

VICTOR H. VROOM: MOTIVATION AND LEADERSHIP DECISION MAKING.

Thinker 044

» INTRODUCTION



Professor Victor H. Vroom (1932-) is acknowledged as a leading authority on the psychological analysis of behaviour in organisations. His major contributions include work on motivation in the workplace, illustrated by his expectancy model, and research into leadership styles and decision-making. From the latter, he and Philip Yetton developed a model for selecting appropriate methods of problem-solving for different situations.

» LIFE AND CAREER

Born in Canada in 1932, Victor Vroom gained his master's degree at McGill University in 1955 and a PhD at the University of Michigan in 1958. He taught at the universities of Michigan and Pennsylvania and the Carnegie Institute of Technology before being appointed as John G. Searle Professor of Organization and Management and Professor of Psychology at Yale University's School of Management. Vroom is currently the BearingPoint Professor Emeritus of Management & Professor of Psychology at Yale.

Vroom's work spans the two disciplines of management and psychology. He is a fellow of the Academy of Management, the American Psychological Society and the American Psychological Association. Vroom has been recognised for many achievements in his career including in 1994 being awarded the Excellence in Teaching Award from Yale SOM Alumni Association and in 1998 the Distinguished Scientific Contributions Award from the Society of Industrial and Organizational Psychology. He also won the 2004 Literati Award.

He first applied psychology to organisations with a prize-winning doctoral dissertation in 1960. This examined the effects of personality on participation in decision-making. His theories were further developed in a 1964 book, *Work and Motivation*, which applied expectancy theory to work for the

first time. Expectancy theory maintains that people will be motivated to behave in certain ways if they believe that doing so will bring them rewards they seek and value.

Vroom's study of the causes of people's decisions to act in certain ways at work continued with his collaboration with Philip Yetton to develop what became known as the Vroom/Yetton model of leadership decision-making (Leadership and Decision Making, 1973). This is a contingency model that identifies styles of leadership appropriate to different situations. Specifically, it can be used by managers to assess the degree to which they should encourage people's participation in the decision-making process. With Arthur Jago, Vroom further developed this model in a 1988 book, *The New Leadership: Managing Participation in Organizations*.

Professor Vroom has acted as a consultant to government agencies and over 100 large organisations, including Bell Labs, General Electric, GTE and American Express.

» KEY THEORIES

Expectancy Theory

In *Work and Motivation*, Vroom defines the central problem of motivation as “the explanation of choices made by organisms among different voluntary responses”. To understand how these choices are made, he defines the three concepts of valence, expectancy and force, and describes how these work in conjunction to determine how people will decide to act, given possible routes of behaviour leading to possible outcomes.

Valence is a term referring to a preference for one outcome over another. An outcome is said to be positively valent when a person prefers attaining it to not attaining it; when he or she prefers not to attain an outcome, then it has a negative valence; and when he or she is indifferent to whether an outcome is attained or not, it has a valence of zero. The valence of an outcome, Vroom suggests, is directly related to its value for the person concerned. If a manager particularly wants a promotion, for example, and thinks that successful completion of a certain project will earn that promotion, then he or she will attach a positive valence to completing the project, and be motivated to do so by the perceived value of the reward.

A person's behaviour, however, is affected not only by their preference for one outcome over another, but also by how likely they believe these outcomes to be. Vroom defines expectancy as “a momentary belief concerning the likelihood that a particular act will be followed by a particular outcome”. Expectancy can be assigned a value from zero (the belief that the outcome will not follow on from the action) to one (the belief that the outcome certainly will follow on from the action). If someone wants a cup of coffee, for example, and knows that there is a drinks machine in the staff room, that person will walk straight there. The act of walking there has a high expectancy value in terms of obtaining coffee, whereas the act of walking to, say, the post room has a low expectancy value, as the person does not believe that he or she will find coffee there.

The third concept which Vroom outlines is force. He argues that a person's behaviour is the result of a field of forces, each of which has direction and magnitude. Mathematical values assigned to the valences and expectancies for acts are combined to produce their hypothetical force, and the act which produces the highest level of force is assumed to be the one that the person will choose. Highest levels of force will be produced by actions with high levels of both valence and expectation. If either valence or expectation is zero, there will be no force to adopt that course of action, since anything multiplied by zero is zero.

Vroom's model is summed up in an equation:

$$M = \sum (E \times V)$$

where M is the motivational force resulting from the sum of expectancy and valence, E is the expectancy measure reflecting the probability of a particular first level outcome and V represents the valence for the individual of a particular outcome. (Source: Martin, J., *Organizational Behaviour*, London, International Thompson Business Press, 1998)

Vroom's theory can be put into practice by interviewing individuals or giving them questionnaires to assess their expectancies and valences. These are then scored, and the expectancy score is multiplied by the valence score. The results for all outcomes that could be produced by a particular behavioural alternative are added together. This gives the expected value (EV) of that alternative. Each possible course of behaviour can be assigned an EV in this way, and the model predicts that the one with the highest EV will be a subject's most likely choice.

The primary implication for managers is that, since motivation is closely tied to reward, they should aim to encourage high work performance by tailoring rewards to those things which employees value most – and some research will be needed here to find out just what these might be for each individual. Incentives and benefits should be explicitly linked to actions which are in line with the organisation's strategy and which will contribute to organisational success.

This model is a normative model, and not a descriptive model. This means that it can only predict how people should make decisions to act, rather than how they actually do make such decisions. In reality, few people are well-enough informed on all the possible choices and all the possible outcomes to make balanced judgements about which behaviour it would be best for them to adopt. As a theory explaining a general approximation of an individual's behaviour, however, it has gained much support.

In 1968, Vroom's expectancy theory was extended by Porter and Lawler in *Managerial Attitudes and Performance* (Homewood: Richard D Irwin, 1968). Their model emphasised that performance is also affected by factors other than motivation, such as individual abilities, traits, and role perceptions. They also linked the concept of satisfaction into their model, maintaining that high performance leads to high rewards, which in turn lead to high levels of satisfaction.

Subsequent research has focused on showing that expectancy models can be used quite accurately to predict choice of occupation, levels of job satisfaction, and levels of work effort. An extensive review of research on expectancy theory can be found in the article *Old friends, new faces: motivation research in the 1990s* by Ambrose and Kulik. They report a new turn taken by researchers such as Chen and Miller (1994), who applied expectancy theory on an organisational rather than individual level, and looked at how strategic decisions were made when engaging in attacks on competitors. Others have attempted to meld expectancy theory with other theories, such as decision-making or goal-setting.

Vroom/Yetton Model of Leadership Decision-Making (The normative model of leadership styles)

Vroom's second major model, as developed with Philip Yetton, shows how different leadership styles can be effectively harnessed in solving different types of problems. In his doctoral dissertation, Vroom had examined the positive effects that participation in decision-making could have on attitudes and motivation. At the same time he had observed that personality characteristics might reduce or increase the impact of participation.

In *Leadership and Decision-Making* (1973), Vroom looked further into the issue of participation in decision-making by subordinates. He and Yetton developed a set of rules which can be used to determine the level and form of participation in the decision-making process which will support the best solution in different problem-solving situations. New managers may think they must make decisions alone, but Vroom clearly believes that this is not the case. He outlines types of decision-making involved in both group problems that affect a manager's workgroup, and in individual problems that affect only the manager.

The following list from *Leadership and Decision-Making* shows the types of management decision methods for group problems:

- › Authority decisions – made by the manager alone without involving others.
 - A1 – The manager makes the decision on his own using information available at the time.
 - A2 – The manager makes the decision alone but obtains his information from subordinates or other group members first.

- › Consultative decision – made by the manager after consultation with a group.
 - C1 – The manager approaches several other people individually to obtain their suggestions, then makes his own decision.
 - C2 – The manager brings several other people together at the same time as a group and collectively obtains their suggestions, then makes his own decision.
- › Group decisions – made by a whole group in consensus.
 - G2 – The manager brings together several other people at the same time and they discuss the problem to arrive at a consensus decision between them.

Five similar methods are defined for individual problems. The Vroom/Yetton model then proposes a decision tree based on seven rules, which managers can use to pinpoint the most appropriate method for a given situation.

By means of a sequence of questions that each require a yes/no answer which advances the manager along a decision tree path, the problem is ultimately defined as one of 14 types. Vroom and Yetton then recommend suitable methods of decision-making (from methods A1 – G2 above) for each problem type.

Since some types of problem can be solved by more than one method, further means of choosing between them are needed. When Vroom revised the model with Arthur Jago in 1988, they suggested that time is one important factor to consider: man-hours carry a financial cost, and a swiftly made decision may be best; also, a decision might be required urgently, and participative processes may slow down the decision-making process.

The Vroom/Yetton model has been progressively developed by its original authors, and by Vroom and Jago, since its inception. Further factors examined include:

- › the extent to which participation benefits the organisation by offering development opportunities for participants
- › the influence of a manager's position in the organisational hierarchy on their problem handling style
- › the styles adopted by women managers.

Although refinements to the basic model have been suggested both by Vroom himself and by other commentators, in a 1984 article '*Reflections on leadership and decision-making*' Vroom refers to his concern to maintain the simplicity he sees as central to the model's utility as a working tool. Many researchers have now tested its validity and, as with the expectancy model outlined above, the Vroom/Yetton model of leadership decision-making has been popular for its practical value.

Vroom continues with his research at Yale and has now collected data from a quarter of a million managers worldwide. He and his colleagues have developed software to guide managers in adapting their leadership style to the situations they face.

» IN PERSPECTIVE

Vroom's work is acknowledged as a valuable contribution in the fields of both management and psychology. His models have been tested and extended, and remain important landmarks in the discipline of industrial psychology. Vroom has explored other, neighbouring aspects of industrial psychology, but the two theories outlined above remain his most famous and enduring work. The models proposed by Vroom, and by Vroom and Yetton, have contributed much to managers' understanding of behaviour, and to their ability to mould behaviour to produce the most favourable outcomes, and so to manage more effectively.

The Vroom/Yetton model of leadership decision-making, however, was at the height of its fame forty years ago and management thinking has changed since then. There is now more emphasis on employee engagement and development and flatter, team based organisation structures, all of which have implications for managers' choices of leadership style. Some critics would also claim that today's different business environment produces different influences on managers, and makes the model less relevant than before. Vroom himself is not oblivious to change and development, and has actually used it to justify the relevance of his work:

"Managers seldom live in a static world. They change jobs, change organisations, move from one country to another, from sector to sector. (Such changes) ... spur new challenges, new opportunities, and place new situational demands on leadership Old habits must be discarded if one is to respond to today's challenges and opportunities". (Vroom, 2000)

» KEY WORKS BY VROOM

BOOKS

Work and motivation

New York: John Wiley, 1964

Leadership and decision making, with Philip Yetton

Pittsburgh: University of Pittsburgh Press, 1973

The new leadership: managing participation in organizations, with Arthur Jago

Englewood Cliffs, NJ: Prentice Hall, 1988

These books are available for loan to members from CMI's library. More information at:

www.managers.org.uk/library

JOURNAL ARTICLES

A New Look at Managerial Decision Making

Organizational Dynamics, vol 1 Issue 4, Spring 73 pp66-80

Can Leaders Learn to Lead?

Organizational Dynamics, vol 4 Issue 3, Winter 76, pp17-28

Reflections on leadership and decision making

Journal of General Management, vol 9 no 3, Spring 1984, pp18-36

Leadership and the decision-making process

Organizational Dynamics, vol 28 no 4, Spring 2000, pp82-94

FURTHER READING

JOURNAL ARTICLES

Old Friends, New Faces: Motivation Research in the 1990s, Maureen Ambrose and Carol

Kulik

Journal of Management, vol. 25 Issue 3, 1999, pp231-292

RELATED MODELS

Vroom's Expectancy Theory Model



MORE INFORMATION

e enquiries@managers.org.uk

t +44 (01536) 204222

w www.managers.org.uk

p Chartered Management Institute
Management House, Cottingham Rd, Corby, Northants, NN17 1TT

This publication is for general guidance only. The publisher and expert contributors disclaim all liability for any errors or omissions. You should make appropriate enquiries and seek appropriate advice before making any business, legal or other decisions.

Revised June 2015