

**Readiness, Resilience, and Readjustment: A Psychological
Investigation of Human Factors across the Deployment Cycle of
Contemporary Peace Support Operations**

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READINESS, RESILIENCE, AND
READJUSTMENT: A PSYCHOLOGICAL
INVESTIGATION OF HUMAN FACTORS
ACROSS THE DEPLOYMENT CYCLE OF
CONTEMPORARY PEACE SUPPORT
OPERATIONS

by

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DECLARATION

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

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PREAMBLE

In warfare the force of armies is the product of the mass multiplied by something else, an unknown X.

Military science, seeing in history an immense number of examples in which the mass of an army does not correspond with its force, and in which small numbers conquer large ones, vaguely recognises the existence of this unknown factor, and tries to find it sometimes in some geometrical disposition of the troops, sometimes in the superiority of weapons and most often in the genius of the leaders. But none of those factors yields results that agree with the historical facts.

One has but to renounce the false view that glorifies the effect of the activity of the heroes of history in warfare in order to discover this unknown quantity, X.

X is the spirit of the army, the greater or less desire to fight and to face dangers on the part of all the men composing the army, which is quite apart from the question whether they are fighting under leaders of genius or not, with cudgels or with guns that fire thirty times a minute.

Leo Tolstoy, *War and Peace*, 1904

ABSTRACT

Contemporary peacekeeping missions are complex, demanding, and potentially hazardous. There is general agreement that psychological factors are crucial to effective individual and collective performance of the military personnel deployed in support of these missions. This research has examined the human dimensions associated with capability, functioning, and health across the deployment cycle. The aim of this research was to increase understanding of the psychological issues associated with peace support operations at the individual, group, and organisational levels. The study applied precepts of the transactional model of stress (Lazarus & Folkman, 1984) to the context of military deployment on peace support operations. The overarching Human Dimensions of Operations model for this research incorporated stressor, buffer, and outcome components within the multi-level structure of the military organisation and across the stages (pre, peri, post) of deployment.

Participants were Canadian and Australian military personnel deployed on Peace Support Operations. The dissertation comprised seven chapters. Chapter One provided an introduction to the psychological challenges posed by peace support operations and the research opportunities these missions afford. The second chapter detailed the methodology and psychometric evaluation of several measurement scales that were developed as part of this research in order to address the unique characteristics of peace support operations. Each of the six scales examined proved to have a meaningful component structure and adequate subscale reliabilities. The third chapter was devoted to an examination of the psychometric properties of a measure of psychological climate factors, the Unit Climate Profile (UCP), which was the cornerstone instrument of this research. The UCP demonstrated a robust, multi-dimensional structure that

was conceptually concordant with its theoretical development and design. In addition, the component structure of the UCP changed in meaningful ways according to its level of analysis - individual or group.

The next three chapters examined human dimension constructs at different stages of deployment, notably psychological readiness for operations, psychological resilience during deployment, and readjustment following return from deployment. In Chapter Four, the most compelling structural model that examined collective psychological readiness demonstrated that perceptions of readiness at the group level, along with effective senior leadership, could significantly impact morale. The results in Chapter Five revealed that leadership both buffered the immediate impact of stressors, and also fostered meaning and morale, thereby reducing strain. Positive aspects of deployment and the personal meaning assumed to be derived from these experiences were also found to bolster morale significantly during deployment. In Chapter Six, the stressors specific to the postdeployment transition phase, rather than stressors encountered during deployment, had the strongest impact on postdeployment adjustment. Social support and a positive psychological climate in the unit (particularly evidenced by cohesiveness and caring behaviour by proximal leaders) moderated the impact of homecoming stressors.

A concluding chapter summarised the dissertation and discussed its practical significance and avenues for the dissemination of its findings. Broadly, the outcomes demonstrated that an understanding of the human factors in military units within the context of the stressors-strain relationship can provide potentially useful information to commanders who want to enhance the well-being, performance, and commitment of Service members deployed on peace support operations.

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GLOSSARY OF ACRONYMS

ADF	Australian Defence Force
AGFI	Adjusted Goodness-of-Fit Index
AMOS	Analysis of Moment Structures
ANOVA	Analysis of Variance
ANZAC	Australia and New Zealand Army Corps
APA	American Psychological Association
ARI	Army Research Institute for the Behavioural and Social Sciences
BOCI	Business Organization Climate Index
CF	Canadian Forces
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CISD/CISM	Critical Incident Stress Debriefing/Management
CMS	Critical Incident Mental Health Support
CPL	Corporal
CRMQ	Combat Readiness Morale Questionnaire
DFPO	Defence Force Psychology Organisation
DHRRE	Directorate for Human Resource Research and Evaluation
DOD	Department of Defense
DSM-III/IV	Diagnostic and Statistical Manual of Mental Disorders (3rd and 4th editions)
GFI	Goodness-of-Fit Index
HDO	Human Dimensions of Operations
HDCRI-X	Human Dimension Combat Readiness Index - Experimental
JNCO	Junior Non-Commissioned Officer
LCPL	Lance-Corporal
MANOVA	Multivariate Analysis of Variance
MSA	Measures of Sampling Adequacy
NASA	National Aviation and Space Administration
NCO	Non-Commissioned Officer
OOTW	Operations Other Than War
PCA	Principal Component Analysis
PCQ	Psychological Climate Questionnaire
PD	Predeployment
PAF	Principal Axis Factoring
PTSD	Post-traumatic Stress Disorder
RMSEA	Root Mean-Square Error of Approximation
RPA	Rwandese Patriotic Army
SEM	Structural Equation Modelling
SGT	Sergeant
SNCO	Senior Non-Commissioned Officer
SPSS	Statistical Package for the Social Sciences

SRMR	Standardised Root Mean-square Residual
SSGT	Staff Sergeant
TLI	Tucker–Lewis Index
TSES	Traumatic Stress Exposure Scale
UCP-A	Unit Climate Profile - Australian
UN	Unit Nations
UNAMIR	United Nations Assistance Mission for Rwanda
U.S.	United States
WHHSS	West Haven Homecoming Stress Scale
WRAIR	Walter Reed Army Institute of Research
WO	Warrant Officer