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Table of Contents

ACKNOWLEDGEMENTS	i
LIST OF TABLES	ii
LIST OF FIGURES	iv
ABSTRACT	v
INTRODUCTION	1
JOB and ORGANIZATIONAL SATISFACTION	7
Conceptual Models of Job Satisfaction	8
Satisfaction with Compensation & Benefits	8
Satisfaction with Perceived Organizational Support	10
Work-Family Issues	12
Satisfaction with Work Relations	14
Satisfaction with Human Rights Legislation	16
Satisfaction with Education & Training	17
Satisfaction with Physical Working Conditions	19
The Impact of Organizational Culture on Job Satisfaction	19
Major Conceptual Models of Job Satisfaction	21
Mobley's Expanded Turnover Process	21
Structural Models of Job Satisfaction & Turnover	25
PURPOSE AND HYPOTHESES OF PRESENT STUDY	28
METHOD	28
Study 1	30
Introduction	30
Method	33
Data Base/Participants	33
Procedure	35
Measures	35
Data Analysis	41
Results	44
Discussion	45
Study 2	47
Introduction	47
Data Analysis	48
Results	49
Discussion	58

Study 3	59
Introduction	59
Method	60
Results	67
Study 4	67
Introduction	67
Method	68
Data Analysis	73
Results	82
Discussion	88
GENERAL DISCUSSION	91
Implications for Further Research	93
Limitations of Present Study	95
CONCLUSION	96
RECOMMENDATIONS	97
REFERENCES	98
APPENDICES	
Appendix A: LISREL Program for Multi-Sample Analysis of CF Personnel by Distinctive Environmental Uniform (DEU)	115
Appendix B: LISREL Program for Multi-Sample Analysis of CF Personnel by Operational Grouping	118
Appendix C: The Canadian Forces Conditions of Service Questionnaire	121

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List of Tables

Table 1.	CFCSQ Focus Group Global Concerns	12
Table 2.	CFCSQ Focus Group Specific Concerns	12
Table 3.	CFCSQ Focus Group Personnel Support Concerns	12
Table 4.	CFCSQ Representativeness of Survey Sample to the Canadian Forces by Gender	34
Table 5.	CFCSQ Representativeness of Survey Sample to the Canadian Forces by Rank	34
Table 6.	Oakes' (1994) Means, Standard Deviations and Zero-Order Correlations of CFCSQ Data	43
Table 7.	Factor Loadings, Communalities and Percentage of Variance of CFCSQ items	50
Table 8.	Measures of Sampling Adequacy, Means, Standard Deviations and Reliability Estimates	54
Table 9.	Revised Means, Standard Deviations and Zero-Order Correlations of Factor Analyzed Scales	55
Table 10.	Army DEU Means, Standard Deviations and Zero-Order Correlations	61
Table 11.	Navy DEU Means, Standard Deviations and Zero-Order Correlations	63
Table 12.	Air DEU Means, Standard Deviations and Zero-Order Correlations	65
Table 13.	Branch and Operational Groupings	69
Table 14.	LandOps Means, Standard Deviations and Zero-Order Correlations	74
Table 15.	NavalOps Means, Standard Deviations and Zero-Order Correlations	76

Table 16.	AirOps Means, Standard Deviations and Zero-Order Correlations	78
Table 17.	Support Means, Standard Deviations and Zero-Order Correlations	80
Table 18.	Goodness-of-Fit Indices and Chi-square Estimates for Tested Models	88

List of Figures

Figure 1.	Oakes CFCSQ Paradigm (1991)	3
Figure 2.	Mobley's Expanded Turnover Process Model (1982)	22
Figure 3.	Lance's Structural Model of Precursors to Voluntary Turnover (1991)	26
Figure 4.	Structural Representation of Oakes' (1991) CFCSQ Development Model	31
Figure 5.	Standardized Solution of CFCSQ Unanalysed Scales	46
Figure 6.	Standardized Solution of Revised CFCSQ Scales	57
Figure 7.	LandOps Common Metric Standardized Solution	83
Figure 8.	NavalOps Common Metric Standardized Solution	84
Figure 9.	AirOps Common Metric Standardized Solution and Overall Goodness-of-Fit-Indices	85
Figure 10.	Standardized Solution for Support Personnel	87

Abstract

The Canadian Forces Conditions of Service Questionnaire (CFCSQ; Oakes, 1991) captures important information regarding the impact of policies, programs and service support on the well being of Canadian Forces members. The purpose of the CFCSQ is to obtain information that will provide senior military executives with a reliable profile of personnel attitudes and perceptions towards those conditions of service which might serve as sources of dissatisfaction with military life. Specifically, the CFCSQ captures information on compensation and benefits policies (pay, promotion, education and training, etc.), overall job satisfaction, current employment as well as working conditions (i.e., leadership, peer relationships) and intentions to stay or leave the CF. The CFCSQ was based on Mobley, Griffeth, Hand and Meglino's (1979) Expanded Turnover Process model. The CFCSQ was administered to 3275 officers and non-commissioned members serving in the CF in June 1993. This study, using that data set, 1) examined how well the Mobley et al model fit the CFCSQ data; 2) examined the factor structure of the different scales embedded in the CFCSQ and, 3) determined if the policies and procedures measured by the CFCSQ, had a differential impact on the turnover behavior of operational members of the Airforce, Army and Navy.

LISREL analysis suggested that the CFCSQ data could be explained in the context of the Mobley et al (1979) model, although the fit was not the best that could be obtained. When LISREL analysis was conducted using psychometrically improved versions of the scales included in the CFCSQ, a better fit occurred. Distinctive Environmental Uniform (DEU) was not an appropriate criterion on which to measure differences in satisfaction and turnover among Canadian Forces (CF) personnel. Military occupations, grouped as either operational or support was a better measure of differential rates of satisfaction and turnover. These findings suggest that the current CFCSQ requires revision so that concerns about conditions of service within each unique sub-culture of the CF can be identified. The inclusion of culture specific questions, measures of organizational commitment and other general recommendations are offered as a means to achieve this aim.

INTRODUCTION

Organizational behaviour is influenced by the interactions between the values of the organization and the characteristics of the individuals employed by it. Positive interactions between organizational and employee values have been associated with increased employee satisfaction, increased organizational commitment, higher productivity, and lower levels of attrition and less absenteeism. Conversely, negative interactions have been associated with low satisfaction, low commitment, low productivity, and increased absenteeism and attrition (Roberts, Hulin, & Rousseau, 1978; Schneider, 1983; Schein, 1985; Judge & Hulin, 1993; Hatch, 1993).

Organizational satisfiers or dissatisfiers may affect the organization's "bottom-line" by influencing productivity and profitability. Therefore, many organizations throughout the world have become more concerned with the effects of working conditions and quality of work-life issues. This has renewed interest in philosophies such as Total Quality Management, Quality of Work Life, Just-in-Time techniques, and more concern for the attitudes of employees. Many military institutions throughout the world (e.g., Britain, Australia, United States and Canada) have developed survey instruments and

methods to assess worker concerns. The Canadian Forces (CF) is currently addressing many issues that affect its workforce, including issues of attrition, harassment, sexual orientation as well as other topics that affect conditions of service.

The Canadian Forces Conditions of Service Questionnaire (CFCSQ; Oakes, 1991) was developed in response to a 1990 Auditor General Report which cited the need to evaluate the effectiveness of conditions of service in the CF. The intent of the CFCSQ was to measure the attitudes and perceptions of CF members about quality of work life issues. The CFCSQ was adapted from Mobley, Griffeth, Hand and Meglino's (1979) model of turnover behaviour (Figure 1). It proposes that the CF's policies and procedures related to conditions of service influenced individual service member's perceptions of the personal impact of each condition of service. In turn, this cognitive evaluation influenced the perception of the quality of working life and the degree of satisfaction or dissatisfaction with present employment and the CF. In short, the policies and procedures influenced an individual's sense of well being and their intention to stay in or leave the CF (Oakes, 1991). Oakes (1991) model, also proposed that policies and procedures could directly influence stay or leave intentions.

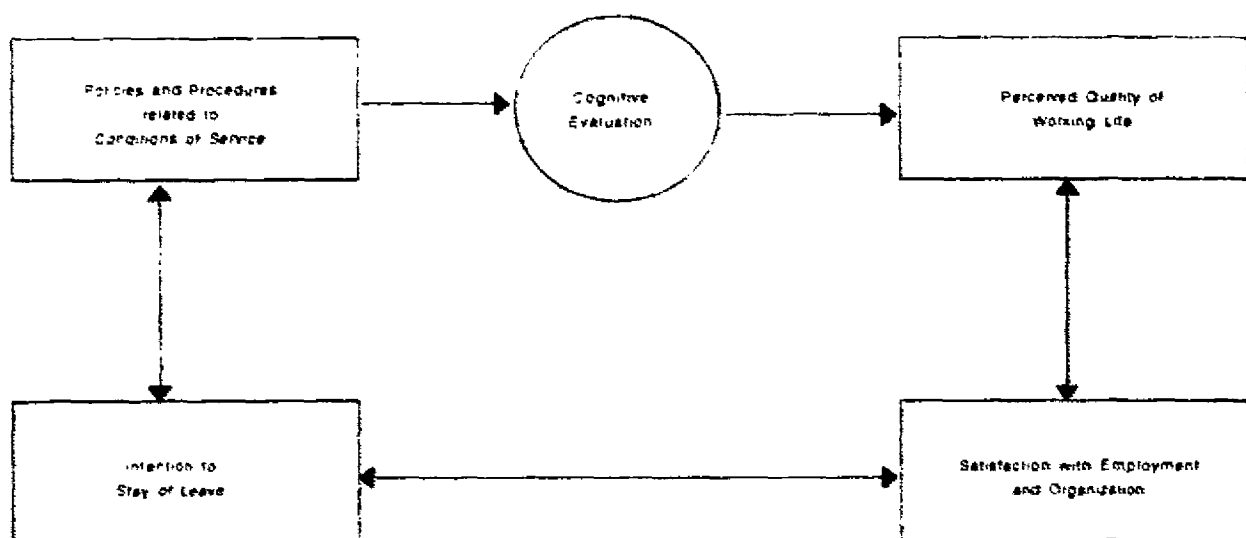


Figure 1. Canadian Forces Conditions of Service Questionnaire Paradigm (Oakes, 1991)

The Conditions of Service Questionnaire is administered on a periodic basis throughout the CF (the next administration is scheduled for Spring '96). Information gained from this survey is used by senior executive military personnel to formulate or amend policy items that affect member satisfaction. To date, there has been only a preliminary, descriptive analysis of a few variables measured by the CFCSQ. The structure and psychometric properties of the CFCSQ have not been analyzed through either exploratory or confirmatory factor analyses. This is required to assure policy makers that the CFCSQ items validly represent the constructs that it purports to measure (e.g., satisfaction) (Oakes, 1991).

The Canadian Forces as an organization is subdivided into three distinct elements: Army, Navy and Airforce. Each of these elements is essentially a subculture of the CF which has distinct social principles, philosophies, goals and standards. From a cultural perspective, differing value systems provide insight into organizational climate (Schein, 1985; Hatch, 1994). What is a source of satisfaction to personnel serving in the Navy may not necessarily be a source of satisfaction to those in the Airforce or Army. To date, differential rates of job and organizational satisfaction have been examined (e.g., through multivariate analyses of variance) by rank, gender, environmental

uniform, first official language, marital status and education level. No significant differences were found to exist using these criteria(Oakes, 1994). Many of these criteria ignore unique cultural differences that exist between the three elements of the CF (e.g., pride in regimental affiliation, Naval traditions). As such, it is possible that true concerns about conditions of service are not being addressed or made known to senior level policy makers because results are reported according to "environmental uniform" as opposed to "operational component".

Environmental uniform is the particular uniform which identifies the CF member as belonging to the Airforce (light blue uniform), Army (brown uniform) or Navy (Black and/or white uniform). Operational component refers to those members, who may be wearing any of the above three uniforms but are directly employed in a unit (e.g., ship, aircraft, or regiment) which is routinely assigned to perform specific tasks. For example, military members who would, as part of their normal job, be employed aboard a naval ship, an infantry unit or aircraft squadron as part of a United Nations, fishery patrol, or any other designated mission are classified as "operational". Those personnel who do not work in this capacity are defined as "support personnel". In this regard, differential rates of job satisfaction and turnover between operational components of the Army, Navy

and Airforce have not been analysed. Such an analysis would provide important information on the need for more culturally specific instruments for each element.

The primary purpose of this study was 1) to confirm how well the Mobley et al (1979) model fits the data generated by the CFCSQ; 2) to confirm the structure and psychometric properties of the CFCSQ and, 3) to determine if the policies and procedures, as measured by the CFCSQ, have a differential impact on the turnover behavior of operational members of the Airforce, Army and Navy.

Linear structural equation modelling can be used to test the model underlying the CFCSQ and to examine the influence that policies and procedures related to pay, promotion, working relations, and family-life predict job satisfaction and turnover. Testing the fit of the underlying model, as well as alternatives, to the data obtained from the CFCSQ will suggest improvements that can be made in questionnaire content and ultimately, the information obtained through it.

Job and Organizational Satisfaction

Work satisfaction is one of the more important variables that has been related to both organizational behaviour and quality of work life. Early studies (e.g., Locke, 1976) related job satisfaction to specific working conditions such as pay rates, promotions, rest periods and increased variety of work. Later research emphasized the human relations aspects of jobs as sources of satisfaction (e.g., Parsons, 1974) and job content factors (e.g., Herzberg, 1966) as true motivators of performance and satisfaction. Extension of these studies to blue collar workers suggested that "perceived intrinsic job characteristics" also has an impact on the level of job satisfaction (Warr, Cook & Wall, 1979). The diversity of findings with respect to job satisfaction led Oskamp (1984) to comment that "...the causes and effects of job satisfaction must be studied anew with better research designs..." However, the study of each of these satisfaction variables individually has laid the foundation upon which more complex models of job satisfaction can be examined.

Conceptual Models of Job Satisfaction & Turnover

Compensation and Benefits

Collectively, rewards such as pay, promotion prospects, vacation, medical and dental benefits and other special gratuities or allowances are thought to affect job satisfaction. Reward systems are a fundamental aspect of organizational culture because of their impact on motivation, satisfaction and continued participation within the organization (Mobley, 1982; Mobley, Hand, Meglino & Griffeth, 1979). Reward systems may have an effect on those outside the culture through their use to attract newcomers into the organization. They also affect the retention of current employees; those who do not see the reward system as equitable may leave. Better performers may feel they are unfairly rewarded compared to those they believe to be 'known' poor performers. As a result, the employee may either quit the organization, or remain in the organization to express dissatisfaction by complaining, requesting special transfers and promoting mistrust within the organization. The potential danger in such situations is that the expressed mistrust may proliferate throughout the organization and poison a once positive environment.

Although some of the reward systems within the CF are pay/promotion based, several other formal and informal rewards may influence member satisfaction. Several reward

systems, however, are grounded in expectancy theory. Expectancy theory involves three components (Lawler & Jenkins, 1981): 1) Performance-outcome expectancy relations hypothesizes that individuals believe or expect that if they behave in a certain way, they will receive certain things. In military terms, if a sailor goes to sea or a soldier goes on a combat mission for an extended period of time under unusually harsh circumstances (e.g. Peacekeeping, War) the organization, for example, would be expected to provide amenities for the family to help cope with the sailors' absence. 2) Outcome attractiveness - individuals will perform better if they value the outcome (e.g., promotion) that the extra work is meant to achieve; and 3) Effort-performance expectancy - an individual's estimate of the likelihood of achieving the desired outcome. Each of these components affect individual motivation and job or organizational satisfaction.

Satisfaction with Pay and Promotion

There is little evidence supporting any relationship between pay satisfaction and turnover (Hellreigal & White, 1979; Newman, 1974; Koch & Steers, 1978). Rather, the Pay satisfaction-turnover relationship is mediated by job/organizational satisfaction and commitment. Rewards such as pay, promotion, and hours of work are highly and directly correlated with organizational satisfaction

($r=.45$), moderately and indirectly correlated with turnover behaviour ($r=-.19$) and not related to job effort (Oliver, 1990). Summers and Hendrix (1991) explored specific structural linkages, through path analysis, between pay equity, pay satisfaction, job satisfaction and organizational commitment and turnover. In part, they found a bidirectional relationship between pay satisfaction and job satisfaction. Of the two, pay satisfaction was a better predictor of job satisfaction ($r=.56$) than job satisfaction was of pay ($r=.15$). There was no relationship between pay satisfaction and any other outcome variable (e.g. turnover). Both studies, Oliver's and Summers and Hendrix's, demonstrated that job satisfaction and organizational satisfaction are two different latent constructs, each with distinct exogenous variables.

Perceived Organizational Support

Despite the large amount of research on organizational commitment, only recently has interest shifted to measuring the support organizations provide to their employees. Eisenberger, Huntington, Hutchinson and Sowa (1986) approached the duality of organizational commitment from a social exchange perspective. They suggested that employees perceptions of the organization's commitment to them (referred to as Perceived Organization Support (POS)) is based on their global view about the degree to which the

organization values their contribution and cares about their well-being. POS, in turn, may affect the employee's commitment to the organization.

Organizations demonstrate their support for employees through the encouragement and facilitation of individual work values. Knoop (1994) asked 187 first-line supervisors in a large manufacturing firm to rank the importance and achievement of 16 work values (e.g., Pride in Organization, Status, Security, Working hours, Recognition,) in relation to job satisfaction. Work values accounted for as much as 63% of the variance in job satisfaction and 35% of the variance in overall satisfaction (organizational). Similarly, focus group discussions with approximately 200 military personnel in the CF identified values and concerns which they believed affected their work values. These values and concerns are illustrated in Tables 1-3 and served as a primary source for the CFCSQ (Oakes, 1992).

Table 1

Global Concerns

Leadership	Discipline and Respect
Military Pride (Ethos)	Communication
Leadership versus Management	Career Management
Postings	Performance Evaluation Reports

Table 2

Specific Concerns

Pay	Incentive Pay
Leave	Accommodation Assistance Allowance
Pension	Clothing Upkeep Allowance
Specialist Pay	Married Service Couples

Table 3

Personnel Support Services

Military Housing	Messes
Medical services	Physical Fitness Training
Canex	Uniforms
Family Resource Centres	Education & Training Benefits

Source: Oakes, L.J. (1992) The Development Of The Canadian Forces Conditions Of Service Questionnaire. Willowdale, ON: CFPARU

Work-Family Issues

Organizations also demonstrate their support for employees by recognizing the possibility of work-family

conflict. Military focus groups raised work-family concerns such as daycare in Family Resource centres or adequacy of military housing (Table 3). Work-family conflicts are a major concern for many organizations because of significant structural and functional changes to the 'traditional family'. Quinn and Staines (1979) were among the first to show that many married couples with children experienced stress due to work-family conflicts. In addition to producing stress, work-family conflict may lead to job dissatisfaction (Greenhaus & Parasuraman, 1987; Bacharach, Bamberger & Conley, 1991; Bedeian et al., 1988).

Using path analysis, Thomas and Ganster (1995) found that supervisor support affected job satisfaction directly as well as indirectly through the amount of control employees perceived themselves to have over their situation and through work-family conflict itself. Supportive policies (e.g., flexible work schedules, time-off) did not predict job satisfaction; however, they did predict the presence of somatic complaints and depression.

Unlike other large organizations, the Canadian Forces is a self-contained unit which meets as many of the needs of its employees as possible. One rationale for operating in this way is that military installations often operate in areas and under conditions in which normal supportive

functions (e.g., medical, dental services) are not available. Military members often bring families with them on postings or deployments, requiring other support services (e.g., Base Exchanges). Employees who believe the organization strongly supports them are more likely to feel an obligation to repay the organization in terms of positive affective commitment and work-related behaviours, which are aspects of satisfaction.

Satisfaction with Work Relations

Satisfaction with Supervision

Oakes' (1991) focus groups identified leadership and managerial concerns as having an impact on conditions of service (See Table 1). These concerns are consistent with past research which suggests a negative relationship between satisfaction with supervision and turnover (Graen & Ginsburgh, 1977; Ilgen & Dugoni, 1978). This negative relationship is not definitive because the leadership variable in most of this research had more to do with aspects of the leader-member exchange rather than with satisfaction with supervision (Mobley, Hand, Meglino and Griffeth, 1979). More recent research supports the view that leadership style has a strong and positive effect on supervisor satisfaction (Putti & Tong, 1992). Putti and Tong found that differences in leadership style significantly

accounted for subordinate satisfaction with supervision among employees of three distinct civil service agencies (e.g., nurses, police and engineers).

Satisfaction with Peers

Peer group relations do not appear to be related to turnover, (Mobley et al., 1979). Individual differences in need for affiliation and task interaction appear to mediate the peer relation-turnover relationship. As well, there are inherent methodological problems in measuring group processes.

Satisfaction with Subordinates

Superiors, or leaders, are also employees of the organization. One system unique to them which could influence their job satisfaction is their satisfaction with the quality of the people they lead. There is little research on this type of satisfaction. Leader-Member exchange (LMX) theory proposes that all superiors form varying social exchange relationships with different subordinates (Graen & Cashman, 1975). Subordinates who the leader believes to be of higher quality receive more benefits, higher status, and greater influence than those subordinates perceived to be of lower quality. In exchange, the leaders obtain hard-working subordinates who are

dedicated to workgroup objectives. Highly regarded subordinates expressed greater satisfaction with their superior and with the superior's effectiveness (Deluga & Perry, 1991). This supports the view that leaders' job satisfaction may be directly influenced by the quality of subordinates under their charge.

Satisfaction with Human Rights Legislation

Reports of harassment (e.g., sexual, personal), and discrimination (e.g., due to race, religion) in the work environment appear to be increasing (Canadian Human Rights Commission Report, 1983). Such instances are in violation of the Canadian Human Rights Act (Canadian Human Rights Commission Report, 1983 No. HR21-14/1983) which states:

"It is the responsibility of the employer to assure to the employee a workplace free of discriminatory practises, including harassment, and to a client or customer service free of harassment".

Consistent with this ruling, the Canadian Forces has implemented policies and guidelines with the purpose of ensuring an harassment free workplace. Despite the existence of these policies and procedures, which have enforceable consequences, as many as 26% of the CF population reported that they experienced some form of harassment (Hansen, 1992). There were no differences in the number of harassing incidents reported by males and

females. However, there was a mitigating problem with the study in that a significant portion of the sample reported that they did not have a clear understanding of the definition of harassment.

Clearly then, satisfaction with the effectiveness of policies designed to limit harassment may predict job satisfaction and/or organizational commitment. Minority managers who experienced more positive treatment in their organization, and who were employed in organizations that were more accepting of minorities, were more satisfied, committed and integrated with the organization (Burke, 1991). Minority managers who held higher status positions were more positive than those in lower status management positions. When organizations such as the CF value diversity, minority workers are motivated to improve their performance and skills; relationships become more harmonious and conducive to effective problem solving and decision making.

Satisfaction with Education & Training

In terms of the current literature, the CF is a culture which promotes a "continuous-learning work environment" (Tracey, Tannenbaum & Kavanagh, 1995; Dubin, 1990; Rosow & Zager, 1988). Dubin (1990) proposed four characteristics which are indicative of such an environment. First, such an

environment is one in which knowledge and skill acquisition are essential responsibilities of everyone's job. Further, job assignments are challenging and meant to promote personal development. Second, knowledge and skill acquisition are supported by social interaction and work relationships. In this way, organizational members gain an understanding of each others tasks and responsibilities and the interrelationships among jobs. This fosters cooperation and cohesion among members so that work relationships also become institutionalized. Third, formal systems that reinforce achievement and provide opportunities for personal development are entrenched (e.g., Military post-graduate training programs) . Extrinsic and intrinsic rewards are also provided to those who effectively use the newly acquired job knowledge (e.g., advanced promotion and/or positions). Finally, there is a shared expectation that all organizational members strive for high levels of performance and try to be the best at what they do (e.g., U.N. Peacekeeping).

Clearly then, effective training is directly related to positive job attitudes (Louis, Posner, & Powell, 1983; Saks, 1995). Consistent with the characteristics of a "continuous-learning work environment", training appears to be related to job satisfaction, organizational commitment, and turnover intentions (Saks, 1995). Given these results,

providing employees with feedback on the efficacy of training programs should predict job satisfaction and turnover intentions.

Satisfaction with Physical Work Conditions

Physical work conditions influence job satisfaction (Ivancevich & Matteson, 1980; Quick & Quick, 1984; Burke, 1990). Lack of privacy, unavailability of equipment, poor air quality, and lack of working space generally lead to a decrease in job satisfaction (Cohen, 1980; Burke, 1990).

The Impact of Organizational Culture on Job Satisfaction

Reward systems are one feature of an organization that contribute to its overall culture (Whyte, 1955). They influence the perception of organizations as having a human-resource oriented, entrepreneurial, or an innovative culture. The working climate of the organization also influences this perception. Organizational climate and, ultimately, culture are represented by the shared perception that people attach to features of the work setting (e.g., the level of authoritarianism or participation in the organization). The climate of the organization may also be thought of as a reward system because it attracts individuals with similar values and beliefs to the

organization.

Individuals may be attracted to the Army, Navy and Airforce based on stereotypes they have about those organizations. For instance, recruits may join the Army because they have a high affinity for camping, hiking, wilderness survival and see Army life as satisfying these interests. Similarly, people may join the Navy because they have an interest in sailing and travel. In fact, recruiting officers use applicant interests such as those to select individuals for employment within the CF. Interests, as well as skills, are matched with the environmental job as part of giving the applicant a realistic preview of the job in the CF.

The "theory of congruence" (Aronoff & Wilson, 1985) proposes that it is necessary to match the characteristics of the person and the situation in order to provide the most productive work environment (i.e., culture). In support of this theory, satisfaction with work was explained by a joint, additive function of organizational climates and personal orientations (Osteroff, 1993). That is, congruent personal work attitudes and organizational philosophy (i.e., culture) led to greater job and organizational satisfaction. In addition the largest explained relationships, independent of climate, were found for personal orientations (i.e.,

value system) between commitment and turnover (Osteroff, 1993). In short, the value an employee attaches to an organization mediates the level of commitment which in turn affects turnover intention. Thus, an organizations' work environment and cultural climate may affect turnover behaviour. Therefore, it is important to examine the antecedents of turnover and satisfaction with respect to an organization's culture. In the current case, culture is directly related to operational environment. Differences in turnover and satisfaction that are related to operational element would support the argument for revising the CFCSQ to take into account different organizational climates and cultural concerns.

Major Conceptual Models of Job Satisfaction & Turnover

Mobley's Expanded Model of Employee Turnover Process

Mobley et al.'s (1979) highly complex model of the employee turnover process attempted to account for all the factors which influence job satisfaction and turnover behaviour (Figure 2). Mobley et al., believed the model offered insight into job satisfaction and did not expect that it could be evaluated in any one study. This model was used to develop the CFCSQ. The following sections describe certain aspects of Mobley et al.'s model, as well as Oakes' (1991) adaptation. Specifically, individual

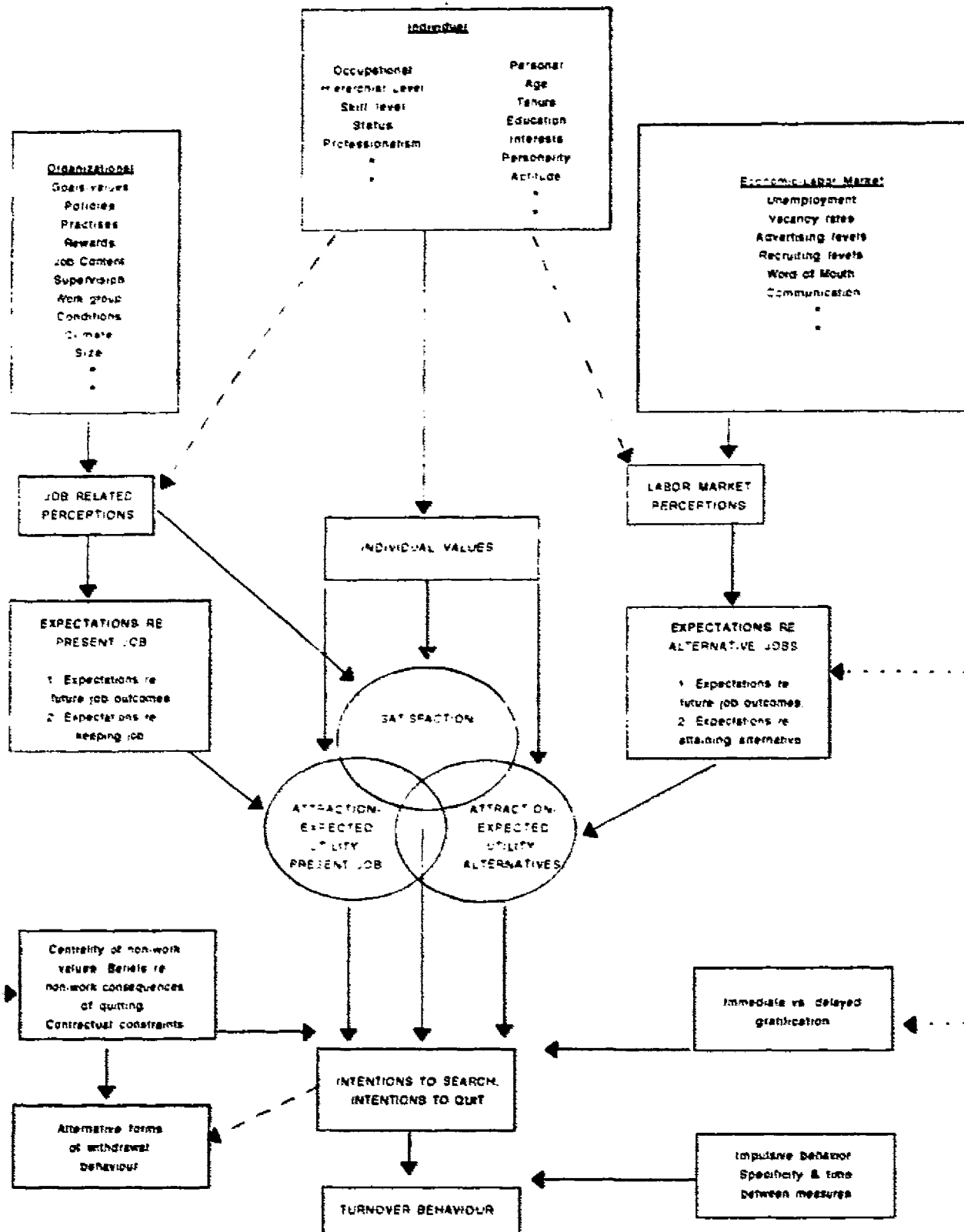


Figure 2. Mobley's Expanded Turnover Process Model.
 Source: Mobley, W.H. (1982).

differences, organizational values and practises, job-related perceptions and expectations about one's employment are discussed in the context of job satisfaction and turnover.

Individual Differences

Satisfaction, whether in life or on the job, is related to individual differences (Figure 2) in values, beliefs and attitudes (Mobley, 1982). For some individuals, a highly repetitive job, irregular work hours, extended absences from family-life, and a cohesive work environment may be attractive. For other individuals, these same factors may be less desirable. Accordingly, trying to satisfy employees through the introduction of uniform policies, practises and procedures which treat the workforce as a homogenous group may be an exercise in futility. Such policies rarely recognize or respond to individual differences in values.

Employee Perceptions

Job satisfaction is also related to employee perceptions (Figure 2). It is a function of what is perceived relative to the employees's values. Employees who believe they are victims of discrimination by their superiors may also believe the organization is unfair to them despite the existence of company policies forbidding discrimination or which provide a procedural mechanism to

grieve the discrimination. This would not be a case of the organization tolerating 'discrimination' but the employees being unaware of the policies or their rights and knowing how to address the issue.

Job and Organizational Values

In Mobley's model, job satisfaction is viewed as a multi-faceted, composite which is governed by the perceived values provided by the job/organization (Figure 2). These values may include high pay, good working conditions, job content or any other perceived reward or incentive. Mobley's model also allows for these incentives to be both extrinsic or intrinsic. As such, an occupation which is perceived as low paying may still attract job applicants because it satisfies other important values (e.g., it may offer travel to foreign countries or highly challenging work).

Employee Expectations

The model also proposes that an employee's expectations (Figure 2) about the job influences their perception of satisfaction or dissatisfaction. For example, members of the Canadian Forces start out in very low ranking positions but expect advancement or promotion. The CF member may endure tenure in a position which is dissatisfying for a fixed period of service with the expectation of transfer to

a new occupation or promotion to a higher rank. If these expectations are not met, the member is likely to become dissatisfied with the organization.

**Structural Models Relating Job Satisfaction
and other Precursors to Voluntary Turnover**

In addition to the Mobley (1979) model presented in Figure 2, other models have influenced research on voluntary employee turnover: Mobley, 1977; Mobley, Griffeth, Hand & Meglino, 1979; Mowday, Porter & Steers, 1982; Price, 1975, 1977; Steers & Mowday, 1981. There are similarities and differences in these models. Lance (1991), integrated these related models into one involving job satisfaction, organizational commitment and other precursors to voluntary turnover. Lance (1991) proceeded to test this new model using structural equation modelling. His final model is presented in Figure 3. His analysis suggested a nonrecursive relationship between job satisfaction and organizational (affective) commitment. Satisfaction with employment predicted commitment ($r=.50$) more so than did the relationship from commitment to satisfaction with employment ($r=.085$). Both job satisfaction and affective commitment partially mediated the effects of job perceptions upon turnover intentions. Some of Lance's hypothesized precursors to voluntary turnover included role stress, leader facilitation and support (leadership), co-worker

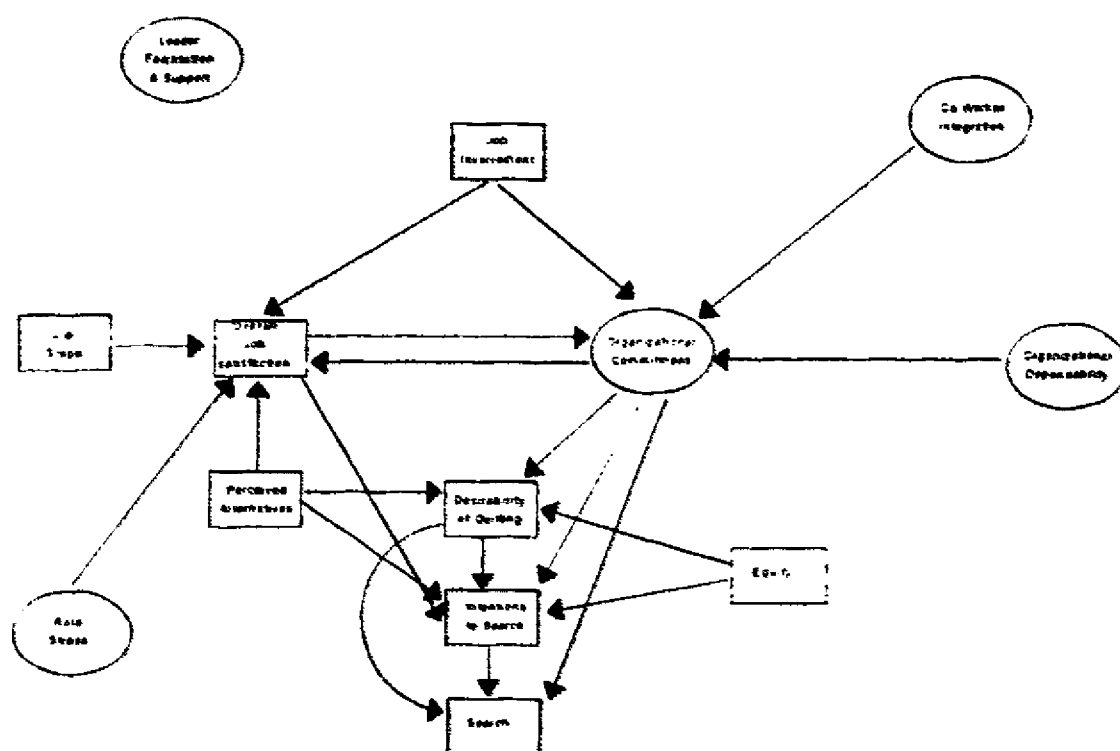


Figure 3. Lance's Structural Model of Precursors to Voluntary Turnover.
Source: Lance, C. (1991) *Evaluation of a Structural Model Relating Job Satisfaction, Organizational Commitment, and Precursors to Voluntary Turnover.* Multivariate Behavioral Research 26, 137-162

integration (peer groups relations), organizational dependability (i.e., the extent to which the organization supports workers), job involvement and perceived availability of alternatives. There was empirical support for some of the hypothesized relationships; however, the findings were limited due to method bias and lack of cross validation. Lance's integrative approach is important from a theoretical perspective; specifically, it can be used as a yardstick with which to compare a causal model based on the CFCSQ data.

Purpose and Hypotheses of Present Study

Purpose

The review and examination of the structural linkages and antecedents of job satisfaction and employee turnover provide the necessary background for analysing the data captured by the CFCSQ. Analysis of the most salient factors identified by the CFCSQ may reveal antecedents of job satisfaction within the Canadian Forces. This information will assure senior policy makers that the questions being asked in the CFCSQ measure what they purport to measure, as well as providing them with a "thermometer" by which to gauge the overall level of satisfaction of the CF. This study examines variables which may affect job and organizational satisfaction and turnover in the CF:

- a. Career Management
- b. Working Conditions (Operational and Static)
- c. Compensation and Benefits
- d. Human Charter of Rights
- e. Education and Training
- f. Present Employment
- g. Support Services
- h. Working Relationships (leadership, peer relations, subordinate relations)

- i. Overall (CF) satisfaction
- j. Effects of CF Career on Family
- k. Career Intentions (Stay/leave)

The present study has three purposes. The first is to compare and test how well Oakes' (1991) model (Figure 1), adapted from Mobley (.979), fits the CFCSQ data in relation to job satisfaction and turnover. The second is to examine the structure and psychometric properties of the CFCSQ through exploratory factor analysis and, third, to examine the rates of job satisfaction between members of the Airforce, Army and Naval environments. Based on the foregoing, it is hypothesized that:

H1. Oakes model will provide a good fit to the data collected through the CFCSQ.

H2. Psychometrically improved CFCSQ scales will provide a better fit to the data.

H3. Consistent with Schein's theory of organizational culture, the uniqueness of the Army, Navy and Airforce environments will lead to differential rates of turnover intentions and perceived differences in job and organizational satisfaction.

Study 1

Introduction

Study 1 used structural equation modeling to determine whether the model represented in Figure 4 fit the data provided by the CFCSQ. Following Oakes' (1991) explanation (Figure 1) for the development of the CFCSQ, the model in Figure 4 is an "X-Y or measurement-structural equation model" (Joreskog and Sorbom, 1984).

The model represented in Figure 4 presents three latent variables: policies and procedures, job and organizational satisfaction and turnover intentions. Policies and procedures has seven indicators (career management, operational work conditions, compensation and benefits, human rights legislation issues, static work conditions, support services and education and training). Job and organizational satisfaction has four indicators (work relations, job satisfaction, overall satisfaction, and effect of CF on family life). Turnover intentions has one indicator (career intentions). The unidirectional arrows from the latent variables to their observed variables indicates direction of effect. Effect is expressed as a standardized beta weight which is analogous to beta weights in regression equations.

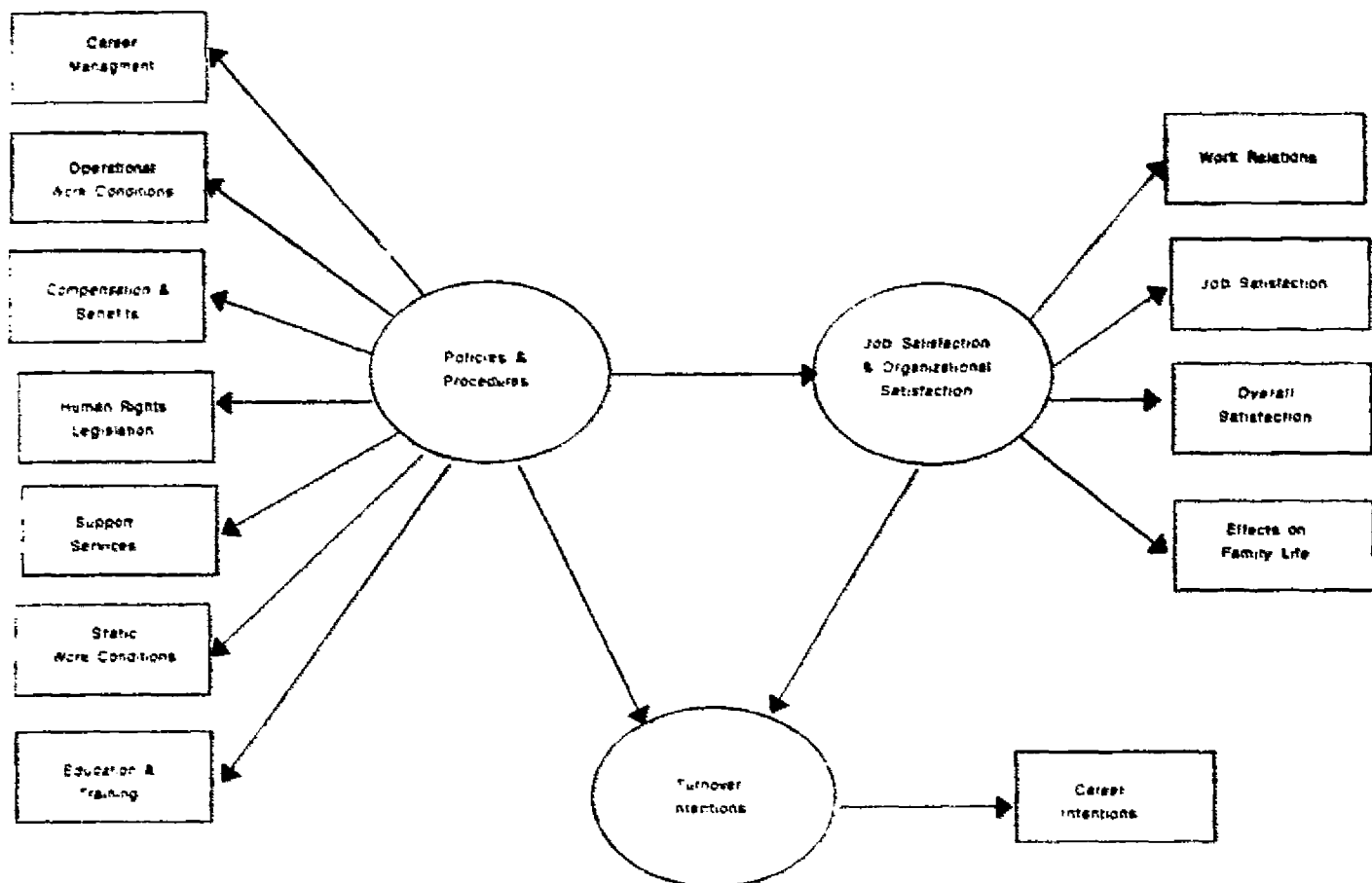


Figure 4: Structural Representation of Oakes' (1991) CFCSQ Development Model.

The model presented in Figure 4 proposes several causal relationships. First, there are direct effects from policies and procedures to job and organizational satisfaction and to turnover intentions. Second, there is a direct effect from job and organizational satisfaction to turnover intention. Third, there is an indirect effect from policies and procedures to turnover intentions that is mediated by job and organizational satisfaction. The coefficient of effect of the latent variable, turnover intentions, on its indicator, career intentions, as well as the error of the indicator is fixed because it is a single indicator.

The original data and variables reported by Oakes (1994) were analyzed through LISREL procedures. Since the purpose of this study was to assess the fit of the model to the obtained data, the variables, as represented by Oakes were used in the first analysis. Because many of the variables had not been examined to determine their psychometric properties, the Oakes (1991) model was not expected to provide the most parsimonious fit.

Method

All data reported in this study were previously collected by the Canadian Forces Personnel Applied Research Unit (CFPARU) as part of a longitudinal examination of the policies and procedures within the Canadian Forces. The data were not previously analyzed except for summary descriptive statistics (Oakes, 1994).

Data Base/Participants

CF members who completed the CFCSQ were selected by the Directorate of Personnel Management Information Systems (PMIS). PMIS generated a random sample (N=4295) from the 77,783 personnel serving in the CF at the time of survey. The sample, and its respondents, was representative of serving CF members in terms of gender and rank - two variables of particular concern (Tables 4 and 5). Completed surveys were returned by 75.3% (N=3275) of the population surveyed.

Table 4
Representativeness of Respondents to the Survey Sample by Gender

Gender	Survey Sample N	Survey Sample (%)	Respondents N	Respondents (%)	CF Population (%)
Male	3715	86.5	2765	85.5	89.3
Female	580	13.5	470	14.5	10.7
Total	4295	100.0	3275	100.0	100.0

Table 5
Representativeness of Respondents to the Survey Sample by Rank

Rank	Survey Sample N	Survey Sample (%)	Respondents N	Respondents (%)	CF Population (%)
Private- Master Cpl	2321	54.0	1744	53.9	54.9
Sgt - CWO	945	22.0	743	22.9	22.6
OCdt - Capt	661	15.4	506	15.7	15.8
Maj - General	368	8.6	242	7.5	8.6
Total	4295	100.0	3275	100.0	100.0

Source: Oakes, L.J. (1994) Personnel Attitudes and Perceptions Toward Conditions of Service in the Canadian Forces: 1993 Survey. Willowdale, ON: CFPARU

Procedure

The CFCSQ data were collected in June 1993. Questionnaires were sent to Base Personnel Selection Officers (BPSOs), together with detailed instructions for its administration and a list of participants. The CFCSQ was administered within controlled classroom environments to 3235 CF personnel. A total of 1,060 surveys were not completed due to operational requirements (i.e., duty) or member unavailability (e.g., leave, posted to another unit, or release from the CF). Completed questionnaires were forwarded in sealed envelopes to CFPARU. Once received, all CFCSQ machine readable data were encoded and stored on the main computer for analysis.

Measures

The CFCSQ (see Appendix C; Oakes, 1991) was used to collect the data for this study and was based on Mobley's Expanded Turnover Process Model (1979). It provides information about policies and procedures related to conditions of service based on servicemembers' perceptions of the quality of working life within the Canadian Forces. The scales used in the CFCSQ are described in detail elsewhere (Oakes, 1991, 1994). However, none of these 'scales' were factor analyzed to examine their validity as measures of the constructs they were intended to measure.

The following section describes the different scales included in the CFCSQ and their reliabilities as reported by Oakes (1994). Unless otherwise noted, all items were measured with five-point likert-type scales ranging from A-"Very Satisfied" to E-"Very Dissatisfied".

The CFCSQ contains five sections which are :

Section 1 - Overall Satisfaction;

Section 2 - Satisfaction with Specific CF Policies;

Section 3 - Satisfaction with Employment;

Section 4 - Career Intentions; and,

Section 5 - Biographical Information.

Section 1 - Overall Satisfaction - measures levels of satisfaction with current employment, trade/occupation, career and the CF organization as a whole. The intention of the questions in this section was to provide a measure of the general level of satisfaction with various aspects of military life. This section contains items developed through focus group discussions with 200 subject matter experts and senior executive military personnel. These discussions identified important variables affecting military service. The questions in this section assess the CF member's overall satisfaction by examining job related perceptions and individual values.

This scale included questions such as "Considering your CF career as a whole, how satisfied are you with the challenge it provides?" The 13 items in this scale had a Cronbach's α of .85 (Oakes, 1994). This scale had a low correlation ($r=.11$) with career/turnover intentions (Oakes, 1994).

Section 2 - Satisfaction with Specific CF Policies - measures the influence of relevant policies and procedures on organizational satisfaction. These items, which are represented by six separate indices, measure satisfaction with compensation and benefits (e.g., How satisfied are you with incentive pay, and annual salary?), career management (e.g., How satisfied are you with the promotion system in regard to fairness and effectiveness?), support services (e.g., How satisfied are you with medical, dental benefit services and recreational facilities?), education and training (e.g., How satisfied are you with MOC training?), charter of rights issues (e.g., How satisfied are you with the CF policy on personal discrimination?) and effects of military career on family life (e.g., In general how much has your spousal/partner relationship been affected by your military career?). This section contains 79 questions which were subdivided into the following groups:

Compensation & Benefits Scale - contains 21 items that

address satisfaction with salary, pay incentives and other benefits, such as gratuities. It had a reported of internal consistency of $\alpha=.87$. This scale correlated significantly with organizational satisfaction ($r=.51$, $p<.01$; Oakes, 1994).

Career Management Scale - contains 10 items with a reported Cronbach's α of .86. This scale also had a high correlation with organizational satisfaction ($r=.58$, $p<.01$; Oakes, 1994).

Support Services Scale - contains 23 questions that deal with the unique services that the CF provides its members (e.g., dental, medical, financial and recreational services, adequacy of uniforms). Such services are typically provided because they help ensure the operational efficacy of CF members as well as contribute to such issues as morale and cohesion. The scale reported a Cronbach's $\alpha=.88$ (Oakes, 1994).

Education and Training Scale - contains 8 items which discuss availability, adequacy and usefulness of training received within a military context. The scale had a reported internal consistency of $\alpha=.74$ (Oakes, 1994).

Human Rights Scale - contains 9 items which discuss level of satisfaction servicemembers have with CF policies and procedures regarding Human Rights (e.g., discrimination, abuse of authority, harassment). The scale had a reported internal consistency of $\alpha=.79$ (Oakes, 1994).

Family-Life Scale - has 6 items which measure the effects of a military career on family life, social life, financial stability and living in a desired place of residence. The scale had good internal consistency (Cronbach $\alpha=.79$, Oakes, 1994).

Career Intentions Scale - assessed members' intentions to stay in or to leave the CF and their willingness to accept special retirement buy-out packages (Force Reduction Program). The four items in this scale had good internal consistency (Cronbach $\alpha=0.83$, Oakes, 1994).

Section 3 - Satisfaction with Employment - measures satisfaction with working relationships (e.g., superiors, peers, subordinates), working conditions and hours of work. The questions in this section focus on "job-specific variables" or antecedents to job satisfaction (Mobley, 1979). This section has 51 items which are grouped into

four different measures:

Job Satisfaction Scale - has 10 items which measure individual satisfaction with specific aspects of present employment (i.e., variety, supervision received, responsibility) with good internal consistency (Cronbach's $\alpha = .79$ Oakes, 1994).

Working Relationships Scale - contains 24 questions dealing with leadership, relationships with coworkers, and the effect of subordinates' attitudes and technical ability on leader satisfaction (Cronbach $\alpha = .93$, Oakes, 1994). This scale correlated with both job satisfaction ($r = .51$) and organizational satisfaction ($r = .44$). Low scores indicate strong satisfaction with either leadership, peer-relations or subordinate relations.

Working Conditions-Operational Scale - addresses concerns such as too much work, not enough compensation received for overtime, old poorly maintained buildings, and cramped spaces. The 7 items in this scale had excellent internal consistency (Cronbach's $\alpha = .92$, Oakes, 1994).

Working Conditions-Static Scale - asks the same

questions as working conditions-operational but addresses working conditions for those members in non-operational environments (i.e., support personnel)¹. The 8 items in this scale had excellent internal reliability (Cronbach's $\alpha=.87$, Oakes, 1994).

Section 4 - Career Intentions - measures intention to stay or leave the CF and their willingness to accept special retirement buy-out packages (Force Reduction Program). The six items in this scale had good internal consistency (Cronbach's $\alpha=0.83$; Oakes, 1994).

Section 5 - Personal Information - contains 10 questions related to individual (e.g., age, gender), organizational (e.g., rank, environment), and extra-organizational (e.g., dependent children) variables that may influence satisfaction.

Data Analysis

The zero order correlations (Table 6; Oakes, 1994) were used as the LISREL input data. Maximum likelihood estimates as well as goodness-of-fit indices were obtained for the

¹Working conditions in static environment are those conditions in which military members are not working in a unit that is participating in active sea, land or air deployments. This is opposed to an "operational environment" or unit within an operational environment whose members are working in situations such as U.N. missions.

model shown in Figure 4. Indices that estimate goodness-of-fit of the baseline model only were calculated as recommended by Sobel and Bohrnstedt (1985). Other indices of fit used were the adjusted GFI (AGFI), the ratio of χ^2 to its degrees of freedom and an examination of the root mean square residuals (RMSR). Acceptable values for the GFI and AGFI are usually above .90. Values less than this usually indicate the model can be substantially improved (Marsh, Balla, & McDonald, 1988). For the χ^2/df ratio, values between 2 and 5 indicate a reasonable fit to the data (Kelloway, 1995) whereas values less than one indicate "overfitting" and capitalization on chance (Loehlin, 1987).

Loadings of the observed variables "career management", "work relations" and "career intentions" were set to a predefined value. This was required by the LISREL program to establish a metric to compute the loadings of remaining observed variables. As such, significance levels are not reported for these variables by LISREL.

The models, where possible, were corrected and simplified. First, the models were corrected on the basis of their modification indices which would allow a comparison of the original model and other nested models. Modification was only carried out if it was consistent with the theoretical background of the constructs being investigated.

Finally, the models were simplified by eliminating nonsignificant relationships that did not also reduce the overall goodness of fit. It must be stressed that the goodness-of-fit index (GFI) as well as other calculated indices, which are obtained through LISREL, may be faulty due to their sensitivity to large sample sizes. Relevant to the present research, the original sample (N=3272) was randomly subdivided into two separate data sets. Hence, the model was confirmed using one set of data and then variations of that same model were explored using the second data set. Notwithstanding, the resultant sample size was still large (N=1500) and could artificially inflate goodness-of-fit indices and chi-square estimates.

Table 6

Means, Standard Deviations and Zero-Order Correlations

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. CRMGT	-											
2. WCONOP	.30	-										
3. COMPBEN	.51	.14	-									
4. HRGTS	.45	.22	.37	-								
5. EDTRG	.44	.29	.34	.36	-							
6. JOBSAT	.42	.31	.25	.33	.35	-						
7. SVCSPT	.42	.32	.39	.43	.44	.30	-					
8. WCONST	.32	.30	.23	.29	.32	.29	.39	-				
9. WRKREL	.41	.25	.23	.31	.30	.51	.28	.25	-			
10. OVRSAT	.58	.30	.38	.41	.41	.61	.42	.37	.44	-		
11. FAMLIF	.13	.10	.12	.10	.12	.09	.13	.10	.07	.14	-	
12. CARINT	.14	.10	.11	.12	.12	.18	.13	.10	.11	.10	.10	-
M	2.57	2.82	2.90	3.10	3.15	3.34	3.37	3.41	3.48	3.75	2.28	3.64
SD	.83	1.10	.78	.72	.76	.85	.54	.76	.73	.58	1.03	1.26

Source: Oakes, L.J. (1994) Personnel Attitudes and Perceptions Toward Conditions of Service in The Canadian Forces. Willowdale, ON: CFPARU

Note 1. CRMGT = Career Management. WCONOP = Operational working conditions. COMPBEN = Compensation and Benefits. HRGTS = Human Rights legislation. EDTRG = Education and Training. JOBSAT = Satisfaction with present working conditions. SVCSPT = Support services. WCONST = Static working conditions. WRKREL = Working relations. OVRSAT = Overall satisfaction. FAMLIF = Effect of CF on Family Life. CARINT = Career Intentions.

Note 2. All correlations were reported to be significant to $p < .01$.

Results

The corrected and simplified model is presented in Figure 5. It represents a moderately good fit to the data collected with the CFCSQ. The fit indices ($\chi^2_{(62)}=375.09$; GFI = .96; AGFI = .94; RMSR = .038) met or exceeded acceptable fit values. The small difference between GFI and AGFI values also suggested the fit was parsimonious.²

However, the χ^2 to-degrees-of-freedom ratio ($\chi^2/df=7.2$) indicated a poor fit. Since the χ^2 is sensitive to sample size, the value of N in the model was reduced from 1500 to 300 and re-evaluated. This produced an acceptable χ^2/df ratio = 1.4 (Loehlin, 1987) without affecting the RMSR, GFI and AGFI indices. Modification indices for the Oakes (1991) model as represented in Figure 4 indicated no additional paths could be freed to improve the fit of the model to the data.

Figure 5 shows that the LISREL analyses did not support Oakes' (1991) proposed direct causal pathway from policies and procedures to turnover intentions. Rather, there was a significant indirect effect through job and organizational

²Kelloway (1995) states that the degree to which the GFI and AGFI values are identical is an indication of the most parsimonious solution. This is due to the nature of the GFI which is based on the ratio of the sum of the squared discrepancies to the observed variances and the AGFI, which adjusts the GFI for degrees of freedom.

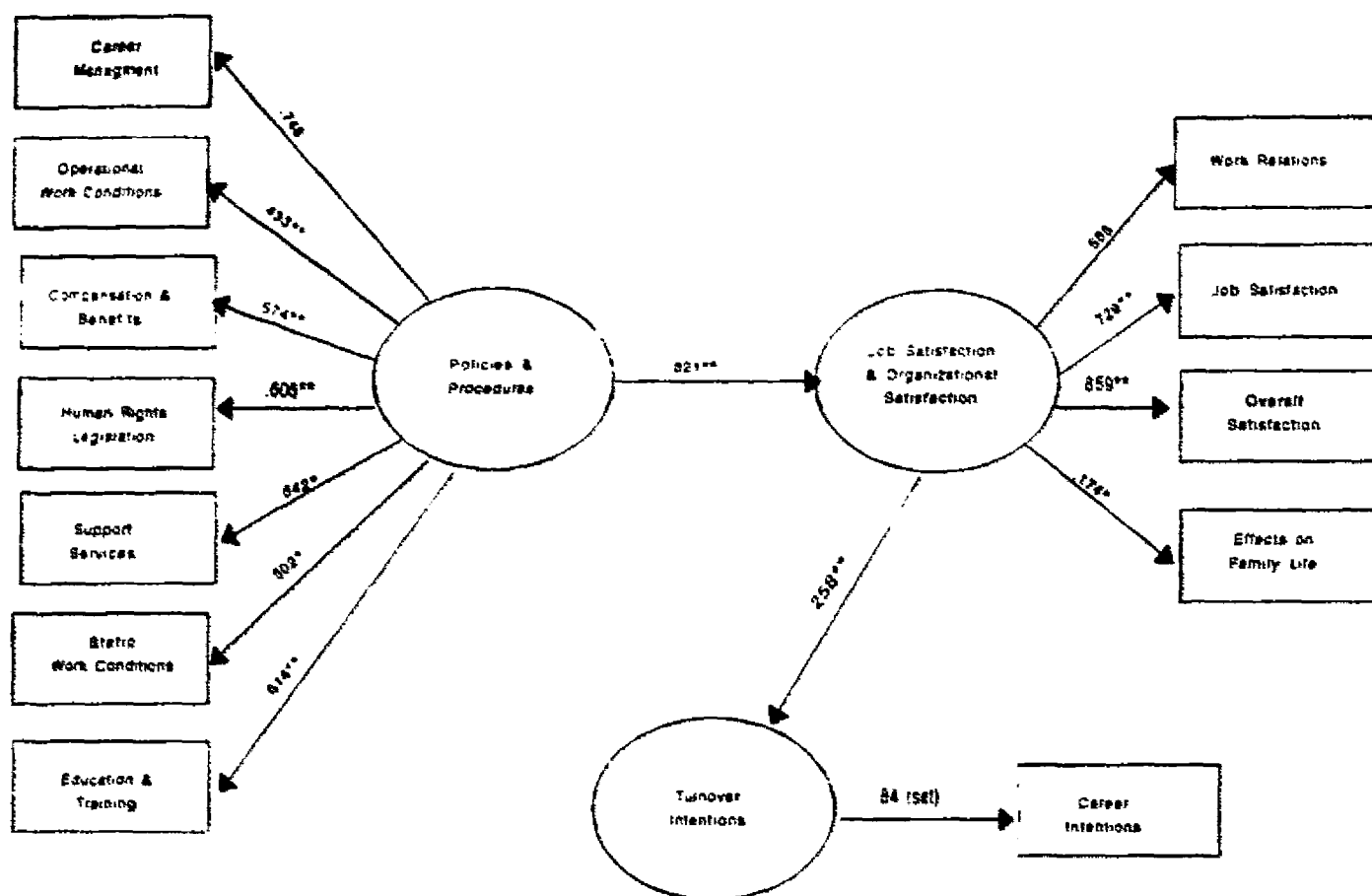


Figure 5: Standardized solution of CFCSQ unanalysed scales.

satisfaction from policies and procedures and turnover (.309). Policies and procedures was a very strong predictor of job and organizational satisfaction ($B=0.821$, $p < .01$) while job & organizational satisfaction was a moderately weak, but significant, predictor of turnover intentions ($B=0.258$, $p < .01$).

Discussion - Fit of Oakes' (1991) Model

Study 1 partially confirmed that Oakes' (1991) adapted version of Mobley's Expanded Turnover Process fits the CFCSQ data. The organizational variables defined by Mobley (e.g., policies and procedures) predicted satisfaction directly, and through it, intent to stay or leave the CF. However, policies and procedures did not directly influence turnover, which was originally hypothesized in Oakes' (1991) model. Consistent with the original model there was a significant indirect effect from policies and procedures to turnover intention.

Study 2

Introduction

With the exception of measuring internal consistency, the measures contained within the CFCSQ were not subjected to psychometric analysis. The failure to assess the

construct validity of the measures leaves open to question the degree of error variance contained in the measures. This is one possible explanation why the Oakes model did not provide a more parsimonious fit of the data. Factor analysis is an accepted procedure for establishing construct validity. Additionally, it minimizes the number of variables while maximizing the amount of reliable variance (Gorsuch, 1993). Study 2 used exploratory factor analysis to determine the dimensional structure of each measure and to revise questionnaire items that were producing little more than error variance. The use of the improved measures was expected to produce a better fit of Oakes' model to the CFCSQ data in subsequent LISREL analyses.

Data Analysis

Exploratory factor analyses were carried out on all items with Likert-type response scales. Principal Axis Factor (PAF) method, in combination with orthogonal rotation, was used to explore the factor structure of each scale. The correlation matrix of items, the Kaiser-Myer-Olkin measure of sampling adequacy for each item, initial communalities and Cronbach's alpha were examined to identify problem items. The problem items were then verified with the final factor output to determine the amount of variance they predicted.

Each scale contained in the CFCSQ was factor analyzed separately, since each addressed a separate construct (Oakes, 1994). Missing data were replaced through mean substitution. The number of factors for each scale was determined through application of the Kaiser rule (Loehlin, 1987), examination of the scree plot, and review of the associated eigen values for each factor. Factors with eigen values below 1.0 (Nunnally, 1978) and not explaining a minimum of 10% of the variance were dropped from subsequent analyses except where doing so violated the theoretical framework. In addition, items which did not have a factor loading in excess of .50 were dropped from the scale.

Results

PAF Analyses

The PAF analyses produced seven scales with one factor each and four scales with two factors. Forty-four CFCSQ items did not load on any factor and were dropped from subsequent analyses. All factors were internally consistent with alpha values ranging from .72 to .93 and accounted for 24% to 57.7% of the total variance for each scale. Tables 7 and 8 present the scales, their factor solutions and their psychometric properties respectively.

Table 7

Factor Loadings (LD), Communalities (COM) and Percentage of Variance for each section of the CFCSQ items.

Scale: Overall Satisfaction	Variance	LD	COM
	37.1%		
Overall satisfaction with CF career		.69	.53
Overall satisfaction with Challenge of CF		.69	.57
Overall satisfaction with responsibility		.67	.46
Satisfaction with Sense of Adventure		.61	.70
Overall satisfaction with CF		.60	.39
Overall satisfaction with variety of career		.60	.43
Overall satisfaction with MOC		.58	.36
Satisfaction with Skills & Training acquired		.57	.32
Scale: Compensation & Benefits			
	31.4%		
Satisfaction with Pay Incentives		-.72	.52
Satisfaction with Annual Salary		-.71	.51
Satisfaction with Separation Allowance		.63	.40
Satisfaction with Foreign Duty Allowance		.63	.40
Satisfaction with Posting Allowance		.63	.40
Satisfaction with House Hunting Trip		.56	.31
Satisfaction with TD pay		.55	.31
Satisfaction with Environmental Allowance		.51	.26
Scale: Career Management	54.3%		
Factor 1 - Promotion System	40.8%		
Satisfaction with Promotion System Effectiveness		.79	.62
Satisfaction with Promotion System Fairness		.78	.62
Satisfaction with Effectiveness of Merit Boards		.76	.57
Satisfaction with Fairness of Merit Board Process		.76	.57
Satisfaction with Importance placed on PER		.64	.41
Satisfaction with Recognition of Individual Merit		.61	.38
Satisfaction with Promotion Prospects		.59	.35
Factor 2 - Career Counsel	13.5%		
Satisfaction with Adequacy of Career Counsel		.94	.88
Satisfaction with Availability of Career Counsel		.90	.81

Table 7 Continued:

Factor Loadings (LD), Communalities (COM) and Percentage of Variance for each section of the CFCSQ items.

Scale: Service Support	Variance	LD	COM
	24%		
<u>Factor 1 - Administrative Services</u>	24%		
Satisfaction with Pay Office hours of Operation		.81	.59
Satisfaction with Financial service availability		.79	.65
Satisfaction with Admin Office hours of Operation		.78	.61
Satisfaction with Admin service availability		.76	.63
Satisfaction with quality of Financial services		.68	.47
Satisfaction with quality of Admin services		.67	.45
 Scale: Education and Training	 47.5%		
<u>Factor 1 - MOC Specific Training</u>	30.2%		
Satisfaction with MOC training adequacy		.82	.68
Satisfaction with MOC training length		.71	.50
Satisfaction with MOC training currency		.69	.50
Satisfaction with MOC training usefulness		.68	.49
 <u>Factor 2 - Second Language Training</u>	 17.3%		
Satisfaction with SLT opportunity		.86	.74
satisfaction with SLT availability		.86	.73
 Scale: Human Rights Policies	 31.1%		
Satisfaction with policies & procedures on Personal Harassment		.77	.59
Satisfaction with policies & procedures on Personal Discrimination		.82	.68
Satisfaction with policies & procedures on Sexual Harassment		.68	.46
Satisfaction with Access to Personal Information		.61	.38
Satisfaction with Privacy Act		.60	.36
 Scale: Effects of CF on Family Life	 37.6%		
Degree to which Military affects family life in general		.67	.45
Degree to which Military affects partner relationship		.67	.44
Degree to which Military affects social life		.62	.39
Degree to which Military affects financial ability		.62	.38
Degree to which Military affects academic upgrading		.55	.31
Degree to which Military affects living where you want		.53	.28

Table 7 Continued:

Factor Loadings (LD), Communalities (COM) and Percentage of Variance for each section of the CFCSQ items.

	Variance	LD	COM
Scale: Job Satisfaction	49.6%		
Satisfaction with responsibility in present employment		.78	.60
Satisfaction with challenge of present employment		.77	.60
Satisfaction with excitement of present employment		.77	.59
Satisfaction with your authority in present employment		.76	.59
Satisfaction with decision making opportunities		.72	.52
Satisfaction with sense of accomplishment		.72	.52
Satisfaction with variety in present employment		.72	.52
Satisfaction with defined objectives in present employment		.68	.46
Satisfaction with supervision received in present employment		.58	.33
Satisfaction with the level of stress within present employment		.50	.25
Scale: Work Relations	57.7%		
Factor 1 - Leadership	32.6%		
Satisfaction with how leader provides leadership		.86	.75
Satisfaction that leader provides direction		.84	.70
Satisfaction that leader is supportive		.84	.70
Satisfaction that leader maintains high performance levels		.82	.66
Satisfaction with how leader encourages communication		.81	.67
Satisfaction that leader recognizes your performance		.78	.61
Satisfaction with leader provides performance feedback		.75	.57
Satisfaction with how leader encourages teamwork		.73	.54
Satisfaction with how leader accepts advice		.68	.46
Satisfaction with how leader encourages commitment to CF		.68	.47
Satisfaction with leaders technical abilities		.62	.39
Factor 2 - Leader Satisfaction with Subordinates	17.5%		
Satisfaction with subordinates acceptance of direction		.76	.59
Satisfaction with subordinates standard of performance		.75	.56
Satisfaction with subordinates support for you		.75	.56
Satisfaction with subordinates respect for your rank		.75	.57
Satisfaction with subordinates respect for your position		.75	.56
Satisfaction with subordinates communication with you		.69	.49
Satisfaction with subordinates commitment to the CF		.69	.49
Satisfaction with subordinates loyalty to the CF		.68	.46
Satisfaction with subordinates training		.62	.39
Satisfaction with subordinates technical abilities		.61	.38

Table 7 Continued:

Factor Loadings (LD), Communalities (COM) and Percentage of Variance for each section of the CFCSQ items.

	Variance	LD	COM
Scale: Work Conditions	41.3%		
Factor 1 - Static Work Conditions	26.3%		
Satisfaction that its a healthy environment		.69	.48
Satisfaction with working space		.68	.54
Satisfaction with cleanliness		.68	.46
Satisfaction with lighting		.66	.47
Satisfaction with safety in the workplace		.62	.39
Satisfaction with privacy		.62	.37
Satisfaction with washrooms		.58	.34
Factor 2 - Operational Work Conditions	15.0%		
Satisfaction that its a healthy environment		.72	.53
Satisfaction with working space		.72	.52
Satisfaction with adequacy of training facilities		.66	.46
Satisfaction with privacy		.65	.42
Satisfaction with workplace safety		.64	.42
Satisfaction with washrooms		.60	.35
Satisfaction with availability of equipment		-.59	.54
Satisfaction with quality of equipment		-.58	.52
Scale: Career Intentions	47.5%		
Intend to leave CF within two years/end of contract		.83	.69
Intend to get a civilian job within two years		.82	.67
Would accept FRP if offered		.76	.58

Table 8

Measures of Sampling Adequacy, Means, Standard Deviations,
and Reliability Estimates

<u>Scale</u>	<u>KMO</u>	<u>N</u>	<u>STD</u>	<u>α</u>
Overall Satisfaction	.865	3.80	.585	.83
Compensation & Benefits	.910	3.04	.437	.86
Career Management	.775	2.85	.749	.86
Support Services	.829	3.52	.556	.87
Education & Training	.719	3.40	.672	.72
Human Rights Legislation	.770	3.50	.865	.74
Effects of CF on Family Life	.798	3.60	.966	.79
Job Satisfaction	.914	3.11	.665	.91
Work Relations	.916	3.36	.826	.93
Work Conditions	.856	3.32	.678	.89
Career Intentions	.824	3.21	.806	.79

Table 9 presents the correlation matrix, means and standard deviations of the new scales that served as the input for subsequent linear structural modelling. Although, "Static Working Conditions" and "Operational Working Conditions" were two separate factors, they were highly correlated. To avoid problems of multicollinearity, these scales were combined into one.

Table 9

Revised Means, Standard Deviations and Zero-Order Correlations of Factor Analysed Scales

Variable	1	2	3	4	5	6	7	8	9	10	11
1. OVRSAT	-										
2. COMPBEN	.25**	-									
3. CRMGT	.47**	.40**	-								
4. SVCSPT	.23**	.26**	.26**	-							
5. EDTRG	.39**	.25**	.34**	-.27**	-						
6. HRGTS	.32**	.31**	.37**	-.27**	.35**	-					
7. JOBSAT	.59**	.24**	.40**	.18**	.37**	.32**	-				
8. WRKREL	.51**	.26**	.43**	.23**	.33**	.30**	.56**	-			
9. WCOND	.28**	.28**	.35**	.34**	.45**	.38**	.38**	.22**	-		
10. CARINT	.13**	.11**	.16**	.04	.11*	.05	.07	-.03	.06	-	
11. FAMLIF	-.12**	-.17**	-.12**	-.14**	-.18**	-.09**	-.13**	-.08*	-.16**	-.11	-
M	3.79	3.44	3.21	3.49	3.41	3.51	3.40	3.65	3.33	3.56	3.61
SD	.61	.57	.80	.78	.66	.73	.80	.66	.67	1.08	.95

Note 1. OVRSAT = Overall satisfaction. COMPBEN = Compensation and Benefits.
 CRMGT = Career Management. SVCSPT = Support services.
 EDTRG = Education and Training. HRGTS = Human Rights legislation.
 JOBSAT = Satisfaction with present working conditions. WRKREL = Work Relations.
 WCOND = Working conditions. CARINT = Career Intentions.
 FAMLIF = Effect of CF on Family Life.

*p<.05 **p<.01

The data presented in Table 9 served as the input data for a new LISREL analysis. Figure 6 presents the results of of this re-analysis. The model, based on the improved measures fit the data moderately well. The fit indices ($\chi^2_{(42)}=410.93$; GFI = .95; AGFI = .93; RMSR = .047) met or exceeded acceptable values. The small difference between GFI and AGFI values also suggested the fit was parsimonious. However, the χ^2 to-degrees-of-freedom ratio ($\chi^2/df=9.0$) again indicated a poor fit; decreasing the value of N from 1500 to 300 led to results similiar to those presented in Study 1. The χ^2/df ratio = 1.8 was an acceptable fit without affecting the RMSR, GFI and AGFI indices(Loehlin,1987). Modification indices for the base model did not suggest any ways to improve the fit of the model.

The LISREL analyses confirmed an indirect effect from policies and procedures to turnover (.229). Also, as in illustrated in Figure 6, policies and procedures strongly predicted job & organizational satisfaction ($B=0.770$, $p < .01$), while job & organizational satisfaction predicted "Turnover Intentions" ($B=0.175$, $p < .01$) to a lesser degree.

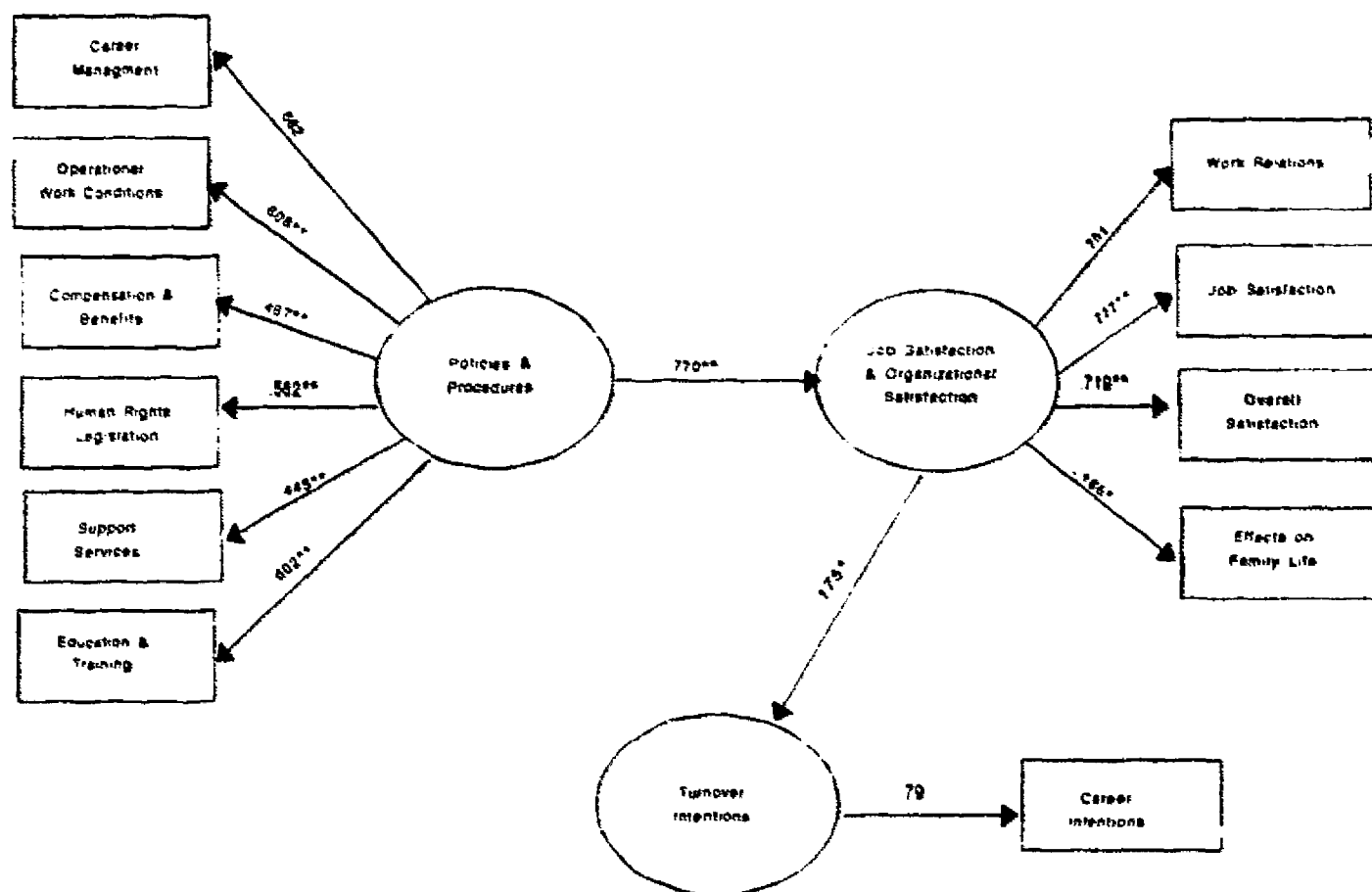


Figure 6: Standardized solution of Revised CFCSQ Scales.

Discussion - Psychometric properties of the CFCSQ

Several conclusions can be drawn from Study 2. The new scales which meet acceptable psychometric standards are valid measures satisfaction and turnover. The revised job satisfaction scale had a better internal consistency (Cronbach's α of .91 vs .79). All other scales were relatively similiar with the exception that they more parsimonious. The revised scales had forty-four less items and achieved the same measures of internal consistency. One exception was the Career Intentions scale. One item (i.e., "I intend to stay in the CF as long as I can.") was dropped because of large amounts of missing data. The revised scale had an alpha = .79 compared to .83.

The new scales had strong measures of sampling adequacy (Kasier-Meyer-Olkin (KMO) values) and communalities, indicating that the scales consisted of items that were related. Values ranged from .72, which is described as 'good', to .92 which is described as 'marvelous' (Norusis, 1990). In addition, the revised scales (Table 9) explained more variance than the originals. In part, the improvement resulted from the deletion of items which had a large amount of missing data. Many of the items with missing data used both "Don't Know" and "Doesn't Apply" in their responses, in conjunction with a "neutral" response, which appears to have led to inconsistency in reporting. It is highly unlikely

that military personnel would be unaware of the issues addressed in the CFCSQ (e.g., "How satisfied are you with Medical, Dental or Administrative services?"). "Don't Know" or "Doesn't Apply" responses may have been due to indifference on the part of the military personnel rather than a lack of knowledge.

In summary, using the original scales embedded in the CFCSQ to test the Mobley et al. (1979) model may not have been a fair test since these scales were not parsimonious and did not have the best internal consistency. Factor analyses produced psychometrically sound scales. When these revised scales were used to test the model, an acceptable fit occurred. The revised version of the CFCSQ has 44 less items which also has the benefit of providing reduced administration time.

Study 3

Introduction

Oakes' (1994) examined whether CF members who wore different Distinctive Environmental Uniforms (DEU) had different levels of job and organizational satisfaction and subsequently left the CF at different rates. Oakes did not find any differences on CFCSQ measures across DEUs through multivariate analysis of variance. Study 3 sought to confirm Oakes' (1994) results using the new psychometrically

improved measures through LISREL analyses.

Method

The data were categorized according to service members' DEU. 1,303 service members reported wearing an Army (light brown) uniform, 535 service members reported wearing a Naval (white/black) uniform and 1,386 reported wearing an Airforce (light blue) uniform for a total N of 3,224. Correlation matrices were computed for the study variables for each DEU. Tables 10-12 report the means, standard deviations and correlations used as the input data for the multi-sample LISREL analyses. Multi-sample analyses permit more parameters to be held constant across groups to test whether the correlation matrices or variance-covariance matrices are equal, whether correlated common factors exist, or whether the factor loadings, error variances and factor intercorrelations are equal. A copy of the command file for the analysis is attached as Appendix A.

Table 10

Army DEU Means, Standard Deviations and Zero-Order Correlations

Variable	1	2	3	4	5	6	7	8
1. OVRSAT	-							
2. COMBEN	.24**	-						
3. CRMGT	.50**	.35**	-					
4. SVCSPT	.28**	.28**	.24**	-				
5. EDTRG	.45**	.31**	.44**	.35**	-			
6. HRGTS	.35**	.31**	.34**	.30**	.38**	-		
7. FAMLIF	-.10**	-.18**	-.09**	-.12**	-.09**	-.10**	-	
8. JOBSAT	.63**	.20**	.42**	.25**	.40**	.40**	-.10**	-
9. LDRSHP	.37**	.14**	.38**	.14**	.30**	.28**	.002	.48**
10. SUBREL	.37**	.17**	.26**	.24**	.29**	.27**	-.04	.34**
11. WCONOP	.33**	.34**	.35**	.35**	.42**	.38**	-.18**	.29**
12. CARINT	.13**	.08**	.15**	.09*	.14**	.14**	-.05	.43**
M	3.7	3.5	2.8	3.4	3.3	3.5	3.6	3.3
SD	.68	.61	.79	.88	.70	.76	.98	.84

Note 1. OVRSAT = Overall satisfaction. JOBSAT = Satisfaction with present working conditions. LDRSHP = Leadership. SUBREL = Subordinate relation with leader. FAMLIF = Effect of CF on Family Life. CARINT = Career Intentions. COMBEN = Compensation and Benefits. CRMGT = Career Management. SVCSPT = Support services. EDTRG = Education and Training. HRGTS = Human Rights legislation. WCONOP = Operational working conditions.

Note 2. **= $p < .01$; *= $p < .05$

Table 10 continued:

Army DEU Means, Standard Deviations and Zero-Order Correlations

Variable	9	10	11	12
1. OVRSAT				
2. COMPBEN				
3. CRMGT				
4. SVCSPT				
5. EDTRG				
6. HRGTS				
7. FAMLIF				
8. JOBSAT				
9. LDRSHP	-			
10. SUBREL	.29**	-		
11. WCONOP	.25**	.23**	-	
12. CARINT	.06**	.07**	.14**	-
M	3.5	3.7	3.0	3.4
SD	.88	.70	.81	1.09

Note 1. OVRSAT = Overall satisfaction. JOBSAT = Satisfaction with present working conditions. LDRSHP = Leadership. SUBREL = Subordinate relation with leader. FAMLIF = Effect of CF on Family Life. CARINT = Career Intentions. COMPBEN = Compensation and Benefits. CRMGT = Career Management. SVCSPT = Support services. EDTRG = Education and Training. HRGTS = Human Rights legislation. WCONOP = Operational working conditions.

Note 2. **= $p < .01$; *= $p < .05$

Table 11

Navy DEU Means, Standard Deviations and Zero-Order Correlations

Variable	1	2	3	4	5	6	7	8
1. OVRSAT	-							
2. COMBEN	.33**	-						
3. CRMGT	.50**	.45**	-					
4. SVCSPT	.25**	.34**	.24**	-				
5. EDTRG	.44**	.37**	.42**	.36**	-			
6. HRGTS	.35**	.30**	.29**	.28**	.37**	-		
7. FAMLIF	-.08	-.10*	-.09	-.09	-.14*	-.07**	-	
8. JOBSAT	.63**	.24**	.43**	.23**	.38**	.30**	-.10	-
9. LDRSHP	.37**	.19**	.35**	.13**	.18**	.25**	-.14**	.52**
10. SUBREL	.38**	.23**	.29**	.20**	.33**	.31**	-.10	.31**
11. WCONOP	.43**	.34**	.39**	.27**	.57**	.40**	-.05	.44**
12. CARINT	.10	.006	.07	.06	.02	.06	-.05	.11**
M	3.8	3.4	2.9	3.5	3.3	3.5	3.6	3.5
SD	.61	.59	.73	.75	.67	.76	.90	.79

Note 1. OVRSAT = Overall satisfaction. JOBSAT = Satisfaction with present working conditions. LDRSHP = Leadership. SUBREL = Subordinate relation with leader. FAMLIF = Effect of CF on Family Life. CARINT = Career Intentions. COMBEN = Compensation and Benefits. CRMGT = Career Management. SVCSPT = Support services. EDTRG = Education and Training. HRGTS = Human Rights legislation. WCONOP = Operational working conditions.

Note 2. **= $p < .01$; *= $p < .05$

Table 11 continued:

Navy DEU Means, Standard Deviations and Zero-Order Correlations

Variable	9	10	11	12
1. OVRSAT				
2. COMPBEN				
3. CRMGT				
4. SVCSPT				
5. EDTRG				
6. HRGTS				
7. FAMLIF				
8. JOBSAT				
9. LDRSHP	-			
10. SUBREL	.20**	-		
11. WCONOP	.29**	.35**	-	
12. CARINT	.05	.04	.08	-
M	3.6	3.7	3.1	3.6
SD	.78	.61	.79	1.06

Note 1. OVRSAT = Overall satisfaction. JOBSAT = Satisfaction with present working conditions. LDRSHP = Leadership. SUBREL = Subordinate relation with leader. FAMLIF = Effect of CF on Family Life. CARINT = Career Intentions. COMPBEN = Compensation and Benefits. CRMGT = Career Management. SVCSPT = Support services. EDTRG = Education and Training. HRGTS = Human Rights legislation. WCONOP = Operational working conditions.

Note 2. **= $p < .01$; *= $p < .05$

Table 12

Air DEU Means, Standard Deviations and Zero-Order Correlations

Variable	1	2	3	4	5	6	7	8
1. OVRSAT	-							
2. COMPBEN	.27**	-						
3. CRMGT	.47**	.45**	-					
4. SVCSPT	.21**	.26**	.23**	-				
5. EDTRG	.33**	.23**	.31**	.18**	-			
6. HRGTS	.33**	.32**	.43**	.28**	.28**	-		
7. FAMLIF	-.10**	-.13**	-.13**	-.16**	-.14**	-.08**	-	
8. JOBSAT	.59**	.23**	.40**	.14**	.37**	.30**	-.09**	-
9. LDRSHP	.31**	.19**	.34**	.15**	.24**	.23**	-.08*	.52**
10. SUBREL	.35**	.21**	.30**	.20**	.26**	.28**	-.02	.31**
11. WCONOP	.25**	.38**	.41**	.25**	.33**	.39**	-.18	.44**
12. CARINT	.05	.05	.07	.005	.04	-.03	-.07	.11**
M	3.8	3.4	2.8	3.5	3.5	3.5	3.5	3.4
SD	.59	.57	.77	.77	.63	.75	.97	.81

Note 1. OVRSAT = Overall satisfaction. JOBSAT = Satisfaction with present working conditions. LDRSHP = Leadership. SUBREL = Subordinate relation with leader. FAMLIF = Effect of CF on Family Life. CARINT = Career Intentions. COMPBEN = Compensation and Benefits. CRMGT = Career Management. SVCSPT = Support services. EDTRG = Education and Training. HRGTS = Human Rights legislation. WCONOP = Operational working conditions.

Note 2. **= $p < .01$; *= $p < .05$

Table 12 continued:

Air DEU Means, Standard Deviations and Zero-Order Correlations

Variable	9	10	11	12
1. OVRSAT				
2. COMPBEN				
3. CRMGT				
4. SVCSPT				
5. EDTRG				
6. HRGTS				
7. FAMLIF				
8. JOBSAT				
9. LDRSHP	-			
10. SUBREL	.31**	-		
11. WCONOP	.29**	.20**	-	
12. CARINT	.03	-.07	.03	-
M	3.5	3.8	3.3	3.5
SD	.86	.65	.72	1.10

Note 1. OVRSAT = Overall satisfaction. JOBSAT = Satisfaction with present working conditions. LDRSHP = Leadership. SUBREL = Subordinate relation with leader. FAMLIF = Effect of CF on Family Life. CARINT = Career Intentions. COMPBEN = Compensation and Benefits. CRMGT = Career Management. SVCSPT = Support services. EDTRG = Education and Training. HRGTS = Human Rights legislation. WCONOP = Operational working conditions.

Note 2. **= $p < .01$; *= $p < .05$

Results

The multi-group LISREL analyses produce a moderate fit of the model to the data. The fit indices for the Army DEU group (GFI=.96; RMSR=.042) and Navy DEU group (GFI=.94; RMSR=.048) met or exceeded acceptable fits values. The overall fit indices for the three groups ($\chi^2_{(156)}=360.57$; GFI=.96; RMSR=.046) and the overall χ^2/df ratio of 2.3 indicate the three models fit the data in a similar fashion.

Study 4

Introduction

The results for study 3 confirmed Oakes' (1994) findings that differential rates of job satisfaction and turnover are not present using DEU as the criterion. However, using DEU as a criterion measure may not be the best indicant of job and organizational satisfaction or turnover. A more accurate criterion might be one which accurately taps into the specific culture, or in a military context, the operational element, in which the service member is employed.

Schein (1985) argued that to understand how an organization operates, one must be aware of the influences different sub-cultures exert within the organization.

Because many CF personnel are cross-employed within different operational and support environments, distinctive environmental uniform may not be an appropriate criterion on which to base job and organizational satisfaction and turnover intention. Operational grouping may be a more meaningful way which to explore differential rates of satisfaction across the three different subcultures. Operational personnel may have developed a closer affinity with their particular subculture. Grouping on the basis of DEU may have obscured the influence of the subculture as support personnel wearing different color uniforms may not have identified with that culture.

Study 4 examined whether differential rates of job/organizational satisfaction and turnover existed for CF personnel working in Land Operations (LandOps; N=460), Naval Operations (NavalOps; N=404) and Air Operations (AirOps; N=497). Personnel working in a support MOC (Support; N=1584) were examined separately.

Method

The CF personnel were grouped into either operational or support categories by following Canadian Forces Administrative Order (CFAO) 2-10 which specifies the grouping of all MOCs within the CF. Table 13 outlines the MOCs and their particular operational element.

Table 13**Branch and Operational Groupings****Land Operations****Officers**

Armour 21

Artillery 22

Infantry 23

Non-Commissioned Members

Crewman 011

Artilleryman (Field) 021

Artilleryman (Air Defence) 022

Infantryman 031

Naval Operations**Officers**

Maritime Engineer 45

Maritime Surface &

Sub-surface 71

Non-Commissioned Members

Boatswain 181

Clearance Diver 341

Clearance Diving Technician 342

Electrical Technician 331

Hull Technician 321

Marine Electrician 332

Marine Engineer Artificer 314

Marine Engineering Mechanic 312

Marine Engineering Technician 313

Naval Acoustics Operator 273

Naval Combat Information Operator 275

Naval Electronic Sensor Operator 276

Naval Electronics Technician

(Acoustics) 283

Naval Electronics Technician

(Communications) 284

Naval Electronics Technician

(Manager) 286

Naval Electronics Technician

(Tactical) 285

Naval Radio Operator 274

Naval Signaller 262

Naval Weapons Technician 065

Oceanographic Operator 191

Table 13 continued:**Air Operations****Officers**

Aerospace Engineering 41
 Air Navigator 31
 Air Traffic Control 63
 Air Weapons Control 64
 Flight Engineer 65
 Meteorology 73
 Pilot 32

Non-Comissioned Members

Aero Engine Technician 511
 Airborne Electronic Sensor
 Operator 081
 Airframe Technician 512
 Air Defence Technician 171
 Air Traffic Controller 161
 Air Weapons Systems
 Technician 572
 Communications and Radar
 Systems Technician 524
 Aviation Technician 513
 Avionics Technician 525
 Flight Engineer 091
 Instrument Electrical Technician 551
 Integral Systems Technician 521
 Machinist 562
 Metals Technician 561
 Meteorological Technician 121
 Photographic Technician 541
 Refinisher Technician 563
 Safety Systems Technician 531
 Search and Rescue Technician 131
 Weapons Technician (Air) 571

Table 13 continued:SupportOfficers

Personnel Administration 68
 Music 75
 Pastoral Associate 59
 Chaplain (P) 61
 Chaplain (RC) 62
 Communications &
 Electronics Engineer 42
 Dental 51
 Dental Associate 52
 Intelligence 82
 Land Electrical and
 Mechanical Engineer 43
 Legal 67
 Logistics 69
 Health Care
 Administration 48
 Medical 55
 Medical Associate 56
 Nursing 57
 Pharmacist 54
 Physical Therapy 49
 Social Work 58
 Military Engineer 45
 Personnel Selection 72
 Physical Education &
 Recreation
 Postal 76
 Public Affairs 66
 Security 81
 Training & Development 74

Non-Commissioned Members

Administrative Clerk 831
 Musician 871
 Communications Technician 224
 Communicator Research 291
 Lineman 052
 Radar Technician 231
 Radio Operator 211
 Radio Technician 221
 Teletype & Cypher Technician 223
 Teletype Operator 212
 Terminal Equipment Technician 222
 Intelligence Operator 111
 Electro-Mechanical Technician 431
 Fire Control Systems Technician 435
 Fire Control Technician (Electronic) 432
 Fire Control Technician (Optronic) 433
 Materials Technician 441
 Vehicle Technician 411
 Weapons Technician (Land) 421
 Ammunition Technician 921
 Cook 861
 Finance Clerk 841
 Mobile Support Equipment Operator 935
 Steward 862
 Supply Technician 911
 Traffic Technician 933
 Aero Medical Technician 717
 Medical Assistant 711
 Medical Laboratory Technician 714
 Operating Room Assistant 713
 Preventive Medicine Technician 716
 X-ray Technician 715
 Construction Engineering Technician 611
 Construction Engineering
 Procedures Technician 631
 Construction and Maintenance Technician 615
 Electrical Generating Systems Technician 622
 Electrician 614
 Field Engineer 041

Table 13 continued

Field Engineer Equipment Operator 042
Fire Fighter 651
Map Reproduction Technician 151
Mechanical Systems Technician 625
Plumber Gas Fitter 613
Refrigeration and Mechanical Technician 621
Stationary Engineer 623
Structures Technician 612
Topographical Surveyor 141
Water, Sanitation and POL Technician 624
Physical Education and Recreation Instructor 851
Postal Clerk 881
Military Police 811
Dental Clinical Assistant 722
Dental Equipment Technician 724
Dental Laboratory Technician 723
Dental Hygienist 725

Data Analysis

Tables 14-16 present the correlation matrices for each operational group. The matrices were used as input data for multi-group analysis in Lisrel (version 7.16). Table 17 presents the correlation matrix for support personnel. The "Static Working Conditions" scale did not apply to the operational groups and was dropped from the model. Data for the support personnel (N=1584) were analysed separately to determine if their perceptions differed from those in operational elements.

Table 14

LandOps Means, Standard Deveiatiions and Zero-Order Correlations

Variable	1	2	3	4	5	6	7	8
1. OVRSAT	-							
2. COMPBEN	.27**	-						
3. CRMGT	.48**	.38**	-					
4. SVCSPT	.24**	.28**	.27**	-				
5. EDTRG	.50**	.29**	.46**	.34**	-			
6. HRGTS	.36**	.36**	.30**	.27**	.42**	-		
7. FAMLIF	-.14**	-.21**	-.11**	-.17**	-.16**	-.05	-	
8. JOBSAT	.62**	.16**	.35**	.25**	.39**	.40**	-.12*	-
9. LDRSHP	.31**	.17**	.36**	.15**	.39**	.30**	-.04**	.44**
10. SUBREL	.39**	.14*	.27**	.30**	.32**	.28**	-.08	.34**
11. WCONOP	.29**	.42**	.39**	.39**	.43**	.43**	-.24**	.31**
12. CARINT	.13	.05	.19	.13	.14	.22**	-.05	.17*
M	3.6	3.4	2.8	3.1	3.3	3.4	3.7	3.2
SD	.74	.63	.78	.92	.68	.80	.94	.85

Note 1. OVRSAT = Overall satisfaction. JOBSAT = Satisfaction with present working conditions. LDRSHP = Leadership. SUBREL = Subordinate relation with leader. FAMLIF = Effect of CF on Family Life. CARINT = Career Intentions. COMPBEN = Compensation and Benefits. CRMGT = Career Management. SVCSPT = Support services. EDTRG = Education and Training. HRGTS = Human Rights legislation. WCONOP = Operational working conditions.

Note 2. **= $p < .01$; *= $p < .05$

Table 14 continued:

LandOps Means, Standard Deviations and Zero-Order Correlations

Variable	9	10	11	12
1. OVSAT				
2. JOBSAT				
3. LDRSHP				
4. SUBREL				
5. FAMLIF				
6. CARINT				
7. COMPBEN				
8. CRMGT				
9. SVCSPT	-			
10. EDTRG	.30**	-		
11. HRGTS	.31**	.25**	-	
12. WCONOP	.05	-.06	.30**	-
M	3.4	3.7	2.8	3.4
SD	.85	.71	.83	1.06

Note 1. OVSAT = Overall satisfaction. JOBSAT = Satisfaction with present working conditions. LDRSHP = Leadership. SUBREL = Subordinate relation with leader. FAMLIF = Effect of CF on Family Life. CARINT = Career Intentions. COMPBEN = Compensation and Benefits. CRMGT = Career Management. SVCSPT = Support services. EDTRG = Education and Training. HRGTS = Human Rights legislation. WCONOP = Operational working conditions.

Note 2. **= $p < .01$; *= $p < .05$

Table 15

NavalOps Means, Standard Deviations and Zero-Order Correlations

Variable	1	2	3	4	5	6	7	8
1. OVRSAT	-							
2. COMPBEN	.36**	-						
3. CRMGT	.49**	.50**	-					
4. SVCSPT	.24**	.34**	.30**	-				
5. EDTRG	.43**	.37**	.48**	.36**	-			
6. HRGTS	.42**	.28**	.32**	.27**	.35**	-		
7. FAMLIF	-.04	-.008	-.10	-.03	-.005	.03	-	
8. JOBSAT	.61**	.26**	.38**	.22**	.40	.38**	-.07	-
9. LDRSHP	.44**	.16**	.39**	.06	.07	.24**	-.09	.52**
10. SUBREL	.38**	.26**	.29**	.16*	.28**	.33**	-.11	.36**
11. WCONOP	.47**	.33**	.44**	.21**	.62**	.40**	.01	.41**
12. CARINT	.13**	.05	.10	.004	.09	.06	-.08	.14
M	3.80	3.41	3.00	3.41	3.30	3.43	3.68	3.48
SD	.60	.57	.71	.75	.65	.72	.86	.73

Note 1. OVRSAT = Overall satisfaction. JOBSAT = Satisfaction with present working conditions. LDRSHP = Leadership. SUBREL = Subordinate relation with leader. FAMLIF = Effect of CF on Family Life. CARINT = Career Intentions. COMPBEN = Compensation and Benefits. CRMGT = Career Management. SVCSPT = Support services. EDTRG = Education and Training. HRGTS = Human Rights legislation. WCONOP = Operational working conditions.

Note 2. **= $p < .01$; *= $p < .05$

Table 15 continued:

NavalOps Means, Standard Deviations and Zero-Order Correlations

Variable	9	10	11	12
1. OVRSAT				
2. COMPBEN				
3. CRMGT				
4. SVCSPT				
5. EDTRG				
6. HRGTS				
7. FAMLIF				
8. JOBSAT				
9. LDRSHP	-			
10. SUBREL	.23**	-		
11. WCONOP	.18**	.37**	-	
12. CARINT	.17	.19	.13	-
M	3.55	3.71	3.08	3.74
SD	.75	.61	.75	1.04

Note 1. OVRSAT = Overall satisfaction. JOBSAT = Satisfaction with present working conditions. LDRSHP = Leadership. SUBREL = Subordinate relation with leader. FAMLIF = Effect of CF on Family Life. CARINT = Career Intentions. COMPBEN = Compensation and Benefits. CRMGT = Career Management. SVCSPT = Support services. EDTRG = Education and Training. HRGTS = Human Rights legislation. WCONOP = Operational working conditions.

Note 2. **= $p < .01$; *= $p < .05$

Table 16

AirOps Means, Standard Deviations and Zero-Order Correlations

Variable	1	2	3	4	5	6	7	8
1. OVRSAT	-							
2. COMPBEN	.28**	-						
3. CRMGT	.46**	.41**	-					
4. SVCSPT	.16**	.22**	.24**	-				
5. EDTRG	.35**	.15**	.35**	.20**	-			
6. HRGTS	.34**	.29**	.38**	.27**	.25**	-		
7. FAMLIF	-.13**	-.16**	-.20**	-.10	-.15**	-.04	-	
8. JOBSAT	.61**	.15**	.35**	.15**	.43**	.33**	-.13*	-
9. LDRSHP	.36**	.08	.33**	.11*	.27**	.20**	-.14**	.46**
10. SUBREL	.42**	.12*	.29**	.18**	.20*	.25**	-.08	.39**
11. WCONOP	.25**	.47**	.48**	.20**	.38**	.37**	-.14*	.30**
12. CARINT	.04	-.08	.01	-.15*	-.03	-.08	-.15*	.11
M	3.85	3.38	2.87	3.36	3.55	3.53	3.63	3.50
SD	.59	.56	.76	.78	.59	.73	.93	.75

Note 1. OVRSAT = Overall satisfaction. JOBSAT = Satisfaction with present working conditions. LDRSHP = Leadership. SUBREL = Subordinate relation with leader. FAMLIF = Effect of CF on Family Life. CARINT = Career Intentions. COMPBEN = Compensation and Benefits. CRMGT = Career Management. SVCSPT = Support services. EDTRG = Education and Training. HRGTS = Human Rights legislation. WCONOP = Operational working conditions.

Note 2. **= $p < 0.01$; *= $p < .05$

Table 16 continued:

AirOps Means, Standard Deviations and Zero-Order Correlations

Variable	9	10	11	12
1. OVRSAT				
2. COMPBEN				
3. CRMGT				
4. SVCSPT				
5. EDTRG				
6. HRGTS				
7. FAMLIF				
8. JOBSAT				
9. LDRSHP	-			
10. SUBREL	.32**	-		
11. WCONOP	.27**	.25**	-	
12. CARINT	.01	-.16	.04	-
M	3.48	3.89	3.26	3.44
SD	.83	.62	.66	1.13

Note 1. OVRSAT = Overall satisfaction. JOBSAT = Satisfaction with present working conditions. LDRSHP = Leadership. SUBREL = Subordinate relation with leader. FAMLIF = Effect of CF on Family Life. CARINT = Career Intentions. COMPBEN = Compensation and Benefits. CRMGT = Career Management. SVCSPT = Support services. EDTRG = Education and Training. HRGTS = Human Rights legislation. WCONOP = Operational working conditions.

Note 2. **= $p < 0.01$; *= $p < .05$

Table 17

Support Means, Standard Deviations and Zero-Order Correlations

Variable	1	2	3	4	5	6	7	8
1. CRMGT	-							
2. WCONOP	.33**	-						
3. COMPBEN	.41**	.28**	-					
4. HRGTS	.38**	.37**	.31**	-				
5. SVCSPT	.24**	.29**	.30**	.30**	-			
6. EDTRG	.36**	.34**	.31**	.35**	.30**	-		
7. LDRSHP	.35**	.25**	.20**	.25	.18**	.28	-	
8. SUBREL	.28**	.19**	.20**	.28**	.22**	.27**	.31*	-
9. JOBSAT	.44**	.34	.25**	.33*	.20**	.37**	.53**	.35**
10. OVRSAT	.50**	.27*	.25**	.31**	.28*	.39**	.33	.34**
11. FAMLIF	-.10	-.20**	-.14**	-.12**	-.13**	-.11**	-.02*	-.03**
12. CARINT	.16	.02	.08	.08*	.05	.08	.15*	.04
M	2.80	3.23	3.45	3.52	3.62	3.40	3.49	3.75
SD	.79	.79	.60	.77	.78	.70	.90	.69

Note 1. OVRSAT = Overall satisfaction. JOBSAT = Satisfaction with present working conditions. LDRSHP = Leadership. SUBREL = Subordinate relation with leader. FAMLIF = Effect of CF on Family Life. CARINT = Career Intentions. COMPBEN = Compensation and Benefits. CRMGT = Career Management. SVCSPT = Support services. EDTRG = Education and Training. HRGTS = Human Rights legislation. WCONOP = Operational working conditions.

Note 2. **= $p < 0.01$; *= $p < .05$

Table 17 continued:

Support Means, Standard Deviations and Zero-Order Correlations

Variable	9	10	11	12
1. CRMGT				
2. WCONOP				
3. COMPBEN				
4. HRGTS				
5. SVCSPT				
6. EDTRG				
7. LDRSHP				
8. SUBREL				
9. JOBSAT	-			
10. OVRSAT	.60**	-		
11. FAMLIF	-.09**	-.09**	-	
12. CARINT	.05	.09	-.05	-
M	3.35	3.80	3.51	3.45
SD	.86	.63	1.00	1.09

Note 1. OVRSAT = Overall satisfaction. JOBSAT = Satisfaction with present working conditions. LDRSHP = Leadership. SUBREL = Subordinate relation with leader. FAMLIF = Effect of CF on Family Life. CARINT = Career Intentions. COMPBEN = Compensation and Benefits. CRMGT = Career Management. SVCSPT = Support services. EDTRG = Education and Training. HRGTS = Human Rights legislation. WCONOP = Operational working conditions.

Note 2. **= $p < 0.01$; *= $p < .05$

Results

The simplified LISREL models for military personnel in the LandOps, NavalOps and AirOps environments are presented in Figures 7, 8 and 9 respectively. Figures 7 and 9 are identical to Oakes' model (Figure 4) which served as the base model. Both have seven indicators of policies and procedures, five indicators of job and organizational satisfaction and one indicator of turnover intentions. Figure 8, the NavalOps group, differs in that only four indicators of job and organizational satisfaction are present. The indicator "Effects of CF on Family Life" did not load significantly and was dropped from the model. The common metric standardized solutions and the overall Chi-Square statistic and goodness-of-fit between the three models also demonstrate that the models fit the data differently. Table 18 provides a clear comparison between the results of the separate models.

All three models failed to provide acceptable fit statistics ($\chi^2_{(1158df)}=315.49$, GFI=0.927, RMSR=0.060). However, in all models, "Policies and Procedures" strongly predicted "Job & Organizational Satisfaction" (LandOps: $B=.824$, $p<.01$; NavalOps: $B=.766$, $p<.01$; AirOps: $B=.659$, $p<.01$).

In the LandOps model, the pathway from "Job &

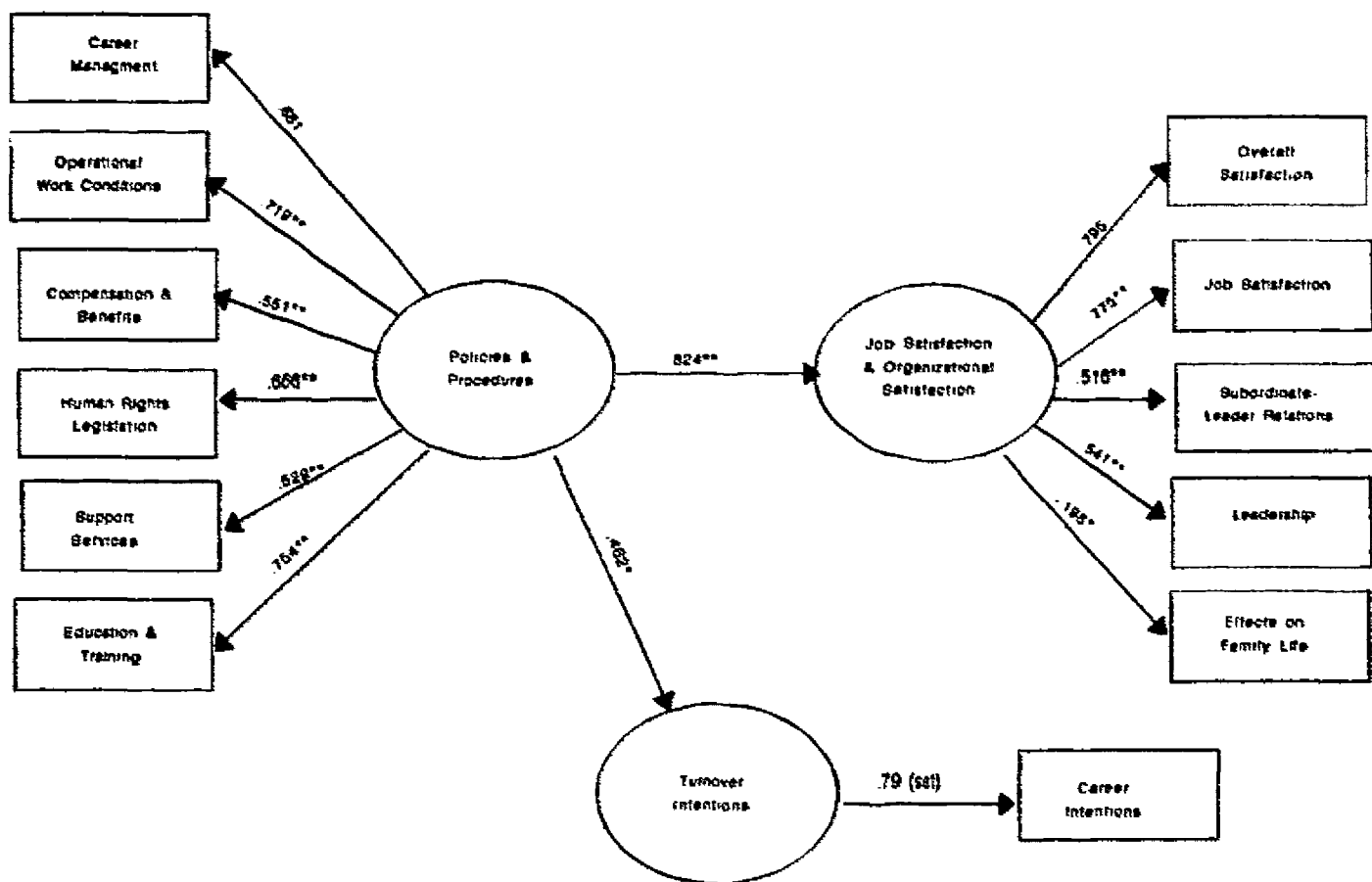


Figure 7: LandOps Common Metric Standardized Solution
 Goodness of Fit Index=0.92
 Root Mean Square Residuals=0.060

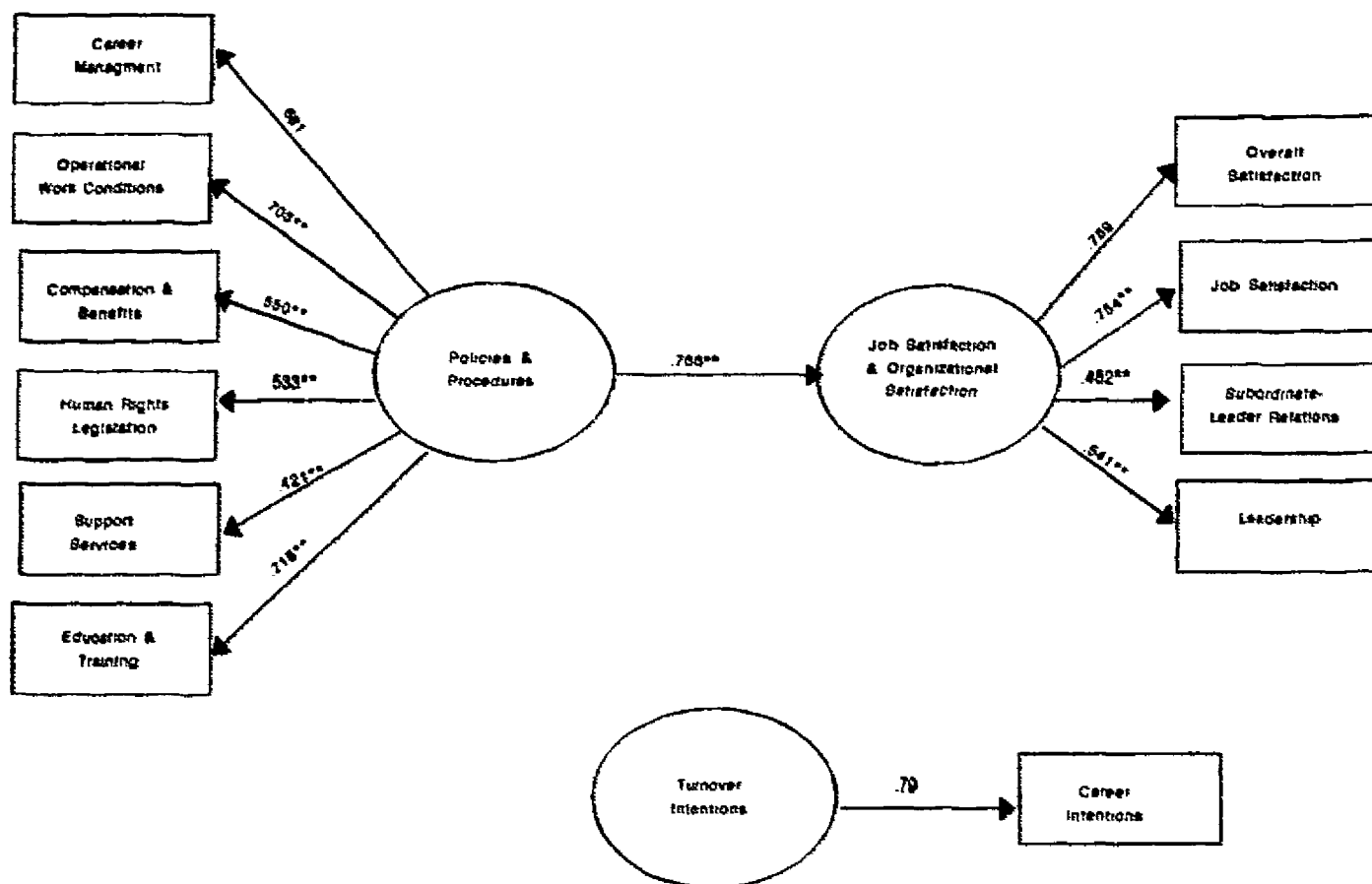


Figure 8: NavalOps Common Metric Standardized Solution
 Goodness of Fit Index=0.91
 Root Mean Square Residuals=0.061

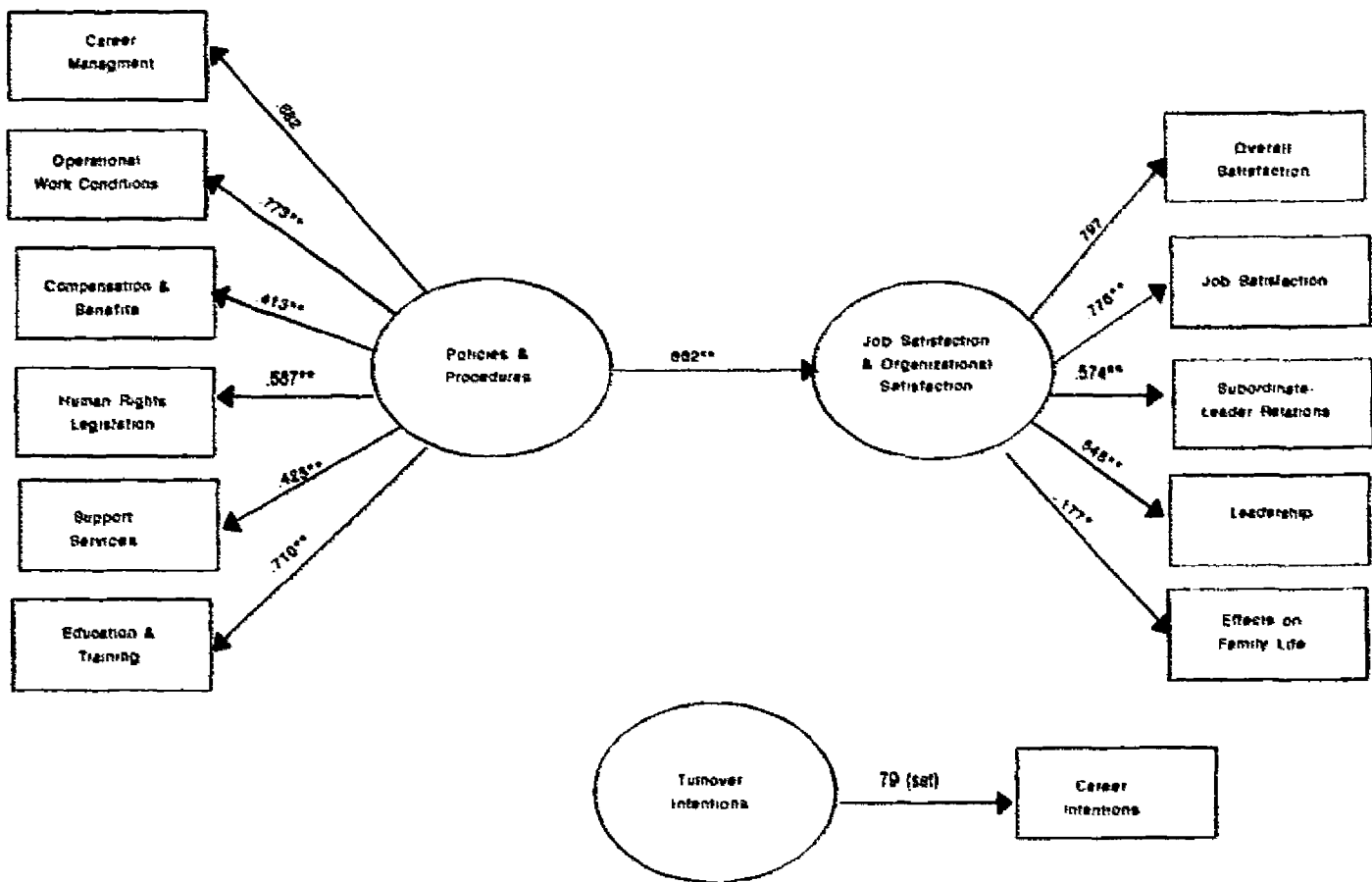


Figure 9: AirOps Common Metric Standardized Solution and Overall Goodness of Fit Index
 Chi-Square with 160df=565.67
 Goodness of Fit Index=0.900
 Root Mean Square Residuals=0.074

Organizational Satisfaction" to "Turnover Intentions" was not significant but the pathway from "Policies and Procedures" to "Turnover Intentions" ($B = .462$, $p < .05$) was significant. While the Goodness-of-Fit Index ($GFI=0.92$) for the LandOps model suggested an acceptable fit, the root mean square residuals ($RMSR=0.060$) did not. In the NavalOps model, the GFI values ($GFI=0.91$) suggested an acceptable fit but the RMSR ($RMSR=0.061$) values are not significant. In the NavalOps model neither the pathway from "Job & Organizational Satisfaction" to "Turnover Intentions" or from "Policies and Procedures" to "Turnover Intentions" was significant. In the AirOps model, the pathway from "Policies and Procedures" to "Job & Organizational Satisfaction" ($B=0.659$, $p < .01$) was significant. Due to the nature of multi-group analysis, separate fit indices for the final group, cannot be determined.

Oakes model (Figure 10) provided a very good fit to the support group data as shown by the fit indices ($\chi^2/df=2.5$, $GFI=0.960$, $AGFI=0.940$, $RMSR=.043$). The fit of Oakes model to the support group was superior to the fit to any of the three operational groups (Table 18) whose fit indices did not meet accepted values.

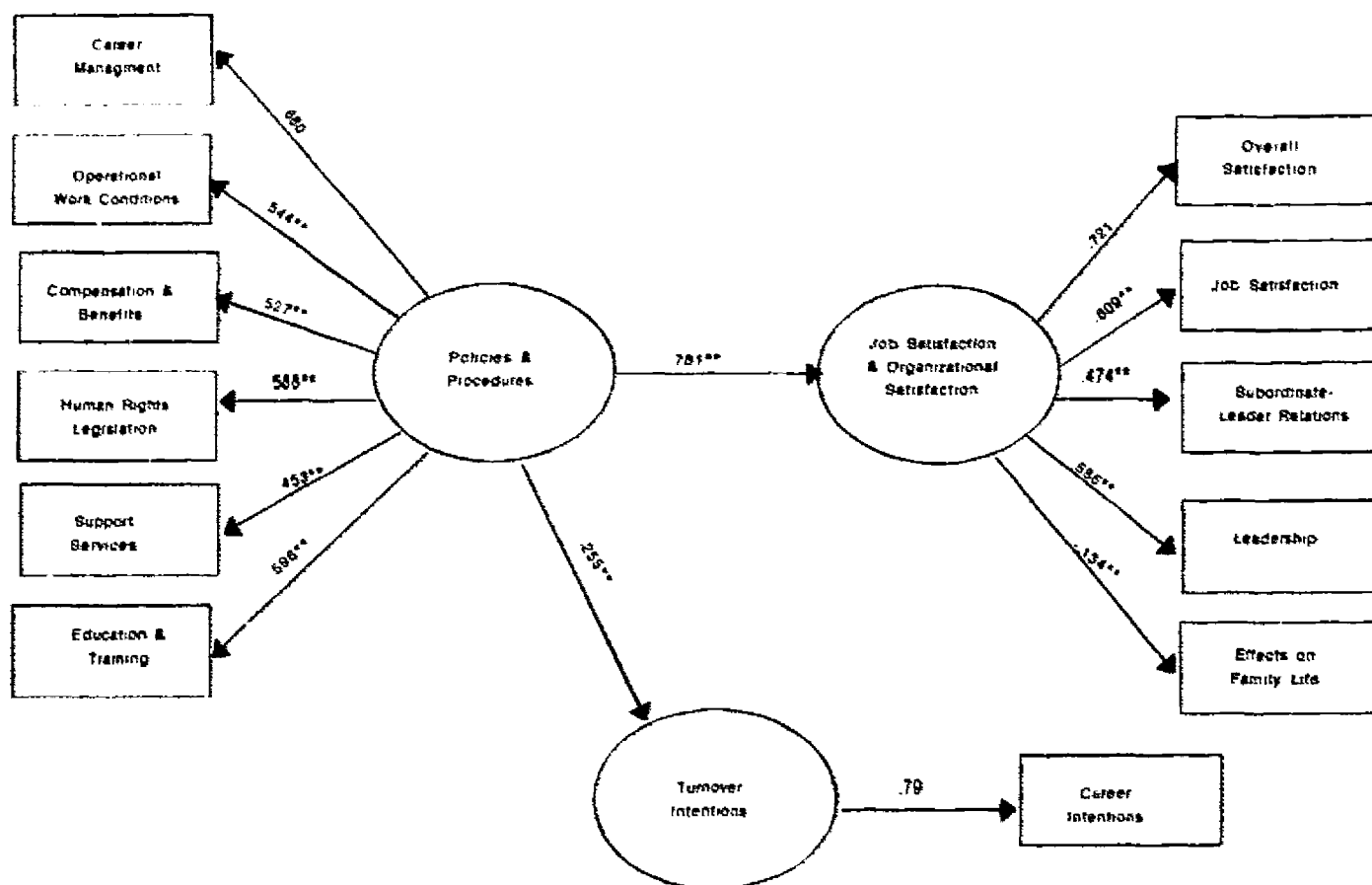


Figure 10. Standardized Solution of Support Personnel.
 Goodness of Fit Index=0.96
 Adjusted Goodness of Fit Index=0.94
 Root Mean Square Residuals=.043

Table 18
Goodness-of-Fit Indices and Chi-Square Estimates for Tested Models

	χ^2	df	GFI	AGFI	RMSR	χ^2/df
Oakes' Model	375.09	52	.960	.940	.038	7.2 (1.4)
Revised Model	410.93	42	.950	.930	.047	9.0 (1.8)
DEU Model(Air)	360.57	156	.960	-	.042	2.3 (Overall)
Navy DEU	-	-	.94	-	.048	-
Army DEU	-	-	.96	-	.042	-
Ops Model(Air)	315.49	156	.927	-	.060	2.02 (Overall)
LandOps	-	-	.922	-	.060	-
NavalOps	-	-	.910	-	.061	-
Support Model	129.52	52	.960	.940	.043	2.50

() indicates recalculated chi-square/df ratio with N=300³

Discussion - DEU vs Environment as a Criterion

Study 3 confirmed Oake's, (1994) earlier finding that differential rates of job and organizational satisfaction did not exist when DEU (uniform color) was the basis for CF members. However, even with the improved measures, the Mobley model did not apply equally to operational groupings. Yet, it provided a good fit when the data were combined across all members as well as for the support group.

³ Acceptable fit indices exist when all of the following prerequisites exist: GFI & AGFI values exceed .90; RMSR values are below .05. The ratio of χ^2/df is greater than 1.0 but less than 5.0.

Apparently, operational military members and members in support roles (e.g., clerical, administrative, logistical, medical, dental, etc) do not have the same set of satisfiers.

The LISREL multigroup analyses strongly suggested that CF members operating in these different environments perceive CF policies differently which leads to differences in job and organizational satisfaction. First, there is the differential manner in which the three groups' pathways existed between the latent variables. The LandOps model (Figure 7) has a significant pathway from "policies and procedures" to "turnover intentions" which is absent in the other two operational groups as well as the support group. However, the level of job and organizational satisfaction does not lead to turnover intention. Apparently, the existence of policies and procedures alone are enough for LandOps personnel to base their intentions to stay in or leave the CF. This seems to suggest that LandOps personnel intention to stay or leave the CF is determined more by the existence of specific policies and procedures as opposed to indices such as working relations or job satisfaction.

The NavalOps (Figure 8) and AirOps (Figure 9) personnel responded in an identical manner in regard to turnover intentions as neither "policies and procedures" nor "job and organizational satisfaction" led to the intention to the

leave the CF. However, the observed variable, "Effects of CF on Family Life", for the NavalOps group was not significant whereas it was for the other two operational groups and support group (Figure 10). These results are important because they provide strong evidence for the notion that service members in the three operational groups and one support group respond differentially to indicants of job and organizational satisfaction. These results also support Scheins's (1985) belief that individual organizational cultures or sub-cultures may have unique values, symbols and artifacts which produce a sense of identity and well-being. The results in the case of the three operational elements and one support group are typical of what one might expect for members of different sub-cultures responding to questions or items which are not salient to their own distinctive environment. Applied to the CF, Schein's theory underscores the need for a cultural specific "thermometer" which not only taps into concerns about conditions of service but which also reflects unique concerns of each operational element. Such culturally specific instruments are needed in the CFCSQ to more accurately judge the efficacy its policies and procedures.

An interesting result of Study 4 was that neither the operational nor support models supported a direct pathway from "job and organizational satisfaction" to "turnover

intentions". Apparently, satisfaction for these groups is not an adequate predictor of turnover intention. This suggests that a better predictor must be found.

Commitment (affective) is a more powerful predictor of turnover behaviour than is satisfaction (Lance, 1991). By systematically assessing commitment, the degree of cultural influence can be directly measured. This would give an indication of whether CF members were satisfied (i.e., affective commitment) or if they were dissatisfied but remaining in the military because it is a "paying job" (i.e., continuance commitment).

General Discussion

There are several suggestions that follow from this research; First, the CFCSQ, with the revised scales, is a psychometrically sound and valid instrument. Regardless of the criterion measured, "policies and procedures" consistently, and significantly, predicted "job and organizational satisfaction". This suggests that feedback from the CFCSQ effectively assesses the relative impact of policies and procedures on conditions of service.

Second, the differential way in which CF members, when classified as operational or support personnel,

responded to the CFCSQ items underscores the immediate need for a culturally specific instrument which taps into the unique concerns of those environments. Particularly, "job and organizational satisfaction" did not relate significantly to "turnover intention" when the data were selected according to operational or support grouping. In part, this suggests that satisfaction is not a good indicator of intention to stay or leave the CF. As such, a major deficit of the CFCSQ is the absence of any measure of organizational commitment. If the CF is determined to measure members' intentions to stay or leave, such a scale must be included in the CFCSQ. A commitment scale (e.g., Allen & Myers', 1990), which captures both affective and continuance commitment would be an excellent addition and have the potential to substantially increase the external validity of the CFCSQ. It would also provide more comprehensive feedback to senior executive military personnel for use in amending policies and procedures that adversely affect conditions of service.

In summary, the model on which the CFCSQ is relevant to CF members is shown by the fit of that model to the data generated by the CFCSQ for both the original scales reported on by Oakes (1994) and the psychometrically improved scales reported in this research. However, this model does not appear to apply equally well to all operational units. It

provides a better description of the data obtained for support personnel. This is strong evidence that differential rates of satisfaction and turnover do exist within CF operational units and that these units react differently to policies and procedures. This in turn suggests the need for a more culturally specific instrument as well as one that accurately reflects turnover intention.

Implications for Further Research

The differential fit of the model across operational units leads to general suggestions for future research. First and foremost, it provides strong evidence for the use of operational units as a criterion measure in future administrations. Second, the results suggest that the unique concerns related to each operational element's culture must be assessed through an "environmental or culturally specific" section within the CFCSQ. Third, organizational commitment is a valid predictor of both job satisfaction and turnover intention and measures of it must be built into the CFCSQ. A commitment scale would assess not only if military personnel were satisfied, but also provide an indication of why they were satisfied. For example, knowing whether personnel are committed to the organization regardless of external influencers (e.g.,

unpopular media coverage) could be more important than just knowing level of satisfaction. Commitment, in contrast to satisfaction, is an enduring quality which may reflect changes in emotion that accompany the introduction of an unpopular policy. For example, it is possible for an individual to be dissatisfied with a certain policy, procedure and even a working relationship but still feel committed to the organization.

An attempt was made to assess commitment by using items from the CFCSQ data. Specifically, scale items which were similar in nature to affective commitment were extracted from the overall satisfaction scale. These items were then tested for their psychometric properties as a scale and used as input data for LISREL analysis. The data, however were highly correlated with the job satisfaction scale, indicating both scales were measuring the same construct - satisfaction. This failure is encouraging because it provides strong support for the inclusion of a commitment scale in the questionnaire. Commitment is a distinct construct from satisfaction. The inclusion of such a scale would add greatly to the prediction of satisfaction and turnover.

Limitations of Present Study

The present research is based on archival data. Because it is two years old, it may be somewhat dated due to changes presently occurring in the Canadian Forces (e.g., downsizing, budgetary reductions). It is entirely possible that "conditions of service" which were once a concern to military personnel, either in an operational or support capacity, have been overshadowed by new concerns (e.g., the increased number of United Nations deployments). In this regard, a subsequent administration of the revised CFCSQ is necessary to validate present findings.

Second, the current response format of the CFCSQ uses both "Don't Know/Doesn't Apply" categories, in conjunction with "neutral" categories, limits the amount of useable data. For example, under "Support Services" and "Immediate Supervisor Relations", it is highly unlikely that even the very newest of military members would not know enough about administrative, financial and medical services. Given this fact, "Don't Know" responses in these categories may reflect indifference and not lack of information. The lack of useable information was further compounded by equally large quantities of missing data which compelled the use of mean substitution during factor extraction and analysis procedures. Therefore, the present study may have artificially inflated values for KMO, internal consistency, and percentage of explained variance.

Conclusion

Notwithstanding the preceding limitations, the present research shows that the CFCSQ is both a valid and psychometrically sound instrument that can be used to assess job and organizational satisfaction and their influence on turnover intention. This research also relates previous findings about turnover intentions to organizational cultures and sub-cultures. To be effective predictors of turnover intention, the antecedents of job and organizational satisfaction, must be examined in the context of the unique cultural concerns which define the organization. Broadbased measures, which are designed to reflect global concerns about conditions of service, may ignore more potent and salient cultural issues which truly underly organizational satisfaction. Relevant to the present research, operational grouping is a salient criterion which predicts job and organizational satisfaction and turnover intention.

Future research should incorporate additional predictors of turnover (e.g., commitment) which are culture specific; in this way, identification of the most salient issues to organizational effectiveness may be realized.

Recommendations

1. Future administrations and analyses of the CFCSQ should report findings according to operational grouping as opposed to environmental uniform. Support personnel should be grouped separately to avoid masking problems that are unique to operational personnel.
2. Include environment specific sections in the CFCSQ that directly tap into the unique concerns of each operational Command. In this way, senior executive personnel will better be able to respond to concerns regarding conditions of service that affect job/organizational satisfaction.
3. Include a scale designed to tap into "organizational commitment" as it is a stronger predictor of turnover behaviour (Lance, 1991; Allen & Myers, 1990) than job satisfaction.
4. Modify, where possible, the response format in the CFCSQ so that both "Don't Know" and "Doesn't Apply" are not possible answers to the same item.
5. Shorten the CFCSQ content by removing those items found in Study 2 that do not adequately load on any scale or predict a significant portion of the explained variance. This will also reduce administration time.

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APPENDIX "A"

**LISREL Program for Multi-Sample Analysis of CF Personnel by Distinctive
Environmental Uniform (DEU)**

```

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APPENDIX "B"

LISREL Program for Multi-Sample Analysis of CF Personnel by Operational Grouping

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FINISH

APPENDIX "C"

The Canadian Forces Conditions of Service Questionnaire

CANADIAN FORCES CONDITIONS OF SERVICE QUESTIONNAIRE

Message to Survey Respondents

As the senior personnel authority in the CF, it is important for me to know how our policies and programmes are working. There are a number of methods for determining this, and they include, among others, asking for input from command, base and unit authorities, and immediate supervisors. This Conditions of Service Questionnaire provides a more direct method in that it permits you, the service member, to express your views directly and in a form that will allow detailed analysis.

We, in the CF, belong to a changing organization in which policies and programmes must be developed, amended or deleted as conditions, needs, and requirements change. To the greatest extent possible, and within a constrained budget, we are attempting to maintain human resource policies, programmes, and services that ensure a high level of morale and well-being of our service members and, where applicable, their families.

In order to assist in this endeavour, I ask that you take the time to carefully respond to the items in this questionnaire, so that we might better assess how well your needs are being met and take appropriate action where required.

Thank you for your cooperation.



P.G. Addy

Lieutenant-General

Assistant Deputy Minister (Personnel)

Canadian Forces Personnel Applied Research Unit
Suite 600, 4900 Yonge Street
Willowdale, Ontario
M2N 6B7

Copie Française
Au Verso

NCS Questionnaire 8811 Trans-Optar by NCS 88004602-32*

PLEASE DO NOT WRITE IN THIS SHADED AREA

4599

Introduction

The Canadian Forces Conditions of Service Questionnaire has been designed to provide CF members with the opportunity to express their views regarding the quantity, quality and equity of a variety of conditions of service (for example, pay and allowances, benefits and promotion) which affect them and their families. Your input is extremely valuable in identifying, assessing and bringing to light those issues which are important to you, and which may require policy or procedural changes.

You have been selected, as part of a random sample of service members, to participate in this survey. For the results to be truly representative of the CF, it is important that each questionnaire be completed. This is an anonymous survey; therefore, you may be assured of complete confidentiality. Please do not write your name or your service number anywhere on the questionnaire. The data collected will be analyzed by the Canadian Forces Personnel Applied Research Unit (CFPARU) and the results will be made available for use by NDHQ and Commands.

Thank you for your co-operation.

General Instructions

This is not a test. There are no right or wrong answers. It is important, however, that your answers reflect, as accurately as possible, your opinions and experiences. In some cases, you may feel that the question does not apply to you. Remember, however, that we want to know about your knowledge and opinions regarding CF policies, as well as those policies which have affected you personally. When you answer the questions, please follow these three steps:

1. Read each question carefully. When there are several responses provided, read all of the choices available before selecting your answer.
2. Record your answer with an HB pencil. Completely blacken the oval corresponding to your response. Should you wish to change your answer, erase completely the pencil marking and then blacken your revised response. Do not put any unnecessary marks on the questionnaire.

EXAMPLES

RIGHT ● WRONG ○○○○

3. Once you have completed the questionnaire, please follow the instructions at the end.

SECTION 1 - Overall Satisfaction

We would first like to ask several questions related to your general level of satisfaction with life in the CF.

1. Generally, how satisfied are you overall with the following?

- a. life in the CF
- b. your CF career
- c. your present MOC
- d. your current unit
- e. your current job
- f. your present geographical location

Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Dissatisfied	Don't Know
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○

2. Considering your CF career as a whole, how satisfied are you with the following?

- a. the variety
- b. the challenge
- c. the responsibility
- d. the sense of adventure
- e. travel opportunities
- f. skills and training acquired
- g. the security it offers

Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Dissatisfied	Don't Know
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○
○	○	○	○	○	○

3. How do you think your life in the CF compares with that of your civilian friends?

Much Better Than Most	Better Than Most	Neither Better Nor Worse Than Most	Worse Than Most	Much Worse Than Most	Don't Know
○	○	○	○	○	○

4. Think of the CF as an employer; overall, how satisfied are you with the CF as an organization for which to work?

Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Dissatisfied	Don't Know
☐	☐	☐	☐	☐	☐

5. In response to the following issues, how do you feel about the CF as an organization for which to work?

The CF, in general...

Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know
☐	☐	☐	☐	☐	☐

- a. provides the kind of leadership I expect.
- b. instills a sense of pride in wearing the uniform.
- c. has goals with which I can identify.
- d. provides the discipline I expect.
- e. looks after the welfare of its members.
- f. keeps me informed of important policies and events.
- g. has esprit de corps.
- h. can effectively defend Canada if/when necessary.
- i. is exciting.
- j. is challenging.
- k. has policies that are applied fairly across the CF.
- l. meets my expectations.

SECTION 2 - Satisfaction with Specific CF Policies

The CF is an organisation unique from other public service departments in terms of the demands it places upon service members and their families. It has long been recognized that the quality, quantity and equity of CF policies have an impact on the morale and well-being of its members. We would like to know how you feel about a variety of CF policies which may affect you and your family. Even if the policies and procedures do not affect you directly, please reply on the basis of your knowledge or opinion.

Compensation and Benefits

6. Generally, how satisfied are you with the following compensation and benefits offered by the CF?

Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Dissatisfied	Don't Know
☐	☐	☐	☐	☐	☐

- a. annual salary
- b. pay incentives
- c. specialist pay
- d. annual leave entitlement
- e. leave without pay (LWOP)
- f. maternity leave entitlement
- g. compassionate leave entitlement
- h. accommodation assistance allowance (AAA)
- i. posting allowance
- j. separation expense allowance
- k. clothing upkeep allowance (CUA)
- l. temporary duty rates
- m. foreign duty allowance
- n. pension benefits
- o. supplementary death benefits (SDB)
- p. service income security insurance plan (SISIP)
- q. house hunting trip (HHT)
- r. environmental allowances
- s. unemployment insurance contributions (UIC)
- t. dependants' dental plan benefits
- u. CF relocation service (ERS)

Career Management

7. Generally, how satisfied are you with the following aspects of career management in the CF?

	Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Dissatisfied	Don't Know
a. the promotion system	00	00	00	00	00	00
(i) fairness	00	00	00	00	00	00
(ii) effectiveness	00	00	00	00	00	00
b. the performance evaluation report (PER)	00	00	00	00	00	00
(i) importance placed on it	00	00	00	00	00	00
(ii) the form itself	00	00	00	00	00	00
c. recognition of individual merit	00	00	00	00	00	00
d. the merit board process	00	00	00	00	00	00
(i) fairness	00	00	00	00	00	00
(ii) effectiveness	00	00	00	00	00	00
e. career counselling	00	00	00	00	00	00
(i) adequacy	00	00	00	00	00	00
(ii) availability	00	00	00	00	00	00
f. your promotion prospects	00	00	00	00	00	00
g. officer/non-commissioned member career structure (BG, JE, PS)	00	00	00	00	00	00
h. specialist officer career structure	00	00	00	00	00	00
i. EXPRES program	00	00	00	00	00	00
(i) career implications	00	00	00	00	00	00
(ii) fairness of application	00	00	00	00	00	00
j. the length of postings	00	00	00	00	00	00
k. posting notification	00	00	00	00	00	00
l. land occupation transfer program LOTP	00	00	00	00	00	00
(i) availability	00	00	00	00	00	00
(ii) selection process	00	00	00	00	00	00
m. in-service officer candidate training plan (OCTP)	00	00	00	00	00	00
(i) availability	00	00	00	00	00	00
(ii) selection process	00	00	00	00	00	00
n. university training plan - non-commissioned members (LTPNCM)	00	00	00	00	00	00
(i) availability	00	00	00	00	00	00
(ii) selection process	00	00	00	00	00	00
o. university training plan - officers (LTPO)	00	00	00	00	00	00
(i) availability	00	00	00	00	00	00
(ii) selection process	00	00	00	00	00	00
p. commissioning from the rank plan (CFRP)	00	00	00	00	00	00
(i) availability	00	00	00	00	00	00
(ii) selection process	00	00	00	00	00	00
q. post graduate training program (PGTP)	00	00	00	00	00	00
(i) availability	00	00	00	00	00	00
(ii) selection process	00	00	00	00	00	00
r. occupational transfer (OT)	00	00	00	00	00	00
(i) availability	00	00	00	00	00	00
(ii) selection process	00	00	00	00	00	00
s. other (please specify)	00	00	00	00	00	00
a. With regard to career management, how do you feel about the following?	Neither Agree Nor Disagree					Don't Know
a. In general, the CF personnel evaluation system (PER and merit board) promotes those who are most deserving.	Strongly Agree	Agree	Disagree	Strongly Disagree		Don't Know
b. No particular group has an advantage when it comes to promotion.	0	0	0	0	0	0
c. Subsidies relating to writing PERs is given to superiors.	0	0	0	0	0	0
d. Career managers consider personal circumstances, posting preferences, and career expectations when posting members.	0	0	0	0	0	0
e. Career managers are accessible for discussion with members about career matters.	0	0	0	0	0	0
f. Members are kept well-informed on matters related to their career.	0	0	0	0	0	0
g. Bilingual members have a better opportunity for promotion than those who are unilingual.	0	0	0	0	0	0
h. The performance evaluation report (PER) is a fair and equitable assessment of individual performance.	0	0	0	0	0	0
i. The CF is considerate and supportive of dual career couples (military or civilian).	0	0	0	0	0	0

12. With regard to the following support services, to what extent do you agree or disagree with...

- the provision of day care centres
- the provision of mess facilities
- voluntary mess membership
- compulsory mess membership
- the provision of an all ranks social centre
- the expansion of the CF Personnel Newsletter to provide more personnel policy information

13. How satisfied are you that the support services provided by the CF are available in the official language of your choice (that is, English or French)?

Education and Training

14. In general, how satisfied are you with each of the following aspects of education and training that you have received or is available within the CF?

- MOE training**
 - adequacy
 - length
 - currency
 - usefulness
- second language training SLT**
 - availability
 - selection process for CFC block course
 - opportunity
- professional development courses (officer NCM, JLC)**
 - availability
 - selection process
 - quality
 - usefulness
- junior officer NCM development courses (example CFCSS, JLC)**
 - availability
 - selection process
 - quality
 - usefulness
- senior officer NCM development courses (example CFCSC, SLT)**
 - availability
 - selection process
 - quality
 - usefulness
- academic upgrading**
 - availability
 - support for (i.e., time-off)
- reimbursement for academic upgrading**
 - adequacy
- data process**
 - military/civilian accreditation program
- unit physical fitness training program**
 - training facilities
- other (please specify)**

Human and Charter of Rights Issues

15. In general, how satisfied are you with CF policies and procedures related to each of the following issues?

- personal discrimination
- personal harassment
- sexual harassment
- sexual orientation
- access to personal information
- privacy act (protection of personal information)
- redress of grievance
- employment of women in all units and occupations

	Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know
12. a.	000000	000000	000000	000000	000000	000000
12. b.	000000	000000	000000	000000	000000	000000
12. c.	000000	000000	000000	000000	000000	000000
12. d.	000000	000000	000000	000000	000000	000000
12. e.	000000	000000	000000	000000	000000	000000
12. f.	000000	000000	000000	000000	000000	000000
13.	Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Dissatisfied	Don't Know
13.	0	0	0	0	0	0
14. a.	Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Dissatisfied	Don't Know
14. a.	000000	000000	000000	000000	000000	000000
14. a.	000000	000000	000000	000000	000000	000000
14. a.	000000	000000	000000	000000	000000	000000
14. a.	000000	000000	000000	000000	000000	000000
14. b.	000000	000000	000000	000000	000000	000000
14. b.	000000	000000	000000	000000	000000	000000
14. b.	000000	000000	000000	000000	000000	000000
14. c.	000000	000000	000000	000000	000000	000000
14. c.	000000	000000	000000	000000	000000	000000
14. c.	000000	000000	000000	000000	000000	000000
14. d.	000000	000000	000000	000000	000000	000000
14. d.	000000	000000	000000	000000	000000	000000
14. d.	000000	000000	000000	000000	000000	000000
14. e.	000000	000000	000000	000000	000000	000000
14. e.	000000	000000	000000	000000	000000	000000
14. e.	000000	000000	000000	000000	000000	000000
14. f.	000000	000000	000000	000000	000000	000000
14. f.	000000	000000	000000	000000	000000	000000
14. g.	000000	000000	000000	000000	000000	000000
14. g.	000000	000000	000000	000000	000000	000000
14. h.	000000	000000	000000	000000	000000	000000
14. h.	000000	000000	000000	000000	000000	000000
14. i.	000000	000000	000000	000000	000000	000000
14. i.	000000	000000	000000	000000	000000	000000
15. a.	Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Dissatisfied	Don't Know
15. a.	000000	000000	000000	000000	000000	000000
15. b.	000000	000000	000000	000000	000000	000000
15. c.	000000	000000	000000	000000	000000	000000
15. d.	000000	000000	000000	000000	000000	000000
15. e.	000000	000000	000000	000000	000000	000000
15. f.	000000	000000	000000	000000	000000	000000
15. g.	000000	000000	000000	000000	000000	000000
15. h.	000000	000000	000000	000000	000000	000000

13. Continued...

- l. common-law relationships
- j. official languages
- k. career medical review boards (CMRB)
- l. compulsory retirement age (CRA)
- m. married service couples
- n. married member with civilian spouse
- o. force reduction program (FRP)
- p. other (please specify)

Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Dissatisfied	Don't Know
00000000	00000000	00000000	00000000	00000000	00000000

Effects of military career on family

16. In general, how much have the following aspects of family life been affected by your military career?

- a. family life in general
- b. spousal/partner relationships
- c. parent/child relationships
- d. spouse's or partner's career (military or civilian)
- e. spouse's partner's and/or children's education
- f. social life
- g. other goals in life
- h. academic upgrading
- i. financial stability
- j. owning your own home
- k. living where you want to live
- l. others (please specify)

A Great Deal	Moderately	Undecided	Somewhat	Not At All	Does Not Apply
00000000	00000000	00000000	00000000	00000000	00000000

17. Within the past 12 months, how many days did your military service require you to be away from your primary residence? (Include operational requirements, incremental staff and TD but not courses.)

None	1-10	11-15	More Than 15
0	0	0	0

Now about your spouse, including common-law spouse...

18. Is your spouse a military member?

Yes	No
0	0

If YES, please skip question 19 and go to Question 20
If NO, please answer question 19

Does not apply. I have no spouse
(Please go to question 22.)

19. Does your spouse have a civilian job/career?

Yes	No
0	0

20. My spouse is supportive of my military career.

Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know
0	0	0	0	0	0

21. My spouse would prefer that I be a civilian.

Strongly Agree	Agree	Neither Agree Nor Disagree	Disagree	Strongly Disagree	Don't Know
0	0	0	0	0	0

Another important part of this study is to learn how you feel about a number of issues related to your present job.

23. Consider your present job, how satisfied are you with the following aspects?

[illegible]

23. Consider your relationship with your current *immediate superior*; generally, how satisfied are you with the following?

	Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Dissatisfied	Don't Know
His/her... a. technical abilities	0	0	0	0	0	0
He/she... b. accepts advice	0	0	0	0	0	0
c. encourages teamwork.	0	0	0	0	0	0
d. provides feedback on your performance.	0	0	0	0	0	0
e. encourages communication.	0	0	0	0	0	0
f. provides leadership.	0	0	0	0	0	0
g. encourages commitment to the CF	0	0	0	0	0	0
h. encourages loyalty to the CF.	0	0	0	0	0	0
i. recognizes your performance.	0	0	0	0	0	0
j. is supportive.	0	0	0	0	0	0
k. maintains high standards of performance.	0	0	0	0	0	0
l. provides direction.	0	0	0	0	0	0

24. Consider your relationship with your subordinates in your present job; generally, how satisfied are you with the following?

☐ Does not apply; I have no subordinates <i>(Please go to question 25.)</i>					
Their...					
a. technical abilities	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Don't Know
b. commitment to the CP	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Don't Know
c. loyalty to the CP	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Don't Know
d. communication with you	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Don't Know
e. support for you	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Don't Know
f. respect for your rank	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Don't Know
g. respect for your position	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Don't Know
h. standards of performance	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Don't Know
i. training	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Don't Know
j. acceptance of direction	Very Satisfied	Satisfied	Dissatisfied	Very Dissatisfied	Don't Know

15. Consider your relationships with your peers in your present job: generally how satisfied are you with the following? The...

Consider your relationships with your peers in your present job. Generally how satisfied are you with the following? The...

a. support you receive	Very satisfied	satisfied	Dissatisfied	Very dissatisfied	Don't know
b. loyalty you receive	000	000	000	000	000
c. respect you receive	000	000	000	000	000

Working Conditions

26. Consider your present *working conditions*, how satisfied are you with the following? (Choose either the static setting or the operational setting, whichever is applicable to your present employment.)

STATIC SETTING (ie. base, headquarters)

- a. availability of equipment
- b. quality of equipment
- c. working space
- d. lighting
- e. cleanliness
- f. washroom facilities
- g. privacy
- h. safety in the work place
- i. healthy environment

Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Dissatisfied	Don't Know
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐

OPERATIONAL SETTING

- (ie. unit capable of sea, land or air deployment)
- a. availability of equipment
 - b. quality of equipment
 - c. working space
 - d. washroom facilities
 - e. adequacy of training facilities
 - f. privacy
 - g. safety in the work place
 - h. healthy environment

Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Dissatisfied	Don't Know
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐

Hours of Work

27. Consider your present *position*, how satisfied are you with the number of hours that you work per week?

Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Dissatisfied	Don't Know
☐	☐	☐	☐	☐	☐

STATIC SETTING (ie. base, headquarters)

The following four questions refer to non-operational employment. It does not include exercises or other operational deployment.

28. Within the past 12 months, how many hours per week on average did you work?

35-39 hours	40-44 hours	45-49 hours	50-54 hours	55-59 hours	60 hours or more
☐	☐	☐	☐	☐	☐

29. Within the past 12 months, how many hours per week on average did you work that were above your regularly scheduled hours as established by your unit? none ☐

1-5 hours	6-10 hours	11-15 hours	16-20 hours	21-25 hours	26 hours or more
☐	☐	☐	☐	☐	☐

30. Considering your answer to question 29, how often were the overtime hours worked on weekends? (Please answer a, b, and c.)

none	1-3 times	4-6 times	7-9 times	10-12 times	13 or more times
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐
☐	☐	☐	☐	☐	☐

- a. both Saturday and Sunday
- b. Saturday only
- c. Sunday only

31. Within the past 12 months, how many compensatory days off did you receive for the extra time you worked? (Do not include annual leave, statutory holidays, weekends or other regularly scheduled days off.) none ☐

1-5 days	6-10 days	11-15 days	16-20 days	21-25 days	26 days or more
☐	☐	☐	☐	☐	☐

(i.e. unit capable of sea, land or air deployment)

32. Within the past 12 months, have you been deployed in exercise or other operations? Yes No
☐ ☐

23. Within the past 12 months, how many days were you deployed on exercise or other operations?

1-30 days	☐	121-150 days	☐	241-270 days	☐
31-60 days	☐	151-180 days	☐	271-300 days	☐
61-90 days	☐	181-210 days	☐	301-330 days	☐
91-120 days	☐	211-240 days	☐	331-365 days	☐

34. Within the past 12 months, how many hours per week on average did you work? (Include duty watches or guard duty.)

none ☐	1-39 hours ☐	40-44 hours ☐	45-49 hours ☐	50-54 hours ☐	55-59 hours ☐	60 hours or more ☐
-------------------------------	--	---	---	---	---	--

35. How many compensatory days off did you receive for the extra time you worked? (Do not include annual leave, statutory holidays, weekends or other regularly scheduled days off.)

none ☐	1-5 days ☐	6-10 days ☐	11-15 days ☐	16-20 days ☐	21-25 days ☐	26 days or more ☐
-------------------------------	--------------------------------------	---------------------------------------	--	--	--	---

36. Do you perform shift work? Yes No
☐ ☐

if YES, please answer question 37:
if NO, please skip question 37 and go to question 35.

[illegible]

Next, we are interested in your future plans with regard to making the CF a career. Please answer the following.

38. What are your career intentions within the next two years?

[illegible]

- a. the CF lifestyle
- b. security of employment
- c. job satisfaction
- d. job workload
- e. job challenge
- f. esprit de corps →
- g. military discipline
- h. stability of family life
- i. spouse's (partner's) job/career
- j. spouse's (partner's) and/or children's education
- k. pay and benefits
- l. support services
- m. posting location
- n. accommodation
- o. public awareness of CF
- p. promotion opportunities
- q. home ownership

[illegible]

- | Much
Better Than
Civilian Life | Better
Than
Civilian Life | Neither
Better Nor
Worse Than
Civilian Life | Worse
Than
Civilian Life | Much
Worse
Than
Civilian Life | Don't
Know |
|--------------------------------------|---------------------------------|--|--------------------------------|--|---------------|
| 0 | 0 | 0 | 0 | 0 | 0 |

Lastly, we would like to ask some questions about yourself to help us interpret the results of this questionnaire. This information will be grouped into categories and only grouped information will be used.

- | | | | |
|-----------|-----------------------|----------------------|-----------------------|
| Ptst/BrOS | ☐ | Ocdt/Ncdt | ☐ |
| Ptst/TvAB | ☐ | 2Lt/ASLt | ☐ |
| Cpl/LS | ☐ | Lt/SLt | ☐ |
| MCpl/MS | ☐ | Capt/Lt.N. | ☐ |
| Sgt/PO2 | ☐ | Maj/LCdr | ☐ |
| WO/PO1 | ☐ | LCol/Cdr | ☐ |
| MWO/CP02 | ☐ | Col/Capt.N. | ☐ |
| CWO/CP01 | ☐ | General officer list | ☐ |

-

- | | |
|-----------------------|---|
| 5 years or less | 1 |
| 6 to 10 years | 0 |
| 11 to 15 years | 0 |
| 16 to 20 years | 0 |
| greater than 20 years | 0 |

- Army ☐ Navy ☐ Air Force ☐

- French ☐ English ☐

- Male
- ☐
- Female
- ☐

- 16-22 years ☐
23-29 years ☐
30-36 years ☐
37-43 years ☐
44-50 years ☐
51 years or more ☐

- | | |
|-----------------------|--------|
| Married | 000000 |
| Common-law | 000000 |
| Separated/Divorced | 000000 |
| Single, never married | 000000 |
| Widowed | 000000 |

- Yes
- ☐
- No
- ☐

50. What is the highest level of education you have completed?

some high school
high school diploma or Sec V
some college or CEGEP
college diploma
some university or CEGEP II
university degree
some graduate school
a graduate degree

☐
☐
☐
☐
☐
☐
☐
☐

51. In what province or territory of Canada did you initially join the CF?

Newfoundland
Nova Scotia
New Brunswick
Prince Edward Island
Quebec
Ontario
Manitoba

☐
☐
☐
☐
☐
☐
☐

Saskatchewan
Alberta
British Columbia
Yukon
North West Territories
Outside Canada

☐
☐
☐
☐
☐
☐
☐



*If you have any comments to make on any of the issues raised in this questionnaire or on the questionnaire itself,
please use the space below.*

Final Instructions

You have now completed the Canadian Forces Conditions of Service Questionnaire. Please insert the questionnaire into the envelope provided; seal the envelope and return it to the survey administrator.

THANK YOU FOR YOUR CO-OPERATION AND ASSISTANCE.