

**THE TURNOVER BEHAVIOUR OF FRANCOPHONE SAILORS  
IN THE CANADIAN NAVY: AN EXAMPLE OF THE UTILITY OF THE  
CANADIAN FORCES ATTRITION MONITORING SYSTEM**

by

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1994

Submitted in partial fulfilment of the requirements  
for the degree of Master of Science in  
Applied Psychology

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### **Abstract**

The primary objectives of this study were: to confirm the structure and psychometric properties of the Canadian Forces Attrition Information Questionnaire (CFAIQ); to examine differential rates of attrition and reasons for leaving for Anglophone and Francophone sailors; and to test important components of Mobley's Expanded Turnover Process Model (1982). The CFAIQ (Lyon, 1987) captures important attrition information including reasons for leaving, CF/civilian comparisons, attitudes toward the CF experience, preparation for transition to civilian life and biographical information. Using archival data collected over a 5 year period, all Francophone and Anglophone graduates of sea-going (hard-sea) occupation training participated in the first portion of the study (N=1077). Those who completed the Canadian Forces Attrition Information Questionnaire (CFAIQ) when leaving the Navy participated in the remainder of the study (N=94). Consistent with previous research (eg. Bender, Chouinard, Lee, Tanner, & Tseng, 1992; Montgomery, 1991), the results of the present study indicate Francophones continue to leave the Navy at double the rate of their Anglophone peers. In addition, Francophones reported more dissatisfaction with their CF experience and cited family issues as their most important reason for leaving



as compared to job related issues for Anglophones. A LISREL analysis lent strong support to the Expanded Turnover Process Model (Mobley, 1982) upon which the CFAIQ was constructed and suggested a revised model for use in military organizations. The discussion of results includes recommendations for CFAIQ improvement and the need for a re-examination of the Realistic Job Preview (RJP) for Francophones entering the hard-sea occupations of the Navy.

**The Turnover Behaviour of Francophone Sailors  
in the Canadian Navy: An Example of the Utility of the  
Canadian Forces Attrition Monitoring System**

Canada is a multicultural and formally bilingual country. That is, English and French representation is legally mandated under the Official Languages Act of 1971 for all national and government institutions. Thus, the Canadian Forces (CF) must pay particular attention to Anglophone-Francophone representation, rates of turnover, and other areas which may indicate systemic or other biases against minorities. In addition, the success of military operations is largely contingent upon the commitment and morale of military personnel. High rates of voluntary turnover are characteristic of problems in these areas and signal the potential for barriers to national and military objectives. Therefore, the importance of the present study can be viewed from both national and armed forces perspectives.

Attempting to maintain Anglophone-Francophone representation at national levels (25% Francophone, 75% Anglophone), has lead to several linguistic re-organization initiatives within the Navy. The most observable is the designation of ships as French Language Units (FLUs), Bilingual Units (BUs), or English Language

Units (ELUs). The language designation refers to the daily working language of the ship. In the case of BUs, either language may be used at the discretion of the Commanding Officer. It should be noted that this is a national policy and when Canadian ships operate with other ships of NATO countries, English is the official language of operations. Of the sixteen major ships in the Canadian Navy, two have been designated FLUs (HMCS Ville de Quebec, HMCS Montreal), two others have been designated BUs (HMCS Preserver, HMCS Athabaskan) and twelve have remained ELUs.

The CF is an organization that has paid particular attention to the problem of attrition. One example is recent research indicating apparent differential rates of turnover between Francophone and Anglophone non-commissioned members (NCMs) in the sea-going (hard sea) occupations of the Navy (eg. Lyon, Montgomery and Martineau, 1989; Montgomery, 1991; Bender, Chouinard, Lee, Tanner and Tseng, 1992). For example Bender et. al. (1992) concluded that "Attrition rates for Francophone NCMs in the sea trades are higher than those for Francophone NCMs in the CF as a whole, while those for Anglophone NCMs have been on par with all NCMs in the CF as a whole" (pp 107-108). Specifically, these researchers report average turnover rates in the hard sea

occupations of 14% for Francophones and 7% for Anglophones. This compares to airforce turnover rates of 5% and 4% for Francophones and Anglophones respectively. Army turnover rates are reported to be 7.5% for both language groups (Bender et. al., 1992). Thus, the problem of differential rates of voluntary turnover between Francophones and Anglophones are unique to the sea-going occupations of the Navy.

Several studies suggest cultural and linguistic differences can account for work perception and subsequent attrition differences between Anglophones and Francophones (eg., Kanungo & Bhatnagar, 1978; Wong-Rieger & Taylor, 1981). For example, interpersonal climate at work tends to be more meaningful for Francophones than Anglophones (Kanungo & Bhatnagar, 1978). Conversely, individual achievement at work has been found to be more important for Anglophones than Francophones (Wong-Rieger & Taylor, 1981). The influence of language and culture on the attrition behaviour of navy personnel has not been examined.

In addition to language and culture, other biographical variables may also influence the attrition behaviour of Navy personnel. Given the long duration of Naval operations (3-6 months), variables such as gender and marital status likely play a role in the decision

making process to leave. Recent research reveals women account for only 7.8% of non-commissioned personnel in the sea-going occupations (DPIS, 1993). Although figures indicating the marital status of Naval personnel are not available, rates of CF married personnel with five years or less service are 23% and 29% for males and females respectively (DPIS, 1993). The influence of these variables on the attrition behaviour of Anglophone and Francophone personnel of the sea-going occupations has yet to be investigated.

With the implementation of the Canadian Forces Attrition Monitoring System (CFAMS) in 1987, the analysis of important attrition information in addition to turnover rates has recently become possible.

The purpose of the present study is three-fold. First, this study will confirm the structure and psychometric properties of the Canadian Forces Attrition Information Questionnaire (CFAIQ). Second, it will examine differential rates of attrition and reasons for leaving the CF for Anglophones and Francophones. Finally, the study will test important components of Mobley's Expanded Turnover Process Model (1982) upon which the CFAIQ was constructed. Findings of the present research will determine the need for relevant personnel policy changes in Maritime Command (MARCOM). A review of

the turnover literature, background to the present study, and development of the CFAIQ and CFAMS will provide the appropriate context for an examination of the findings of the present research.

### Scheduled versus Unscheduled Turnover

The study of employee turnover or attrition, as it is sometimes called, has been a major area for research in industrial/organizational psychology for many years. Scheduled or predicted employee turnover is a fact of life in all organizations and has the potential for positive individual and group consequences. For example, studies by Dalton and Todor (1979) and Staw (1980) examined a number of ways in which scheduled turnover can contribute to organizational effectiveness through the infusion of new technology, variety, reorganization, and disruption of entrenched bureaucratization. These positive consequences are a function of the nature or type of business, technology inherent in the business, quality of recruits relative to leavers, the position levels involved, opportunities for organizational change, and the amount or rate of turnover.

Unscheduled turnover, however, has a greater potential for negative organizational and individual consequences. For the purposes of this study, unscheduled turnover is synonymous with voluntary

attrition and refers to the act of leaving the CF voluntarily prior to compulsory retirement age. Although money and other costs are incurred to replace both the scheduled and unscheduled leaver, the disruption to the organization caused by the unscheduled leaver may oftentimes be more serious. A model for the measurement of human resource replacement costs has been put forward by Flamholtz (1974). According to this model, in addition to the original human resource costs, replacement costs include separation pay (direct costs), loss of efficiency prior to separation, and the cost of the vacant position during search (indirect costs). Moreover, unscheduled or otherwise, high rates of turnover may disrupt performance (Mobley, 1982), social and communication patterns (Price, 1977), and morale (Mobley, 1977; Steers and Mowday, 1981).

Like any other large organization, the Canadian Forces (CF) have a vested interest in the organizational and individual consequences of turnover. To this end, the Canadian Forces Personnel Applied Research Unit (CFPARU) has developed the CFAIQ as the primary attrition monitoring device of the Canadian Forces CFAMS (Lyon, 1987; Parker, 1992). Briefly, the CFAIQ has been designed to monitor voluntary attrition (unscheduled turnover) patterns and identify potential attrition

problem areas within the organization. The responses of voluntary leavers are examined in the aggregate to analyze those factors thought to be related to the attrition process and to describe the characteristics of voluntary leavers. The form, content and development of the CFAIQ will be discussed in detail in a later section. Until now, the utility of the CFAIQ as an attrition monitoring device has not been tested.

#### Background to the Present Study

In a study designed to determine what differences exist between stayers and leavers and what effect language group has on attrition, Montgomery (1991) found that intentions to quit and actual turnover rates were much higher for Francophone sailors than that for their Anglophone peers ( $\chi^2 = 29.419$ ,  $df = 1$ ,  $p < .01$ ). Montgomery used the Wheel Questionnaire (Shalit, 1985) and the Fleet School Attrition Survey (Lyon, Montgomery & Martineau, 1989) to assess the attitudes of both groups while in navy occupation (QL3) training. After 3 years of service, of the 237 original subjects in the cohort, 174 (74%) were still serving and 63 (26%) were released. When broken down by language group, a total of 144 (82.75%) Anglophones remained in service, while 30 (17.25%) had voluntarily left. Of the Francophones, 28 (46%) remained, while 33 (54%) left. These results



confirm the notion that Francophones voluntarily leave navy occupations at a higher rate than do Anglophones. "In fact, the rate of attrition for this sample is even higher than the rate the navy had reported for earlier groups" (Montgomery, 1991;pp 41).

Although implemented in 1988, sufficient CFAIQ data for the sample were not available at the time of Montgomery's (1991) study to fully address turnover related issues such as reasons for leaving, or perceptions of CF experience at the time of turnover. At present, over 5 years of CFAIQ data are available for the examination of these questions.

#### Turnover Research Prior to the Major Conceptual Models **Job Satisfaction and Turnover**

In an effort to respond to industries' concern over the costs related to loss and replacement of personnel, many early studies of employee turnover focused on the relationship between overall job satisfaction and turnover. The bulk of the early work, however, was conducted without a theoretically based model to guide the investigation of the turnover process. Brayfield and Crockett (1955), for example, pointed to serious methodological problems in most of the turnover research up to that time. The most critical deficiencies were in the area of reliable and independent measures.

The first model of the turnover process was proposed by March and Simon (1958). In this inducements/contributions model, they suggested that the individual weighs the benefits (inducements) and drawbacks (contributions) offered by the current job such as salary, promotion opportunities, supervisors, working conditions, and geographic location over those in other organizations. If the balance was equal or weighted in favour of the current employment, then the individual was more likely to stay. If, on the other hand, the balance was in favour of job alternatives then the individual might choose to leave. This relationship between inducements and contributions represented the two major factors in the model: (1) the perceived desirability of leaving; and (2) the perceived ease of movement from the organization. The perceived desirability of movement was thought to be influenced by the individual's level of job satisfaction plus the perceived possibility of interorganizational transfer. The primary component that influenced the desirability to leave was the individual's conceptualization and perception of employee satisfaction with the job. In this form, the model represented an important theoretical advance and continues to influence turnover research today.

Vroom (1964) reviewed several studies which supported the relationship between job dissatisfaction and turnover. According to Vroom, the probability of someone voluntarily leaving was a function of the balance between the forces to remain and the forces to leave. Job satisfaction was seen as the major factor in the force to remain. The valence of outcomes not obtainable in the present job and the expectancy of their fulfilment elsewhere was seen as the major influence in the force to leave.

Although a consistent negative relationship between job satisfaction and turnover is well established (eg. Vroom, 1964; Koch & Steers, 1978; Marsh & Mannari, 1977; Newman, 1974; Waters & Roach, 1973), it rarely accounts for more than 14% of the variance in reported turnover (Mobley, Griffeth, Hand & Meglino, 1979). In addition, many researchers felt overall job satisfaction was conceptually simplistic and looked to other variables such as pay, promotions, supervision, and peer group relations to predict individual-level turnover (Mobley, 1982). The study of each of these variables separately laid the groundwork for the development of the major conceptual models of turnover.

**Satisfaction with Pay**

The evidence dealing with a relationship between pay satisfaction and turnover is mixed. For example, Federico, Federico and Lundquist (1976) in their sample of 96 Credit Union females found that higher salary was associated with longer tenure. However, higher salary and the difference between expected and actual salary were associated with shorter tenure. In a study which examined the pay attitudes of 349 Certified Public Accountants, Hellriegel and White (1973) discovered that "leavers" had more negative attitudes toward pay than "stayers" and also reported significant increases in pay on their new jobs.

In their study of 77 entry-level public agency employees, Koch and Steers (1978) found no relationship between satisfaction with pay and turnover. Other studies examining hospital employees (Mobley, Horner, & Hollingsworth, 1978), nursing home employees (Newman, 1974) and clerical insurance company personnel (Waters, Roach, & Waters 1976) have found similar non-relationships between pay satisfaction and turnover.

**Satisfaction with Promotions**

There is little evidence to suggest a strong relationship between satisfaction with advancement or promotion and turnover (eg. Kraut, 1975; Koch & Steers,

1978). However, Marsh and Mannari (1977) in their study of 1,033 Japanese electrical company workers did report a low negative correlation of  $-.22$  between perceived chances of promotion and turnover.

#### **Satisfaction with Supervision**

In general there is moderate support for the negative relationship between satisfaction with supervision and turnover (eg. Hellriegel & White, 1973; Dansereau, Cashman, & Graen, 1974). Similarly, leadership has been significantly related to turnover. Graen and Ginsburgh (1977) suggested the focus of supervision research shift to the leader-member exchange rather than a continued reliance on generalized supervision affect measures.

#### **Satisfaction with Peer Group Relations**

There is little evidence for a relationship between group relations and turnover. This is most likely due to the general methodological problem of measuring task interaction and other group processes. (Marsh & Mannari, 1977; Newman, 1974; Waters, Roach, & Waters, 1976). Only one study reported a significant relationship between satisfaction with co-workers and turnover (Koch and Steers, 1978) and even then only a minor effect was found.

## **Summary**

The research reviewed above points to a consistent, although generally weak, relationship between several satisfaction variables and turnover. Although important, the reliance on job satisfaction has been considered a conceptually simplistic and an empirically deficient basis for understanding the employee turnover process (eg. Mobley, Griffeth, Hand, & Meglino, 1979). This has led to the development of several major conceptual models which attempt to account for the complexity and interaction of many other variables thought related to the turnover process. Two of these models have been applied to the problem of military turnover or attrition.

### **Major Conceptual Models**

#### **The Ajzen and Fishbein Model of Reasoned Action (1980).**

The Ajzen and Fishbein Model of Reasoned Action is effective in predicting a wide range of behaviours such as academic achievement (Ajzen & Madden, 1985), weight loss (Schifter & Ajzen, 1985) and contraceptive behaviour (Fisher, 1984). Several studies have also used the model to predict turnover intentions and behaviour (eg. Newman, 1974 ; Prestholdt, Lane and Matthews, 1987; Bradley & Paunonen, 1989; Montgomery, 1991).

The Model of Reasoned Action (MRA) (Ajzen & Fishbein, 1980) followed from the authors' research on

how attitudes influence behaviour in choice situations. The model purports to explain how the choice of behaviour can be predicted from attitudes toward the target behaviour and from social pressures to perform the behaviour (Figure 1).

The major idea of the model is that an individual's **intention** to act is the best indicator of what an individual will do in a choice situation. If the measure of intention to act closely corresponds with the behavioral criterion and if the intentions are stable, then the intentions will predict subsequent behaviour. Behaviour, therefore, is determined by the individual's intention to act. The intention to act, in turn, is influenced by two separate sources: the individual's attitude towards the action, and the normative influence (social pressure) to act. **Attitude**, in the model, is defined as an affective evaluative response. The normative influences are **subjective norms** and refer to the individual's perceptions of how people who are important to him or her (referents) feel he or she should act. The extent to which **attitude** and **subjective norms** will influence behavioral intentions will vary from situation to situation.

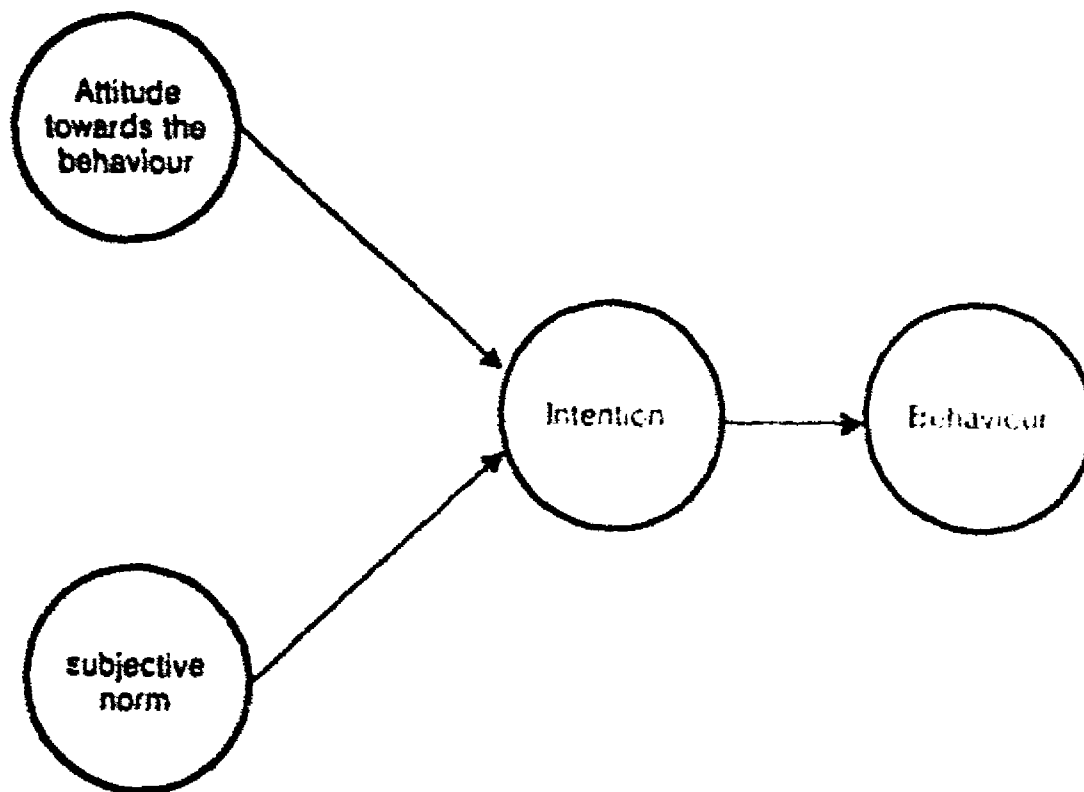


Figure 1. The Ajzen and Fishbein Model of Reasoned Action. Source: Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behaviour. Englewood Cliffs, NJ: Prentice-Hall.



Bradley and Paunonen (1989) used the Model of Reasoned Action (Ajzen & Fishbein, 1980) as their methodological framework to examine the determinants of medical officers' intentions to leave the Canadian Forces (CF). Attitudes toward remaining in or leaving the CF predicted the intentions of 328 medical officers.

Montgomery (1991) used the NRA in conjunction with Shalit Sequential Appraisal Model (Shalit, 1985) to examine the attrition and retention predictors for Canadian Naval personnel. Intention to serve predicted attrition behaviour. In turn, beliefs about being in the navy, beliefs about one's military occupation, and attitudes for stayers predicted intention to serve. Beliefs about being in the navy predicted intention to leave.

Mobley's Expanded Turnover Process Model (1982).

First described in the work by Mobley, Griffeth, Hand, and Meglino (1979), the Expanded Turnover Process Model builds on elements of existing research (eg. Mobley, 1977) and attempts to capture the overall complexity of the turnover process. The model has been tested in several studies designed to examine military attrition (eg. Youngblood, Mobley, & Meglino, 1983; Mendes & Lyon 1984; Lyon, 1987; Parker, 1992). The model graphically illustrates the multiple organizational,

environmental, and individual variables associated with turnover. The Expanded Turnover Process Model (Figure 2) suggests that there are four primary determinants of intentions to quit and, subsequently, turnover: (1) job satisfaction-dissatisfaction; (2) expected utility of alternative internal (to the organization) work roles; (3) expected utility of external (to the organization) work roles; and (4) nonwork values and contingencies (Mobley, 1982).

#### Job Satisfaction

The Expanded Turnover Process Model (Mobley, 1982) recognizes job satisfaction as a "highly individualized evaluation that is dependent on individual differences in values" (pp 125). Moreover, the model emphasizes that satisfaction is a function of what the employee perceives relative to his or her values rather than a function of formal policy or management perceptions. In addition, satisfaction is presented as multi-faceted and present-oriented and, therefore, a composite of the

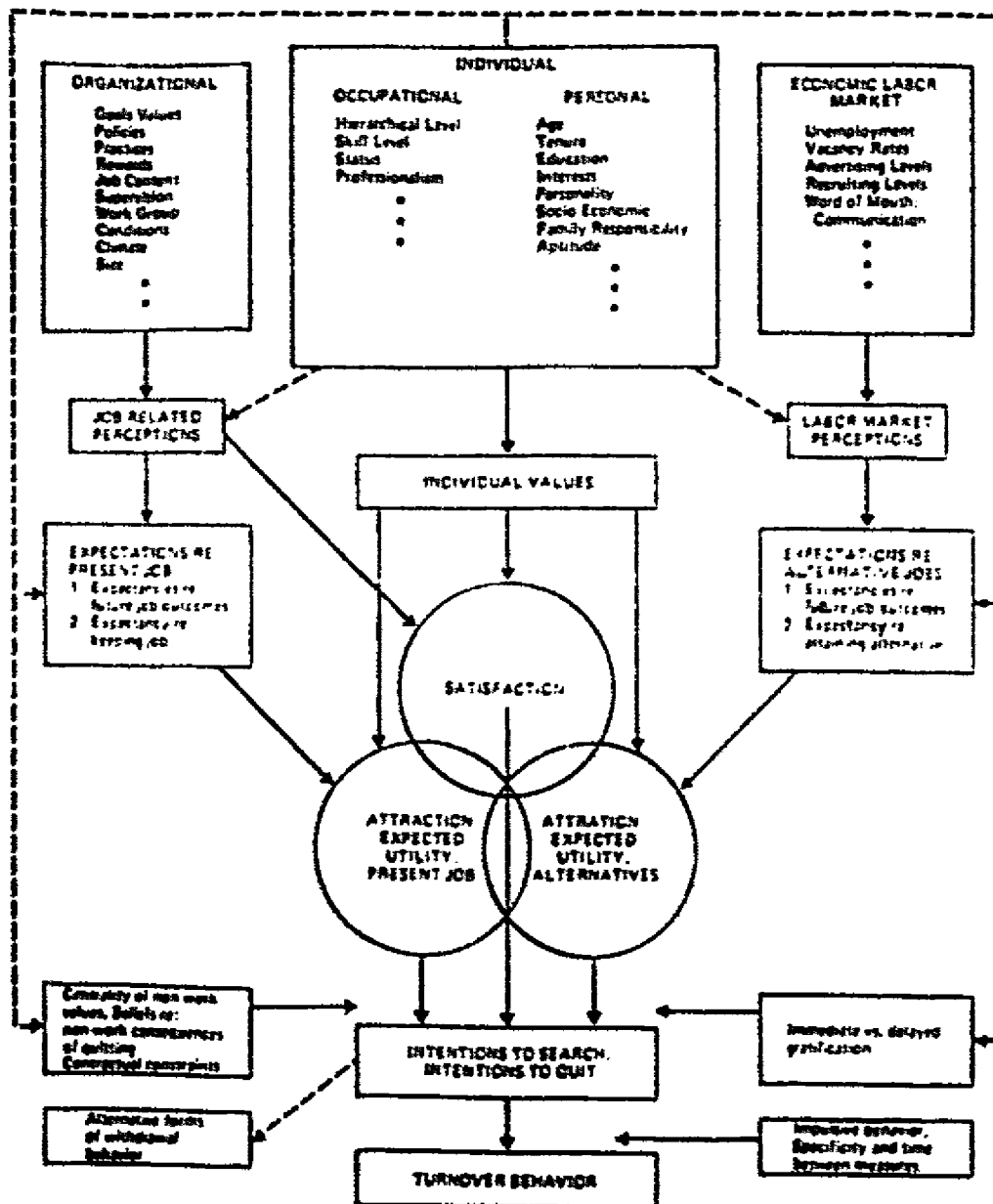


Figure 2. Mobley's Expanded Turnover Process Model.  
 Source: Mobley, W.H. (1982). Employee Turnover: Causes, Consequences, and Control. Reading, MASS: Addison-Wesley.

extent to which a set of important values are perceived as being attained on the job.

Relevant to the present study, value differences between Francophones and Anglophones and their influence on perceptions of work have been well documented (eg. Hughes, 1968; Kanungo, Gorn & Dauderis, 1976; Kanungo & Bhatnagar, 1978; Wong-Rieger & Taylor, 1981). For example, Kanungo and Bhatnagar (1978) examined the achievement orientation and occupational values of Francophone and Anglophone youths (N=370) in their final year of high school (near recruiting age). The authors found, consistent with previous research using adults, that Francophone youths preferred setting difficult rather than moderate goals for themselves, and relied less on task competence and more on the sympathetic nature of their co-workers. This is reflective, the authors suggest, of stronger esteem and social needs on the part of Francophones. Moreover, in comparison to Anglophones, Francophones tended to be more socially dependent, more affiliative, and emphasized the interpersonal climate at work and fringe benefits that could provide them with a sense of security and belonging.

In a study that examined the group membership values in Anglophones and Francophones (N=80), Wong-Rieger and

Taylor (1981) found differences in several areas. For example, Francophones placed greater emphasis on their cultural group and their personal groups had highly similar value orientations relative to Anglophones. In addition, Francophones' own values were found to be group-oriented and similar to those of all their groups, whereas Anglophones' own values were found to be individualistic and less similar to their groups' values. Evidence of value differences between Francophones and Anglophones and their subsequent influence on turnover behaviour is examined in the present study.

#### Expected Utility of Internal Roles

To understand the entire turnover process, it is necessary to assess not only the employee's current satisfaction but also the employee's expectations about future roles in the organization based on the work values most important to the individual. This is distinct from satisfaction which is based on multiple individual values and current perceptions. Expected utility of alternative internal roles, on the other hand, is based on multiple individual values and future expectations of policies, practices, conditions and outcomes in the organization. Such future-oriented expectations and evaluations are based on: expected transfer possibilities; expected promotions; expected changes in present job; expected

changes in organizational policies, practices or conditions; and/or expected transfer, promotion, or turnover among other individuals (Mobley, 1982).

Expected Utility of External Alternative Work Roles

A third major determinant of turnover according to this model is the individual's expectation of finding an attractive alternative job external to the present organization. In this case, the expected utility of an alternative job external to the organization is based on: the employee's important work values; expected attainment of these values from the external job; and the expectation of being able to attain the alternative job. The model emphasizes a complete assessment of this variable to understand fully the turnover process. From this perspective, it is useful for organizations to conduct regular comparative analyses of pay and benefits in their industry and relevant labour market conditions or opportunities (Mobley, 1982). In addition, employee perceptions of the rewards, outcomes, and conditions available from external alternatives are useful diagnostic information.

### Nonwork Values and Roles

In addition to satisfaction, expectation regarding jobs internal to the organizations, and expected utility of external jobs which are related to work values, an individual's turnover intentions may also be related to the degree to which the job or alternatives are perceived or expected to facilitate or interfere with important nonwork values or roles. For example, family orientation, geographical preferences, and religious and social values will be interrelated with work-related values for most individuals. The different organizational attitudes of dual-income and single-income families (eg. Lamerson, 1987) is an example of the influence of nonwork roles in the work force. The model suggests that these nonwork values and roles require detailed explanation if turnover is to be understood more fully and managed effectively.

### Summary of Mobley's Model (1982)

The Expanded Turnover Process Model (Mobley, 1982) describes the relationships among individual, organizational and extra-organizational factors, and indicates how these factors might influence attitudes and perceptions about work. Specifically, individual values, attitudes and perceptions about the job and labour market create expectations about one's present job and about

alternative employment, which, in turn, influence the levels of satisfaction and attraction to the present job and to possible alternatives. Subsequently, the levels of satisfaction and attraction influence both an individual's intention to search for alternative employment as well as the intention to leave the current job.

This comprehensive and complex model has strongly influenced the study of turnover behaviour in the last ten years and forms the basis for the Canadian Forces Attrition Monitoring System (CFAMS; Lyon, 1987). Since the present study addresses questions related directly to CFAMS, and specifically the Canadian Forces Attrition Information Questionnaire (CFAIQ), the influence of the Expanded Turnover Process Model (Mobley, 1982) on the development of the CFAIQ is discussed.

#### **The Influence of Mobley's Model (1982) on the CFAIQ**

Guided by the Expanded Turnover Process Model (Mobley, 1982) the CFAIQ (see Appendix; Lyon, 1986; Lyon, 1987; Parker & Lyon, 1988) provides information about specific aspects of the attrition process. Administered to all voluntary leavers during their last few days of service, the CFAIQ attempts to capture the effects of organizational, individual and extra-organizational factors on employee satisfaction, intentions to quit and



actual turnover behaviour. Elements of Mobley's Model are reflected in the following sections of the CFAIQ:

Section 1 - REASONS FOR LEAVING;

Section 2 - CF/CIVILIAN COMPARISON;

Section 3 - ATTITUDES TOWARD YOUR EXPERIENCE IN  
THE CF;

Section 4 - PREPARATION FOR TRANSITION FROM CF TO  
CIVILIAN LIFE; and,

Section 5 - BIOGRAPHICAL INFORMATION

Section 1 - Reasons For Leaving

This section of the CFAIQ measures specific individual (eg., desire for more challenging work), organizational (eg., too many postings), and extra-organizational (eg., spouse unwilling to move to new posting location) factors in the turnover decision. These factors represent the initiating turnover variables in the Mobley Model (Mobley, 1982) which influence attitudes and perceptions about work and subsequent turnover decisions. This section contains 46 items selected on the basis of three criteria. It includes past, present and future orientations; individual (Table 1), organizational (Table 2) and extra-organizational (Table 3) variables; and represents important reasons for leaving identified in previous research or

identified by CF authorities as potentially important leave considerations (Lyon, 1987).

Using a five point scale ranging from A - "Extremely Important" to E - "Not True or of No Importance", respondents identify only the reasons that contributed to their turnover decision. The number of items rated by the respondent as having had at least "some importance" in the leave decision provides an

**Table 1**  
**Individual Variables**

---

Work Challenge	Freedom of Speech
Sex Discrimination	Retraining Needs
Co-worker Relationships	Responsibility
Job/Vocation Match	Stress
Supervisor Relationships	Interest
Credit for Work	Lifestyle
Respect	

---

**Table 2**  
**Organizational Variables**

---

Postings	Tools and Equipment
Compensation	Terms of Service
Performance Evaluation	Benefits
Retirement Policy	Promotion
Physical Environment	Time Away
Pay	Safety Hazards
Hours of Work	Job Security

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**Table 3**  
**Extraorganizational Variables**

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Attractiveness of Alternatives	Family
Accommodation	Distance from Work
Transportation	

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Source: Lyon, C.D.F. (1987). The CF Attrition Information Questionnaire: Conceptual Development and Evaluation Plan. Willowdale, On: CFPARU

indication of the various factors considered in making such a decision. In addition, respondents are asked to rank-order, from among the 46 items, the three most important reasons for their decision to leave the CF. This response procedure identifies in order of importance the three most often reported reasons for CF turnover.

### Section 2 - CF/Civilian Comparison

As described by Mobley (1982), attitudes about one's employment are formed by comparing current lifestyle and work opportunities with those available in other organizations. These attitudes form expectations about present and alternative job outcomes and influence the employee's intention to quit and subsequent turnover behaviour. The CF/Civilian Comparison section provides information on three important questions: (1) whether life in the CF is perceived as favourable or unfavourable in comparison to civilian life; (2) which aspects of CF life are critically different from civilian life; and, (3) whether the leaver's views of military and civilian life are consistent with his or her reasons for requesting release. The items represent those important work, social, environmental or lifestyle factors which are present in the CF and in Canadian society at large.

On a five point scale ranging from 1 - "Clearly better in the CF" to 5 - "Clearly better in civilian

life", respondents are asked to consider 30 items that are relevant to civilian and CF employment.

Each of the 30 items in the CF/Civilian comparison section is also represented in the initial Reasons for Leaving section so that the respondents assessments of the attractiveness of civilian life can be compared with their earlier stated reasons for leaving.

### Section 3 - Attitudes Toward Your Experience in the CF

This section addresses directly the overall satisfaction component of the model influenced by job related perceptions and individual values (Mobley, 1982). Poor perceptions of one's job and its conflict with individual values may initiate the search for employment alternatives. Overall satisfaction is measured using a five point scale ranging from 1 - "Very Satisfied" to 5 - "Very Dissatisfied". Respondents consider 20 statements dealing with general CF experiences such as training, career management, and pay. This section provides the organizational context for understanding the stated reasons for leaving included in the initial section of the CFAIQ.

### Section 4 - Preparation for Transition from CF to Civilian Life

This section of the CFAIQ examines the respondents search for alternative employment or lifestyle and

represents actual turnover behaviour as described in the Mobley (1982) model. Its purpose is to provide information about the individual's level of preparedness for civilian life. It contains three parts: immediate and specific second career intentions; intentions to pursue academic upgrading or retraining; and job search or civilian work plans.

Part one contains 7 items and assesses the respondent's intentions to either obtain a job similar to his or her current military occupation, enter a training program, go into one's own business, or take full retirement. Responses to these items are related to reasons for leaving, views of civilian life, and overall satisfaction with the CF.

Part two contains 9 items which examine an individual's intention to pursue academic upgrading or re-training in preparation for transition. Respondents are asked to answer 'yes' or 'no' to each item. The frequency of 'yes' responses indicates the degree of prior involvement in education and training. In addition, each item progressively indicates a higher degree of education and training involvement.

Part three contains 11 items and examines job search or civilian work plans. Similar to part two, the frequency of 'yes' responses indicates the degree of

involvement in conducting a job search and also describes job search activities. Knowing the extent the leaver has prepared for another career assists in the interpretation of the reasons given for requesting a voluntary release.

#### Section 5 - Biographical Information

The Biographical Information section contains 25 items and provides information that categorizes respondents by important individual (eg., gender), organizational (eg., rank), and extra-organizational (eg., dependant children) variables (Table 4).

**Table 4**  
**Biographical Variables**

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Rank	Command
Military Occupation	Release Data
Accommodation	Leave Intention
Education	Element
UIC	Marital Status
Item of Release	Age
CFAIQ Completion Date	Years of Service
Sex	Terms of Service
Transportation	Clearance Date
Primary Language	Service Number

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Source: Lyon, C.D.F. (1987). The CF Attrition Information Questionnaire: Conceptual Development and Evaluation Plan. Willowdale ON: CFPARU

This section is used to identify subgroups of leavers for comparison purposes; for example, the relationship between number of years service, dependant children and voluntary turnover in urban areas may be examined. In addition, service numbers are included to allow access to additional information such as posting histories, which are available from the CF Personnel Management Information System (PMIS). Finally, a comment sheet is provided so that the respondent can provide any further comments or suggestions.



### Questionnaire Processing and Administration

The CFAIQ (Third Edition) is administered at 46 CF locations, including all bases, stations and units that originate Release or Transfer Notification (RTN) messages (Parker, 1992). Base Personnel Selection Officers (BPSOs) are responsible for the routine administration of the CFAIQ, including technical supervision of Designated Administrators at sites which do not have a BPSO. Administrative procedures ensure that all members of the CF who leave under the following Queen's Regulations and Orders items contained in article 15.01 are provided with an opportunity to voluntarily complete the questionnaire:

- (4a) on request and entitled to an immediate annuity;
- (4b) on completion of a fixed period of service;
- (4c) on request for other reasons; and
- (5a) on retirement age. "In the case of a 5 (a) release, a long-term member with 28 years of service may be released voluntarily although he/she may have several years of service remaining " (Lyon, 1987 pp.7).

Therefore, all voluntary (unscheduled) leavers from the commencement of recruit training until retirement just prior to reaching the mandatory age limit are afforded the opportunity to complete the CFAIQ (Parker, 1992).

### Potential of the CFAMS and the CFAIQ

According to Parker (1992), "The CFAMS, with its CFAIQ, has the potential to provide sound interpretative data concerning voluntary attrition. Combined with biographic information, analysing the CFAIQ data provides the means for isolating and examining the responses of particular groups and allows for the comparison between groups." (pp iv). In his analysis of the potential of the CFAIQ as an attrition monitoring device, Parker (1992) examined all (N=4297 from all CF occupations) completed questionnaires collected between 10 July 1989 and 31 October 1991. This sample accounted for 59.7% of the voluntary releases during this period.

Although primarily descriptive in nature, the study examined all sections of the CFAIQ and pointed to appropriate types of analysis to address possible turnover research questions. For example, the three most important reasons for leaving reported by Francophone respondents were: 1. desire to go back to school (14.2%); 2. desire to increase family stability by establishing roots in one community (13.9%); and 3. too much time spent away from home (11.1%). For Anglophones, the three most important reasons for leaving were: 1. desire to increase family stability by establishing roots in one

community (17.0%); 2. desire to go back to school (14.8%); and 3. desire for more challenging work (12.1%).

As another example, Parker (1992) found that when asked to rate the importance of the statement "My role in the military is undervalued/unappreciated in Canadian society" (CFAIQ Section 1 item 46), significantly different response patterns emerged between officers and non-commissioned members (Chi-square = 4.444, degrees of freedom = 1,  $p < .05$ ). Non-commissioned members rated this more important than did officers.

According to Parker (1992), "The variety of these types of comparisons is limited only by the creativeness of agencies needing the information. NDHQ and Commands now have at their disposal the means to investigate and analyze possible causes for attrition behaviour and provide solutions to these problems." (pp 30).

### Purpose and Hypotheses of Present Study

#### Purpose

To review, the purpose of the present study was three-fold. First, this study examined the structure and psychometric properties of the CFAIQ.

Second, it investigated the research questions posed by MARCOM Headquarters. Specifically, "Do Francophone sailors in the hard sea occupations continue to voluntarily leave at a higher rate than do their

Anglophone peers?", and "Are Francophone sailors in the hard sea occupations voluntarily leaving for different reasons than their Anglophone peers?".

Third, the study tested several important relationships hypothesized in the Mobley Model (1982).

#### Hypotheses

Based on the information presented, it was hypothesized that:

1. The rate of voluntary turnover for Francophone sailors in the hard sea occupations would be higher than that of their Anglophone peers;
2. Reflecting cultural differences, the underlying dimensions which represent homogeneous groupings of attrition factors would be different for Anglophones and Francophones;
3. The most important reasons for leaving reported by Francophone sailors in the hard sea occupations would be different from the most important reasons for leaving reported by their Anglophone peers;
4. Francophone sailors in the hard sea occupations would report that they were more dissatisfied with their CF work experience than their Anglophone peers; and
5. As predicted in the Mobley Model (1982), language would influence job-related perceptions, expectations about one's present job and individual values. These

variables would in turn influence satisfaction. Although not addressed in the Model, it was expected that education level would influence expectations about one's present job, individual values and expectations about alternatives. In addition, education level was expected to influence satisfaction directly (Figure 3).

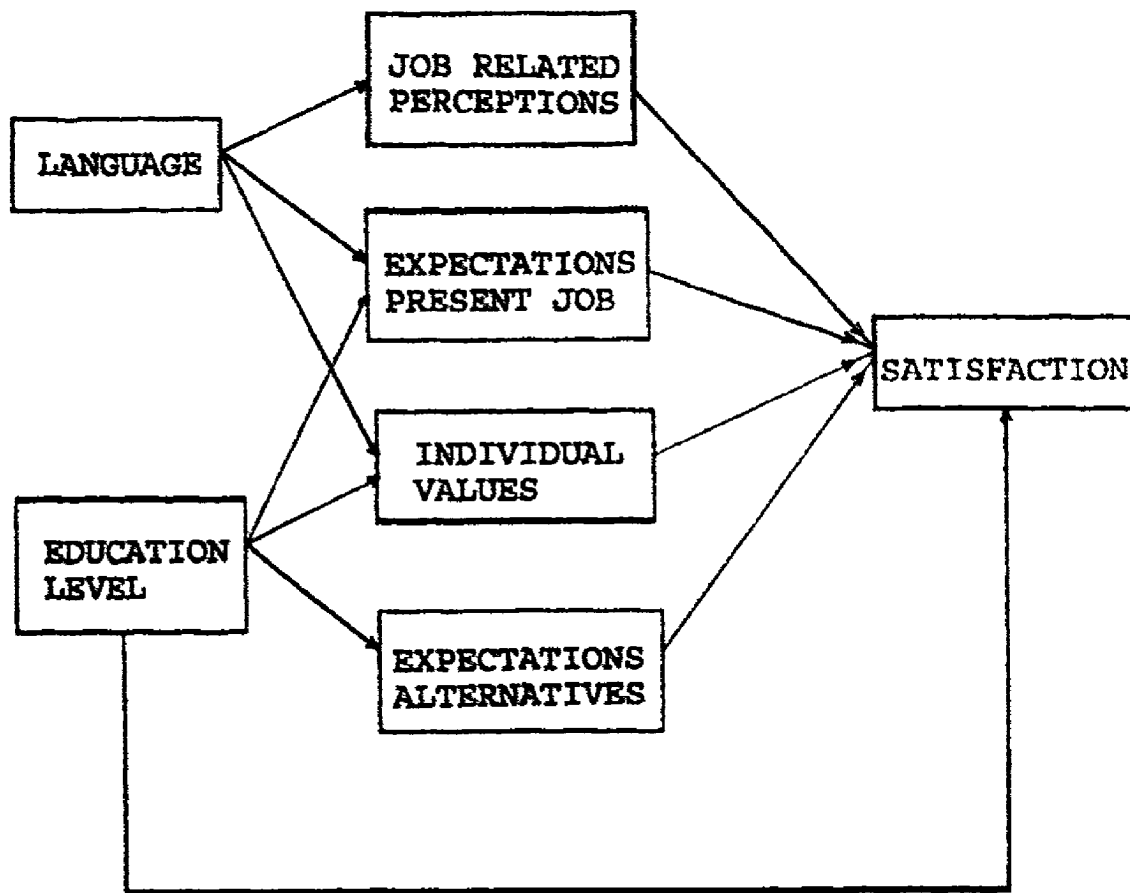


Figure 3. Predicted path analysis diagram for hypothesis 5. Direction of influence is from left to right.

## METHOD

All data reported in this study had been previously collected by CFPARU as part of normal operating procedures. The data remained unanalyzed. The hypotheses and models reported here were not previously examined within this data set.

### Data Base

A test of the first hypothesis was based on all personnel who were Qualification Level 3 (basic occupation training) graduates of the hard sea occupations between September 1987 and December 1992. This sample was identified for examination for several reasons. First, all voluntary leavers during this period would have the opportunity to complete the CFAIQ. Second, occupation trained personnel with less than five years service would have similar work experiences compared to more senior sailors. This would have the effect of increasing within-group homogeneity. Third, this sample of sailors represented a "turnover risk" since higher rates of voluntary turnover are often observed with junior personnel (eg. Mobley, 1982). Thus, the sample would be larger than one drawn from more senior sailors. Finally, in terms of lifestyle and leaving options, trainees and trained sailors were

thought to be sufficiently different as to exclude the former from the sample. That is, training is very stressful and poor performing trainees are sometimes given the option to "voluntarily withdraw" (voluntary turnover) rather than leave as a "training failure" (involuntary turnover). This practice has the potential to confound the identification of "real" voluntary leavers (QR&O Article 15.01) and resulted in the exclusion of hard sea occupation trainees from the sample.

The hard sea occupations include:

- a. Naval Weapons Technician (NW TECH 065);
- b. Boatswain (BOSN 181);
- c. Naval Signalman (NAV SIG 262);
- d. Naval Acoustics Operator (NAC OP 273);
- e. Naval Radio Operator (N RAD OP 274);
- f. Naval Combat Information Operator (NCI OP 275);
- g. Naval Electronic Sensor Operator (NES OP 276);
- h. Naval Electronic Technician-Acoustics (NE TECH A 283);
- i. Naval Electronic Technician-Communications (NE TECH C 284);
- j. Naval Electronic Technician-Tactical (NE TECH T 285);



- k. Naval Electronic Technician-Systems (NE TECH S 286);
- l. Marine Engineering Mechanic (MAR ENG M 312);
- m. Marine Engineering Technician (MAR ENG T 313);
- n. Marine Engineering Artificer (MAR ENG A 314);
- o. Hull Technician (H TECH 321);
- p. Electrical Technician (E TECH 331); and
- q. Marine Electrician (MAR EL 332).

The Oceanographic Operator (OCEAN OP 191) occupation was excluded from the study because it is considered a shore-based occupation.

Given these parameters, the CFTS data base produced 1,077 personnel records for examination. Of this number, 213 personnel left voluntarily during the period of interest. Information on each subject included their course code and abbreviation, course serial, service number, QL3 graduation date, gender, release date and release reason. Release reason was presented as a release item in accordance with Queen's Regulations and Orders article 15.01. The absence of a release reason and release date indicated the subject was still serving during the period of interest.

Tests of the remaining four hypotheses were based on available CFAIQ data on those who had voluntarily left the CF between QL3 graduation and December 1992. For the

purposes of this study, those members of the CF eligible to complete the CFAIQ were considered voluntary leavers (Lyon, 1987). The CFAIQ data base was matched with the available CFTS data by service number for each member. The integration of the data bases was needed to ensure all those who were members of the hard sea occupations during the period of interest and also completed a questionnaire were included in the study. This procedure produced useable data for 94 leavers, 44.13% of all who left. When broken down by language, Francophones comprised 36.17% of voluntary leavers (n=34), while the Anglophones comprised 63.82% (n=60). Due to an information processing error, the variables marital status and gender were not available for examination within this sample. This restriction will impose limitations on the interpretation of some aspects of this investigation.

#### Procedure

CFAIQ administration and processing was carried out at all 46 CF locations that originate Release or Transfer Notification (RTN) messages. Members were offered an opportunity to voluntarily complete the CFAIQ as part of the normal administrative procedures that occur immediately prior to release (end of service). Completed questionnaires were collated and secured by the local

Base Personnel Selection Officers (BPSO) or Designated Administrators and transmitted to CFPARU once per month by service post. Once received by CFPARU, all CFAIQ machine readable data were encoded and stored on the main computer system for analysis.

#### Data Analysis

To test the first hypothesis, a 2X2 contingency table crossing language by release date was constructed for the entire data set (N=1077). Given the general lack of power of non-parametric statistical tests such as Chi-square (contingency tables), a significance level of .05 was set.

To address hypotheses 2 and 3, a series of principal factor analyses were conducted. One factor analysis was conducted for the entire CFAIQ sample (N=94) and then separate analyses were conducted for Anglophones and Francophones. As was proposed by Lyon (1987), factors with eigenvalues of less than one were dropped. Items with factor loadings of less than .5 were not used to define the factors. For ease of interpretation, orthogonal rotation of factors was used. To the extent that certain dimensions or scales within the CFAIQ were identified through the factor analyses, the internal consistency (coefficient alpha) of these scales was examined. The influence of language on item responding

was then examined using discriminant function analysis. For this procedure, factor scores derived from the initial factor analysis were used as predictors. The classification procedure was used to assess the predictability of group membership from item responses.

To test hypothesis 4, satisfaction scores for each language group were derived by summing Section 3 items. The group means were compared using a t-test (two-tailed).

To test important aspects of the Mobley Model (1982), a path analysis using LISREL was conducted. For this procedure, variable scores were computed based on Section 1 items derived from the initial factor analysis. In addition, satisfaction scores were computed by summing item scale scores from Section 3 of the CFAIQ. A correlation matrix for these variables was then constructed and used as the input for the path analysis procedure. Based on theoretical and statistical issues (Kerlinger, 1986), the model was modified by the deletion and addition of appropriate pathways.

## RESULTS

### Hypothesis 1

Table 5 shows a comparison of the voluntary attrition rates for both language groups. Involuntary leavers (Anglos = 57, Francos = 9) were excluded from the analysis. Over a third (34.4%) of the Francophones who joined the hard sea occupations as QL3s left the CF over the five and a quarter years for which data were examined. During the same period, 16.22% of the Anglophones were released voluntarily. This difference was statistically significant (Chi-square = 29.232, degrees of freedom = 1,  $p < .01$ ). Thus, Francophone sailors in the hard sea occupations continue to leave voluntarily at a significantly greater rate than do their Anglophone peers.

Table 5

Comparison of Attrition Rates Between Francophones and Anglophones In Hard Sea Occupations N = 1077

Language Group	Stayers	Voluntary Leavers	Row Total
Anglos	742 83.27%	149 16.22%	891
Francos	122 65.59%	64 34.4%	186

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Note. Chi-square = 29.232, degrees of freedom = 1,  $p < .01$ . Cell percentages represent proportions of row total.

### Hypotheses 2 and 3

To test hypotheses 2 and 3, a series of principal components factor analyses with orthogonal rotation were performed through SPSS (Release 4.1) on 45 items of Section 1 "Reasons for Leaving" of the CFAIQ. Orthogonal rotation was retained because of conceptual simplicity and ease of description. In addition, minimal correlation between factors was observed when oblique rotation was used. Item 21 ("I was offered a job with less responsibility") was excluded from all analyses because it did not produce any variation in response options for Anglophones and only minimal variation for Francophone respondents. Factor scores were computed and saved for further analysis. Factor analyses were performed for the entire CFAIQ sub-sample (N=94) as well as for Anglophones (N=60) and Francophones (N=34) separately.

Four factors were extracted for the entire sub-sample (both Anglos and Francos). Items with factor loadings of less than .5 were not used to define the factors. This resulted in 17 variables not loading on any factor. All factors were internally consistent with alpha values ranging from .68 to .83. This solution accounted for 37.9% of the total variance. Although somewhat low, this can be explained in part by the

moderate final communality estimates, which ranged from a low of .32 to a high of .68.

Details of the 4-factor orthogonal solution are shown in Table 6. The first factor seems related to respondents' job related perceptions loading fairly heavily with a number of fairness items (e.g., no credit for job well done, unfair performance appraisal and equal pay for equal work issues). The second factor combines items that reflect respondents' expectations about the present job (eg., could not get postings wanted, future postings/work unattractive and unlikely to get promoted). Factor 3 clearly reflects respondents' individual values, specifically, with respect to family issues (eg., separation from family, too much time from home and spouse unwilling to move). Finally, factor 4 is related to respondents' expectations about obtaining alternative jobs (eg., offered more pay/responsibility, offered a job with better security).

**Table 6**  
**Factor Loadings, Variance Accounted for by Factors and**  
**Communalities for Reasons for Leaving Items in Four-Factor**  
**Orthogonal Solution. (N = 94)**

<u>Item</u>	<u>Variance</u>	<u>LD</u>	<u>COM</u>
<b>Factor 1 - <u>Job Related Perceptions</u></b>	<b>16.5%</b>		
No credit for job well done		.72	.59
Unfair performance appraisal		.66	.62
Dislike physical work conditions		.62	.59
Do not get equal pay for equal work		.60	.49
Inadequate overtime compensation		.56	.53
Work hours are too long		.54	.45
Younger members promoted faster		.53	.59
Discrimination		.52	.50
Difficulty living on earnings		.52	.39
Role undervalued/unappreciated		.51	.41
<b>Factor 2 - <u>Expectations About Present Job</u></b>	<b>8.4%</b>		
Could not get postings wanted		.66	.48
Did not get along with co-workers		.60	.40
Do not use training and knowledge		.55	.40
MOC not transferable		.55	.38
Future postings unattractive		.53	.32
Unlikely to get promoted		.50	.66
Unattractive future work		.50	.41
<b>Factor 3 - <u>Individual Values</u></b>	<b>7.3%</b>		
Separation from family		.75	.68
Too much time away from home		.72	.67
Establish roots in one community		.71	.54
Stay at home to raise family		.69	.49
Spouse unwilling to move		.59	.40
Conflict with spouses career		.53	.33
<b>Factor 4 - <u>Expectations About Alternatives</u></b>	<b>5.7</b>		
Offered more pay		.81	.66
Offered more responsible job		.66	.46
Offered job with better security		.63	.44
Attracted to job with better benefits		.62	.66

**Note.**

LD = Loading; COM = Communality.



Through separate factor analyses, five factors were extracted each for Anglophones and Francophones. For Anglophones, all factors were internally consistent with alpha values ranging from .69 to .82. For Francophones, Factor 5 - Stress, yielded a lower than acceptable reliability coefficient, .51; the four other factors were in the acceptable range, .60 to .83. With a factor loading cut of .5 (25% of variance) for inclusion of a variable in the interpretation of a factor, 17 and 10 of 45 variables for Anglophones and Francophones, respectively, did not load on any factor. The 5-factor orthogonal solutions accounted for 44.7% and 57.9% of the variance for Anglophones and Francophones respectively. For Francophones, final communality estimates for items loading on factors ranged from .08 to .84. For Anglophones, they were slightly lower: .03 to .71.

Loadings of variables on factors, communalities, percents of variance and percents of covariance are shown in Table 7. Variables are ordered and grouped by size of loading to facilitate interpretation. Loadings under .5 are replaced by zeros. Interpretive labels are suggested for each factor in footnotes.

There was a strong similarity in the Job Related Perception factors (Factor 1 for Anglophones and Factor 2 for Francophones) for the language groups. Factor 2

for Anglophones and Factor 1 for Francophones, both interpreted as Individual Values factors, were similar but for the 5 additional variables that loaded on that factor for Francophones. Factor 3, Expectations About Alternative Jobs, Factor 4, Supervision, and Factor 5, Limited Future in Organization, for Anglophones had no counterparts for Francophones. Similarly, Factor 3, Poor Work Environment, Factor 4, Workplace Unfair, and Factor 5, Stressful Work, for Francophones had no counterparts for Anglophones. Three variables (do not get equal pay for equal work, attracted to job with better benefits, and role undervalued/unappreciated) on Factor 3 for Anglophones did show up on Factors 4, 1, and 2 respectively for Francophones, however. Similarly, one variable (unlikely to get promoted) on Factor 5 for Anglophones appeared on Factor 2 for Francophones.

These results indicate that the underlying dimensions which represent homogeneous groupings of attrition factors is different for Anglophones and Francophones.

Table 7

Factor Loadings, Communalities (C), Percents of Variance and Covariance for Principal Factors Extraction and Orthogonal Rotation for Anglophones and Francophones on CFA1Q Section 1 Items.

Item	Anglophones						Francophones					
	F1	F2	F3	F4	F5	C	F1	F2	F3	F4	F5	C
Younger members	.73	.00	.00	.00	.00	.61	.00	.76	.00	.00	.00	.62
Co-workers	.72	.00	.00	.00	.00	.65	.00	.00	.70	.00	.00	.52
Unfair Appraisal	.66	.00	.00	.00	.00	.58	.00	.67	.00	.00	.00	.75
No postings wanted	.64	.00	.00	.00	.00	.55	.00	.00	.71	.00	.00	.64
Postings unnattrac	.59	.00	.00	.00	.00	.37-.58	.00	.00	.00	.00	.00	.38
Not use training	.58	.00	.00	.00	.00	.35	.00	.00	.00	.00	.00	.53
Unnattr future work	.56	.00	.00	.00	.00	.48	.00	.60	.00	.00	.00	.50
Too many postings	.53	.00	.00	.00	.00	.50	.00	.00	.00	.00	.00	.40
Too much stress	.52	.00	.00	.00	.00	.57	.00	.00	.00	.00	.82	.70
Phys work conds	.52	.50	.00	.00	.00	.61	.59	.00	.00	.00	.00	.59
Wk hours too long	.51	.00	.00	.00	.00	.51	.00	.00	.00	.59	.00	.53
Separat from family	.00	.73	.00	.00	.00	.59	.88	.00	.00	.00	.00	.40
Too much time away	.00	.67	.00	.00	.00	.57	.79	.00	.00	.00	.00	.71
Establish roots	.00	.64	.00	.00	.00	.47	.74	.00	.00	.00	.00	.64
Stay home raise fam	.00	.57	.00	.00	.00	.33	.71	.00	.00	.00	.00	.73
Offered more resp	.00	.50	.00	.00	.00	.50	.00	.00	.00	.00	.00	.59
Offered more pay	.00	.00	.68	.00	.00	.66	.00	.00	.00	.00	.00	.67
No equal pay	.00	.00	.65	.00	.00	.60	.00	.00	.00	.71	.00	.66
Job w/better bfts	.00	.00	.63	.00	.00	.45	.52	.60	.00	.00	.00	.77
Operating business	.00	.00	.59	.00	.00	.36	.00	.00	.00	.00	.00	.29
Role undervalued	.00	.00	.57	.00	.00	.43	.00	.73	.00	.00	.00	.63
Incompetant suprvsr	.00	.00	.00	.79	.00	.71	.00	.00	.00	.00	.00	.59
Suprvsr no interest	.00	.00	.00	.68	.00	.65	.00	.00	.00	.00	.00	.31
No offer re-engage	.00	.00	.00	.00	.85	.76	.00	.00	.59	.00	.00	.38
No operational role	.00	.00	.00	.00	.78	.65	.00	.00	.00	.00	.00	.35
Avoid compulsory rel	.00	.00	.00	.00	.69	.70	.00	.00	.00	.00	.00	.08
Unlikely to get prom	.00	.00	.00	.00	.60	.65	.00	.73	.00	.00	.00	.66
Crit Spse's career	.00	.00	.00	.00	.00	.22	.61	.00	.00	.00	.00	.60
Children's educatn	.00	.00	.00	.00	.00	.03	.53	.00	.00	.52	.00	.88
Spse unwilling move	.00	.00	.00	.00	.00	.48	.51	.00	.00	.00	.00	.56
Take advtg pen/sal	.00	.00	.00	.00	.00	.30	.50	.00	.00	.00	.00	.65
No credit for job	.00	.00	.00	.00	.00	.46	.00	.73	.00	.00	.00	.74
More challenging work	.00	.00	.00	.00	.00	.14	.00	.62	.00	.00	.00	.53
Living on earnings	.00	.00	.00	.00	.00	.19	.00	.60	.00	.00	.00	.53
Can't get new MOC	.00	.00	.00	.00	.00	.44	.00	.57	.00	.00	.00	.49
Compassionate circs	.00	.00	.00	.00	.00	.17	.00	.56	.00	.00	.00	.50
Tools and equimnt	.00	.00	.00	.00	.00	.29	.00	.67	.00	.00	.00	.64
Medical cat limits	.00	.00	.00	.00	.00	.03	.00	.00	.00	.59	.00	.48
MOC not transfrble	.00	.00	.00	.00	.00	.33	.00	.00	.00	.78	.00	.69
Going bck to school	.00	.00	.00	.00	.00	.20	.00	.00	.00	.62	.00	.70
Discrimination	.00	.00	.00	.00	.00	.38	.00	.00	.00	.57	.00	.79
Inadsqte ovrtm comp	.00	.00	.00	.00	.00	.56	.00	.00	.00	.00	.64	.67
% of variance	16.6	8.2	7.8	6.2	5.9		16.7	14.2	10.5	9.2	7.3	
% of covariance	37.1	18.3	17.4	13.9	13.2		28.8	24.5	18.1	15.9	12.6	

## Factor labels:

Anglophones

- F1 Job related perceptions
- F2 Individual values
- F3 Expectations about alternatives
- F4 Supervision
- F5 Limited future in organization

Francophones

- F1 Individual values
- F2 Job related perceptions
- F3 Poor work environment
- F4 Unfair workplace
- F5 Stress

Moreover, the factor accounting for the most variance (16.6%) in the attrition behaviour for Anglophones is related to their perceptions of the present job. While this is important for Francophones, the factor accounting for the most variance (16.7%) in their attrition behaviour is related to individual values concerning the family. Thus, the most important reasons for leaving are different for Anglophones and Francophones.

#### Predicting Language Group from Attrition Data

To determine whether group membership (Anglophone or Francophone) could be predicted from the four factors derived from the initial factor analysis (N=94), a direct discriminant function analysis was performed. Predictors were Job Related Perceptions, Expectations About Present Job, Individual Values, and Expectations About Alternatives.

Of the original 94 cases, 20 had missing data. Missing values were replaced by the variable mean for the purposes of the analysis. No cases were identified as outliers. For the purposes of the analysis, evaluation of assumptions of linearity, sample size, and multicollinearity and singularity (minimum tolerance level = .001) revealed that distortion of results or research artifacts would be minimal.

One discriminant function was calculated which maximally separated Anglophones and Francophones (Chi-square = 20.327, df = 4,  $p < .01$ ). The loading matrix of correlations between predictors and the discriminant function, as seen in Table 8, suggests that the best predictors for distinguishing between Anglophones and Francophones are Expectations About Alternatives (.73) and Expectations About Present Job (.66).

For the classification procedure using all 94 cases, 56 (93.3%) Anglophones were classified correctly, compared to 38 (63.8%) that would be correctly classified by chance alone. For Francophones, 9 (26.5%) were classified correctly, compared to 12.3 (36.2%) that would be correctly classified by chance alone. Overall, 69.15% of cases were correctly classified (See Table 9). These results indicate the variables analyzed have a greater predictive power for Anglophones than Francophones with respect to identifying meaningful reasons for attrition behaviour.

Table 8Results of Discriminant Function Analysis of Factor Scores N = 94

<u>Predictor Variable</u>	<u>Correlation of predictor variables with discriminant function</u>
Job Related Perceptions	.56
Expectations About Present Job	.66
Individual Values	-.13
Expectations About Alternatives	.73
Canonical R	.50
Eigenvalue	.34

---

Table 9Classification Results of Discriminant Function Analysis

<u>Actual Group</u>	<u>Cases</u>	<u>Predicted group membership</u>	
		<u>Anglo</u>	<u>Franco</u>
Anglophone	60	56 93.3%	4 6.7%
Francophone	34	25 73.5%	9 26.5%

Percent of "grouped" cases correctly classified = 69.15%

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#### Hypothesis 4

To test Hypothesis 4, satisfaction scores for each group were derived by summing the scale scores (1 "very satisfied" to 5 "very dissatisfied") on Section 3 - Attitudes Towards Your Experience in the CF. As can be seen in Table 10, an independent t-test ( $t=-2.183$ ,  $df=91$ ,  $p<.05$ , two tailed) revealed significant differences between group means. That is, on average, Anglophones reported they were more satisfied with their CF work experience (lower group mean) than did Francophones.

Table 10

#### Comparison of Group Mean Satisfaction Scores

Group	N	Mean	SD	t	df	p
Anglo	60	54.22	15.74			
				-2.183	91	.032
Franco	33	61.52	14.73			

---

Note. Two-tailed test.

#### Hypothesis 5

A partial test of the Mobley Model (1982) was conducted using a confirmatory path analysis through the SPSS version of LISREL V11. For ease of interpretation, not all pathways predicted in the Mobley Model were

entered in the first submission (Figure 3). Based on the four latent variables derived from the initial factor analysis (N=94), pathways chosen for inclusion represented the most theoretically meaningful relationships. The correlation matrix and standard deviations which served as input for the LISREL analysis are presented in Table 11.

**Table 11**

Correlation matrix, means, and standard deviations used for LISREL input.

Variable	1	2	3	4	5	6	7
1. JOBRELPER	--						
2. EXPRESJOB	.54	--					
3. INDIVALE	.31	.21	--				
4. EXPALTERN	.40	.31	.18	--			
5. SATISFACT	-.43	-.37	.05	.06	--		
6. PLANGUAGE	-.42	-.35	-.04	-.33	.22	--	
7. EDUCLEVEL	.03	-.01	-.05	.03	.03	-.07	--
<hr/>							
M	37.68	27.95	21.22	16.99	56.82	1.36	15.56
SD	8.97	6.14	6.57	4.04	15.71	.48	5.29

**Note.**

JOBRELPER = Job Related Perceptions; EXPRESJOB = Expectations About Present Job; INDIVALE = Individual Values; EXPALTERN = Expectations About Alternatives; SATISFACT = Satisfaction; PLANGUAGE = Primary Language; EDUCLEVEL = Education Level (N=94).



The first model submitted for analysis did not provide an adequate fit to the data, Chi-square ( $df = 9$ ,  $N = 94$ ) = 55.13,  $p < .001$  (see Table 12). Using the maximum modification index for suggestions of model improvement, 3 additional pathways (Model 3) were included which ultimately proved to be a better fit to the data on 7 out of 7 indices, Chi-square ( $df = 6$ ,  $N = 94$ ) = 5.89,  $p > .4$ .

Table 12

Chi-square fit values and fit indices for path analysis models.

Model	$\chi^2$	p.	df	$\chi^2/df$	GFI	AGFI	RMSE	NFI	TLI
Null Model	55.13	.000	9	6.125	.847	.523	.166	--	--
Model 1	32.03	.000	8	4.003	.912	.693	.156	.419	.414
Model 2	15.77	.027	7	2.252	.957	.826	.088	.714	.702
Model 3	5.89	.435	6	.981	.982	.918	.039	.893	1.003
Model 4	9.72	.641	12	.810	.971	.931	.050	.823	1.03

Note.

GFI = Goodness of Fit Index; AGFI = Adjusted Goodness of Fit Index;  
 RMSE = Root Mean Square Residual; NFI = Normed Fit Index; TLI = Tucker-Lewis Index.

As can be seen in Figure 4, Model 3 includes significant pathways from Job Related Perceptions to Expectations About Present Job, from Job Related Perceptions to Individual Values, and from Job Related Perceptions to Attractiveness of Alternatives.

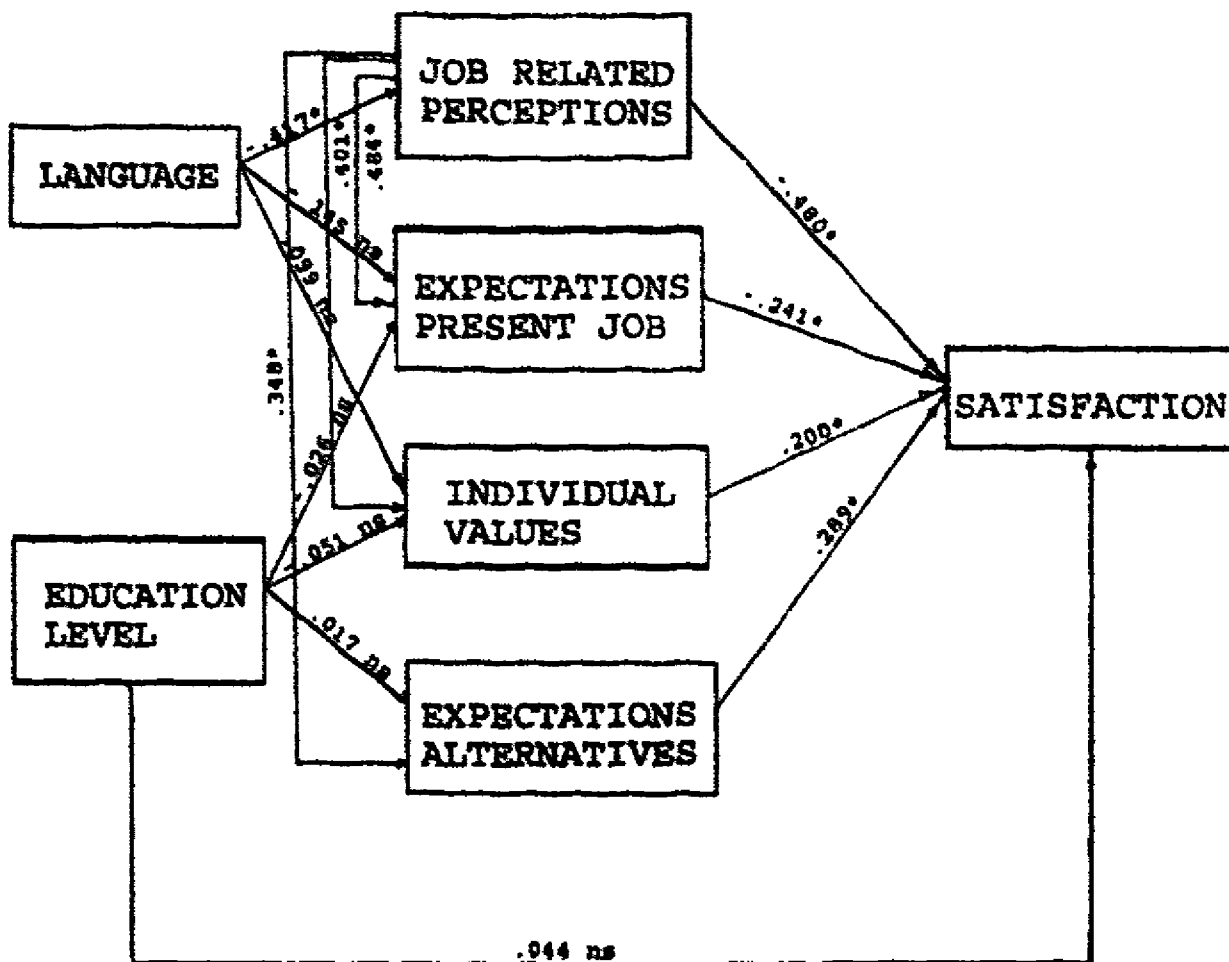


Figure 4: Model (3) suggested by Path Analysis.

For ease of interpretation, all possible direct effects were calculated with the removal of those pathways that were non-significant ( $p < .05$ , two-tailed). As can be seen in Figure 5, this procedure resulted in the deletion of the paths from Language to Expectations About Present Job and Individual Values and from Education Level to Expectations About Present Job, Individual Values, Expectations About Alternatives and Satisfaction.

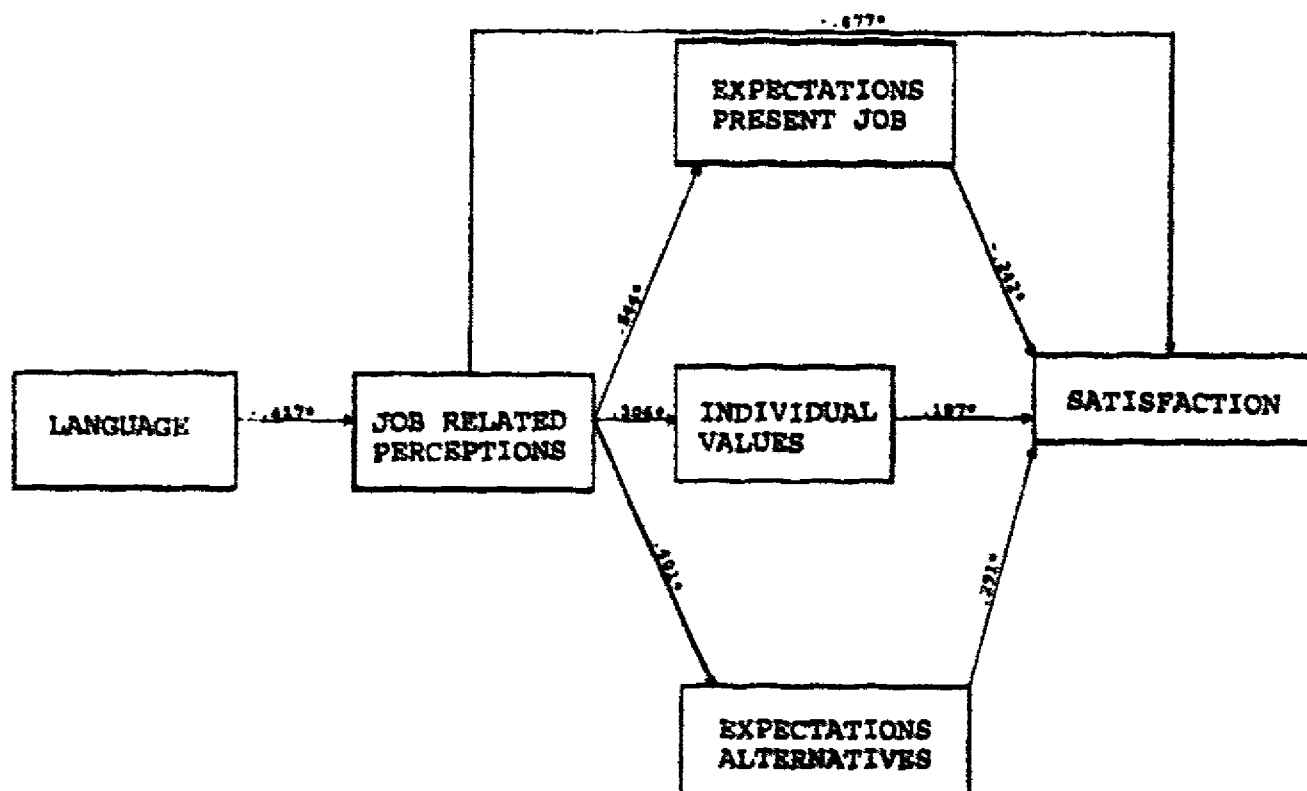


Figure 5: Modified Model (4) with non-significant pathways removed.

\*  $p < .05$

As can be seen in Table 12, the revised model (Model 4) provides a much better fit to the data than the original model, Chi-square ( $df = 12$ ,  $N = 94$ ) = 9.72,  $p > .64$ . Since pathways were deleted as well as added to the modified model, the two models are not nested and a decrease in chi-square (9.72 vs 55.13), along with improvements on all the other fit indices, is evidence for the superiority of the modified model.

The structure of the modified model (Figure 5) lends strong support to Mobley's Model (1982). As predicted by Mobley, Job Related Perceptions influence directly Satisfaction and Expectations About Present Job. However, direct effects of Job Related Perceptions on Expectations About Alternatives were found where only indirect effects were hypothesized by Mobley. In addition, direct effects of Job Related Perceptions on Individual Values were found where none were hypothesized by Mobley (1982).

### Discussion

In general, the results of this study support hypotheses 1, 2, 3 and 4 and lend partial support to hypothesis 5. That is, Francophone sailors continue to leave the Navy voluntarily at a higher rate but for different reasons than do their Anglophone peers. Moreover, Francophones report family related issues as their primary reasons for leaving while job related issues are most important for Anglophones. On average, Francophones report they are more dissatisfied with their CF experience than Anglophones. In addition, the Mobley Model (1982) provides a relatively accurate explanation for attrition behaviour for this sample of respondents. When broken down by language, however, prediction of group membership by item responding is much more accurate for Anglophones than Francophones. Each hypothesis is considered in greater detail below, followed by a discussion of the limitations of the present study. Finally, considerations for future research and conclusions are presented.

Hypothesis 1:

The results of this study reveal a significantly higher voluntary attrition rate for Francophones. These findings are consistent with those of previous studies (eg. Montgomery, 1991; Bender et. al., 1992). Although Montgomery's (1991) study included both trained and untrained personnel, other similarities between the respective samples (language, occupation, place of training and duty, etc.) warrant a comparison of research results. Recall that in her sample of hard sea personnel (N=237), Montgomery found a 26% voluntary attrition rate for Anglophones versus a 54% rate for Francophones over a three-year period. This parallels the present study (N=1077, over a 5 year period), which found a 16.2% rate for Anglophones and a 34.4% rate for Francophones. Although the present findings indicate lower rates of voluntary attrition for both groups of trained sailors, between-group differences remain significant. In comparison, Bender et. al. found rates (14% for Francophones and 7% for Anglophones) over a three-year period that were lower than those found by Montgomery (1991) or the present study.

While all three studies report significantly higher attrition rates for Francophones, the actual rates are quite different. When one examines the respective study

samples, however, this apparent discrepancy in findings makes sense. That is, Montgomery (1991) used both untrained and trained sailors with 3 years or less service in her sample. During this initial period of service, attrition is expected to be at its highest (Mobley, 1982). In the present study, only trained sailors with up to 5 years service participated. Thus, lower attrition rates can be seen to be related to increased seniority. This appears to be confirmed by Bender et. al. (1992) whose sample included all trained personnel up to retirement age. Although Bender et. al. (1992) report lower rates of attrition overall, differences between Anglophones and Francophones remain striking. In all three studies, the Francophone attrition rate was double the Anglophone rate.

No other occupational group (land and air occupations) experiences the differential rates of voluntary attrition found between Anglophones and Francophones in the hard sea occupations. Pinch (1989) suggests the problem for Francophones in the hard sea occupations lies in "linguistic and environmental discontinuity" (pp 24). Since Francophone NCMs undergo both basic and language training at St. Jean, PQ, they arrive at their environmental destinations unprepared for the reality of training and work in predominantly

Anglophone communities. The problem is compounded for the Francophone sailor who is thrust into a training system with operating procedures that are embedded in the British tradition. In addition, "the living conditions ashore are among the most spartan to be found anywhere, and substantially inferior to those enjoyed at Francophone recruit and language schools." (Pinch, 1989; pp 24).

The known value differences between Francophones and Anglophones with respect to work perceptions (eg., Hughes, 1968; Kanungo, Gorn & Dauderis, 1976; Kanungo & Bhatnagar, 1978; Wong-Rieger & Taylor, 1981) may also exacerbate these problems. For example, the "double shock" of language and environment may negatively influence the esteem and social needs, reported to be stronger for Francophones than Anglophones (eg. Kanungo & Bhatnagar, 1978). Moreover, since Francophones place greater emphasis on their cultural group than Anglophones (eg. Wong-Rieger & Taylor, 1981), training and employment in an organization heavily steeped in British traditions may be disorienting for them. With respect to the present study, the influence of individual values on reasons for leaving reported for both groups lends support to these arguments and will be discussed next.



Hypotheses 2 and 3:

The underlying dimensions which represent homogeneous groupings of attrition factors were different for Anglophones and Francophones. Five factors were extracted for each group. When compared, two were similar but of different importance and three in each had no counterparts in the other group. For Anglophones, in descending order of importance, job related perceptions, individual values, expectations about alternatives, supervision and a limited future in the organization emerged as factors influencing leaving behaviour. For Francophones, individual values, job related perceptions, poor work environment, unfairness in the workplace and stress were seen as important in making a decision to leave. Clearly, individual values, specifically related to family issues, were reported by Francophones as the most important reasons for leaving compared to job related issues as cited by their Anglophone peers.

These results appear consistent with those found by Parker (1992). In his examination of the entire CF CFAIQ data set to that time (N=4297), Parker found that of the five most frequently reported reasons for leaving for Francophones, three were related to family issues: desire to increase family stability by establishing roots in one community, too much time spent away from home, and desire

not to be separated from family. Alternatively, of the five reasons reported as most important for Anglophones, four were related to job related issues: desire for more challenging work, lack of credit for job well done, work performance not evaluated fairly, and future postings in MOC unattractive because of nature of work.

It appears, then, that family related issues carry the most weight in the exit decision making process for many Francophone sailors and may account for some or most of their higher attrition behaviour discussed earlier. This seems reasonable since all hard sea positions allocated to QL3 graduates are located on ships in either Halifax NS or Esquimalt BC. Indeed, a Francophone sailor may serve his or her entire career in "English Canada". Because of their cultural differences, Francophone sailors and their families often find it difficult to integrate into these primarily Anglophone communities. Each of these military communities serves as a microcosm of the society from which they are drawn. As in Canadian society at large, the onus is largely on the newcomer to "fit in". The result is often factionalism and inter-group friction. As Montgomery (1991;65) points out, "Francophones bring differences to the CF that are emphasized by the fact that they are in many cases encountering a bilingual environment for the first time.

Not only is it new to them, but also it is often hostile". Moreover, spouses and dependants, who speak predominantly or only French, are left behind when the member is at sea, often for months at a time. This, coupled with a perception of an unfair and stressful workplace, may push Francophones into exit decisions more often than their Anglophone peers.

While the implementation of several programs such as Second Language Training (SLT) for members and family support centres have led to greater understanding between groups, the results of this study indicate the need for an increased focus on family integration issues. For example, units might hold regular "open house" events or structured family briefings. This would have the effect of informing people while, at the same time, creating a network of community contacts. In addition, SLT for spouses should be more available as a base service.

#### Predicting Language Group from Attrition Data

While the reasons reported for leaving were different between groups, the results of the discriminant analysis indicate that the questionnaire is doing a better job identifying leaving reasons for Anglophones than for Francophones. The low ability to predict Francophone group membership from item responding indicates missing elements in the current form of the

questionnaire. Rather than simply translating an English form of the questionnaire for administration to Francophones, the construction of the questionnaire should take into account known and hypothesized cultural differences (eg., Kanungo & Bhatnagar, 1978; Wong-Rieger & Taylor, 1981) as they relate to the aim of the research. For example, items that carefully address the interpersonal climate at work (Kanungo & Bhatnagar, 1978) may be more meaningful as reasons for leaving for Francophones than Anglophones. Conversely, items which examine individual achievements at work (Wong-Rieger & Taylor, 1981) as meaningful reasons for leaving for Francophones should be given less weight. Focus groups made up of serving and former Francophone members could serve to confirm these issues.

#### Hypothesis 4:

As predicted in the Mobley Model (1982), lower levels of job satisfaction influence directly one's intention to quit. It is implied, then, that the group demonstrating the highest rate of voluntary attrition will be the most dissatisfied with their work experience. The results of this study are consistent with this general prediction. Specifically, when Francophone group satisfaction scores were compared to those for Anglophones, Francophones reported more dissatisfaction

with their experience in the CF. Again, in light of the disproportionate Francophone attrition rate, this finding makes sense. As suggested by Mobley (1982), attention directed at problem areas could improve the levels of satisfaction felt by service members and possibly reduce voluntary attrition.

As discussed earlier, the major problem area identified in this study for Francophones is family related issues. Thus, lower levels of satisfaction for Francophones can be seen as a by-product of this problem. In the context of the Mobley Model (1982), satisfaction is viewed as a function of what the employee perceives relative to his or her values rather than a function of formal policy or management perceptions. Therefore, in addition to initiatives (eg., SLT for spouses, community building, etc.) designed to enhance the integration of Francophone members and their families in both work and community environments, this finding suggests that the perceptions of members should continue to be monitored to identify other possible problems areas.

Hypothesis 5:

The modified model derived from the LISREL path analysis resembles fairly closely the model proposed by Mobley (1982). Specifically, the results of this study indicate that the primary language of the respondent influenced directly job related perceptions. In turn, job related perceptions were found to directly influence expectations about one's present job, individual values, expectations about alternatives and satisfaction.

From the results presented in this study it is clear that language, or, more accurately, culture, influences many aspects of one's CF work experience (overall satisfaction, reasons for leaving, attrition rate, etc.). As shown in the modified model, the influence of language on job related perceptions (and indirect influence of language through job perceptions on all other variables) is not surprising.

At first glance, the direct influence of job related perceptions on individual values seems out of place. Indeed, such a relationship was not predicted by Mobley (1982). However, taken in the context of the military environment, some sense can be made of this pathway. The indoctrination and socialization of service members takes place, for many, at a very young age (17 to 23 years). As such, the formulation of a consistent set of

individual values can be seen to be influenced strongly by the job environment. Moreover, for young members, this early period of indoctrination takes place in the context of a "total institution" (accommodation, food, work, socialization, supervision, recreation, etc.). In fact, the aim of this period of indoctrination can be seen as the instillment of values and behaviours that are consistent with goals of the organization. Taken from this perspective, this relationship between job-related perceptions and individual values described in the modified model makes sense and may reflect more accurately the military organization than the civilian one on which the Mobley Model (1982) was based.

Using meta-analysis (N=5,013) which included several U.S. military samples, Hom, Caraniks-Walker, Prussia and Griffeth (1992) also contested the generalizability of Mobley's Model (1982) to the problem of military turnover. Specifically, these researchers found a closer correspondence between intentions to leave and leaving for enlisted personnel than for civilians. One possible reason for this, they offer, is that unlike civilians, military personnel must make explicit reenlistment decisions within a clearly defined window of opportunity that irreversibly commit them to multiyear membership. In addition, the authors suggest that decisions to

withdraw from the military develop relatively early and remain more stable in comparison to civilians.

Because of the many differences that exist between U.S. and Canadian military organizations, the findings of Hom et. al. (1992) may not be applicable to Canadian naval personnel. The importance of the study is that it suggests the Mobley Model (1982) may be organization specific. That is, while the structural components of the model remain fairly stable across organizations, the relative influence or even position of the individual components may change according to the unique dynamics of the organization under study.

The results of the present study appear to support this view. The importance of the model derived in this study is that it suggests changes in job-related perceptions will ultimately change turnover behaviour. For example, accurate information regarding occupational duties and military lifestyle during the recruiting process may reduce the dissonance between what is expected and what actually occurs during military training and employment. This may result in more self-selection and accurate expectancies which, in turn, will reduce future negative job-related perceptions and ultimately reduce turnover behaviour. Thus, the need for



a re-examination of the Realistic Job Preview (RJP) will be discussed in detail below.

#### Research Limitations

The most pertinent limitation in this study concerns the moderate to rather small sample sizes (N=94, Anglo n=60, Franco, n=34) during a portion of the multivariate phase of the analysis. In the case of the factor analysis, for example, Kerlinger (1986) recommends five cases for each variable as a general rule of thumb. By contrast, Comrey (1973) suggests that in the case of a solution with a few distinct factors, a sample size of 50 may even be adequate as long as there are notably more cases than factors.

Although the sample sizes used in this study were somewhat low, especially in the case of Francophones, they represented a substantial proportion (44%) of the target population. In addition, the results of several different analysis procedures were very consistent. Nevertheless, inferences drawn from these analyses should be made with care and confirmatory analyses should be conducted when more data from this population become available.

Secondly, missing data on the computer file prevented the use of some biographical variables which would have been useful to examine. For example, since

family related issues played an important role in the turnover decisions of both groups, future turnover research should control for relevant variables such as marital status and gender. The inability to examine these variables and their influence on turnover behavior limits a more complete understanding of the process for this sample of respondents.

Third, the present study examined Anglophones and Francophones in the sea-going occupations of the Canadian Navy. Therefore, the results can not be generalized to other Anglophone or Francophone groups in the CF. For example, while several variables in Section 1 of the CFAIQ did not load on any Factor during the Factor Analysis for either group in this study, these variables may be important in identifying meaningful reasons for leaving for other groups in the CF. Thus, research using much larger samples representing all members of the CF should be undertaken before variables are deleted from the CFAIQ.

#### Suggested Future Research and Improvements to the CFAIQ

Already in the third edition, the CFAIQ continues to be revised on the basis of attrition research using its ever increasing data base. Based on the findings of the present study, three distinct issues should be considered when preparing for the next revision of the

questionnaire: 1) deletion of Item 21 contained in Section 1 of the CFAIQ; 2) the inclusion of personality variables that may help explain more variance in attrition; and 3) consultation of serving and former serving Francophone members across all ranks and occupations on the appropriateness and form of items contained in Section 1 of the CFAIQ. In addition to changes in the CFAIQ, a re-examination of the Realistic Job Preview (RJP) with emphasis on family concerns and the support agencies available for Francophones should be given serious consideration.

#### **Item 21**

During the early stages of the factor analysis (N=94), Item 21 ("I have been offered a civilian job with less responsibility") had no response variability for Anglophones and only minimal variability for Francophones. That is, on a five-point scale ranging from "Extremely Important" to "Not True or of No Importance", all Anglophones (N=60) reported that this item was "Not True or of No Importance" in their decision to leave. Similarly, only three of 34 Francophones reported any degree of importance to this item. A detailed analysis of this item using the complete data base may yield similar results. If this is the case, the

item offers no additional information and should be deleted from future versions of the questionnaire.

### **Personality Variables**

Increasingly, researchers have suggested investigating possible personality variables that may help explain even more variance in voluntary attrition (eg. Spector and Michaels, 1986; Judge, 1993; Jenkins, 1993). One such construct is affective disposition. It has long been argued (eg., Weitz, 1952) that job dissatisfaction would be more predictive of turnover if it was considered in light of an individual's predisposition to be satisfied with everyday life events. In a recent study Judge (1993) hypothesized that affective disposition moderates the relationship between job satisfaction and voluntary turnover. Judge (1993) used a series of measures to test this hypothesis including a modified, 25-item affective disposition survey originally developed by Weitz (1952). Using a sample of 234 nurses, this researcher found that the more positive the disposition of the individual, the stronger the relationship between job dissatisfaction and turnover. That is, individuals dissatisfied with their jobs but positively disposed to life in general were the individuals most likely to quit. On the other hand, for employees who were unhappy with most things in their

lives, job dissatisfaction was not a particularly important factor in decisions to quit. This finding is consistent with earlier work by Fisher and Locke (1992) who suggested that those negatively disposed toward life are less likely to translate job dissatisfaction into withdrawal behaviours than are other individuals because individuals with negative dispositions are not accustomed to acting on the basis of their levels of job dissatisfaction (which may be on par with how they feel about the rest of their lives). Conversely, Fisher and Locke (1992) suggested that individuals equally dissatisfied with their jobs, but more positively disposed toward life, may be quite active in changing their work situations because job dissatisfaction is a new and uncharacteristic state for them.

Another personality variable worth consideration is the social psychological construct of self-monitoring (Snyder, 1987). According to the concept of self-monitoring, individuals differ in the extent to which they monitor their expressive behaviour and self-presentation. Individuals high in self-monitoring act in ways that are highly sensitive to situational and interpersonal cues to behavioural appropriateness; thus, through regulation of their expressive self-presentation they seek to promote a desired public image. Low self-

monitors, on the other hand, lack either the motivation or the ability to regulate their behaviour in this manner. There is a behavioural consistency between who they are and what they do. The relevance of self-monitoring to turnover was first suggested by a body of research comparing low and high self-monitors in the formation of, and commitment to, personal friendships (eg., Snyder, Gangestad and Simpson, 1983).

An example of the self-monitoring construct in turnover research is offered by Jenkins (1993) who found that previously unexplained variance in turnover intentions was accounted for when this variable was entered after the traditional predictors of satisfaction and commitment. Moreover, the pattern of relationships among the variables of job satisfaction, organizational commitment, differed for high and low self-monitors. That is, commitment was a better indicator of intent to leave among low self-monitors but job satisfaction showed a stronger relationship among high self-monitors.

Snyder's (1987) 18-item Self-Monitoring Scale is the most widely used instrument to measure the psychological construct of self-monitoring. Snyder (1987) reports an internal consistency, or coefficient alpha, of .70 and test-retest reliabilities have ranged from .71 for a 2.5-month interval to .83 for a 1-month interval.

The Affective Disposition Survey and Self-Monitoring Scale could be incorporated into a future edition of the CFAIQ. Alternatively, they could be administered as a separate document but simultaneously with the CFAIQ.

#### **A Transformed Rather Than Translated CFAIQ for Francophones**

Using the larger sample size available in the data base, the classification by language group procedure of the discriminant analysis should be repeated to confirm the results of the present study. The inability to predict group membership for Francophones from Section 1 item responding indicates there may be important cultural issues that are not addressed by the questionnaire in its present form. If these results are replicated, future research may be needed to identify items that represent meaningful turnover reasons for Francophones. The use of focus groups of serving and former serving Francophone members may lead to a revised form of the questionnaire for Francophones. The present form of the questionnaire appears to address the items that concern Anglophones quite well.

#### **Realistic Job Preview**

The Realistic Job Preview (RJP) is an attempt to provide job applicants with information about the organization that paints a realistic picture (Wanous,

1980). Not a single technique, the RJP is rather "a general philosophy or approach" (Wanous, 1980: 83). This philosophy or approach assumes that giving candidates and newcomers accurate and complete information will result in better matching, increased satisfaction and commitment, and lower turnover. The realistic information can be transmitted through booklets, films, video-tape, realistic work samples, interviewers, supervisors, other recent hires, and a combination of these approaches.

Research on the effectiveness of RJP's have yielded generally positive results. For example, in their review of the RJP literature to that time, Popovich and Wanous (1982) found that in 9 out of 10 studies, employee turnover, on average, was 28% higher when RJP's were not used. Although related to decreased turnover rates, RJP's have not been shown to effect job performance.

At present, the CF recruiting system employs several techniques that, when combined, may be considered a RJP approach (eg. Campbell, 1991; Miller & Ellis, 1986; Ellis, Flynn & Zuliani, 1985). The Canadian Forces Career Information System (CFCIS) is a computer and video-aided strategy of vocational counselling currently in use in Canadian Forces Recruiting Centres (CFRCs). Designed as an efficient way of creating realistic job



expectations, the CFCIS consists of 3 major components: an orientation video (OV) which provides a general description of life in the CF; a series of Trade and Lifestyle Videos (TLVs) which provide more detailed descriptions of the various occupations in the CF; and the automated counselling component (ACC) which is a computer interactive counselling system designed to assist applicants in determining the military occupations for which they may be best suited (Campbell, 1991).

Although much research has been conducted on the CFCIS, the focus has been on behavioural and attitudinal changes during the recruiting process itself (eg., Hemsley, 1990; Miller & Ellis, 1986; Flynn, 1983) and not on changes in subsequent turnover rates. One reason for this approach in the research is offered by Miller and Ellis (1986). These authors suggest that economic conditions tend to dictate attrition rates. "In a depressed economic climate, both attrition and recruiting rates are typically low because fewer people leave the CF and need to be replaced. In these circumstances, job dissatisfaction may manifest itself in poor performance, or in increased numbers of requests for trade reassignment and remuster. Thus, the effects of a poor match between individual characteristics and trade requirements can impact on morale, and on the

effectiveness of the military socialization process, in ways which may not be reflected in attrition rates." (pp 30). It is clear, however, that economics do not account for all of the variance in turnover. If this were the case, economic forces would pull at Anglophones and Francophones equally. While this may be true for other occupational groups (land and air occupations; eg. Bender et. al., 1992), the consistent differential rates of attrition between Anglophones and Francophones in the hard sea occupations suggest other variables such as culture and values are important in maintaining these differences.

Therefore, research on the relationship between the CFCIS and attrition should be undertaken. The aim of this research should be to first identify these relationships to act as a basis for the improvement of existing programs or the implementation of new ones. Given the results of the present study, the CFCIS for Francophones entering the hard sea occupations should be reviewed to confirm all information is accurate and special attention should be given to family related issues and support services available in the organization.

### Conclusions

The present study was designed to examine the attrition behaviour of Francophone sailors in the CF. This investigation confirms the results of previous studies and provides limited support for Mobley's Expanded Turnover Process Model (1982). Although portions of the analysis should be replicated with a larger sample, the present findings indicate significant differences exist in the work perceptions and subsequent attrition behaviour of Anglophones and Francophones.

A re-examination of the Realistic Job Preview for Francophones entering the hard sea occupations is recommended as one possible solution to attrition problems identified in this study. In addition, the need for a revision of Section 1 of the CFAIQ is suggested, based on apparent content deficiencies for Francophone respondents. Finally, the integration of personality measures with the CFAIQ may aid in the improvement of the attrition monitoring system of the CF.

## REFERENCES

- Ajzen, I., & Fishbein, M. (1980). Understanding Attitudes and Predicting Social Behavior. Englewood Cliffs, NJ: Prentice-Hall.
- Ajzen, I. & Madden, T.J. (1985). Prediction of goal-directed behavior: Attitudes, intention, and perceived behavioral control. Journal of Experimental Social Psychology, 22, 453-474.
- Bailey, K.D. (1978). Methods of Social Research. New York: The Free Press.
- Bender, P., Chouinard, A., Lee, A.D., Tanner, L., & Tseng, S. (1992). An examination of Francophone participation within the Canadian Forces. (Research Note 5/92). Ottawa, Ontario: Directorate of Manpower Analysis.
- Bradley, J.P., & Paunonen, S.V. (1989). Development of the Canadian Forces Medical Officer Questionnaire (CFMOQ). (Technical Note 89-1). Willowdale, Ontario: Canadian Forces Personnel Applied Research Unit.
- Brayfield, A.H., & Crockett, W.H. (1955). Employee attitudes and employee performance. Psychological Bulletin, 52, 396-424.

- Campbell, C.A. (1991, June). Canadian Forces Career Information System: Automated Counselling Component. Paper presented at the 52nd Annual Convention of the Canadian Psychological Association, Calgary, Alberta.
- Dalton, D.R., & Todor, W.D. (1979). Turnover turned over: An expanded and positive perspective. Academy of Management Review, 4, 225-235.
- Dansereau, F., Jr., Cashman, J. & Graen, G. (1974). Expectancy as a moderator of the relationship between job attitudes and turnover. Journal of Applied Psychology, 59, 228-229.
- Directorate of Personnel Information Systems. (1993). Personnel Facts. National Defence Headquarters. Ottawa, Ontario.
- Ellis, R.T., Flynn, J.A., & Zuliani, R.A. (1985, June). The Orientation Video Component of the Canadian Forces Career Information System: A Realistic Preview of Life in the Canadian Military. A paper presented at the Annual Convention of the Canadian Psychological Association, Halifax, Nova Scotia.

- Federico, J.M., Federico, P., & Lundquist, G.W. (1976). Predicting women's turnover as a function of extent of met salary expectation and biodemographic data. Personnel Psychology, 29, 559-556.
- Fisher, C., & Locke, E.A. (1992). The new look in job satisfaction theory and research. In J. Cranny, P. Smith, & E.F. Stone (Eds.), Job Satisfaction: How People Feel About Their Jobs and How it Affects Their Performance (pp. 165-194). Lexington, MA: Lexington Books.
- Fisher, W.A. (1984). Predicting contraceptive behavior among university men: The role of emotions and behavioral intentions. Journal of Applied Social Psychology, 14, 104-123.
- Flamholtz, E. (1974). Human Resources Accounting. Encino, California: Dickenson Publishing.
- Flynn, J.A. (1983). Viewer reaction to the CF Orientation Video "The Difference is You". (Working paper 83-4). Willowdale, Ontario: Canadian Forces Personnel Applied Research Unit.

- Graen, G.B., & Ginsburgh, S. (1977). Job resignation as a function of role orientation and leader acceptance: A longitudinal investigation of organization assimilation. Organizational Behavior and Human Performance, 19, 1-17.
- Hays, W.L. (1988). Statistics. Orlando, Florida: Holt, Rinehart and Winston, Inc.
- Hemsley, G.D. (1990). Evaluation of the Canadian Forces Career Information System: Automated Counselling Component. (Working Paper 90-5). Willowdale, Ontario: Canadian Forces Personnel Applied Research Unit.
- Hom, P.W., Caranikas-Walker, F., & Prussia, G.E. (1992). A meta-analytic structural equations analysis of a model of employee turnover. Journal of Applied Psychology, 77 (6), 890-909.
- Hellriegel, D., & White, G.E. (1973). Turnover of professionals in public accounting: A comparative analysis. Personnel Psychology, 26, 239-249.
- Jenkins, J.H. (1993). Self monitoring and turnover: The impact of personality on intent to leave. Journal of Organizational Behavior, 14 (1), 83-92.

- Judge, T.A. (1993). Does affective disposition moderate the relationship between job satisfaction and voluntary turnover? Journal of Applied Psychology, 78 (3), 395-401.
- Kanungo, R.N., Gorn, G.J., & Dauderis, H.J. (1976). Motivational orientation of Canadian anglophone and francophone managers. Canadian Journal of Behavioural Science, 8, 107-122.
- Kanungo, R.N., & Bhatnagar, J.K. (1978). Achievement orientation and occupational values: A comparative study of young French and English Canadians. Canadian Journal of Behavioural Science, 10, 202-213.
- Kerlinger, F.N. (1986). Foundations of Behavioral Research. Third Edition. Orlando, Florida: Holt, Rinehart and Winston, Inc.
- Koch, J.L., & Steers, R.M. (1978). Job attachment, satisfaction, and turnover among public sector employees. Journal of Vocational Behavior, 12, 119-128.
- Kraut, A.I. (1975). Predicting turnover of employees from measured job attitudes. Organizational Behavior and Human Performance, 13, 233-243.



- Lamerson, C.D. (1987). The Organizational Attitudes of Dual-Income, Single-Income and Single Canadian Forces Personnel. Unpublished Masters Thesis, Saint Mary's University, Halifax, N.S.
- Lyon, C.D.F. (1986). Proposal for an Attrition Information System: What Do Leavers Say? (Technical Note 86-6). Willowdale Ontario: Canadian Forces Personnel Applied Research Unit.
- Lyon, C.D.F. (1987). The Canadian Forces Attrition Monitoring Questionnaire: Conceptual Development and Evaluation Plan. (Working Paper 87-1). Willowdale, Ontario: Canadian Forces Personnel Applied Research Unit.
- Lyon, C.D.F., Montgomery, M.A., & Martineau, J.C.Y. (1989). Canadian Forces Fleet School Attrition Study. (Technical Note 89-2). Halifax, N.S.: Maritime Command Headquarters.
- March, J.G., & Simon, H.A. (1958). Organizations. New York: Wiley.
- Marsh, R., & Mannari, H. (1977). Organizational commitment and turnover: A predictive study. Administrative Science Quarterly, 22, 57-75.

- Mendes, H.C. & Lyon, C.D.F. (1984). Canadian Forces Attrition/Retention Study. (Working Paper 84-8). Willowdale Ontario: Canadian Forces Personnel Applied Research Unit.
- Miller, D.L., & Ellis, R.T. (1986). The Effect of Trade and Lifestyle Videotapes on Preference and Interest in Trade Enrolment. (Working Paper 86-2). Willowdale Ontario: Canadian Forces Personnel Applied Research Unit.
- Mobley, W.H. (1977). Intermediate linkages in the relationships between job satisfaction and employee turnover. Journal of Applied Psychology, 62, 237-240.
- Mobley, W.H. (1982). Employee Turnover: Causes, Consequences, and Control. Reading, Massachusetts: Addison-Wesley Publishing.
- Mobley, W.H., Horner, S.D. & Hollingsworth, A.T. (1978). An evaluation of precursors of hospital employee turnover. Journal of Applied Psychology, 63, 408-414.
- Mobley, W.H., Griffeth, R.W., Hand, H.H., & Meglino, B.M. (1979). Review and conceptual analysis of the employee turnover process. Psychological Bulletin, 86, 493-522.

- Montgomery, M.A. (1991). An Examination of Attrition and Retention Predictors for Canadian Naval Personnel. Unpublished Masters Thesis, Saint Mary's University, Halifax, N.S.
- Newman, J.E. (1974). Predicting absenteeism and turnover: A field comparison of Fishbein's model and traditional job attitude measures. Journal of Applied Psychology, 57, 76-79.
- Parker, R.O. (1992). Canadian Forces Attrition Monitoring System: Implementation and Potential. (Working Paper 92-1). Willowdale, Ontario: Canadian Forces Personnel Applied Research Unit.
- Parker, R.O., & Lyon, C.D.F. (1988). Preliminary Evaluation of the Canadian Forces Attrition Information Questionnaire (CFAIQ-P). (Technical Note 88-20). Willowdale, Ontario: Canadian Forces Personnel Applied Research Unit.
- Pinch, F.C. (1989, October). Structural impacts on initial military socialization in the Canadian Forces. Paper presented at the Inter University Seminar on Armed Forces and Society, Baltimore, Maryland.
- Popovich, P. & Wanous, J.P. (1982). The realistic job preview as a persuasive communication. Academy of Management Review, Oct., 571.

- Prestholdt, P. H., Lane, I.M., & Matthews, R.C. (1987). Nurse turnover as reasoned action: Development of a process model. Journal of Applied Psychology, 72, 221-227.
- Price, J.L. (1977). The Study of Turnover. Ames, Iowa: Iowa State University Press.
- Schifter, D.E., & Ajzen, I. (1985). Intention, perceived control, and weight loss: An application of the theory of planned behavior. Journal of Personality and Social Psychology, 49, 843-851.
- Shalit, B. (1985). A Model for Assessment of Military Effectiveness and Coping with Stress. Presented to the International Applied Military Symposium, Paris.
- Snyder, M. (1987). Public Appearances/Private Realities: The Psychology of Self-Monitoring. New York: W.H. Freedman and Company.
- Snyder, M., Gangestad, S. & Simpson, J.A. (1983). Choosing friends as activity partners: The role of self-monitoring. Journal of Personality and Social Psychology, 45, 1061-1072.

- Spector, P.E., & Michaels, C.E. (1986). Personality and employee withdrawal: Effects of locus of control on turnover. Psychological Reports, 49, 1005-1016.
- Staw, B.M. (1980). The consequences of turnover. Journal of Occupational Behavior, 1, 253-273.
- Steers, R.M., & Mowday, R.T. (1981). Employee turnover and the decision accommodation process. In R.M. Shaw and L.L. Cummings (eds.) Research in Organizational Behavior. Greenwich: JAI Press.
- The Queen's Regulations and Orders for the Canadian Forces (1968). Volume 1 (Administration), Article 15.01.
- Vroom, V.H. (1964). Work and Motivation. New York: Wiley.
- Wanous, J.P. (1980). Organizational Entry: Recruitment, Selection and Socialization of Newcomers. Reading, Mass.: Addison Wesley Publishing.
- Waters, L.K., & Roach, D. (1973). Job attitudes as predictors of termination and absenteeism: Consistency over time and across organizational units. Journal of Applied Psychology, 57, 341-342.

- Waters, L.K., Roach, D., & Waters, C.W. (1976). Estimate of future tenure, satisfaction, and biographical variables as predictors of termination. Personnel Psychology, 29, 57-60.
- Weitz, J. (1952). A neglected concept in the study of job satisfaction. Personnel Psychology, 5, 201-205.
- Wong-Rieger, D., & Taylor, D.M. (1981). Multiple group membership and self-identity. Journal of Cross Cultural Psychology, 12 (1), 61-69.
- Youngblood, S.A., Mobley, W.H., & Meglino, B.M. (1983). A longitudinal analysis of the turnover process. Journal of Applied Psychology, 68, 507-516.

**APPENDIX**

The Canadian Forces Attrition  
Information Questionnaire  
(Third Edition)



# **Canadian Forces Attrition Information Questionnaire (CFAIQ)**

# **Booklet**

(Third Edition)

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



**DO NOT WRITE IN THIS BOOKLET**

September 87

## **INSTRUCTIONS**

The Canadian Forces (CF) is interested in the opinions of service members, like yourself, who have served in the military and are now returning to civilian life. The Canadian Forces Personnel Applied Research Unit (CFPARU) is gathering this attrition information from everyone who is leaving the CF on a voluntary basis.

This questionnaire package is self-contained and consists of three parts: the questionnaire booklet which you are reading at present, a four page machine-readable answer sheet and a return envelope. The questionnaire comprises five sections; each section has a corresponding area on the answer sheet.

Comments that you have concerning the questionnaire or your CF experiences are also of interest. Sections of the questionnaire have corresponding areas on Page 3 of the answer sheet for written comments, and page 4 is available for any general comments you wish to make.

Once you have completed the questionnaire, put it in the envelope provided, seal the envelope and give it to the questionnaire administrator or the person who gave you the package. Should you have any questions or need clarification after reading these instructions, or at any time while completing the questionnaire, please ask for assistance from the person who is administering the questionnaire to you.

All individual information from this study will be treated in *strictest confidence*. The data gathered will be analyzed in groups and only summary findings will be provided to NDHQ and the Commands for use in planning future personnel policies, programs and practices.

Please answer each item as honestly and thoughtfully as possible.

**DO NOT WRITE IN THIS BOOKLET**

## SECTION 1

### Reasons for Leaving

**Begin on Page 1 of the Answer Sheet.**

We are interested in your reasons for leaving. The response areas for this section are located at the top of Page 1 on the Answer sheet, and are labelled "Section 1 - Part A" and "Section 1 - Part B". There are two steps to answering this section.

- **PART A** Read the first reason for leaving statement given below:  
**DIRECTIONS:** Decide how important this reason is in your decision to leave the CF by selecting the letter from the levels of importance scale that most nearly matches how important you believe it was in your decision to leave. Show your responses by finding the corresponding question number in the 'Section 1 - Part A' area of the Answer Sheet, and blackening completely the letter representing the level of importance.

Levels of Importance Scale				
A	B	C	D	E
<i>Extremely Important</i>	<i>Very Important</i>	<i>Important</i>	<i>Of Some Importance</i>	<i>Not True or of No Importance</i>

1. I have had too many postings.
2. My CF career conflicts with my spouse's career.
3. I want more challenging work.
4. I am not being adequately compensated for overtime.
5. My most recent military posting does not make good use of my knowledge and training.
6. Future posting in my MOC are unattractive because of the nature of the work.
7. I have difficulty living on what I earn in the CF.
8. I was offered a civilian job with more responsibilities.
9. Postings are disruptive to my children's education.
10. I do not get credit for a job well done.
11. I have been discriminated against.
12. I was offered a civilian job with better job security.
13. I want to stay at home and raise my family.
14. I was attracted to a civilian job with more fringe benefits.
15. My work performance is not evaluated fairly.
16. Younger service members get promoted faster than I do.
17. I cannot get the MOC I want.

Levels of Importance Scale				
A	B	C	D	E
<i>Extremely Important</i>	<i>Very Important</i>	<i>Important</i>	<i>Of Some Importance</i>	<i>Not True or of No Importance</i>

18. My hours of work are too long.
19. My MOC is, or is becoming, obsolete.
20. I am spending too much time away from home.
21. I have been offered a civilian job with less responsibility.
22. I am under too much stress.
23. I don't expect to get an offer of re-engagement.
24. I have not been provided with the tools or equipment I need to do my job properly.
25. I don't like my physical work conditions.
26. My immediate supervisor is not competent.
27. I am not in a MOC that is useful for future civilian employment.
28. My supervisor lacks interest in his/her subordinates.
29. I am unlikely to get promoted.
30. I want to increase my family stability by establishing roots in some community.
31. I have been offered a job that pays more.
32. I do not get along with my co-workers.
33. Likely future postings are unattractive because of their location.
34. I want to avoid compulsory release.
35. I cannot get the postings I asked for.
36. I am going back to school.
37. I am taking full advantage of my pension and potential civilian salary.
38. My spouse is unwilling to move to a new posting location.
39. I do not want to work in a mixed gender unit.
40. I do not want to work in an operational role.
41. I am leaving because of compassionate circumstances.
42. My career is limited because of my medical category.
43. I am going into business for myself.
44. I do not want to be separated from my family.
45. I am not getting equal pay for equal work.
46. My role in the military is undervalued/unappreciated in Canadian society.



**PART B**

**DIRECTIONS:**

Now that you have completed Part A, re-read all of the reasons for leaving statements. Choose only three of them that you consider to be your most important reasons for leaving the CF. Go to the 'Section 1 - Part B' area on Page 1 of the answer sheet. WRITE the number of the statement that is your first most important reason for leaving in the squares provided, then **BLACKEN** the numerals in the circles which correspond to that leaving statement number. REPEAT this procedure for the second most important reason you have for leaving and, finally, for the third most important reason for leaving.

47. **Comments:** Having completed the Reasons for Leaving section, are there any factors not listed that you consider to be other reasons for taking your release from the CF? If so, write these other factors in the additional reasons for leaving area (Part A) on Page 3 of the Answer Sheet.

**NOW TURN THE PAGE TO SECTION 2.**

## SECTION 2

### CF/Civilian Comparison

- **DIRECTIONS:** Below is a list of factors which many CF service members consider when deciding to voluntarily leave the CF for civilian life. For each statement, please indicate whether you think the factor is better in the CF or better in civilian life, using the five point scale that follows. (Show your response by finding the question number in the 'Section 2' area on page 1 of the Answer Sheet and blackening completely the appropriate numeral.)

CF/Civilian Rating Scale				
1	2	3	4	5
<i>Clearly better in the CF</i>	<i>Somewhat better in the CF</i>	<i>About the same</i>	<i>Somewhat better in civilian life</i>	<i>Clearly better in civilian life</i>

1. Opportunity for making friends at work.
2. Opportunity for leisure time.
3. Protection against sex discrimination.
4. Work-related safety standards.
5. Rewards for job performance.
6. Opportunity for employer-sponsored travel.
7. Number of fringe benefits.
8. Opportunity for promotion.
9. Opportunity to develop new skills.
10. Opportunity for high salary.
11. Opportunity for desired amount of responsibility at work.
12. Freedom from unwanted overtime.
13. Fair performance evaluation.
14. Acceptable discipline and rules of workplace.
15. Choice of work location.
16. Job security.
17. Opportunity to use major skills.
18. Protection against ethnic discrimination.
19. Overall lifestyle.
20. Opportunity for educational upgrading.
21. Participation in community affairs.

**CF/Civilian Rating Scale**

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<i>Clearly better in the CF</i>	<i>Somewhat better in the CF</i>	<i>About the same</i>	<i>Somewhat better in civilian life</i>	<i>Clearly better in civilian life</i>

- 22. Freedom of speech.
- 23. Opportunity for additional part-time work.
- 24. Quality of supervision and leadership.
- 25. Desired work challenge.
- 26. Opportunity to establish roots in ones community.
- 27. Equal pay for equal work.
- 28. Time spent at home.
- 29. Protection against language discrimination.
- 30. Tools and equipment.

(NOTE: The answer sheet may have extra response circles to allow for the addition of questions in the future. Ignore those circles which do not have corresponding statements.)

**NOW TURN THE PAGE TO SECTION 3.**

## SECTION 3

### ***Attitudes Toward Your Experience in the CF***

- **DIRECTIONS:** Although earlier sections have dealt with your actual reasons for leaving, this section asks you to specify your attitudes and opinions toward the CF. Using the five point scale shown below, indicate how satisfied/dissatisfied you are with each factor, based on your experiences in the CF. (Show your response by finding the question number in the 'Section 3' area of the Answer Sheet and blackening completely the appropriate numeral that reflects your level of satisfaction/dissatisfaction.)

Levels of Satisfaction/Dissatisfaction Scale				
1	2	3	4	5
<i>Very Satisfied</i>	<i>Somewhat Satisfied</i>	<i>Neither Satisfied nor Dissatisfied</i>	<i>Somewhat Dissatisfied</i>	<i>Very Dissatisfied</i>

1. Current MOC.
2. Postings.
3. Hours of Work.
4. Training.
5. Supervisors.
6. Job Tasks.
7. Career Management.
8. Advancement (promotion) Opportunities.
9. CF Lifestyle.
10. Work Challenge.
11. Fringe Benefits.
12. Last Job Position.
13. Pay.
14. Physical Working Environment.
15. Performance Evaluation.
16. Level of Responsibility at Work.
17. Relationship with Co-workers.
18. Your Work Accomplishments.
19. Variety in Work.
20. Overall Experience in the CF.

(NOTE: The answer sheet may have some extra response circles to allow for the addition of questions in the future. Ignore those circles which do not have corresponding statements.)

**NOW TURN THE PAGE TO SECTION 4.**

## **SECTION 4**

### ***Preparation for Transition from CF to Civilian Life***

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- **PART A** This section asks about the plans that you have made for a civilian life, including  
**DIRECTIONS:** school and training intentions, and employment preparations. (BLACKEN only the one number in Section 4 – Part A that corresponds to the answer that most closely matches your intentions.)

**What are your immediate second career intentions?**

- (1) Do similar work as in your MOC?
- (2) Do different work than your MOC?
- (3) Go into your own business?
- (4) Take full retirement?
- (5) Attend a training course or return to school.
- (6) No immediate work plans.
- (7) Other. (Write your other Second Career Intentions in Part B on Page 3 of the Answer Sheet).

(NOTE: The answer sheet may have some extra response circles to allow for the addition of questions in the future. Ignore those circles which do not have corresponding statements in this section.)

- **PART B** Each of the following statements asks about your school and/or training prepara-  
**DIRECTIONS:** tions. (Find the statement number in Section 4 – Part B response area on Page 1 of the Answer Sheet. BLACKEN either a 'Y' for YES or a 'N' for No.)

**In terms of education and training in preparation for civilian life, have you:**

1. Talked seriously with friends about your educational/re-training plans?
2. Discussed your educational/re-training plans with relatives?
3. Talked with an academic/re-training counsellor?
4. Decided upon your major subject/training area?
5. Applied to a school/training program?
6. Been accepted at a school/training program?
7. Currently enrolled in a school/training program?
8. Finished a civilian trade, professional or academic course in the past two years?
9. Attained a civilian trade, professional or academic certificate/diploma in the past two years?



**PART C** Each of the following statements asks about your employment preparations.  
**DIRECTIONS:** Find the statement number in the response area for section 4 – Part C on Page 1 of the Answer Sheet. BLACKEN either a 'Y' for Yes or a 'N' for No.)

In terms of your civilian work plans, have you:

1. Talked with friends or relatives about job leads?
2. Taken part in the Second Career Assistance Network (SCAN) program of the CF?
3. Talked with a civilian job counsellor about job opportunities?
4. Prepared a career resumé?
5. Searched through job listings and newspaper want ads?
6. Contacted employment agencies?
7. Applied for any jobs?
8. Been interviewed for a job(s)?
9. Been offered a firm job position?
10. Accepted or begun working at a job you plan to continue temporarily after you leave the CF?
11. Accepted or begun working at a job you plan to continue permanently after you leave the CF?

**NOW TURN THE PAGE TO SECTION 5.**

## SECTION 5

### ***Biographical Information***

---

**DIRECTIONS:** This section asks for biographical information. The information will allow researchers to group data into useful categories. The intention is to use these categories to compare different groups of people who voluntarily leave the CF.

**1. Today's Date:**

Give today's date using the day/month/year format: for example, 3 June 1992 would be 03 06 92. (WRITE the numbers in the squares provided, then **BLACKEN** the numbers in the circles that specify the date.)

**2. Your Retirement Leave Start Date:**

Give your retirement leave start date/terminal leave start date using the day/month/year format: for example, 15 June 1992 would be 15 06 92. (WRITE the numbers in the squares provided, then **BLACKEN** the numbers in the circles that specify the date.)

**3. Your Release Date:**

Give your release date using the day/month/year format: for example, 30 August 1992 would be 30 08 92. (WRITE the numbers in the squares provided, then **BLACKEN** the numbers in the circles that specify the date.)

**TURN TO PAGE 2 OF THE ANSWER SHEET. START AT THE TOP LEFT CORNER.**

**4. Your Military Occupation Code: (example - NCM 831, Officer 21A)**

Give your MOC. WRITE the numbers for your MOC in the squares provided, then **BLACKEN** the circled numbers and letter in the MOC response area of Page 2 that correspond to your MOC.

**NOTE:** NCMs blacken 3 of the circled numbers; officers blacken only 2 of the circled numbers (leave blank the third circled number) and blacken only 1 of the circled letters.

**5. Your element:**

**BLACKEN** the circle that identifies your Element (Sea, Land or Air).

**6. Your rank level:**

**BLACKEN** the circle that corresponds to your rank.

**7. Your Occupation Qualification Level (OQL):**

For NCMS, what is your current Occupation Qualification Level (OQL)? (Should you have an OQL other than those listed, write the OQL in Part C - Other Occupation Qualification Level - on Page 3 of the Answer Sheet.) **BLACKEN** the OQL circle that matches your OQL.

**8. Your Command:**

**BLACKEN** the Command circle that matches the Command in which you are currently serving.

**9. Your Unit Identification Code:**

Give your UIC. (You should have been given a list of all the UIC's for your CF location. Please refer to the list to answer this question. If you are uncertain about your UIC, ask the questionnaire administrator for assistance.) **WRITE** the numbers for your UIC in the squares at the top of the block and **BLACKEN** the circled numbers that comprise your UIC.

**10. Type of Unit:**

Give the type of unit in which you were serving when you submitted your release request. (If you were serving in a type of unit other than those listed, write the unit name in Part D - Other Types of Units - on Page 3 of the Answer Sheet.) **BLACKEN** the Unit Type circle that corresponds to your present unit. **Blacken only one.**

**11. Total Number of Years of Service:**

Give your total number of years of service, including previous service and reserve time. **WRITE** the numbers for your years of service in the squares at the top of the block and **BLACKEN** the circled numbers that total your years of service.

**12. Terms of Service:**

Give your Terms of Service. (If you have terms of service other than those listed, write the type of terms of service in Part E - Other Terms of Service - on Page 3 of the Answer Sheet.) **BLACKEN** the terms of service circle that corresponds to your terms of service. **Blacken only one.**

**13. Decision to Leave:**

Give the length of time it took you to decide to leave the CF. **BLACKEN** the appropriate decision to leave time circle.

**14. Release Item (QR&O 15.01):**

Give the QR&O 15.01 release item under which you are being released. **BLACKEN** the release item circle that matches your release item.

**15. Reasonable Action:**

Could a reasonable action have prevented your leave decision? **BLACKEN** Yes or No in the response block, then **WRITE** your comments regarding actions that could have prevented your leaving in Part F – Reasonable Actions – on Page 3.

**16. Date of Birth:**

Give your date of birth. Use the day/month/year format: for example 21 November 1960 would be 21 11 60. **WRITE** the numbers in the squares provided, then **BLACKEN** the numbers in the circles that specify the date.)

**17. Marital Status:**

Give your present marital status. **BLACKEN** the marital status circle that matches your present marital status.

**18. Dependant Children:**

Do you have any dependant children living with you? Yes or No. **BLACKEN** the appropriate circle.

**19. Sex:**

State your sex. **BLACKEN** the circle that corresponds with your sex, male or female.

**20. Your First Official Language:**

Which do you consider your first official language? **BLACKEN** only the circle that corresponds to your first official language, English or French.

**21. Your Highest Level of Education:**

Give the highest level of education that you have completed. **BLACKEN** only the circle that corresponds with your highest level of educational attainment.

**22. Your Highest Level of Academic Accreditation:**

Give your highest level of academic accreditation you have obtained. **BLACKEN** only the circle that corresponds with your highest level of educational attainment.

**23. Reserve/Militia Intentions:**

Do you intend to join the reserves or militia? Yes or No. **BLACKEN** the appropriate response circle (Yes or No) then **WRITE** your comments regarding your reserve intentions in Part G - Reserves/Militia Intentions - on Page 3.

**24. Additional Information - Social Insurance Number/Service Number:**

This survey was about your reasons for leaving the CF. Your responses and those of others who are leaving the CF will be the most valid and reliable sources of information we have about voluntary release.

However, not all of the answers as to why service members leave can come from a questionnaire. There are other valuable sources of information in the CF that are relevant and could help us understand why you are leaving (e.g., posting history). This additional information and your questionnaire responses would provide a more complete determination of attrition causes. To compare your military background and other members who are leaving, we request that you provide your Social Insurance Number/Service Number or SIN/SN, because the SIN/SN is the only reliable link that exists across the Personnel Information Management System.

Find the SIN/SN response block. **WRITE** the numbers of your SIN/SN in the squares provided, then **BLACKEN** the circled numbers that specify your SIN/SN.

**25. Your General Attitude Towards this Questionnaire:**

Knowing your attitude toward this questionnaire will assist in its amendment. **BLACKEN** the questionnaire attitude circle that matches your attitude towards this questionnaire.

**TURN TO PAGE 4 OF THE ANSWER SHEET**

**PART H - ADDITIONAL COMMENTS:**

As part of the research work in determining why members leave the CF, we are interested in your comments regarding the CF, your reasons for leaving, and your opinions about this questionnaire.

Page 4 of the Answer Sheet has been provided so that you can provide any further comments or suggestions that you wish to give. Please write any comments in this area. Should the space provided not be long enough, ask the questionnaire administrator for more paper.

**WE APPRECIATE THE TIME AND EFFORT YOU  
HAVE TAKEN TO COMPLETE THIS QUESTIONNAIRE.  
THANK YOU FOR YOUR HONESTY AND COOPERATION.**

CANADIAN FORCES ATTRITION INFORMATION QUESTIONNAIRE ANSWER SHEET

SECTION 1 - PART A REASONS FOR LEAVING

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	

SECTION 1 - PART B

MOST IMPORTANT REASONS FOR LEAVING

1st	2nd	3rd

SECTION 2 CIVILIAN COMPARISON

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33

SECTION 3 CF EXPERIENCE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25

INSTRUCTIONS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

SECTION 4 PREPARATION

PART A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

PART B

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

PART C

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

SECTION 5 - BIOGRAPHICAL DATA

1. TODAY'S DATE

DAY	MONTH	YEAR

2. RETIREMENT LEAVE START DATE

DAY	MONTH	YEAR

3. RELEASE DATE

DAY	MONTH	YEAR

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33

CANADIAN FORCES ATTRITION INFORMATION QUESTIONNAIRE ANSWER SHEET

9. NOC		8. ELEMENT		7. COC		6. COMMAND		5. LFC		10. TYPE OF UNIT	
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CANADIAN FORCES ATTRITION INFORMATION QUESTIONNAIRE ANSWER SHEET

H ADDITIONAL COMMENTS

SHOULD YOU WISH TO MAKE ANY FURTHER COMMENTS, ASK THE  
QUESTIONNAIRE ADMINISTRATOR FOR ADDITIONAL PAPER.

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