MILITARY UNIT EFFECTIVENESS AND READINESS: A THEORETICAL FRAMEWORK AND A PRACTICAL APPLICATION

Luc Léveillé, Martin Villeneuve & Rhena Izzo

Directorate for Human Resource Research and Evaluation

Abstract

In this paper, the traditional notion of military effectiveness is reconsidered in the light of a proposed multidimensional model of unit effectiveness, representative of the actual military context define by the changing nature of CF operations and expectations. The presentation of the model will be preceded by an overview of the major contextual factors that initiated the need to revisit the concept of combat effectiveness. One dimension of the effectiveness model is the human readiness dimension. This dimension will be described in relation to an instrument called UCP (Unit Climate Profile) use to measure the climate profile of CF troops in operations. Both academic and applied military sources have been used as resources for the development of the theoretical formulation and application of the military unit effectiveness model in the Canadian Forces (CF).

Introduction

The changing nature of operations

The years 1990's have been resulted in vast changes with regard to the nature of military operations in the CF. A paradigm shift has evolved resulting in an increasing demand for Canadian Forces assistance and intervention on behalf of countries that are involved in situations of internal conflict or natural disaster. To illustrate the increased demand for assistance of the CF soldier one only has to compare the requests received from 1948 to 1989 and those since 1989. From 1948 to 1989, the CF was involved in 25 international operations. Since 1989, the Canadian Forces have been deployed 65 times. This does not include the responses of CF members to the different crises at home (ie.1998 Ice Storm, 1999 Manitoba flood). At any given time during 1999, more than 4,500 men and women were deployed on 23 missions

It is clear that there has been a dramatic increase, from other nations and/or organizations, such as the UN or NATO, requesting the assistance of Canadian troops in what may be termed as non-combat operations (for example, peacekeeping and security operations). These changes have directly impacted the way the CF member performs a task. These operations are complex and the level of unpredictability that face CF members while in the field may be extremely high. Additionally, the rules of engagement that define the nature of the conduct to undertake while on the ground also contribute to increase the complexity of the soldier's task. These non combat operations have resulted in the CF soldier having to acquire an additional set of abilities and skills in order to performs his (her) tasking. This new abilities and skills go beyond the traditional skills needed to be effective in combat. For example, Eyre (1993) argues that, while some tasks of the Canadian Army may be rooted in conventional training, recent events in Somalia, Sarajevo and the Cyprus War of 1974, recent events point to the necessity for today's soldiers to go beyond traditional combat skills. Reports have identified Canadian soldiers are being required to "negotiate," "mediate," "conciliate," and "arbitrate" while on missions. Notably, these observations and the need for ability and skill adjustment is dictated by new alliances, this network of players encompasses both military allies and civilian authorities that act together to coordinate peace enforcement and humanitarian aid.

It appears that the changing nature of military operations described above has necessitated a change in the way effectiveness is defined and subsequently measured. Effectiveness can no longer be assessed using the simplistic notion of whether the battle or war has been won; other considerations must be taken into account. The redefinition process must also take into consideration the changing nature of expectations, emanating from public opinion and government.

.

The changing nature of expectations

Within the last two decades Western society has changed, with a resultant change in the societal expectations of the military. The CF now exists in a very different socio-political context to that which existed during the reign of the super powers. The CF is answerable to the federal government. As such, the military is under public scrutiny and is required to ensure transparency in regard to management, finance and social policy. Moral and ethical issues involving military professionals have also attracted a great deal of attention from the media. Given this new social contexts in which the CF functions, effectiveness measures must incorporate more dimensions than in the past. An example is seen in the recent implementation of CF policy recognizing issues related to variables of HDO (Human Dimension of Operations) and QOL (Quality of Life) as important modulators that could affect human dimension of effectiveness in any type of operations.

Thus, the changing nature of military operations and expectations resulted in a need to define operational effectiveness in a contemporary way. A new model of effectiveness must be develop to meet the expectations of the people and government. The model must also address the needs of the primary users, the military leaders on the ground whose responsibility is to ensure the success of the operation.

The notion of operational effectiveness

Theoretical confusion exist in the literature with regard to the definition and terminology of the notion of effectiveness. With the aim of introducing a new model of operational effectiveness a sound theoretical foundation must be establish. Therefore, an attempt is made in this section of the paper to briefly clarify the definition and conceptualization of the notion of effectiveness.

Toward an integrated model of operational effectiveness

In the military, effectiveness is frequently discussed as combat effectiveness. The implication is that effectiveness can only be measured when a unit is in combat, which in recent years has become quite uncommon. In the context of the Canadian military, combat operations does not describe the type of engagement that the Canadian Forces are presently facing. The CF member is involved more and more in the unpredictable area of non-combat operations (for example, peacekeeping and security operations). With this in mind, the traditional definition of effectiveness must be revisited.

The diversity of disciplines and the uniqueness of the languages used to describe concepts of effectiveness often leads confusion, incomprehension and limitations in terms of measurement A major breakthrough in the conceptualization of organizational effectiveness was made by Morin, Savoie et Beaudin (1994). Their research resulted in a more representational definition of effectiveness in an organization. This model integrates a diversity of disciplines such as economics, accounting, management and behavioral sciences.. These disciplines have a common goal that is to find indicators of organizational effectiveness.

The review of the literature made by Morin et al (1994) distinguishes four main dimensions of organizational effectiveness: (a) the worth of human resources (psychosocial dimension); (b) economic efficiency (economic dimension); (c) the organization's legitimacy with outside groups (ecological dimension); and (d) the organization's durability (systemic dimension). After a continuous validation of the model with practitioners, the model was slightly modified to better represent the actual reality of the organizational effectiveness (Savoie and Morin, in press). This vision of the organization is multidimensional or, to be more precise, quadripartite. This does not mean that each individual or group assesses the organization's effectiveness through reference to each of the four dimensions – far from it – it means that their evaluations can be situated within one or more of these dimensions. The four dimensions are briefly described and represent in figure 1.

a) The worth of human resources

- Worth of human resources refers to an organization's work force and deals with measures pertaining to an employee's morale, performance, development and motivation. In regard to this dimension, the organization needs to find answers to the following questions: Are the employees committed to their organization? Are the personnel hard-working? Are they competent? Is the morale good?

b) Economic Efficiency

- Economic efficiency relates specifically to the notion of organizational productivity.

The criteria of internal economy (the degree to which an organization reduces the quantity of the resources used while ensuring that the system continues to function smoothly) and productivity (the quantity of goods produced divided by the resources used to produce them) are clearly components of this dimension.

c) Corporate Responsibility

- This dimension refers to assessments made by external constituents of the organization, i.e., regulatory agencies and the community. Any organization has a corporate responsibility. For example it may be judged on its ability to follow regulations or/and on its involvement within the community at large.

d) Durability of the Organization

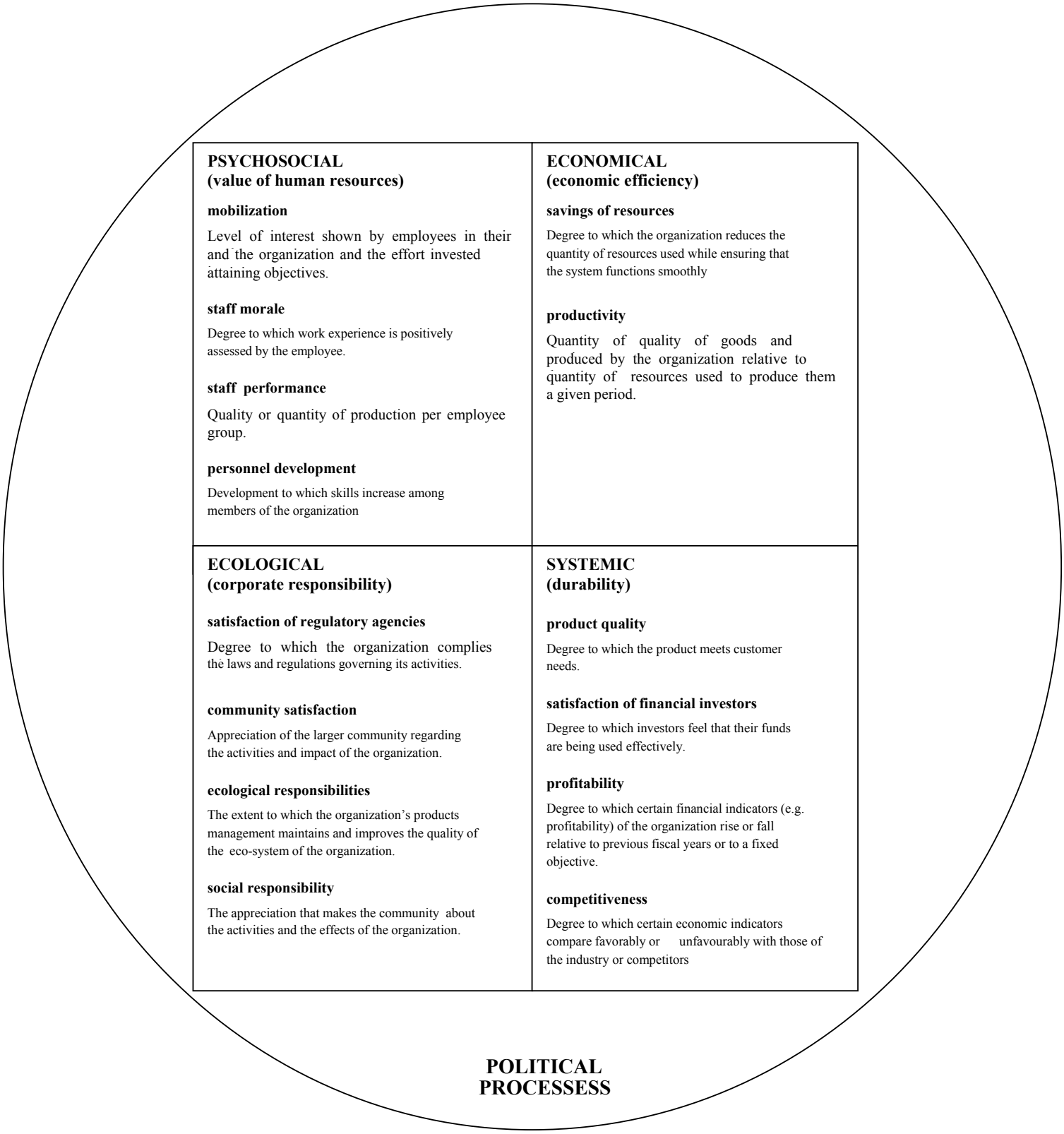
- This is the systemic dimension of organizational effectiveness, which addresses the question of the survival of the organization. Durability reflects the degree to which the stability and the growth of an organization have a chance to survive the test of time. This dimension

deals with the capacity of the organization to adapt to always changing-environment environment (Bakke, 1950, Thompson, 1967; Emery & Trist, 1960; Katz & Kahn, 1978).

e) The Political Processes: Establishing Organizational Criteria

- The political process is related to the decisions made by leaders and is directing the focus on specific dimension of the model instead of others. This process is also function of contingencies as financial constrain and underlying objectives of the organization.

Figure 1



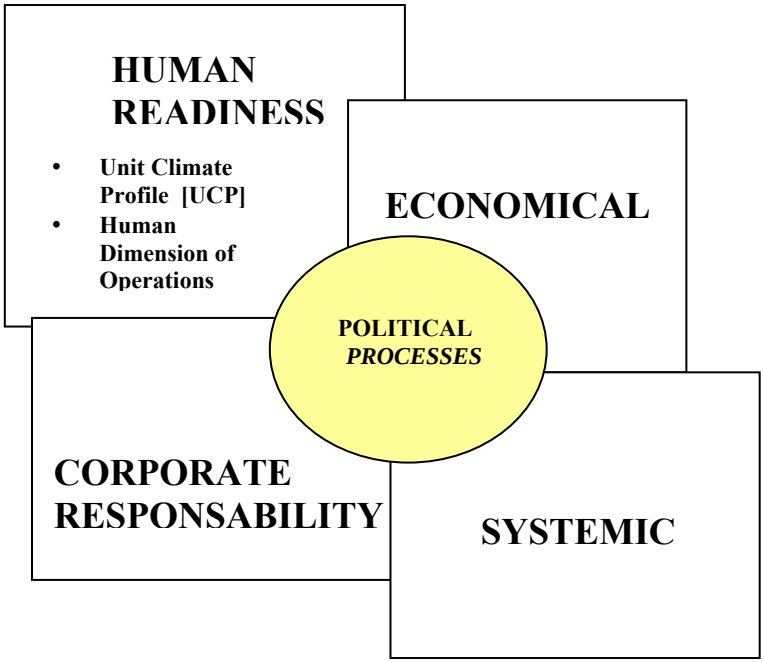
The human readiness dimension of effectiveness

In figure 2, the 4 dimensions of the model are presented and applied to the military context. This adaptation of the model to the CF implied three transformations: first, the dimension called the worth of human resources is analyzed in term of the human readiness dimension. Second, the political process dimension has moved to become more central and third, the four dimensions are interrelated.

First, readiness is an important construct for the military, unfortunately, this concept offered considerable problems in his definition and is presented as both an outcome (e.g., Castro & Adler, 1999; Oliver, Harman, Hoover, Hayes and Pandhi as cited in Mangelsdorff, 1999; Scheflen, 1996) and has a predictor (e.g., Wild, 1988). A promising avenue is to see readiness as a multilevel and multidimensional construct. In this regard, the work of Orlick (1995) in the field of sport psychology is of particular interest. He states that readiness is a multi-dimensional construct and as to be treated as psychological state (outcome) evolving from variables taken from group dynamics and from special cognitive learning attributes. For us, measures of readiness in the military is closely tied to the worth of human resources dimension requesting empirical assessment. In that regard, the CF possess two instruments to assess empirically the human readiness dimension: The Unit Climate Profile (UCP) and the Human Dimension of Operations (HDO).

Second, the application of the model to the military must also imply a change in the way the political process is represented. One reason is because commanders on the ground make use of the political process to integrate dissimilar contingency and this help to maintain priorities associated with a deployment. And third, we recognized that in the military system the dimensions of the model are interrelated. As an example, level of human readiness must certainly have an impact on the level of productivity of the economic dimension of the model.

Figure 2

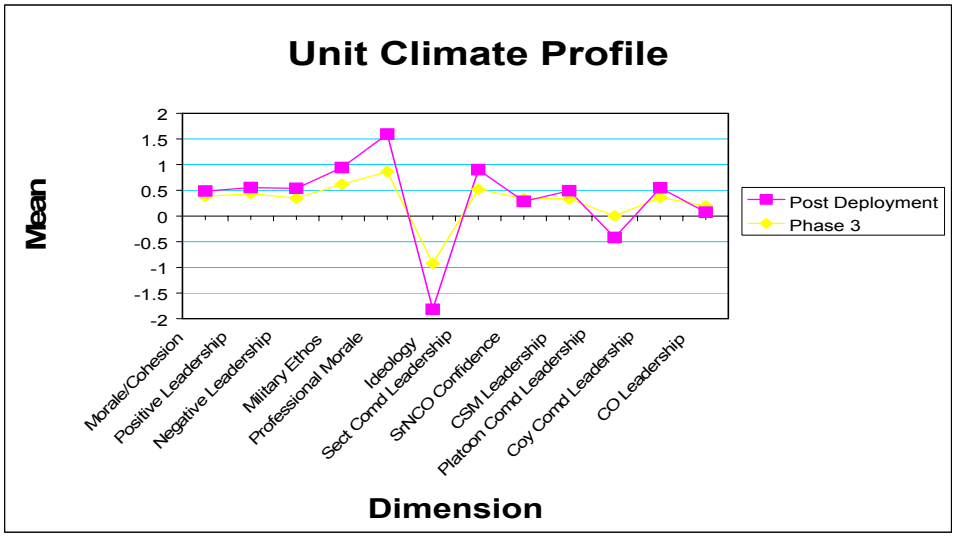


Indicators of military effectiveness: a practical example

In regard to the human readiness dimension of the model, commanders need to possess information concerning the level of effectiveness of his (her) unit either in garrison or in a deployment situation. In that sense, the measures of effectiveness must have the capacity to be applied in a flexible matter and be used at any point in time. This includes before, during and after a specific operational deployment. The measures of operational effectiveness should be designed with consideration to the uniqueness of the unit analysis under study; either the individual, the group (platoon) or the unit level.

The Unit Climate Profile (UCP) is one of the instruments used to measure the indicators of human readiness according to the model of operational effectiveness. This instrument was develop in collaboration with the Chief of Land Staff. Interests have been manifested to adapt this instrument to the Air Force and Navy members. This instrument is applicable in pre deployment, during and post deployment. In terms of the unit of analysis, the unit is the prime target. The actual version of the UCP comprise 62 items and revealed a cluster of 12 human dimensions after factorial analysis procedures. A complete description of the steps toward reliability and validity of the UCP is available (review draft, Dobreva-Martinova; 2000).

The 12 dimensions of the UCP such as morale/cohesion and confidence in the level of command, can be plotted on a graph to form a profile of the readiness component of the unit. The data is collected from a stratified random sample and analyzed by the Operational Effectiveness Section of the Directorate for Human Resources Research and Evaluation (DHRRE). The analysis is completed within a week and a profile of the units are returned and communicated to the commanding officer by the military psychologist deployed with the Canadian contingent. Additionally, the commanding officer is also briefed by the military psychologist on interventions that can be used to improve the level of readiness of his (her) unit. Overall, the UCP is a valid tool that can be to be used in conjunction with other sources of information available to commanders to assess the effectiveness of their unit.
- Below is an example of the UCP of a CF unit surveyed at two phases of a deployment cycle. The range of the values for the climate dimensions is from –2 (very negative) to +2 (very positive), with a middle point of zero (neutral, neither positive nor negative).



Conclusion

The nature of military operations is changing and as a result operators will have to adapt to this reality. In that sense, realistic and practical indicators of military effectiveness must be developed to assist commanders in their decision making. The UCP is presented as a viable tool for determining components of the human readiness dimension of the unit effectiveness model. The unit effectiveness model is a means of addressing the issues of the 21st century within the military context. One of the challenges for researchers at DHRRE will be, to continue developing and validating instruments related to the human readiness dimension, and also, to create indicators related to other dimensions of the unit effectiveness model.

References

Bakke, E.W. (1950). Bounds of Organization. New York: Harper & Row.

Canadian Forces Publication 300 (CF 300). (1997). Canada's Army (Version 6.1). National Defence Headquarters. Ottawa: Canada.

Castro, C.A. and Adler, A.B. (1999a). Military Deployments and Soldier Readiness. U.S. Army Medical Research and Materiel Command Ft. Detrick. Frederick: MD 21702-5012

Castro, C.A. and Adler, A.B. (1999b). OPTEMPO: Effects on Soldier and Unit Readiness. Parameters, Autumn pp. 86 – 95.

Cummings, L.L. and Berger, C. (1980). Organizational structure: How does it affect Attitudes and performance. In L.L. Cummings and C. Berger (ed.), Introduction to OB: Text and Readings. Homewood (Ill): R.D. Irwin.

Dobreva-Martinova, T. (2000). Unit Climate Profile: Guide for Commanders. Paper presented to the Command Group Defence and Civil Institute of Environmental Medicine, Toronto, Canada, fev 2000.

Emery F.E. and Trist E.L. (1960). Socio-technical systems in management Science Models and Techniques, Vol. 2. London: Pergamon.

Eyre, K. (1993). The Changing Face of Peacekeeping. In A. Morrison, R. Tychonick, and S. McNish (ed.), The Changing Face of Peacekeeping. The Institute of Strategic Studies. Toronto: Canada.

Katz, D. and Kahn, R.L. (1978). The Social Psychology of Organizations. (2nd ed.). New York: John Wiley & Son.

Mangelsdorff, D.A. (1999). Military cohesion. [special issue] Military Psychology, 11 (1).

Morin, E.M., Savoie, A., Beaudin, G. (1994). L'Efficacté de L'Organization: Théories, représentations et mesures. Montréal: Gaëtan Morin.

Orlick, T (1995). The Wheel Of Excellence. Journal of Performance Education, 1, 3-18.Pfeffer, J. and Salancik, G.R. (1978). The External Control of Organizations. New York: Harper & Row.

Quinn, R.E. and Rohrbaugh, J. (1983). A spatial model of effectiveness criteria: Toward a competing values approach to organizational analysis. Management Science, 29 (3) , 363 – 377

Scheflen, K. (1996). The Readiness Baseline (RBL) : Readiness Indicators. Paper presented at The Technical Cooperation Program (TICP HUM-TP3) meeting, 1996.

Scott, W.R. (1987). Organizations : Rational, Natural and Open Systems. (2nd ed.) . Englewood Cliffs (N.J.): Prentice Hall.

Seashore, S.E. (1983). A Framework for an integrative model of organizational effectiveness. In K.S. Cameron and D.A. Whetten (ed.) , Organizational Effectiveness. A Comparison of Multiple Models. (pp. 55 – 70). New York: Academic Press.

Thompson, J.D. (1967). Organizations in Action. New York: McGraw-Hill.

Van de Ven, A.H. and Morgan M.A. (1980). A revised framework for organizational assessment. In E.E. Lawler III, D.A. Nadler and C. Cammann (ed.), Organizational Assessment, Perspectives on the Measurement of Organizational Behavior and the Quality of Work Life. (pp. 216 – 260). New York: John Wiley & Son.

Villeneuve, M.; Dobreva-Martinova, T.; Little, G. and Izzo, R. (2000). Military Unit Effectiveness and Readiness: A Theoretical Framework. Paper presented at Human in Command Conference, breda, Netherlands, jun 2000.

Wild, W.R. (1988). Proposal for Studying the Human Dimension of Combat Readiness. (Technical Note 5/88). Canadian Forces Personnel Applied Research Unit. Willowdale: Canada.

Zammuto, R.F. (1984). A comparison of multiple constituency models of organizational effectiveness. Academy of Management Review, 9 (4) , 606 – 616.