Expectancy Value Theory: Motivating Healthcare Workers

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Abstract
Vroom’s expectancy theory provides a process of cognitive variables that reflects individual differences in work motivation. In this model, employees are rational people whose beliefs, perceptions, and probability estimates influence their behaviors. From a management perspective, the expectancy theory has some important implications for motivating employees in healthcare setting. It identifies several important things that can be done to motivate employees. The paper presents the results of an empirical study in three government-funded hospitals in Italy, by applying this theory. In fact the survey focuses on the factors affecting the level of motivation of medical and nursing staff, such as expectancy, valence, instrumentality, and on their satisfaction.

Keywords: Theoretical framework; motivation; health care staff; survey

1. Introduction
The centrality of human resources is a strategic asset that can affect the value creation supporting the idea that an effective human resource management promotes organizational performance (De Simone, 2014). The importance of this issue is supported by a current literature considering the creation of value in general as a variable dependent on the quality of human factor (Huselid, 1995; Harter, Schmidt & Hayes, 2002).

Human resources are even more emphasized in healthcare organizations, where job satisfaction is increasingly recognized as a critical measure of care outcome, especially for its relation with patient satisfaction. In this context, where service quality and efficiency are closely linked to human factor, there is the need to introduce tools to assess the motivation of healthcare workers. Healthcare organizations can provide a quality service only if workers perceive they are considered as value resources and they can be in turn attentive to patients’ needs (De Simone, 2013).

The widest accepted explanation of the motivation was given by Victor Vroom (1964) with the theory most commonly known as the Expectation-Value theory that tries to merge together the various elements of previous theories. It combines perception aspects of the equity theory with the behavioral aspects of other theories. Need theories of motivation (Alderfer, 1972; Herzberg, 1968; Maslow, 1970; McClelland, 1976) attempt to explain what motivates people in the workplace. Instead, Vroom’s expectancy theory does not provide specific suggestions on what motivates organization members. Expectancy theory is more concerned with the cognitive antecedents that go into motivation and the way they relate to each other. It deals with a cognitive process based on the idea that people believe there are relationships between the effort they put at work, the performance they achieve from that effort, and the rewards they receive from their effort and performance. In other words, people will be motivated if they believe that strong effort will lead to good performance and good performance will lead to desired rewards.

The paper presents first the expectancy theory of motivation and then the results of an empirical study by applying this theory in three government-funded hospitals in Italy. The survey focuses on the factors affecting the level of motivation of medical and nursing staff.
2. Analysis of Expectancy-Instrumentality-Valence

Victor Vroom (1964) was the first to develop an expectancy theory with direct application to work settings, which was later expanded and refined by Porter and Lawler (1968) and others (Pinder, 1987).

The expectancy theory has three key elements: expectancy, instrumentality, and valence (Vroom, 1964). A person is motivated to the degree that he or she believes that (a) effort will lead to acceptable performance (expectancy), (b) performance will be rewarded (instrumentality), and (c) the value of the rewards is highly positive (valence). Expectancy is a person’s estimate of the probability that job-related effort will result in a given level of performance. Generally, estimates of expectancy by employees lie between two extremes. Expectancy, ranging from 0 to 1, is based on probabilities. If an employee sees no chance that effort will lead to the desired performance level, the expectancy is 0. On the other hand, if the employee is completely certain that the task will be completed, the expectancy has value 1.

Instrumentality is an individual’s estimate of the probability that a given level of achieved task performance will lead to various work outcomes. As with expectancy, instrumentality ranges from 0 to 1. For example, if an employee sees that a good performance rating will always result in a promotion increase, the instrumentality has a value 1. If there is no perceived relationship between a good performance rating and a promotion, the instrumentality is 0.

Valence is the strength of an employee’s preference for a particular reward. Theoretically, a reward has a valence because it is related to an employee’s needs. Valence provides a link to the need theories of motivation (Alderfer, Herzberg, Maslow, and McClelland). The reward such as promotion, peer acceptance, recognition by supervisors, might have more or less value to individual employees. Unlike expectancy and instrumentality, valence can be either positive or negative. If an employee has a strong preference for attaining a reward, valence is positive. At the other extreme, valence is negative. And if an employee is indifferent to a reward, valence is 0. The total range is from -1 to +1.

Vroom suggests that motivation, expectancy, instrumentality, and valence are related to one another by the equation:

$$M = E \times I \times V$$

(The motivation is equal to expectance times instrumentality times valence).

The multiplier effect in the equation is significant. It means that higher levels of motivation will result when expectancy, instrumentality, and valence are all high than when they are all low. If any one of the three factors is zero, the overall level of motivation is zero. Therefore, even if an employee believes that his effort will result in performance, which will result in reward, motivation will be zero if the valence of the reward he expects to receive is zero, i.e. if he believes that the reward he will receive for his effort has no value for him (Lunenburg, 2011).

Porter and Lawler (1969) have expanded this theory in order to identify the source of the values and expectations of individuals, and find the link between effort and performance with job satisfaction. The figure 1 shows the concepts proposed by Vroom and expanded by Porter and Lawler. The introduced variables are: predictors of effort, as a function of perceived value for the reward and the perceived probability of the relation between effort and reward; predictors of performance, since the latter depends not only on the effort but also on personal characteristics and skills; predictors of satisfaction, related to extrinsic and intrinsic rewards of the performance. The workers tend to be more satisfied if they perceive that their rewards as fair and adequate, and the satisfaction influence the value that the workers attribute to the rewards in subsequent situations.

3. An Empirical Study in Italian Health Care Organizations

This study is part of a larger study on employees’ well-being in three government-funded hospitals in Italy and it focuses on the factors affecting the level of motivation of medical and nursing staff, such as expectancy, valence, instrumentality, and on their satisfaction. The preference is given to the quantitative method, i.e. the questionnaire survey, and data are obtained from medical and nursing staff within the three hospitals in 2014. One anonymous questionnaire was distributed to the almost total number of health care staff working in the wards of the three hospitals. 492 questionnaires for medical and nursing staff were returned and analyzed. The full sample of health care staff is represented by about 37% of doctors and 63% of nurses.
The motivation comes from the situation where a person is located, it depends on the effort of a person in such a situation and the choice derives from the relations effort/performance and performance/outcome.

The expectancy is the subjective evaluation of the degree of effort really related to the performance and is the estimate of the probability to achieve such performance. The factors affecting perceptions of expectancy include the self-esteem, the self-efficacy, the support of colleagues, the availability of information for the work activities, the availability of tools to carry out the work. In the three hospitals, the most of medical and nursing staff believe that their effort will allow obtaining a specific performance. The 6.5 percent of the sample asserted they almost always have the benefits resulting from the passion for work, and the 76.2 percent of respondents believe they sometimes or often have benefits from work commitment. Only the 17.3 percent state they have never benefits from the work engagement (table 1).

The instrumentality is the personal assessment of how the reward is correlated with the quality of the performance. The instrumentality ranges from -1 to 1: 1 means the result depends entirely on the performance; 0 indicates there is no relationship between performance and outcome; -1 indicates the opposite relationship, so if the performance is high the chance to achieve the result will reduce, and if the level of performance is low, the chances increase. In this study, the most of respondents (71.9 percent) considers the probability to have some gratification between 25 percent and 50 percent, followed by the 22.6 percent of employees attributing value 0, which means there is no probability the performance will be rewarded, and there is no relationship between performance and outcome. Only a small proportion of respondents (5.5 percent) gives value 1, and believes not to have gratification in doing the job well (table 1).

The valence is the perceived effort on the reward for the performance. If the recognition is low the motivation will reduce, although expectancy and instrumentality are positive and therefore high. This means that the value depends on the needs of the individual. The 40.9 percent of the sample gives an average value to the possible gratification arising from the work engagement. So the employee can be motivated to work better if he knows that better performance will lead him to a good rating in the form of recognition. The 31.5 percent associates a high value to the gratification, the 20.3 percent gives a low value and the 7.3 percent isn’t interested in any form of gratification (table 1).

Referring to the job satisfaction, the 52.6 percent of respondents is quite satisfied and the 14.2 percent is very satisfied, while the 27.8 percent declares a little satisfaction, and only the 5.3 percent expresses the job dissatisfaction (table 1).

4. Efforts to Improve Motivation of Health Care Workers

From a management perspective, the expectancy theory has some important implications for motivating employees also in health care setting. It identifies several important things that can be done to motivate employees (Lunenburg, 2011).

Only 35.4% of the sample responds to the open question of the questionnaire, concerning proposals to improve workers’ well-being. As a result, the collected suggestions refer to emotional, cognitive and instrumental factors of organizational climate and well-being (Ostroff, 1993).

The most relevant factors to improve the well-being in the workplace are: for the 20.3 percent of respondents, instrumental factors; for the 9.3 percent the affective factors; and only for the 5.7 percent the cognitive factors.

In this study the affective factors include cooperation among colleagues (4.4% of the respondents), enthusiasm to work (0.2%), psychological support (1.4%), and respect for the work (1.4%).

The cognitive factors include training and education (1.8 %), work autonomy (0.4%), professional growth (0.2%), and information technology innovation (0.2%).

The instrumental factors are represented by need to comfort (3.0%), extrinsic rewards (2.2%), meritocracy (2.2%), organization (13.4%), physiological turnover (3.5%) and management (0.8%).

Most of these factors depend on leader’s capabilities. Leaders should try to increase the belief that employees are capable of performing the job successfully. These ways of doing include: select people with the required skills and knowledge; provide the required training and clarify job requirements; provide sufficient time and resources; assign progressively more difficult tasks based on training; follow employees’ suggestions about ways to change their jobs; attempt to alleviate problems that may hinder effective performance. Good leaders not only make clear to employees what is expected of them, but also help them attain that performance level (Lunenburg, 2011).
Leaders should try to increase the belief that good performance will result in valued rewards. They should measure job performance accurately and directly link the specific performance they desire to the rewards desired by employees.

Leaders should try to increase the expected value of rewards resulting from desired performance. They have to distribute rewards that employees’ value, and individualize rewards because not all employees prefer the same rewards. Some employees may value a promotion or a pay raise, whereas others may prefer additional vacation days, improved benefits, day care, or elder-care facilities.

References


![Figure 1: The Model of Expectation of Porter and Lawler](image-url)
Table 1: Levels of Motivation of Health Care Workers in the Analyzed Italian Hospitals

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expectancy</strong>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>85</td>
<td>17,3</td>
</tr>
<tr>
<td>Sometimes</td>
<td>225</td>
<td>45,7</td>
</tr>
<tr>
<td>Often</td>
<td>150</td>
<td>30,5</td>
</tr>
<tr>
<td>Very often</td>
<td>32</td>
<td>6,5</td>
</tr>
<tr>
<td><strong>Instrumentality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0%</td>
<td>111</td>
<td>22,6</td>
</tr>
<tr>
<td>25%</td>
<td>193</td>
<td>39,2</td>
</tr>
<tr>
<td>50%</td>
<td>161</td>
<td>32,7</td>
</tr>
<tr>
<td>100%</td>
<td>27</td>
<td>5,5</td>
</tr>
<tr>
<td><strong>Valence</strong>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No value</td>
<td>36</td>
<td>7,3</td>
</tr>
<tr>
<td>Low value</td>
<td>100</td>
<td>20,3</td>
</tr>
<tr>
<td>Medium value</td>
<td>201</td>
<td>40,9</td>
</tr>
<tr>
<td>High value</td>
<td>155</td>
<td>31,5</td>
</tr>
<tr>
<td><strong>Satisfaction level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>26</td>
<td>5,3</td>
</tr>
<tr>
<td>Little satisfied</td>
<td>137</td>
<td>27,8</td>
</tr>
<tr>
<td>Quite satisfied</td>
<td>259</td>
<td>52,6</td>
</tr>
<tr>
<td>Very satisfied</td>
<td>70</td>
<td>14,2</td>
</tr>
<tr>
<td><strong>Total (respondents)</strong></td>
<td>492</td>
<td>100,0</td>
</tr>
</tbody>
</table>

* Perception of employees to have benefit from the work engagement  
** Probability of employees to have rewards  
*** Value given by employees to the reward