MEASURING PROFESSIONAL ATTITUDES IN THE CANADIAN ARMY

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Abstract

Recently we surveyed 2600 Canadian Army personnel on a large number of variables from the domains of organizational culture and organizational climate. In this paper we will describe an important element of this research – our attempts to measure professionalism at the individual level of analysis. We will show the range of measures we compiled and developed to measure the professional attitudes of Canadian army officers, noncommissioned members and soldiers. Our results will show the extent to which professional attitudes are also related to positive organizational outcome variables such as satisfaction, commitment, organizational citizenship behaviours and intentions to remain in (or leave) the Army.

Introduction

Last year at the annual convention of the International Military Testing Association we reported on our initial attempts to develop a measure of military professionalism (Bradley, Charbonneau, Campbell, & Johnston, 2003). This paper reports on our progress since then. Our conceptual start point for this research was the work of Samuel Huntington (1957), the traditionally accepted model of military professionalism in North America. Huntington contends that the military officer corps is a profession like the medical or legal profession because it embodies the three professional criteria of expertise, responsibility and corporateness. An important distinction to be made here is that Huntington's professionalism criteria focus on the organizational level, "analyzing the character of the modern officer corps" (p. 24). Our research attempts to extend the Huntington concepts to the individual level of analysis, examining the professional attitudes of individual officers, noncommissioned officers and soldiers.

In the Huntington model, expertise refers to specialized knowledge held by the professional practitioner and obtained through extensive study of the profession. We have extended the Huntington definition of expertise in our research to include the continuous upgrading of this specialized knowledge.

Huntington's definition of social responsibility reflects the extent to which the professional organization provides a service essential to society. Important elements of Huntington's definition of responsibility include the obligation of the profession to regulate its members by enforcing professional codes of ethics and the requirement for the individual member of the profession to be intrinsically motivated by "love of his craft" and committed to the state by a "sense of social obligation to utilize this craft for the benefit of society" (p. 31).

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Opinions in this paper are those of the authors and not the Department of National Defence.

Huntington's definition of corporateness revolves around the "sense of organic unity and consciousness of themselves [i.e., the professionals] as a group apart from laymen" (p. 26). Huntington highlights the importance of corporate structures like schools, associations and journals established to develop and regulate the conduct of military professionals. At this point the Huntington model shows some degree of conceptual interdependence between responsibility and corporateness, as his definition of each construct refers to professional standards and ethics.

The fourth component in our model of military professionalism, national pride, is taken from the recently published Canadian Forces doctrinal manual on military professionalism, <u>Duty with Honour</u>. In another important Canadian doctrinal publication written specifically for the army, the fifth component of our model is found – risk acceptance. Called <u>Canada's Army</u> this document exhorts soldiers "to carry out duties and tasks without regard to fear or danger, and ultimately, to be willing to risk their lives" (p. 33).

As part of the research on developing our measure of military professionalism we also investigated the relations between professionalism dimensions and important organizational outcomes. With respect to professionalism-outcome relations, we hypothesized that professionalism measures should be related to employment attitudes like organizational citizenship behaviour (OCB), satisfaction, and commitment to the Army.

<div align="center">Method</div>

Overview

We developed 5 professionalism scales as shown in Table 1. All items and scales were measured on a 5-point scale. In 2002, the scales were pilot tested on a sample of 333 army members as described by Bradley et al. (2003). Some of the scales and items were revised after the pilot test and the final version of the survey was administered to Canadian Army personnel at 16 sites in Canada and Bosnia in 2003.

Participants

The sample included 2470 personnel from the rank of private to lieutenant-colonel. Females comprised 13 % of the sample and 15 % of the sample were officers.

Measures

Expertise. The expertise scale contained 8 items measuring two dimensions. The first reflects the extent to which respondents possess unique knowledge that provides an important contribution to society (Item 28: I think that most members of the Army have unique skills and knowledge that make an important contribution to the Canadian Forces and to society). The second dimension reflects the extent to which they strive to keep this knowledge up to date (Item 24: I keep up-to-date with new developments in the profession of arms).

Table 1

Internal Consistency of Professionalism Scales

Scale	Sub-scale	Iems	Alpha
Expertise		8-item scale	.64
	A Unique knowledge	4, 20, 28	.46
	B Maintain knowledge	8, 16, 18, 24, 37	.61
Responsibility		11-item scale	.53
	A Service to society	1, 2, 26, 32	.64
	B Adhere to professional standards	3, 12, 14, 29	.39
	C Sense of calling	10, 23, 27	.54
Corporateness		14–item scale	.70
	A Understand standards of conduct	7	
	B Aware of the system of monitoring conduct	9, 21, 25, 30, 35	.52
	C Comfort in using the system of monitoring conduct	11, 13, 19, 31, 33	.62
	D Autonomy	5, 15, 17	.51
National Pride		6, 22, 34, 36 (4 items)	.62
Risk Acceptance		38 – 45 (8 Items)	.88
Professionalism		1 – 45 (45 items)	.85

Responsibility. Measured by an 11-item scale, responsibility is conceptualized as having three dimensions. First, the profession must perform a service to society (Item 2: I always use my skills and knowledge in the best interest of Canadians). Second, individual members of the profession have the obligation to adhere to professional standards in their daily work (Item 12: I would comply with unethical assignments or rules if I were ordered to do so (reverse scored)). Third, the profession is a "calling" rather than a job (Item 10: People in the military have a real "sense of calling" for their work).

Corporateness. This 14-item scale focuses on the regulatory practices within the profession which ensure members' competence and ethical behaviour. There are four dimensions to the corporateness construct. First, members must be familiar with and understand the standards of competence and ethical conduct (Item 7: I know how competence is defined in the army). Second, members must be aware of the system for monitoring professional conduct (Item 35: It is my duty to take action when I observe another unit member commit unprofessional actions). Third, members must be comfortable using the monitoring system (Item 19: I would not report a member for misconduct (reverse scored)). Lastly, members must be given the autonomy to exercise their professional judgment (Item 30: I don't have much opportunity to exercise my own professional judgment (reverse scored)).

National pride. Measured with a 4-item scale, national pride reflects the extent to which

military professionals are proud of their nation (Item 6: I am proud of Canadian society and Canadian culture) and proud to be serving their nation (Item 34: I am proud to be a member of Canada's military).

Risk acceptance. Risk acceptance was measured by 8 items such as: Item 36: I am prepared to put my life at risk to defend Canadian territory; Item 40: I am prepared to put my life at risk in peace support operations (e.g., peacekeeping, peace making).

Outcome measures. Our OCB (i.e., extra-role behaviours) scale consisted of 17 items, some of which were adapted from Van Dyne, Graham, and Dienesch (1994) and Podssakoff, MacKenzie, Moorman, and Fetter (1990), and some developed by our research team. Our satisfaction scale consisted of 6 items, a 2-item measure of satisfaction with the Army, a 2-item measure of satisfaction with the unit, and a 2-item measure of satisfaction with the occupation along the lines of the satisfaction measure employed by Cotton (1979). We measured commitment with a 6-item measure of Meyer's and Allen's (1991) affective commitment, the extent to individuals identify with their organization because of emotional attachment to their organization. All outcome items and scales were measured on a 5-point rating scale.

Results and Discussion

Overview

In this paper we focus on two research questions: (a) To what extent are our rationally derived scales supported by psychometric analyses (i.e., scale internal consistency indices and principal components analyses)? (b) To what extent are the dimensions of professionalism related to important attitudinal outcomes?

Reliability of Professionalism Scales

We calculated Cronbach Alpha coefficients for each of our professionalism scales and sub-scales. As shown in Table 1, some of the coefficients are low, indicating that the dimension is multidimensional or requires additional items.

Structure of the Professionalism Measure

We conducted principal components analyses (PCA), with varimax rotation, on the 45 professionalism items and found that most of the items formed one general factor. We examined a number of solutions, but found none that adequately reflected our 5-factor conceptualization of professionalism. The most interpretable solution, the 3-component solution displayed in Table 2, shows the general factor as well as a separate factor (i.e., component 3) comprised of 8 items from the responsibility and corporateness dimensions. On closer analysis, these 8 items all address ethical issues. Thus, our most interpretable PCA solution has a general factor and an independent ethical factor.

Table 2

Professionalism Scales 3 - Component Solution

Item	Construct	Comp 1	Comp 2	Comp 3
4	Exp A			
20	Exp A	.365		
28	Exp A	.500		
8	Exp B	.501		
16	Exp B	.352		
18	Exp B	.351		
24	Exp B	.396		
37	Exp B			
1	Resp A	.515		
2	Resp A	.528		
26	Resp A	.564		
32	Resp A	.345		
3	Resp B			.385
12	Resp B			.465
14	Resp B			
29	Resp B			
10	Resp C	.404		
23	Resp C			
27	Resp C	.502		

Item	Construct	Comp 1	Comp 2	Comp 3
7	Corp A	.397		
9	Corp B	.414		
21	Corp B			
25	Corp B	.357		.502
30	Corp B	.343		
35	Corp B	.417		
11	Corp C	.335		.447
13	Corp C			
19	Corp C	.377		.497
31	Corp C	.382	.296	.585
33	Corp C			.516
5	Corp D			
15	Corp D	.307	.363	
17	Corp D	.324	.297	
6	Pride	.398		
22	Pride	.349		
34	Pride	.604		
36	Pride	.365		
38	Risk Acc	.471		
39	Risk Acc	.507		
40	Risk Acc	.521		
41	Risk Acc	.453		
42	Risk Acc	.527		
43	Risk Acc	.516		
44	Risk Acc	.484		
45	Risk Acc	.535		

Note. Table displays only factor loadings of .3 and higher. Exp = expertise, Exp A = expertise subscale A as described in Table 1, Resp = responsibility, Resp A, B, and C = responsibility subscales as described in Table 1, Corp = corporateness, Corp A, B, C, and D = corporateness subscales as described in Table1, Pride = national pride, and Risk Acc = risk acceptance.

Professionalism-Outcome Relations

As shown in Table 3, we found many positive (statistically significant) correlations between our professionalism scales and the other attitudinal outcome measures. These correlations show that professionalism is related to important employment attitudes. Except for the responsibility subscale "adhere to professional standards" all scales and subscales correlate with many of our outcome measures.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1 Professionalism	**.85**																		
2 Expertise	.71	**.64**																	
3 Expertise A	.52	.57	**.46**																
4 Expertise B	.61	.92	.30	**.61**															
5 Responsibility	.72	.44	.43	.35	**.53**														
6 Responsibility A	.64	.42	.42	.31	.72	**.64**													
7 Responsibility B	.22	--	--	--	.54	--	**.39**												
8 Responsibility C	.52	.40	.39	.33	.64	.35	--	**.54**											
9 Corporateness	.76	.47	.34	.42	.46	.36	.23	.28	**.70**										
10 Corporateness A	.34	.23	.12	.21	.37	.18	.34	.17	.33										
11 Corporateness B	.62	.39	.27	.36	.36	.30	.18	.20	.80	.23	**.52**								
12 Corporateness C	.54	.27	.20	.24	.29	.22	.24	--	.77	.17	.52	**.62**							
13 Corporateness D	.39	.27	.20	.24	.29	.16	.14	.26	.55	.12	.22	.11	**.51**						
14 National Pride	.60	.36	.32	.29	.44	.47	--	.43	.31	.21	.25	.15	.19	**.62**					
15 Risk Acceptance	.63	.25	.19	.21	.22	.31	--	.16	.22	.40	.21	.20	--	.27	**.88**				
17 Commitment	.36	.44	.31	.39	.39	.38	--	.39	.35	.15	.25	.16	.28	.37	.28	**.81**			
18 Satisfaction	.45	.37	.27	.32	.34	.33	--	.35	.33	.14	.24	.14	.29	.35	.22	.61	**.80**		
19 OCB	.66	.54	.39	.51	.44	.43	--	.30	.56	.18	.48	.41	.28	.36	.32	.57	.50	**.85**	

Note. All coefficients are significant at $p < .001$. -- = not statistically significant. Coefficients in the diagonal in bold are indices of scale internal consistency (i.e., Cronbach alphas).

Conclusion

The results of our research provides moderate evidence of the utility of our study into military professionalism and suggests that future research focus on improving the psychometric quality of our measure.

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