic_instrumentality	4.0664	1.01106
extrinsic_valence	4.3770	.62811
intrinsic_valence	4.5219	.48075
work_motivation	4.5615	.71674

The high value of Cronbach's Alpha coefficient (C=0.7444) based on the five components of Vroom theory revealed a good reliability of original data, highlighting a satisfactory internal consistency for the set of individual indicators.

Furthermore, the multiple regression analysis has been used to detect the main determinants of work motivation from Vroom's perspective, using as dependent variable the overall level of work motivation, determined as mean scores of the four items of motivation and as independent variables the five components of the motivational theory determined as mean scores.

The empirical results revealed a strong statistical significance for the expectancy, extrinsic instrumentality and intrinsic valence and an insignificant impact for intrinsic instrumentality and extrinsic valence (table 2).

Therefore, we can mention that hypotheses H₁, H₂ and H₅ have been validated, while the other two H₃ and H₄ have been refuted.

The expectancy positively and significantly impacted the overall level of work motivation, which revealed that for Romanian employees, it is very important to be regarded as effective employees, with higher productivity and increased performance.

Extrinsic instrumentality displayed a positive and significant impact on work motivation, highlighting the fact that people are convinced that if they performed well this will result in good pay, bonuses and opportunities for promotion.

The intrinsic valence manifests an important impact on work motivation, pointing out the need of personal development as a main desire of employees.

It is important to mention that intrinsic instrumentality and extrinsic valence does not exhibit any statistical impact on the overall level of motivation revealing that financial incentives such as good salary, monetary bonuses or pay increases together with the feeling of accomplishment as a consequence of good performance will not manifest any influence on the level of motivation.

Analysing the standardised coefficients, it can be revealed that the highest relevance is given to intrinsic valence representing the main driver of work motivation for Romanian employees followed by the expectancy and extrinsic instrumentality.

What it is really an important finding of research is the fact that in the employees' view, the level of responsibility, the usage of skills and abilities, the feelings of accomplishment are the most important determinants in increasing the level of motivation.

Expectancy is important for the Romanian employees because it creates the belief that the effort will lead finally to performance, instrumentality creates the conviction that there is a relationship between performance and rewards.

Therefore, for the Romanian employees, the intrinsic valence elements are highly valuable valorising the responsibility over the job, using their abilities, and feeling of accomplishment.

Table 2: The empirical results of the regression analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.030	.369		5.505	.000
	expectancy	.136	.042	.225	3.201	.002
	extrinsic_instr	.126	.044	.192	2.851	.005
	intrinsic_instr	.030	.052	.042	.570	.569
	extrinsic_valence	-.052	.064	-.046	-.816	.415
	intrinsic_valence	.356	.083	.239	4.264	.000

a. Dependent Variable: work_motivation

The empirical results of ANOVA analysis pointed out that the model is statistically valid due to the fact that Sig.(F-test) is smaller than 1% significance level.

Table 3. ANOVA results

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	38.350	5	7.670	19.546	.000 ^b
	Residual	115.763	295	.392		
	Total	154.113	300			

a. Dependent Variable: work_motivation
b. Predictors: (Constant), intrinsic_valence, extrinsic_instr, extrinsic_valence, expectancy, intrinsic_instr

The goodness of fit of the model revealed that the degree of determination in the model is 0.499, pointing out that the influence of all significant variables explains 50% of the total variance in work motivation. Also, the standard error of the model is relatively small (0.62). The modest value of R^2 can be explained by the statistical significance of only three components of the expectancy theory. The high lack of determination in the model can be attributed to other factors not yet included in the model.

Table 4. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.499 ^a	.249	.236	.62643

a. Predictors: (Constant), intrinsic_valence, extrinsic_instr, extrinsic_valence, expectancy, intrinsic_instr

4.3. Underlining differences of opinions regarding the main motivational factors among Romanian employees

Analysing the potential differences among Romanian employees regarding the main motivational factors, it can be mentioned that there were not statistical differences related to gender, the area of residence, and type of sector, seniority and age. Instead of this, is worth to mention that we found significant differences by regions of development, company size, the activity sector, salary and professional status.

Extrinsic instrumentality is very important for micro enterprises, their employees appreciating that if they performed well this will result in good pay, bonuses and opportunities for promotion. There are differences regarding the intrinsic valence by sector of activity since the probability is less than 5% significance level, people acting in services and agriculture considering very important to have more responsibility/control over my job, more challenging work tasks, full use their skills and abilities, feelings of accomplishment, personal growth and development.

Table 5: Socio-demographic differences on the work motivation factors

		expectancy	extrinsic instrum.	intrinsic valence	work_ motivation
		Mean	Mean	Mean	Mean
Gender	Sig(Mann-Whitney test)	.317	.449	.998	.577
Area of residence	Sig(Mann-Whitney test)	.328	.272	.608	.557
Public vs. private sector	Sig(Mann-Whitney test)	.112	.409	.140	.381
Company size	Sig(Kruskal-Wallis test)	.458	.030**	.267	.957
Activity sector	Sig(Kruskal-Wallis test)	.326	.442	.024**	.382
Regions of development	Sig(Kruskal-Wallis test)	.000***	.166	.000***	.000***
Professional status	Sig(Kruskal-Wallis test)	.130	.095*	.000***	.377
Seniority in the company	Sig(Kruskal-Wallis test)	.985	.236	.149	.981
Age	Sig(Kruskal-Wallis test)	.927	.135	.182	.875
Salary	Sig(Kruskal-Wallis test)	.560	.927	.001***	.345

The empirical results revealed statistical differences among people from different regions of development concerning the expectancy, intrinsic valence and work motivation, the probability being less than 1% significance level. Therefore, people from West are the most contented with their expectancy believing that their efforts will lead to a higher job performance, a higher feeling of accomplishment and a higher productivity. At the opposite pole, there are those from the North-East region, the least confident in their level of expectancy.

Regarding the intrinsic valence, people from North-West and South-West Oltenia considered as very important having more responsibility/control over their job, more challenging work tasks, full use of their skills and abilities, feelings of accomplishment, personal growth and development, unlike those from the West region.

We found also statistical differences related to the overall level of motivation by regions of development, the most satisfied with their job being employees from Bucharest-Ilfov and North-West, while at the opposite side there are people from North-East.

Professional status pointed out several differences regarding the extrinsic instrumentality and intrinsic valence. Therefore, the highest level of extrinsic instrumentality was acquired by the general manager, director or high-ranking person while the lowest level is held by technicians.

The intrinsic valence was highly felt by the high-ranking managers while the unqualified workers exhibited the lowest level of intrinsic valence.

Intrinsic valence is considered to be an important characteristic revealing differences also among different groups of earnings. Thus, a higher responsibility/control over their job, higher challenging work tasks, full use of their skills and abilities, feelings of accomplishment, personal growth and development are more important for employees who earned between 2500 lei and 5000 lei, while employees with higher salaries (greater than 10000lei) are less motivated by such values.

4. Conclusions

The main purpose of the paper was to investigate the motivational system in different types of Romanian companies from various sectors of activity testing the validity of one of the most known motivational theory-the expectancy theory using a national representative sample of 301 employees. The main assumptions of the paper concerned the positive impact of various components of Vroom's theory-expectancy, extrinsic instrumentality, intrinsic instrumentality, extrinsic valence and intrinsic valence on the overall level of employee motivation.

The paper tried to respond to the following questions: What are the main drivers in enhancing the overall motivation level of Romanian employees? Which kind of determinants of motivation according to Vroom's theory are more influential for the Romanian employees? There are significant differences between the opinions of employees from different companies or different sectors of activity regarding the degree of satisfaction and the main factors? What kind of statistical differences in opinions can be revealed among the main determinants of work motivation?

The empirical results pointed out the relevance of valence, expectancy and instrumentality as main drivers of the Romanian employees' motivation. More in depth, three

components of Vroom's theory were considered to be fundamental for the Romanian employees- intrinsic valence, expectancy and extrinsic instrumentality. Therefore, Romanian employees valued more the responsibility/control over the job, challenging work tasks, use of skills and abilities, feelings of accomplishment and personal growth.

The empirical evidence proved that statistical differences concerning the overall level of motivation and its determinants among Romanian employees have been unanimously revealed for different regions of development.

By regions of development, it can be emphasized that employees from West region are satisfied with their level of expectancy, while people from North-West and South-West Oltenia appreciated more the intrinsic valence of their jobs. Also, workers from Bucharest-Ilfov and North-West tend to be more satisfied with their jobs compared with those from North-East.

Analysing the differences among Romanian employees regarding the main motivational factors, it can be highlighted that significant differences have been found for extrinsic instrumentality by professional status and company size, while for intrinsic valence, the differences are mainly revealed by activity sector, professional status and salary.

Therefore, extrinsic instrumentality is very important for micro enterprises, their employees appreciating that if they performed well this will result in good pay, bonuses and opportunities for promotion.

Intrinsic valence is valorised more by the people acting in services and agriculture for which a higher responsibility/control over my job, challenging work tasks, a full use my skills and abilities, feelings of accomplishment and personal growth are very important.

In conclusion, the expectancy theory proved its validity even in our days testifying that managers need to be very careful at these crucial elements if they want to enhance the motivation level of their employees.

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