ORGANIZATIONAL MENTORING:
WHAT ABOUT PROTÉGÉ NEEDS?

by

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ABSTRACT

ORGANIZATIONAL MENTORING:
WHAT ABOUT PROTÉGÉ NEEDS?

Whereas studies in organizations have almost exclusively measured mentoring occurrences, this research on health care professionals has uniquely contributed to the mentoring literature in two ways. First, the importance of examining mentoring needs from the protégé's perspective has been empirically demonstrated. Six types of mentoring needs were identified, namely professional development, sponsorship and recognition, equal partnership, friendship, coaching on work issues, and role-modeling. From a theoretical perspective, the six mentoring needs disconfirm Kram's (1983, 1985a) two-dimensional model of mentoring. Furthermore, the construct of mentoring needs was different from the construct of mentoring occurrences. In other words, what protégés need in terms of mentoring behaviour is different from what they are receiving.

From a practical perspective, determining mentoring needs is important because: (1) employees have different needs; (2) mentors provide different mentoring functions according to their own skills, abilities, personal style, and motivation; (3) it allows for a better match between individual and organizational needs; (4) it is a proven benefit during times of organizational change and restructuring; (5) it can be used as a powerful tool for leaders who wish to assess the climate of their organization; and (6) it may significantly increase the effectiveness of formalized mentoring programs.

Second, this research has demonstrated the value in examining the gender composition of
the dyad in future mentoring research. Female protégés who had a male mentor distinguished themselves from their peers in that they expressed stronger mentoring needs than male protégés with male mentors, particularly for professional development, equal partnership, coaching on work issues, and role-modeling. They also reported receiving more mentoring functions compared to protégés in other dyads, specifically sponsorship and recognition, coaching on work issues, and role-modeling. A follow-up study revealed that female protégés who had a male mentor were not more competitive, more ambitious, nor more in need for power and achievement than their peers in other dyads. This is in keeping with other literature which suggests that sex differences on achievement-related motives and behaviours are small to non existent. Furthermore, these women were not more prone to seek help.

With regards to the person consulted for specific mentoring behaviours, it was found that women approached women to discuss personal issues but they had no gender preference with regards to the person consulted for career developmental matters. Men, on the other hand, always approached men, regardless of the issue. Women who preferred consulting men for career advancement issues were younger, more junior, had a greater need for achievement, and tended to have a greater need for power than women who consulted women.

In sum, this thesis has uniquely contributed to the mentoring literature by operationalizing the construct of mentoring needs and demonstrating the value of assessing mentoring needs in a organizational context. Furthermore, the importance of examining the gender composition of the mentoring dyad in future research has been demonstrated. Theoretical and practical implications are presented.
ACKNOWLEDGEMENTS

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Finally, I would be remiss if I did not acknowledge my mentors, past and present, who have profoundly influenced me professionally and personally. In particular, Alan Okros, Chris Ford, and Simon Berthiaume, who have made a substantial impact on who I am.
DEDICATION

This accomplishment is dedicated to my family and to those I love:

Eric for your unremitting love, support, and encouragement since the day we met.

Anika and Yohan for reminding me everyday in your childish innocence that life is so incredibly beautiful.

My parents Ursula and Hans Knackstedt, and my grandmother Erna Schumann, for having survived the ordeals of a war, persevered and succeeded, and for being a constant source of inspiration to me.

My brother Werner for your strength and immense kindness.

My other family members, friends, and loved-ones for being who you are.
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ORGANIZATIONAL MENTORING:
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Chapter I
INTRODUCTION

The concept of mentor found its origins in Greek mythology in the tale of Odysseus (Dalton, Thompson, & Price, 1977). After Odysseus left to fight the Trojan wars, the goddess Athena appeared in the form of a mentor to give counsel, comfort, courage and guidance to his son Telemachus when he undertook a journey in quest of his father. As in Greek mythology, a mentor has been defined as a trusted advisor who protects, sponsors, guides and teaches inexperienced people (e.g., Levinson, Darrow, Klein, Levinson, & McKee, 1978; Zey, 1984), who has a positive influence on the person’s career development (Klauss, 1981) and personal life (Levinson et al., 1978).

While the struggle of Telemachus has long passed, the concept of mentoring has remained and has been the focus of a great deal of research in work settings (e.g., Burke & McKeen, 1989, 1990; Colwill & Pollock, 1988; Dreher & Ash, 1990), in the public sector (e.g., Henderson, 1985; Klauss, 1981; Vertz. 1985), in the military (e.g., Yoder, Adams, Groce, & Priest, 1985), and in academia (e.g., Brooks & Haring-Hidore, 1987; Redmond, 1990; Zey, 1984, 1988).
Mentoring in Work Organizations

There has been an explosion of literature on mentoring, particularly in the last ten years. Research on mentoring in the workplace has explored such aspects as the phases of mentorships (Kram, 1983, Chao, 1997), antecedents (Whitely, Dougherty, & Dreher, 1992) and outcomes of mentorships (Chao, Walz, & Gardner, 1992; Orpen, 1995; Scandura, 1992), cross-gender mentoring (Burke & McKeen, 1990; Ragins, 1989; Ricketts Gaskill, 1991a, 1991b; Riley & Wrench, 1985), cross-cultural and cross-ethnic mentoring (Dreher & Cox, 1996; Feist, 1994; Kalbfleisch & Davies, 1991; Ragins, 1995, 1997a, 1997b; Redmond, 1990; Thomas, 1990, 1993). as well as its relationship with various leadership theories (Godshalk & Sosik, 1998; Scandura & Schriesheim, 1994; Thibodeaux, & Lowe, 1996). For good reviews of the mentoring literature, the reader is referred to Kram (1986) and Murray and Owen (1991).

In the workplace, mentoring has been recognized as having an increasing importance to employees' career and professional development (Hall, 1986; Kram & Bragar, 1992). The academic (e.g., Bowen, 1986; Kram, 1985a; Zey, 1984) as well as the popular press (e.g., Collins, 1983) have described mentoring as one of the most valuable avenues for developing upwardly mobile, talented individuals (Buschardt, Fretwell, Holdnak, 1991).

Definition

Mentoring is a term used to describe the relationship between a mentor and a protégé. In a general sense, it is "a deliberate pairing of a more skilled or experienced person with a lesser skilled or experienced one, with the agreed-upon goal of having the lesser skilled person grow and develop specific competencies" (Murray & Owen, 1991, p. xiv). The term mentor has often been used interchangeably with sponsor, role-model, coach, teacher, advisor, guide, tutor.
confidante, rabbi, or godfather, amongst others. Mentoring is generally considered to encompass all of these roles and more. In fact, mentoring has been identified as an integral component of leadership.

According to Fine (1989) in his well-known procedure of Functional Job Analysis, the most complex job function in dealing with people is leadership, immediately followed by mentoring. In this system, a job requiring performance at one level also requires performance at all the lower levels. Therefore, all leaders should perform mentoring functions. One of the main distinctions between the two constructs is related to their role: leadership involves a performance-oriented influence role, whereas mentoring primarily refers to a career-oriented development role (Burke & McKeen, 1990).

In keeping with other researchers, mentors in this study are defined as higher ranking influential organizational members with advanced experience and knowledge, who are committed to providing upward mobility and support to their protégé's career development, who serve as role models, and increase the protégé's visibility to organizational decision-makers who may influence career opportunities (Collins, 1983; Kram, 1985a; Noe, 1988a; Ragins, 1989; Roche, 1979). A protégé is usually described as a young professional with high career ambitions, who may be relatively new to the organization (Hunt & Michael, 1983; Kram, 1985a), who has demonstrated potential for advancement and a strong desire to learn.

Benefits and Risks of Mentoring

When mentoring is effective, protégés, mentors, and the organization alike derive benefits (Dreher & Ash, 1990). Mentoring provides protégés with long term career and professional development (Kram, 1983, 1985a). Compared with their non-mentored counterparts, protégés
who have received the benefits of mentoring become more effective leaders and display earlier organizational socialization (Burke, 1984; Chao et al., 1992; Ostroff & Kozlowski, 1993). They have demonstrated a greater ability to obtain valuable information otherwise not available through the formal channels (Dreher & Ash, 1990), more policy influence, greater access to influential and senior people, greater resource power (Fagenson, 1988), higher wages (Roche, 1979), faster promotion rates and advancements that are crucial for attaining career success (Dreher & Ash, 1990; Dreher & Cox, 1996; Fagenson, 1988; Hunt & Michael, 1983; Stumpf & London, 1981), occupational mobility (Scandura, 1992), higher levels of managerial and technical skills (Burke, 1984), greater career opportunities and recognition (Fagenson, 1989), and increased productivity (Fagenson, 1989). Mentored protégés have indicated a more developed need for power and achievement (Fagenson, 1992), higher career satisfaction (Koberg, Boss, Chappell, & Ringer, 1994; Riley & Wrench, 1985; Roche, 1979), higher career commitment (Colarelli & Bishop, 1990); increased self-confidence (Reich, 1983) and self-esteem (Koberg, Boss, & Goodman, 1998; Kram, 1985a; Schein, 1978). They also set higher personal standards and have acquired a code of ethics (Cronan-Hillix, Gensheimer, Cronan-Hillix, & Davidson, 1986).

Mentors also derive a number of benefits. They report an increased sense of competence and feelings of confidence in their abilities (Kram, 1985a), a gain in respect among their peers and superiors (Hunt & Michael, 1983; Kram, 1983), greater job satisfaction, motivation, and enhanced leadership skills (Smith, 1990), and they find the experience to be creative, satisfying, and rejuvenating (Levinson & al., 1978). Mentoring has also been reported as one of the most significant roles available during middle adulthood (Levinson et al., 1978) which often coincides
with the mid-career period (Burke & McKeen, 1989). Mentoring enables the mentor to contribute to the next generation by passing on a legacy while learning valuable information about junior personnel and new technology from the protégé.

Organizational benefits of mentoring include earlier organizational socialization of the more junior members (Chao, 1997), decreased turnover (Koberg et al., 1998; Scandura & Viator, 1994), increased productivity, better educated employees, as well as effective management and succession planning (Burke, 1984; Murray & Owen, 1991; Zey, 1984). Mentoring was also found to be a key resource during times of major corporate change (Kram & Hall, 1991).

Although mentioned less frequently than its advantages, a few drawbacks to mentoring have been identified. As in any relationship, there are risks involved. For example, a poor match between the mentor and the protégé can cost both parties valuable career time, especially for the protégé (Kram, 1985a). If the protégé does not meet the mentor's expectations in terms of performance, this may negatively reflect on the mentor (Fitt & Newton, 1981). Furthermore, when the relationship comes prematurely to an end, feelings of loss of self-esteem, frustration, blocked opportunities, and a sense of betrayal may surface (Hunt & Michael, 1983). Mentors may also inappropriately block their protégés' promotions, shield them from mistakes (Reich, 1986), become jealous of their protégé and sabotage the protégé's career (Ragins & Scandura, 1997), or even commit sexual improprieties (Bowen, 1985; Henderson, 1985). On the other hand, protégés may become overly dependent on the mentor (Busch, 1985; Ragins & Scandura, 1997), have exaggerated expectations of career advancement, and overidentify with their mentor (Reich, 1986). It must be noted, however, that these drawbacks are not uniquely associated with mentoring, but may simply be a reflection of poor leadership.
On the organizational level, the establishment of a mentoring program necessitates the coordination with other developmental programs. It depends on the commitment of those involved, requires the involvement of decision makers, and may lead to a complicated and expensive administration. In fact, the literature suggests that the majority of drawbacks are associated with extremely formalized and structured mentoring programs (Allen, Russell, & Maetzke, 1997; Burke & McKeen, 1989; Chao et al., 1992; Heimann & Pittenger, 1996; Keele, Buckner, & Bushnell, 1987; Phillips-Jones, 1983). Finally, mentoring may result in excessive political behaviour within the organization when, for example, the mentor attempts to bypass regular procedures to give the protégé needed resources (Dirsmith & Covaleski, 1985, cited in Pollock, 1990).

In sum, mentoring relationships significantly impact all parties, the mentor, the protégé, and the organization as a whole. Overall, the benefits associated with forming such relationships have been shown to significantly outweigh the potential risks (Chao et al., 1992).

Operationalization of Mentoring Functions

Interestingly, while extensive evidence has documented the importance and benefits of mentoring in a variety of settings, there is still no consensus on the specific functions performed by mentors. Over the last thirty years, several researchers have attempted to define the mentoring construct. Kram (1983) was the pioneer in this area. She and her associates (Kram, 1983, 1985a, 1985b; Kram & Isabella, 1985) conducted the most systematic research on mentoring processes. Based on a content analysis of in-depth interviews with mentors and protégés in a large business organization, they found that mentoring relationships have two major components: career development and psychosocial functions. Career development functions depend on the mentor's
power in the organization, whereas psychosocial functions depend on the "quality of the interpersonal relationship and the emotional bond that underlies the relationship" (Ragins & Cotton, 1999, p. 530). Career development or vocational functions are those aspects of the relationship that enhance learning the ropes and preparing for advancement within an organization. Psychosocial functions involve an enhanced sense of competence, clarity or identity and effectiveness in a professional role.

According to Kram (1985a), career development functions include sponsorship (nominating the protégé for desirable lateral moves and promotions), exposure and visibility (giving the protégé responsibilities which require contacts with other senior organizational members), coaching (suggesting specific strategies for accomplishing work objectives, recognition, and career objectives), protection (shielding the protégé from untimely and potentially damaging contact with senior officials), and giving challenging assignments. The four psychosocial functions Kram (1985a) identified include role-modeling (demonstrating values and behaviours for the protégé to emulate), acceptance and confirmation (conveying mutual positive regard and respect, providing support and encouragement), counselling (enabling the protégé to explore personal concerns that may interfere with a personal sense of self in the organization), and friendship (having social interactions and informal exchanges about work, and non-work experiences as a result of mutual liking and understanding).

Like Kram (1985a), a few other researchers have grouped mentoring functions into two broad categories. For example, analyses conducted by Olian, Carroll, Giannantonio, and Feren (1988) using survey responses from business managers revealed two types of roles: instrumental, which resembles Kram's career development dimension, and intrinsic, which resembles the
psychosocial aspects of mentoring. Based on a principal component analysis conducted on data from school teachers and administrators, Noe (1988a) also found evidence for career development and psychosocial dimensions. Friendship, however, fitted under neither category.

Nevertheless, Noe's (1988a) research contained a number of methodological flaws: only two items measured some of the mentor roles and some of the career development items loaded on the psychosocial items.

Many other researchers have not found evidence for Kram's (1985a) two dimensions (career development and psychosocial). For example, Burke's (1984) factor analytic study of managers provided evidence for three mentoring dimensions: the two factors found by Kram plus role-modeling. However, the sample size was relatively small (80), several items had poor loadings, and other items clearly loaded on two factors. In a study of academic counsellors and administrators which used cluster analysis, Cohen (1993) developed and validated a "Principles of Adult Mentoring Scale". He identified six types of mentoring behaviours which ideal faculty mentors should exhibit: a relationship emphasis, an information emphasis, a facilitative focus, a confrontational focus, student vision, and role-model behaviours.

Trying to make sense of all the mentoring functions reported in the literature, Jacobi (1991) summarized the variety of ways in which mentoring has been defined within higher education, management, and psychology. Her investigation revealed 15 functions or roles that have been ascribed to mentors. For this thesis, a review independent of Jacobi's (1991) findings was conducted. The articles selected for inclusion in this review had to satisfy two criteria: (1) mentoring behaviours were measured in a systematic way, that is, using sound methodological and statistical procedures; and (2) research was set in a work context. Consequently, not all of
Jacobi's (1991) studies were incorporated in this review, however, others which she omitted were, as well as all mentoring researchers who published in the 1990's and who satisfied the two criteria. Nineteen distinct mentoring functions were identified, each representing a range of mentoring behaviours covering career development and psychosocial aspects. They are listed in Table 1.

When one examines actual mentoring functions illustrated in Table 1, it becomes evident that there is a lack of agreement, even within similar fields. For example, although authors such as Schockett and Haring-Hidore (1985) and Whitely and Coetsier (1993) found the same five career developmental dimensions as Kram (1985a), they also reported additional mentoring dimensions not identified in her studies. Similarly, Riley and Wrench (1985) and Busch Wilde and Garrett Schau (1991) found that mentors provided their protégés with resources, but they did not protect them. Others found that mentors were directly involved in assisting their protégés with their tasks and technical aspects (e.g., Dreher & Ash, 1990; Scandura & Ragins, 1993; Schockett and Haring-Hidore, 1985), and vouched for the protégé's accomplishments (e.g., Benabou, 1995; Schockett & Haring-Hidore, 1985; Whitely & Coetsier, 1993). With regards to the career developmental functions, researchers have discovered additional psychosocial functions not originally identified by Kram (1985a), such as enhancing the protégé's self-esteem and self-confidence (Collins, 1983; Pollock, 1995; Riley & Wrench, 1985; Schockett & Haring-Hidore, 1985); and acting as a parent figure (Ragins & Cotton, 1999). Consequently, a number of authors have been measuring mentoring in different ways, and thus, sometimes reporting contradictory findings.
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Table 1
Summary of Research Findings by Authors: Mentoring Functions and Behaviours (Continued)

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Limitations of the Mentoring Research

As seen previously, much confusion still exists with regards to labels, definitions, mentoring functions and behaviours, as well as measures. Consequently, mentoring research remains fragmented and, at times, flawed by serious methodological limitations.

Among the general criticisms of mentoring research, several are directly linked to the way it was measured. First, the wording of the instructions and definition of mentoring in surveys affects the quality and quantity of mentoring reported, which in turn results in different findings. For example, when using Levinson et al.'s (1978) definition of mentoring, which involves an intense emotional relationship, only one out of 100 persons interviewed in Roche's (1979) study reported having a mentor. However, most of the managers in his study reported having someone who has been influential in their careers. The incidence of reported mentorships was far greater in other studies (e.g., Benabou, 1995; Colwill & Pollock, 1988; Scandura & Ragins, 1993) where the definition of mentoring leaned towards the notion of sponsorship. Thus, how mentoring is defined determines the extent of mentoring found: "Those that use the classical Levinsonian understanding tend to find a lesser incidence of mentoring than those that broadly define it as a helping, sponsorship-type of activity" (Merriam, 1983, p. 167).

Second, researchers have been using different types of populations as mentors (for example, supervisors, non-supervisors, and peers), warranting caution prior to the generalization of results. For example, most studies provide a definition of mentoring and then query about the existence of a mentoring relationship and the prevalence of mentoring behaviours. Conversely, some researchers (e.g., Tepper et al., 1996) have asked the respondent to refer to their supervisor when rating mentoring prevalence, thereby assuming that their supervisor engaged in such
activities. As indicated earlier, there is a clear distinction between supervisory and mentoring roles. Even though practitioners suggest that the mentor usually be two organizational levels higher than the protégé, studies have shown that the respondent's supervisor is identified as a mentor in approximately half of the cases (Aryee, Chay, & Chew, 1994; Scandura & Schriesheim, 1994; Tepper, Shaffer, & Tepper, 1996).

When peers are identified as the target mentor by protégés, it is not surprising to find a different type of mentoring relationship. Indeed, Kram and Isabella (1985) have discovered that the functions provided by peer mentors tend to center around psychosocial aspects rather than instrumental functions. Peers usually do not have the organizational power, knowledge, and expertise to assist their protégés in the various career developmental roles mentors usually assume (McDougall & Beattie, 1997). Therefore, studies on mentoring that identify specific individuals as mentors at the onset will likely result in different reported mentoring functions than studies that provide respondents with a standardized definition of mentoring and allow them to indicate who their mentors are and what they do. Since many researchers have not clearly defined who a mentor is, subsequent comparisons between various studies may have been misleading, thereby warranting caution on the generalizability of results.

The third major limitation in the research on the operationalization of mentoring relates to questionable methodology used to define the mentoring construct. For example, Schockett and Haring-Hidore (1985) confirmed Kram's two dimensions of mentoring in a study in which college students were asked to rate four vignettes on vocational functions and four vignettes on psychosocial functions. It is therefore not surprising that they found two mentoring dimensions comprised of four factors each.
Another methodological weakness, which is applicable to many studies, relates to the wording used in the mentoring instruments. Items describing mentoring functions have, at times, been vague resulting in different factor loadings. As an illustration, Scandura's 15-item measure (1992, 1997), which she used in all of her research and which is used by a number of other authors, contains such items as "Mentor gives me special coaching on the job" (Scandura & Ragins, 1993). Given the broad interpretation of the word "coaching", this item could easily be interpreted as learning about organizational politics, receiving career advice, getting technical assistance, or even counseling.

Finally, another major limitation of the mentoring operationalization research relates to the statistical tools used to derive the construct's factors. Most researchers used principal component analysis (PCA) to generalize findings across populations (Knackstedt, 1994; Kogler Hill et al., 1989; Noe, 1988a, 1988b; Pollock, 1995; Busch Wilde & Garrett Schau, 1991) and several depicted low variable-to-subject ratios in their factor analyses (Burke, 1984; Cohen, 1993; Morgan, 1989). Here, exploratory factor analyses could have been conducted. The first major difference between PCA and factor analysis (FA) is the end result: PCA produces components, whereas FA produces factors. Common factors will account for correlations among measured variables more rigorously than components will (MacCallum, 1998). Related to this point, the second major difference is the variance that is being analyzed. Principal Component Analysis analyzes all the variance in the observed variables whereas FA analyzes only the variance that each observed variable shares with other observed variables: "PCA analyzes variance and FA analyzes covariance (communality)" (Tabachnick & Fidell, 1996, p. 663). Therefore, because FA provides a theoretical solution uncontaminated by unique and error
variability, it is recognized as a statistically stronger solution when determining the probable number and nature of factors (MacCallum, 1998; Tabachnick & Fidell, 1996).

In sum, there is still a great deal of work to be done in identifying mentoring functions. As indicated by Carden (1990), "The relatively unsophisticated design of mentoring research and the tendency of investigators to leap from survey and interview data to sweeping endorsements of mentoring applications warrants continued attention" (p. 280).

The Importance of Assessing Mentoring Needs

In addition to the limitations identified above, another possible explanation for the disparity in findings may be related to protégé needs. It is important to note that all measures have examined mentoring behaviours as they occurred, and only two studies measured protégé expectations (Knackstedt, 1994; Knackstedt & Kwak, 1996). Recently, a few researchers have begun to draw their attention to the importance of studying mentoring needs (e.g., Allen, Poteet, & Russell, 1998; Noe, 1988b; Ragins, 1997a, 1997b). This may allow for a better understanding of the mentoring process, particularly what the protégé brings to the relationship. To date, however, no study has ever been conducted to address the issue of mentoring needs from the protégé's perspective, that is, specific mentoring behaviours desired by protégés.

Ragins and Cotton stated that "informal mentoring relationships develop on the basis of mutual identification and the fulfilment of career needs" (1999, p. 530). Mentors, it has been found, select protégés partly based on the protégé's need for or solicitation of help (Allen, Poteet, & Burroughs, 1997). In fact, the two most influential characteristics reported by mentors when choosing a protégé were the protégé's potential/ability and the protégé's need for help, the first reason being predominant (Allen et al., 1998).
The assessment of mentoring needs in an organizational context is therefore important for a number of reasons: (1) each protégé has different needs and these needs may influence the types of mentoring behaviours provided by the mentor; (2) each mentor has unique skills, abilities, and personality traits, which may influence the types of mentoring behaviours provided to the protégé; (3) there are numerous benefits associated with matching individual and organizational needs, many of which can be facilitated by mentors; (4) mentoring has proven to be a valuable resource to organizations in times of organizational change; (5) identifying employee mentoring needs can serve as an additional tool for organizational leaders, for example, to feel the pulse of the workforce and to aid in assessing the organization's climate profile; and (6) formalized mentoring programs would greatly benefit if mentors had a knowledge of their protégés' needs, especially when the relationship is assigned by a third party. Each of these reasons will be discussed in some detail.

**Individual differences with respect to mentoring needs.** First, different employees may have different needs for mentoring behaviours. Ragins (1997) contends that protégé' needs significantly determine the mentoring functions received: "The mentor's behaviour is influenced by the protégé's needs, the mentor's perception of the protégé's needs, and the ability and motivation of the mentor to meet the needs of the protégé" (p. 502, italics added). If these needs are communicated to the mentor, they are more likely to occur. In fact, Kram and Bragar (1992) noted that protégés build several developmental relationships given their changing needs in the course of their careers.

**Mentor competencies.** As suggested by Ragins (1997), mentors provide different mentoring functions to their protégés according to their own skills, abilities, personal style, and
motivation. These mentoring functions may vary from one mentor to another and may or may not match all of the protégé's needs. Burlew's (1991) multiple mentor model recognizes that, given the strengths, abilities, and resources of each mentor, it may be unreasonable to expect one mentor to be able to fill all of the protégé's needs. Thus, it is likely that no mentor will be able to provide all of the mentoring functions and, therefore, protégés will have several mentors.

Matching individual and organizational needs. Another important reason for determining mentoring needs is to facilitate a better match of individual and organizational needs, with the benefits this entails. Schein (1978) has written extensively about matching individual and organizational needs and argues that organizations must be concerned with the total problem of human resource development "for the sake not only of humanistic values, but organizational survival as well" (p. vii). Mentoring is known as an effective tool for developing human resources. It is also an ideal means for employee self-development. According to Schein (1978), the matching process must make use of a variety of human resources planning and development functions over the life of an individual's career. For example, to meet early career issues such as finding one's identity within the organization ("locating one's area of contribution"), learning how to fit in the organization, and seeing a viable future for oneself in the career, Schein suggests a number of human resources processes (for example, socialization, supervising and coaching, career counseling, training and development) which also serve to meet organizational needs (such as planning for staffing and for growth and development). He contends that mentoring is an effective way to meet these individual needs. Furthermore, according to Schein, a match between individual and organizational needs may be best ensured when: (1) the "psychological contract" is perceived as being met; (2) organizational "secrets" are shared, and (3) workers in
their mid-career stage (among others) get the clear message that employee and career self-development is valued by the organization. Mentors may play a vital role in ensuring these three conditions are met.

(1) The psychological contract. "Through various kinds of symbolic and actual events, a 'psychological contract' is formed which defines what the employee will give in the way of effort and contribution in exchange for rewarding work, acceptable working conditions, organizational rewards in the form of pay and benefits, and an organizational future in the form of a promise of promotion or other form of career advancement. This contract is "psychological" in that the actual terms remain implicit; they are not written down anywhere" (Schein, 1978, p. 112).

Consequently mutual expectations are formed and failure to meet them may result in serious consequences (for example, demotivation, turnover, lack of advancement, or termination). According to Schein, when the psychological contract is perceived as being met, employees manifest their acceptance of the organization through a number of ways: the decision to remain in the organization, a high level of motivation and commitment, and the willingness to accept various kinds of constraints, delays, or undesirable work. Through the various roles they provide, mentors are ideally suited to coach and counsel their protégés on the psychological contract of the organization.

(2) The sharing of organizational secrets. The need to feel accepted during the early stage of an individual's career (which coincides with the organizational need to integrate and socialize its new employees) can be achieved through the sharing of organizational "secrets" such as work-related information, what others really think of the new employee, "how one really gets things done", and "what really happened" around key historical events (Schein, 1978). The sharing of
the above "secrets" are all part of the functions provided by mentors. Consequently, mentoring can be used as an additional valuable tool to match individual and organizational needs.

(3) The mid-career stage. Individuals have a number of organizational needs which change as a function of organizational experience and individual life experience. For instance, one of the late career issues is the need to become a mentor (Schein, 1978). Individuals at this stage in their career gain a renewed sense of work motivation when they feel that they are contributing to the legacy of the organization by partaking in developmental activities with more junior employees. Here, the advantages of mentoring are two-fold: re-motivating workers in their mid-career stage and providing long-term professional development to the next generation of organizational leaders. In other words, mid-career stage workers can fulfill their need to mentor while being involved in succession planning.

Consequently, in addition to its numerous advantages, mentoring is also an ideal developmental activity for meeting individual and organizational needs. If protégé needs are identified, a better match can be made with the needs of the organization.

Mentoring needs in a climate of organizational change and restructuring. The fourth major advantage of determining employee mentoring needs occurs during times of high corporate stress or organizational change. In the roles they perform, mentors are ideally suited to ease the transition process. They can use the special relationships they have developed with their protégés as an opportunity to rebuild a stronger organizational culture and a renewed sense of commitment. When properly managed, change can also spark organizational regeneration, that is, build people who recognize that the rules of the game have changed, who see themselves as architects of change rather than victims, and who look for new ways in approaching their work
(Marks, 1994). Research conducted by Kram and Hall (1991) revealed that mentoring emerged as "an antidote" to stress during corporate trauma. Workers reported mentoring to be beneficial because they formed mutually enhancing relationships which positively influenced their self-esteem, well-being, and performance during drastic times of organizational change. "Mentoring may not only be feasible in such a situation, but a much overlooked tool for managing the heightened stress that characterizes organizations as they restructure" (Kram & Hall, 1991, p. 504). Their findings are echoed by the opinion of Harback (1993) who states that mentoring is one of the key lessons the military should be learning from American corporations which have successfully survived major organizational changes and restructurings. Such a venue, he argues, would aid military personnel in developing future leaders, redefining military culture, as well as empowering and caring for the survivors.

In light of the benefits derived by mentoring relationships during times of corporate trauma, determining mentoring needs would be a first step in easing an already elevated tension among an organization's workforce. At the very least, allowing employees to express their needs would permit them to ventilate their feelings. The individuals with more seniority in the organization could be valuable mentors in the transition process and, with the added knowledge provided by the assessment of mentoring needs, they could focus on the specific needs their personnel have expressed.

A leadership tool. Fifth, the identification of mentoring needs can be used by organizational leaders to feel the pulse of their employees' concerns (desired psychosocial mentoring behaviours) and ambitions (desired developmental mentoring behaviours). Since mentoring is an integral part of leadership (Fine, 1988), this tool serves the added function of
identifying the required leadership behaviours for the organization from the employees' perspective. In a sense, a mentoring needs assessment could be a valuable complement to an organizational climate survey.

Leaders can use the information provided in the assessment tool to reinforce the human resources systems in place as well as to encourage specific behaviours from supervisors in order to narrow the gap between the needs and current occurrences of desired mentoring behaviours. In practical terms, a substantial requirement for career coaching, for example, may be an indication that current training and development systems are weak in this area and/or that supervisors are not sufficiently addressing this issue with their personnel. In order to minimize this gap, information on career opportunities, for instance, may have to be included as an integral part of various stages of employee career progress. Furthermore, supervisors may be encouraged to discuss short and long term career development plans with their subordinates during performance feedback sessions. If, on the other hand, the assessment of mentoring needs reveals a great demand for role-modeling, this may be an indication of poor or inappropriate leadership in the organization. If such important issues are not addressed, the organization may find itself losing its best employees to competitors.

**Increased effectiveness of formalized mentoring programs.** Finally, another potential advantage of assessing mentoring needs is the resulting increased efficiency in formalized mentoring programs. Researchers have found that very formalized and highly structured mentoring programs are not as effective as semi-formal or informal mentorships (Allen, Russell, & Maetzke, 1997; Heimann & Pittenger, 1996; Keele, Buckner, & Bushnell, 1987; Phillips-Jones, 1983; Ragins & Cotton, 1991). As one researcher puts it, "... many formal mentoring
programs are paradoxical, because the intense relationship found in informal mentoring can only be successfully managed to the same extent as one can find true love on a blind date. It can happen, but the odds are against it." (Chao, 1998, p. 337). Yet, the last decade has witnessed a steady increase in the establishment of formalized mentoring programs across all types of organizations.

Mentoring processes can be viewed on a continuum from informal, to semi-formal, to formal. *Informal mentoring relationships* develop on the basis of mutual identification and the fulfilment of career needs (Ragins & Cotton, 1999), as well as perceived competence and interpersonal comfort (Allen et al., 1997; Kram, 1983, 1985a; Olian, Carroll, & Giannantonio, 1993; Olian, Carroll, Giannantonio, & Feren, 1988). *Semi-formal mentoring relationships*, on the other hand, entail some degree of structure and coordination (e.g., meeting opportunities between potential mentors and protégés, newsletters, training sessions for those interested). They do not involve a matching process. In addition to the efforts deployed in a semi-formal program, systems are put in place in *formalized mentoring programs* such as evaluations and monitoring processes to ensure they meet set goals. In such programs, the matching between potential protégés and potential mentors is done by a third party (Ricketts Gaskill, 1993; Murray & Owen, 1991), and sometimes they do not even meet until after the match has been made.

A formal match impedes the mutual identification process, role-modeling, and interpersonal comfort usually present in non formalized mentorships. Consequently, many of the psychosocial functions, such as role-modeling, acceptance and confirmation behaviours, friendship, and counseling are less likely to take place (Ragins & Cotton, 1999). Moreover, appointed mentors may be less motivated than informal mentors to provide career development
and psychosocial functions (Ragins & Cotton, 1991) since they do not always identify with their protégés. The degree of motivation differs for participants in each type of relationship: "Informal mentorships arise because of a desire on the part of the mentor to help the protégé and a willingness on the part of the protégé to be open to advice and assistance from the mentor. Formal mentorships, on the other hand, entail a degree of pressure; the mentor and the protégé may be required to participate in the mentorship program as a function of their positions" (Chao et al., 1992). Formally appointed mentors may also have less effective communication and coaching skills than informal mentors (Kram, 1985b, 1986), which could strain the relationship and render it less effective (Ragins & Cotton, 1999).

The establishment of a mentoring program in the organization, be it formal or semiformal, would benefit from the information provided in the assessment of mentoring needs. Here again, the identification of mentoring needs could be used as a leadership tool to identify the desired mentoring behaviours from the protégé's perspective. If mentors are cognizant of their protégé's mentoring needs, especially those who are appointed in the realms of a formalized program, their attempts to provide their protégés with the needed behaviours would likely increase. Thus, appointed mentors could be sensitized to the specific needs of their protégés and assist them in focussing on what is deemed important. Furthermore, known mentoring needs can be of assistance to the coordinators in assuring a better match between mentors and protégés, as well as providing training to mentors when required. Consequently, results from the assessment of mentoring needs could be used as a leadership tool to identify the desired mentoring behaviours from the protégé's perspective, and thus significantly contribute to the effectiveness of the organization's mentoring program.
Mentoring as a Form of Training

From the above, it can be concluded that mentoring is a form of training for junior personnel. In fact, increasing attention has been paid to mentoring as a method for training managers and leaders (London & Mone, 1987, cited in Tannenbaum & Yukl, 1992; Noe, 1991). Training has been defined as "the systematic acquisition of attitudes, concepts, knowledge, rules, or skills that result in improved performance at work" (Goldstein, 1991, p. 508). Based on this definition, mentoring can be viewed as a form of training, though perhaps less formal and systematic.

A well accepted and recurring theme in the literature on training and development is the necessity to conduct a thorough training needs analysis in order to align training objectives with the organizational strategy and direction (Latham, 1988; Goldstein, 1991; Tannenbaum & Yukl, 1992). One of the critical components of a training needs analysis is called the "person analysis", which identifies what employees need in terms of training (Goldstein, 1986). Recently, in a field study on 607 state government supervisors, several researchers have used a training needs analysis to examine factors related to willingness to mentor (Allen, Poteet, Russell, & Dobbins, 1997). They also assessed subordinates' training needs. Because mentoring is considered an integral part of training when planning for the next generation of leaders, it is clear that a mentoring needs analysis ought to be conducted as part of the regular training needs analysis to identify the particular developmental activities required by each individual. Such an approach would further aid in the matching of individual needs with those of the organization.
The Mentoring Needs Analysis

When organizations are striving to redefine themselves, which includes establishing their vision, values and goals, they are also redefining their training and development needs. Given the number of benefits derived from identifying employee mentoring needs, organizations would gain from incorporating a mentoring needs analysis as part of their human resources strategy. When a sound mentoring strategy based on the needs identified by its workers is integrated in the career development system, organizations could reap such benefits as earlier organizational socialization (Chao, 1997; Ostroff & Kozlowski, 1993), higher levels of organizational commitment (Baugh, Lankau, & Scandura, 1996), increased productivity, and efficient succession planning (Burke, 1984; Murray & Owen, 1991; Zey, 1984). In fact, mentoring is believed to be a key resource in creating a learning organization (Kram & Hall, 1991).

As indicated earlier, however, no study has been conducted on the specific mentoring behaviours perceived as important by protégés. In other words, mentoring needs, that is, mentoring behaviours which have been expressed as essential by protégés, have not been examined so far. This may explain why researchers across different fields, and even within similar contexts, have not reached a consensus on the operationalization of mentoring functions. Given the recognized benefits of mentoring, and the benefits directly associated with assessing mentoring needs, organizations have a vested interest in evaluating workers' mentoring needs as part of their training needs analysis. This can be done, to a great extent, by conducting a mentoring needs analysis. Consequently, the assessment of mentoring needs in an organizational context will be the first aim of this research.
Factors Affecting Mentoring

In addition to the importance of assessing mentoring needs, the literature on mentoring has demonstrated that a multitude of factors, including demographic variables, affect the mentoring process. Thus, any research examining mentoring needs must take these into account. Factors of importance for the present study, such as language, age, tenure, education, career stage, supervisory status, length of the relationship, frequency of communications, sex of the protégé and sex of the mentor, should be considered.

Language. Primary language is an important demographic variable that must be incorporated in any study where cultural differences may shape the expectations of mentoring behaviours. Steiner (1988) has demonstrated that primary language and cultural background contributed to discrepancies in the supervisor-subordinate interaction between Frenchmen and Americans. In a study conducted by the writer on aspiring Canadian officers in a military college context which examined mentoring expectations, Knackstedt and Kwak (1996) found that francophones reported significantly stronger expectations of being treated as a peer compared to anglophones. Their results also showed that anglophones indicated stronger expectations than francophones for role modeling, encouragement, personal counselling, and career coaching. Their expectations did not differ with regards to sponsoring behaviours.

Age and tenure. Age and tenure are usually correlated. One example of research demonstrating the effects of seniority on mentoring is the writer's study on mentoring expectations (Knackstedt and Kwak, 1996). It revealed that first year (junior) Officer-Cadets gave higher ratings of importance to counselling compared to sophomores. Furthermore, as the seniority of respondents increased, so did their reported expectations of being treated as a peer.
Other studies found that managers in higher organizational echelons, as well as older respondents in both managerial and professional occupations, reported receiving more career developmental mentoring than younger and more junior personnel (Whitely et al., 1992).

Other variables. Education, career stage, occupation, supervisory status, length of the mentoring relationship, and frequency of communications are other examples of variables which may affect mentoring behaviours. Several studies have indeed reported the relationship between mentoring and a number of demographic and non-demographic variables. For example, Whitely et al. (1992) found that: managers received more mentoring than professionals; younger, more work-involved respondents from higher socio-economic origins received more career developmental mentoring; but educational level was not related to mentoring. Personality traits of protégés, such as locus of control, self-monitoring, self-esteem, affectivity, and self-efficacy have also been shown to influence what mentoring behaviours are reported as being received (Turban & Dougherty, 1994).

Sex of the protégé. Studies which examined the role of the protégé’s sex on reported mentoring behaviours remain inconclusive. Some researchers have linked mentoring functions to the protégé’s sex (e.g., Burke, 1984; Erkut & Mokros, 1984; Fitt & Newton, 1981; Goh, 1991; Knackstedt & Kwak, 1996; Kram, 1985a; Laviolette, 1994; Noe, 1988b; Ragins, 1989) whereas others have failed to find such associations (e.g., Dreher & Ash, 1990; Dreher & Chargois, 1998; Ensher & Murphy, 1997; Fagenson, 1989; Ragins & McFarlin, 1990; Whitely et al., 1992).

As an illustration of those who found sex differences, research conducted by Laviolette (1994) and Burke (1984) revealed that women protégés were more likely than men to receive psychosocial benefits when they were involved in mentoring relationships. Furthermore,
interviews conducted with 30 female managers by Fitt and Newton (1981) revealed that junior female protégés needed more encouragement, more role modeling, and more assistance with learning the ropes than their male counterparts. Subsequently, these women shifted their needs to career development matters at higher ranks.

It is possible that reported differences are not linked to the actual mentoring behaviours received by male and female protégés, but rather in the availability and characteristics (such as organizational hierarchy) of mentors, which result in different outcomes based on the sex of the protégé. Therefore sex differences in mentoring may actually be reflected by sex differences in the availability of mentors and thus mentoring outcomes, rather than actual behaviours received.

Whereas mentoring has been identified as an important factor in men's career attainment (Farren, Gray, & Kaye, 1984; Ragins & Cotton, 1991; Reich, 1983; Roche, 1979; Stumpf & London, 1981), it has been found essential for women's career success (Clawson, 1985; Collins, 1983, 1988; Fitt & Newton, 1981; Kanter, 1977; Noe, 1988a, 1988b). Research has shown that women need additional support to have access to more advanced positions, as they face structural and systemic discrimination as well as more obstacles to career achievement than men (e.g., Morrison, White, & Van Velsor, 1987; Burke & McKeen, 1989; Ragins & Cotton, 1991). In spite of this, women are less likely to be selected as protégés than their male counterparts, by either male or female mentors (Burke, 1984; Fitt & Newton, 1981; Lean, 1983; Ragins, 1989; Shapiro, Haseltine, & Rowe, 1978; Zey, 1984). Consequently, women often lack mentors who can be instrumental to their career advancement (Fitt & Newton, 1981; Shapiro et al., 1978), which, in turn, may affect outcomes such as career progression, salary attainment, upward mobility and turnover intentions.
**Sex of the mentor.** The sex of the mentor may be another factor influencing the types of mentoring behaviours provided to protégés. In other words, what if men and women differed in the kinds of help they gave to their protégés? It is often suggested that senior men will provide their protégés with more instrumental and career developmental mentoring functions whereas senior women will provide more psychosocial help. Nevertheless, most studies have not supported this hypothesis. Whether the mentoring functions and behaviours provided to protégés were reported by the mentors themselves (e.g., Ragins & McFarlin, 1990) or by the protégés (e.g., Gaskill, 1991; Struthers, 1995), no difference was found as to the kind of help women and men gave to their protégés. In a recent study conducted on 654 women and 500 men from various professional occupations, Ragins and Cotton (1999) found no support for their hypothesis that male mentors were associated with more career development functions than female mentors.

Although most studies revealed no sex differences in mentoring functions, Ragins and Cotton (1999) found differences in long term mentoring outcomes for protégés. Specifically, protégés with a history of male mentors received significantly greater compensation and more promotions than protégés with a history of female mentors, possibly because male mentors tend to occupy the senior ranks and thus have more power in organizations (Ragins & Sundstrom, 1989). Dreher and Cox (1996) also found evidence for Ragins and Cotton's (1999) finding that protégés with male mentors received greater compensation that those with female mentors.

**Same- versus cross-sex mentoring.** Given the absence of sex differences found in mentoring behaviours based on the mentor's sex and contradictory findings based on the protégé's sex, some have suggested comparing same-sex versus cross-sex mentorships (e.g., Ricketts
Gaskill, 1991). For example, Ragins and McFarlin's (1990) study revealed that protégés in same-sex mentorships reported receiving more role-modeling (one of the psychosocial functions) than those in cross-sex mentorships. Although some researchers found that same-sex mentorships provided more psychosocial support to protégés than cross-sex mentoring relationships (Koberg et al., 1998), this was not the case for others (Ensher & Murphy, 1997). Recently, Ragins and Cotton (1999) also attempted to test whether protégés in same-sex mentorships would report more psychosocial functions than protégés in cross-sex mentorships. Their results failed to support their hypothesis, although the means were in the direction predicted. Similarly, studies examining same- versus cross-sex differences in mentoring functions generally remain inconclusive.

The Impact of Gender Composition of the Dyad on Mentoring Relationships

The conflicting findings of studies investigating sex effects on mentoring have prompted a number of researchers in the field to call for studies examining the role of gender composition of the dyad on mentoring processes and outcomes (Allen et al., 1998; Burke & McKeen, 1990; Dreher & Ash, 1990; Ragins, 1997; Ragins & Cotton, 1999; Ragins & McFarlin, 1990; Noe, 1988b; Ricketts Gaskill, 1991b; Sosik and Godshalk, in press; Tharenou, Conroy, & Latimer, 1994), arguing for the superiority for such a research design. Typically, the four dyads (male and female mentors with male and female protégés) are compared in terms of perceived mentoring functions received by the protégés in a work context. For example, Burke, McKeen and McKenna (1990) found that female mentors provided more friendship, counseling, personal support and sponsorship in same-sex mentorships than in any other gender composition. Similarly, compared to other gender combinations, female protégés with female mentors reported
receiving more role-modeling (Ragins & McFarlin, 1990; Ricketts Gaskill, 1991b) and had greater opportunities for explorations of personal concerns (Ricketts Gaskill, 1991b). This finding was also echoed in Sosik and Godshalk's (in press) research: when controlling for education, job level, age, type of mentoring relationship (formal versus informal), and supervisory (versus non-supervisory) relationship of the mentor, the authors found that female protégés in same-sex mentorships reported receiving more role-modeling and less career development than male protégés in same-sex relationships. Furthermore, with the same controls, their study revealed that female protégés who had a male mentor reported receiving more career development than any other dyad.

The dyadic approach is argued to be superior because of the unique behavioural and perceptual processes generated by the composition of the mentoring relationship (Ragins, 1997). Even though research examining dyad composition is still in its infancy, several theoretical perspectives support the continuance of such a methodology. The human information processing theories (see Baumgardner, Lord, & Maher, 1991; Lord & Maher, 1992; Rosch & Lloyd, 1978) for example, propose that individuals process information and categorize others by using cognitive knowledge structures based on prototypes or stereotypes derived from traits, attributes, and/or experiences (Sosik & Godshalk, in press). These cognitive knowledge structures shape the expectancies individuals form about others (Rosch & Lloyd, 1978). As an illustration, both genders hold stereotypical perceptions that men have more power than women, irrespective of their actual power (see a review by Ragins & Sundstrom, 1989). Consequently, "the congruence
between sex-roles and mentor behaviors (as perceived by the protégé) may play an important role in protégé perceptions of mentoring functions received" (Sosik & Godshalk, in press. p.7).

According to Ragins (1997), social identity theory (Tajfel & Turner, 1985), as well as the theories of shared identity (Deschamps, 1982) and interpersonal comfort (Lincoln & Miller, 1979) provide further support for using the dyadic approach in mentoring research. Members in same-sex mentorships, for example, are more likely to identify with each other because of shared experiences and similar social identities (Deschamps, 1982). The perceived shared identity leads to increased interpersonal comfort in the relationship (Lincoln & Miller, 1979). Moreover, Steiner’s (1988) research indicated that gender influenced the closeness of the interaction between the supervisor and the subordinate. Consequently, protégés in same-sex mentorships should be receiving more psychosocial and role-modeling functions than protégés in cross-sex relationships (Ragins, 1997). This hypothesis was partially supported by Ragins and McFarlin's (1990) research which found female same-sex dyads more likely than any other dyad to report the provision of role-modeling.

Research Objectives

The literature has provided ample evidence of the benefits of mentoring for protégés, mentors, and the organization alike. Although progress has been made with regards to the operationalization of mentoring functions, scholars still use a number of different measures to assess this construct. Furthermore, research on training and individual needs in a work context has raised the importance of assessing mentoring needs.

This review revealed the existence of extensive research with a focus on mentoring prevalence, that is, specific mentoring behaviours and functions. Results, therefore, relied on
accounts of what happened as opposed to what needed to happen. Only two studies, both by the
writer, examined mentoring expectations from the point of view of the protégé (Knackstedt.
1994; Knackstedt & Kwak, 1996). Identifying mentoring needs may help us understand why
results have been inconsistent so far. To date, no research has yet focussed on the assessment of
mentoring needs from the protégé's perspective. This critical limitation in the mentoring
literature will be addressed in the first research question:

**RQ 1: What constitutes mentoring needs from the protégé's perspective?**

Once mentoring needs are identified, the mentoring process can directly address
employees' specific needs (for example, technical assistance, understanding of organizational
politics, counseling on work-related issues), thus providing a better match between
organizational and individual needs. The literature has indicated that mentoring behaviours vary
as a function of group membership (for example, dyad composition, language, occupation,
tenure). It is therefore likely that mentoring needs will also vary according to protégé
characteristics. For example, in a thorough review of the literature on the linkages between
diversity and organizational mentorship using a power perspective, Ragins (1997) pointed out the
importance of recognizing that "minority" groups, women in this case, have different needs than
their male counterparts. As indicated earlier, women face discriminatory barriers to
advancement (Ragins & Sundstrom, 1989), are often excluded from informal networks and role-
modeling (Ibarra, 1993), and are alienated as minority members in organizations (Kanter, 1977).
In fact, Kanter (1977) intimated that *men and women have different career and developmental
needs.*
Furthermore, theories of human information processing (Baumgardner, Lord, & Maher, 1991; Lord & Maher, 1992; Rosch & Lloyd, 1978), social identity (Tajfel & Turner, 1985), shared identity (Deschamps, 1982) and interpersonal comfort (Lincoln & Miller, 1979), combined with recent findings in the mentoring research (e.g., Ragins, 1997; Sosik & Godshalk, in press) have provided strong support for investigating the role of gender composition of the dyad when examining mentoring functions. Extending this logic to mentoring needs, it becomes clear that research on mentoring needs ought to incorporate a dyadic approach. Finally, in order to assist industrial and organizational practitioners, identifying the gap between mentoring needs and occurrences would provide organizational leaders with a valuable diagnostic tool. Taken together, the aforementioned arguments lead to the following research question:

**RQ 2: How do mentoring needs and occurrences perceived by protégés differ as a function of various demographic variables, especially dyad composition?**

In sum, a number of aspects need to be addressed which can essentially be examined two-fold. The first issue deals with the importance of assessing mentoring needs. The second issue concerns the importance of examining mentoring needs and occurrences with a dyadic approach, that is, the role of the gender composition of the dyad. In order to address these issues, a mentoring questionnaire was developed and administered to 816 professionals working in a health care environment.
The purpose of this study was twofold: (1) to determine what constituted mentoring needs in an organizational context from the protégé's perspective; and (2) to investigate how mentoring needs and occurrences, as perceived by protégés, differed as a function of various demographic variables, especially gender composition of the dyad. All military health care officers of the Canadian Forces Medical Branch received a survey which was presented as the first step in the process of establishing a mentoring program. First, a measure of mentoring needs was developed, and second, the relationship between demographic variables and mentoring needs and occurrences was examined.

METHOD

Test Instrument and Measures

The first page of the mentoring needs analysis provided a definition of "mentoring", "mentor", and "protégé", as well as the purpose of the needs analysis. The questionnaire was divided into seven parts: (1) mentoring needs; (2) current mentoring situation; (3) experience as a protégé; (4) experience as a mentor; (5) interest in a mentoring process; (6) demographic information; and (7) feedback and suggestions.

(1) Mentoring needs. Seventy-five items were developed to assess all potential mentoring functions which may be perceived as needed and important from the protégé's perspective. First, all items which had demonstrated strong statistical relevance in past research (for example, they had a high factor loading) were included. When judged necessary, they were slightly modified to
adapt to the military health care population. Earlier research by the writer (Knackstedt, 1994; Knackstedt & Kwak, 1996) had developed a mentoring expectations questionnaire which incorporated all the mentoring functions identified by the following researchers: Alleman (1986); Burke (1984); Cohen (1993); Collins (1983); Dreher and Ash (1990); Kram (1983, 1985a, 1985b, 1988); Noe (1988a); Pollock (1990); Ragins and Scandura (1994); Riley and Wrench (1985); Scandura and Viator (1994); Schockett and Haring-Hidore (1985); Tepper (1995); and Zey (1984). These items were used as the basis of the present questionnaire. Items that duplicated each other were eliminated. Second, new items were developed to ensure that the additional dimensions stated in Table 1 were included, such as mentoring functions recently identified by other authors (e.g., Benabou, 1995; Cohen, 1995; Pollock, 1995; Ragins & Cotton, 1999), as well as aspects of organizational socialization needs according to Chao (1997) and Ostroff and Kozlowski (1993), which, so far, have received little attention. Participants rated mentoring needs on a five-point Likert-type scale ranging from 1 = "not at all important" to 5 = "very important". Participants were also provided with the opportunity to write and rate up to five additional mentoring needs if they felt that they were not covered in the questionnaire.

(2) Current mentoring situation. After participants rated the importance of each mentoring behaviour, they were to rate each item again on the frequency of their occurrence at the present time. A five-point Likert-type scale was used, ranging from 1 = "never" to 5 = "very frequently". This part was meant as a diagnostic tool for determining the gap between mentoring needs and actual mentoring functions received.

(3) Experience as a protégé. In this section, the participant was requested to provide information about his or her mentors, such as gender, age, status, hierarchical level, distance,
state of the relationship, frequency of communications, and whether the mentor was or had been a supervisor. Even though the definition of mentoring suggests that mentors are several hierarchical levels higher than the protégé, thus negating the option of being in a supervisory relationship, several studies have found that in up to approximately half of the cases, protégés reported their supervisors as being their mentors (Aryee, Chay, & Chew, 1994; Scandura & Schriesheim, 1994; Tepper, Shaffer, & Tepper, 1996). Participants had the option to describe up to six mentors.

(4) Experience as a mentor. Similar to the previous section, participants were asked about their experience as mentors and to provide information about their protégés (up to six) using the same categories as above.

(5) Interest in a mentoring process. Here participants were provided with the opportunity to indicate their interests, needs, and preferences with regards to the potential establishment of a mentoring process (for example, degree of formality and preferences in terms of the gender, status, and occupation of their mentor or protégé).

(6) Demographic information. Information about the participants' gender, age, official language, rank, military element (Army, Navy, or Air), occupation, tenure, and education were gathered in this section.

(7) Feedback and suggestions. The final part allowed participants to provide qualitative feedback, comments, or suggestions with regards to the issue of mentoring for health care professionals or any concerns they wished to raise.
**Review and translation of the test instrument**

The survey was first reviewed by six senior health care professionals whose native language was English and who were occupational advisors representing the majority of the occupations surveyed. Their feedback was incorporated, after which the survey was sent to official translators. Following the translation, it was reviewed by the author and two French speaking occupational advisors. Further minor revisions to both French and English versions were made. Feedback from the pilot group was generally positive, namely that the instructions were clear, the format appealing, and the information gathered important. The only negative comment was related to its length (it took some reviewers close to an hour to complete both the questionnaire and the evaluation). Most modifications dealt with technical issues, for example, using the correct medical and military jargon, or ensuring that no group felt omitted in the phrasing of questions. A copy of the letter addressed to the pilot group along with the survey evaluation sheet is found in Appendix A.

**Participants**

Questionnaires were sent to 816 military health care professionals of the Canadian Forces. They represented nine professions: medical doctors, nurses, physiotherapists, dentists, pharmacists, social workers, health care administrators, medical administration officers (in non military terms: biomedical professionals), and health services officers. The last category is a feeder occupation for nurses, health care administrators, and pharmacists who wish to apply for senior administrative positions starting at the rank of major. There is a yearly competition to enter the health services officer profession.
A total of 387 surveys were returned, for a response rate of 47.5%. Respondents were on average 37.51 years old (s.d. = 7.3, ranging from 23 to 54 years), had served 15.43 years in the military (s.d. = 7.12, ranging from 1 to 37 years), and consisted of 60.9% males (aged 37.84, s.d. = 7.0, ranging from 23 to 54 years), 39.1% females (aged 36.78, s.d. = 7.7, ranging from 23 to 53 years), 70.3% anglophones and 29.7% francophones. There were 47% of the participants in the Army, 34.2% in the Air force, and 16.5% in the Navy. They served as medical doctors (23.6%), nurses (28.6%), physiotherapists (1.9%), dentists (12.5%), pharmacists (5.3%), social workers (2.4%), health care administrators (14.1%), medical administration officers (3.7%), and health services officers (7.7%). In increasing order of authority, they were composed of officer-cadets (3.5%), lieutenants (8.8%), captains (50.0%), majors (29.8%), lieutenant-colonels (6.6%), and colonels (1.3%). One out of six participants (16.2%) had completed a technical certificate/diploma or college diploma, 44.0% held a university degree, 10.5% a master's degree, and 27.5% a doctorate degree (M.D. and D.D.S.).

Overall, the proportion of respondents by age, language, rank, and environment was relatively equivalent to that of the total population of military health care professionals as well as of the Canadian Forces. Women, however, were represented in greater proportions than men compared to the Canadian Forces as a whole, which was expected given that some of the health care professions are predominantly female. Similarly, the education level was higher than that of the Canadian Forces given the proportion of doctors and dentists in the sample. A breakdown of the sample population by occupation, rank and sex is provided in Table 2.

One sixth of respondents (15.8%) reported never having experienced a mentoring relationship. Specifically, non-protégés consisted of 61 respondents, 61.4% male, 62.7%
Table 2

Demographic Breakdown of the Research Sample by Occupation, Rank, and Sex

<table>
<thead>
<tr>
<th>Occupation</th>
<th>OCdt</th>
<th>Lieutenant</th>
<th>Captain</th>
<th>Major</th>
<th>LCol</th>
<th>Colonel</th>
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<td>Health Care Administrator</td>
<td>5</td>
<td>8</td>
<td>32 (29/3)</td>
<td>8</td>
<td></td>
<td></td>
<td>53 (46/6)</td>
</tr>
<tr>
<td>Physiotherapist</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td>7 (4/3)</td>
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<tr>
<td>Dentist</td>
<td></td>
<td></td>
<td>23</td>
<td>21</td>
<td>2</td>
<td></td>
<td>46 (38/8)</td>
</tr>
<tr>
<td>Health Services Officer</td>
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<td></td>
<td></td>
<td>16</td>
<td>9</td>
<td>3</td>
<td>28 (14/14)</td>
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<tr>
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<td>4</td>
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<td></td>
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<tr>
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<td>13 (5/8)</td>
<td>32 (20/12)</td>
<td>185 (103/81)</td>
<td>109 (78/25)</td>
<td>27 (20/7)</td>
<td>4 (1/3)</td>
<td><strong>370 (227/136)</strong></td>
</tr>
</tbody>
</table>

Note: Data on gender were missing for 17 respondents. The number of males and females is not indicated if there is any possibility of identifying individuals. OCdt = Officer-Cadet, LCol = Lieutenant-Colonel.
anglophones. Their mean age was 38.38 years old (s.d. = 7.20) and they had served for an average of 16.12 years (s.d. = 7.42) years in the service. They represented approximately the same proportions in terms of rank, education, element (Army, Navy, Air), and occupation compared to the overall population. Consistent with the literature, the majority of respondents (71%) who had not experienced the benefits of mentoring did not report having any protégés of their own.

Frequencies by occupation on language, education, and protégé status is provided in Table 3. Similarly, means and standard deviations on respondents age, tenure, as well as information on their mentors and protégés, is provided in Table 4.

Procedure

As indicated earlier, this project originated from the desire on the part of the Medical Branch Advisor to establish a mentoring program. Prior to implementing such a program, it was decided that a mentoring needs analysis should be conducted, which formed the basis of this study. Several weeks before sending the survey, the monthly medical and dental bulletins (which are distributed to all health care professionals) informed them that a mentoring needs analysis would be conducted, and encouraged the participation of all staff members. The final official version of the survey was reproduced as a bilingual pamphlet with the English version on one side and the French on the other. It was sent to all health care officers of the Canadian Forces (N = 816) along with a covering letter signed by the Medical Branch Advisor stating the Surgeon General’s (the highest ranking military health care professional in the Canadian Forces) endorsement, as well as a more detailed factual sheet about mentoring. Participants were provided with a pre-addressed envelope and a detachable sheet asking them whether they would
Table 3

Information on Return Rate, Language, Education, and Protégé Status for each Occupation

<table>
<thead>
<tr>
<th>Variable/Occupation</th>
<th>Nurses</th>
<th>Doctors</th>
<th>HCAs&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Dentists</th>
<th>HSOS&lt;sup&gt;d&lt;/sup&gt;</th>
<th>Pharmacists</th>
<th>MAOs&lt;sup&gt;e&lt;/sup&gt;</th>
<th>Physio&lt;sup&gt;f&lt;/sup&gt;</th>
<th>SocWork&lt;sup&gt;g&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size&lt;sup&gt;a&lt;/sup&gt;</td>
<td>108</td>
<td>89</td>
<td>53</td>
<td>47</td>
<td>29</td>
<td>20</td>
<td>14</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Return rate</td>
<td>42.9%</td>
<td>41.6%</td>
<td>44.17%</td>
<td>47%</td>
<td>74.4%</td>
<td>47.6%</td>
<td>73.7%</td>
<td>58.3%</td>
<td>34.6%</td>
</tr>
<tr>
<td>Language:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>English</td>
<td>67.6%</td>
<td>84.3%</td>
<td>57.7%</td>
<td>71.7%</td>
<td>58.6%</td>
<td>40%</td>
<td>85.7%</td>
<td>57.1%</td>
<td>66.7%</td>
</tr>
<tr>
<td>French</td>
<td>32.4%</td>
<td>14.8%</td>
<td>42.3%</td>
<td>28.3%</td>
<td>41.4%</td>
<td>60%</td>
<td>14.3%</td>
<td>42.9%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Education&lt;sup&gt;b&lt;/sup&gt;:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical</td>
<td>39.3%</td>
<td>2.2%</td>
<td>26.5%</td>
<td>0%</td>
<td>13.8%</td>
<td>0%</td>
<td>15.4%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Bachelor</td>
<td>57.9%</td>
<td>18.0%</td>
<td>69.4%</td>
<td>10.6%</td>
<td>48.3%</td>
<td>75%</td>
<td>76.9%</td>
<td>85.7%</td>
<td>11.1%</td>
</tr>
<tr>
<td>Master</td>
<td>2.8%</td>
<td>10.1%</td>
<td>4.1%</td>
<td>4.3%</td>
<td>34.5%</td>
<td>20%</td>
<td>0%</td>
<td>14.3%</td>
<td>88.9%</td>
</tr>
<tr>
<td>Doctorate</td>
<td>0%</td>
<td>69.7%</td>
<td>0%</td>
<td>85.1%</td>
<td>3.4%</td>
<td>5%</td>
<td>7.0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Status:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protégés</td>
<td>81%</td>
<td>81.6%</td>
<td>80.8%</td>
<td>91.3%</td>
<td>89.3%</td>
<td>95%</td>
<td>23.1%</td>
<td>100%</td>
<td>87.5%</td>
</tr>
<tr>
<td>Non-protégés</td>
<td>19%</td>
<td>18.4%</td>
<td>19.2%</td>
<td>8.7%</td>
<td>10.7%</td>
<td>5%</td>
<td>76.9%</td>
<td>0%</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

Note: <sup>a</sup> 12 respondents did not indicate their occupation. <sup>b</sup> Several respondents have transferred from another occupation, which explains why they may not have completed the necessary educational requirements for their profession. <sup>c</sup> Health Care Administrators. <sup>d</sup> Health Services Officers. <sup>e</sup> Medical Administration Officers. <sup>f</sup> Physiotherapists. <sup>g</sup> Social Workers. Non-protégés are those who indicated never having experienced a mentoring relationship.
<table>
<thead>
<tr>
<th>Occupation/Variable</th>
<th>Age of Resp</th>
<th>Years in the CF&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Numb of Mentors</th>
<th>Age of Mentor</th>
<th>Dur of MR- M&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Numb of Protégés</th>
<th>Age of Protégé</th>
<th>Dur of MR- P&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses</td>
<td>37.07 (7.56)</td>
<td>13.69 (6.26)</td>
<td>2.41 (1.80)</td>
<td>43.04 (9.24)</td>
<td>3.41 (4.08)</td>
<td>2.34 (3.18)</td>
<td>30.94 (7.69)</td>
<td>2.29 (2.67)</td>
</tr>
<tr>
<td>Doctors</td>
<td>37.58 (6.39)</td>
<td>14.92 (6.25)</td>
<td>2.32 (1.70)</td>
<td>44.26 (7.09)</td>
<td>4.10 (7.04)</td>
<td>1.91 (2.75)</td>
<td>34.72 (7.19)</td>
<td>2.67 (2.62)</td>
</tr>
<tr>
<td>HCAs&lt;sup&gt;d&lt;/sup&gt;</td>
<td>37.57 (7.14)</td>
<td>18.58 (7.72)</td>
<td>1.85 (1.41)</td>
<td>43.54 (6.66)</td>
<td>2.36 (2.10)</td>
<td>1.46 (2.53)</td>
<td>31.11 (7.15)</td>
<td>1.81 (1.29)</td>
</tr>
<tr>
<td>Dentists</td>
<td>34.93 (6.07)</td>
<td>12.65 (5.95)</td>
<td>2.46 (1.57)</td>
<td>44.76 (8.56)</td>
<td>3.17 (2.49)</td>
<td>2.47 (2.49)</td>
<td>31.00 (4.32)</td>
<td>2.85 (3.10)</td>
</tr>
<tr>
<td>HSOs&lt;sup&gt;e&lt;/sup&gt;</td>
<td>44.34 (5.95)</td>
<td>22.74 (6.29)</td>
<td>2.86 (1.76)</td>
<td>48.13 (6.13)</td>
<td>6.4 (5.63)</td>
<td>3.21 (2.36)</td>
<td>35.91 (5.89)</td>
<td>6.15 (4.76)</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>36.40 (7.49)</td>
<td>14.30 (5.17)</td>
<td>2.20 (1.32)</td>
<td>43.89 (7.81)</td>
<td>1.77 (1.26)</td>
<td>1.06 (1.21)</td>
<td>30.67 (6.60)</td>
<td>2.46 (1.71)</td>
</tr>
<tr>
<td>MAOs&lt;sup&gt;f&lt;/sup&gt;</td>
<td>38.93 (7.40)</td>
<td>17.75 (9.76)</td>
<td>2.08 (1.61)</td>
<td>48.30 (8.69)</td>
<td>4.95 (6.77)</td>
<td>1.27 (1.68)</td>
<td>30.40 (5.08)</td>
<td>3.60 (2.70)</td>
</tr>
<tr>
<td>Physio&lt;sup&gt;g&lt;/sup&gt;</td>
<td>27.86 (5.73)</td>
<td>8.50 (3.28)</td>
<td>2.29 (1.11)</td>
<td>38.86 (2.91)</td>
<td>1.44 (1.61)</td>
<td>1.50 (2.35)</td>
<td>26.33 (1.53)</td>
<td>4.17 (5.11)</td>
</tr>
<tr>
<td>SocWork&lt;sup&gt;h&lt;/sup&gt;</td>
<td>42.11 (7.56)</td>
<td>16.78 (7.84)</td>
<td>2.37 (1.51)</td>
<td>50.29 (3.45)</td>
<td>4.26 (4.11)</td>
<td>3.29 (3.40)</td>
<td>39.33 (5.89)</td>
<td>4.83 (4.12)</td>
</tr>
</tbody>
</table>

**Note:**<sup>a</sup> Canadian Forces. <sup>b</sup> Duration of mentoring relationship with mentor in years. <sup>c</sup> Duration of mentoring relationship with protégé in years. <sup>d</sup> Health Care Administrators. <sup>e</sup> Health Services Officers. <sup>f</sup> Medical Administration Officers. <sup>g</sup> Physiotherapists. <sup>h</sup> Social Workers. Standard deviations are provided in parentheses.
be interested in participating in a second phase of the study. A code number was used to ensure anonymity. Their participation was voluntary, no incentives were offered, and their anonymity and confidentiality were guaranteed. They were also assured that the results (in an aggregate format) would subsequently be published in their monthly bulletin. A reminder letter was sent to all participants around mid-November, that is, approximately three weeks following the first mailing. Given a somewhat low return rate, a second reminder letter was sent early December in the form of a military message (the equivalent of a telex). All materials were provided in both official languages and participants had the opportunity to choose either version of the questionnaire, according to their preference. A copy of the questionnaire, the covering letter, and the reminder letters are found in Appendix B.

Data Analysis

Factor structure of mentoring needs. Preliminary analyses were first conducted to check for missing data as well as normality and multicollinearity. Then, since mentoring needs have never been measured before, an exploratory factor analysis was conducted to operationalize the mentoring needs construct.

Demographic analyses. Once the mentoring needs sub-scales were identified, the same items were used to calculate the mentoring occurrences sub-scales. Zero-order correlations were then computed and examined to assess the general pattern of relationships among the study variables. Next, analyses of variance (ANOVAs) were conducted to examine whether a number of variables, including demographic ones, affected the dimensions of mentoring needs and mentoring occurrences. Analyses of covariance (ANCOVAs) were then performed on each of the dependent variables (mentoring needs and occurrences) to examine the effects of gender
composition of the mentoring dyad while controlling for age, language, tenure, education, and rank as covariates. Analysis of covariance was chosen as the most appropriate statistical procedure because the independent variable, gender composition of the dyad, was qualitative. The dyad variable was composed of four categories: (1) male protégé with male mentor; (2) female protégé with male mentor; (3) female protégé with female mentor; and (4) male protégé with female mentor. Finally, exploratory post hoc tests were performed to elucidate the significant dyad effects found in the ANCOVAs. Analyses on other aspects of the questionnaire were also conducted, such as those pertaining to the profile of respondents' mentors and protégés.

RESULTS

The goal of the first research question was to determine what constituted mentoring needs from the protégé's perspective in a work context, whereas the second one dealt with the assessment and comparison of mentoring needs and occurrences as a function of various demographic variables, especially dyad composition. To gain a better understanding of the mentoring process and the population studied, a profile of the respondents' mentors and protégés as well as characteristics of the dyads were analyzed prior to exploring all facets of the second research question. To this end, results will be presented in the following order: (1) preliminary analyses; (2) identification of mentoring needs; (3) identification of mentoring occurrences; (4) comparison of mentoring needs and occurrences; (5) profile of respondents' mentors; (6) profile of respondents' protégés; (7) mentoring needs as a function of demographic variables; (8) mentoring occurrences as a function of demographic variables; (9) comparison between protégés and non-protégés; (10) correlational findings; (11) characteristics of the mentoring dyads; (12)
the role of dyad composition on mentoring needs and occurrences; and (13) occupational analyses.

(1) Preliminary Analyses

Some missing data were expected since participants were given the option to respond to only parts of the questionnaire. These cases were not eliminated but simply reduced the listwise sample size according to the analyses performed. When factor analytic procedures were performed, preliminary data analyses were conducted to check for missing data as well as normality and multi-collinearity. Cases with more than ten percent of missing data were deleted, however, they were retained in the overall sample so as to use responses on other measures.

A few items revealed values with residuals two standard deviations from the mean. For example, some items on the mentoring needs measure were rated at extreme ends of the scale by participants on the low and high age continuum (23 and 54 years of age). Analyses were conducted twice to ensure that the potential outliers did not affect results, once including them and once omitting them. In both cases the results were identical. It was thus decided to retain them because they added meaning to the interpretation of the data. As an illustration, item 5 "arrange for me to meet people who could be helpful in my career" was not surprisingly rated as "very important" by younger and junior personnel and "not at all important" by older and senior personnel.

(2) Identification of Mentoring Needs

An exploratory factor analysis was conducted on the mentoring needs measure. Recall that items on the mentoring needs instrument were rated on a scale from 1 to 5 (1 = "not at all important" to 5 = "very important"). In spite of the categorical nature of the scales, the data for
this study were treated as continuous for factor analytic purposes (Wickens, 1998). Although there may be some risks associated with treating categorical data as continuous, experts agree that the advantages far outweigh the limitations. Byrne (1998) summarized findings from several simulation studies which investigated the robustness of test statistics when the categorical nature of the observed variables was ignored. She concluded that (1) maximum likelihood estimation is less problematic when the covariance [data treated as continuous] rather than the correlation [data treated as categorical] matrix is used; and (2) the failure to address the ordinality of the data is negligible when the number of categories is large (p. 137). Given that both mentoring measures used five categories, the treatment of the data as continuous was considered appropriate: "Continuous methods can be used with little worry when a variable has four or more categories, but with three or fewer categories one should probably consider the use of alternative procedures" (Bentler & Chou, 1987, p. 88).

Factor structure of mentoring needs. Initially, twelve cases were deleted during the preliminary analyses because more than ten percent of responses were missing, resulting in 376 usable responses. Subsequently, the sample data were assessed for normality by examining values for skewness and kurtosis for each of the 75 mentoring needs items. Skewness and kurtosis values revealed a slightly negative trend, although considered acceptable. Skewness values ranged from -1.416 to 1.210 (M = -0.368) and kurtosis values ranged from -1.043 to 1.303 (M = -0.346). The negative direction of the skewness is an indication that respondents generally reported relatively high mentoring needs.

1 For a more extensive discussion on treating data as continuous in factorial analysis, the reader is referred to Byrne (1998).
In order to maximize the listwise sample, imputation of missing data was conducted\(^2\) using PRELIS (Jöreskog and Sörbom, 1996a), which is a component of the LISREL program developed by Jöreskog and Sörbom (1996b). Although the alternative strategy was to replace missing values by the mean, such an approach has received wide criticism from statisticians (Little & Rubin, 1987). PRELIS is a statistically more rigorous procedure in that for each missing value, the program searches for all cases with a similar response pattern over a set of matching variables. It then suggests a value to be substituted for the missing value which is obtained from the case with the lowest variance ratio (which is not to exceed .5). Consequently, if a good match is found, a value to replace the missing value is suggested and then imputed. For the mentoring needs measure, values were suggested for 24 of the 52 missing values, thereby increasing the listwise sample to 369. Given that the measure contains 75 items, the ratio of cases to items was now 369 to 75, that is, 4.92, which is considered acceptable for factor analytic purposes. Statisticians often recommend a ratio of ten to one as ideal and of five to one as minimal (Gorsuch 1983; MacCallum, 1998). In fact, rather than judging the appropriateness of conducting factor analyses solely on this ratio, some statisticians recommend a sample size of at least 300 and state that 150 is considered acceptable when the factor loadings of the marker variables exceed .80 (Comrey & Lee, 1992; Guadagnoli & Velicer, 1988; Tabachnick & Fidell, 1996). It will be shown that for this study, the sample size was 369 and the factor loading of the marker variable was .78.

\(^2\) The factor analysis was also conducted without imputed values. The same factors emerged with the quasi-identical items for each factor. Explanations are provided later in the chapter.
Following the preliminary analyses, an exploratory factor analysis (EFA) using the Maximum Likelihood extraction with Oblimin rotation was performed. The Bartlett's test of sphericity ($\chi^2_{(2775)} = 21317.56, p<.001$) suggested that the measure's matrix was factorable and the Kaiser-Meyer-Olkin measure of sampling adequacy (.97) provided a favourable indication of the reliability of the relationships between pairs of variables. Two criteria were used in order to determine which items defined the rotated factors: (1) the item had to have a factor loading equal to or greater than .35; and (2) the item could not have a factor loading greater than .30 on any other factor. These criteria are considered conservative as statisticians usually recommend interpreting variables with loadings of .32 and above (Tabachnick & Fidell, 1996).

The initial analysis yielded a total of 13 eigenvalues greater than one. A visual inspection of the scree plot, however, suggested the presence of six factors. Consequently, five, six, and seven-factor solutions were examined in greater detail. The five- and seven-factor solutions were rejected because several dimensions did not make conceptual sense (items on psychosocial mentoring loaded with items on vocational mentoring) and because each solution offered one factor composed only of three or fewer items with a loading above .35. The six-factor solution was deemed more interpretable and more statistically appropriate. Further examination of this solution resulted in the removal of 30 items from the analyses based on the criteria stated above. In order to reassess the stability of the six-factor solution, the 45 items that defined the factor loadings were reanalyzed. This resulted in a factor loading identical to the original analysis.

The six interpretable factors accounted for 56.75% of the variance in the mentoring needs items. The first factor, need for professional development, was composed of 11 items which accounted for 40.70% of the variance, and its internal consistency reliability coefficient was .93.
It measured such mentoring needs as teaching and discussing professional values, providing advice on how to improve one's military skills and knowledge, and teaching about the organization and its political dynamics. The second factor, need for sponsorship and recognition, was composed of five items, accounted for 5.41% of the variance, and had a Cronbach Alpha of .87. It depicted issues such as providing the protégé with visibility and good press, and ensuring that the protégé gets recognition for his/her work. The third factor was termed need for equal partnership. It was composed of 11 items which accounted for 3.52% of the variance and had a Cronbach Alpha of .92. Mentoring needs included issues related to trust, such as being able to confide in the mentor and feeling comfortable to discuss sensitive issues such as fears, mistakes and doubts. This factor also tapped into the importance of being treated as an equal partner, as illustrated by such items as "treats me as a professional", "I can challenge his/her points of view", and "values my ideas". The fourth factor, need for coaching on work issues, comprised ten items which accounted for 3.46% of the variance and had a Cronbach Alpha of .90. It measured needs directly associated with day-to-day work activities, such as teaching and assisting with the technical aspects, setting challenging standards, giving feedback on the protégé's performance, and suggesting work strategies. The fifth factor was called need for friendship. It was composed of four items which accounted for 2.34% of the variance, and had an internal consistency reliability coefficient of .76. The friendship items described the need for social interactions as well as discussing personal issues, concerns, such as how to balance family and work conflicts. Finally, the sixth factor, need for role-modeling, comprised four items which accounted for 1.33% of the variance and had a Cronbach Alpha of .83. Here the items illustrated the need for a role-model with respect to leadership, ethics, values, and attitudes. Internal consistency
reliability coefficients for the six factors thus ranged from .93 to .76, with an overall Cronbach Alpha of .97 on the 45 items. A summary of item descriptions, means, standard deviations, alpha coefficients, and factor loadings for mentoring needs is provided in Table 5.

(3) Identification of mentoring occurrences

Following the establishment of mentoring needs dimensions, mentoring frequency sub-scales were computed using the ratings on the same items as the mentoring needs sub-scales. Psychometric properties of the mentoring occurrences sub-scales were found to be as good as those of the mentoring needs sub-scales, with internal consistency coefficients ranging from .79 to .95 and an overall Cronbach Alpha of .98. A summary of means, standard deviations, and alpha coefficients for the mentoring needs and mentoring occurrences sub-scales is provided in Table 6.

(4) Comparison of Mentoring Needs and Occurrences

Having identified the dimensions of mentoring needs and those of mentoring occurrences, the next issue of interest was their comparison to assess whether there was a significant gap

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3 As indicated earlier, the analyses were also performed without the imputed values (N = 356) using the same statistical procedures. This resulted in six mentoring needs factors identical to the ones found here. There were a few minor discrepancies, however. First, item 71 "Share some of his/her career history with me" clearly loaded on the first factor (.54), need for professional development, thereby increasing the revised scale from 45 to 46 items. Second, in addition to loading on need for equal partnership (.46), item 65 "Genuinely cares about me as a person" also loaded on the need for friendship factor (.33). Third, item 73 "Act as a 'sounding board' for my ideas" did not meet the criteria for loading on the need for equal partnership factor (.32), even though it clearly loaded on that factor. Finally, only 15 iterations were required for the solution to converge, compared to 31 in the imputed values solution. The percentages of variance explained by each of the six factors were in the same proportions as those of the imputed solution.

4 A separate exploratory factor analysis was also conducted on mentoring occurrences. A detailed description is provided in Appendix C.
Table 5

**Alpha Coefficients, Percentages of the Variance Accounted for, Means, Standard Deviations, and Factor Loadings for the Mentoring Needs Measure (N = 369)**

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha Coefficient</td>
<td>.93</td>
<td>.87</td>
<td>.92</td>
<td>.90</td>
<td>.76</td>
<td>.83</td>
</tr>
<tr>
<td>Percentage of the variance accounted for</td>
<td>40.70</td>
<td>5.41</td>
<td>3.52</td>
<td>3.46</td>
<td>2.34</td>
<td>1.33</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>64 Advise me on how to improve my military skills and knowledge</td>
<td>3.32</td>
<td>1.14</td>
</tr>
<tr>
<td>58 Inform/teach me about other aspects of the military</td>
<td>3.12</td>
<td>1.09</td>
</tr>
<tr>
<td>59 Provide me with feedback on how to better conform to military expectations</td>
<td>3.00</td>
<td>1.08</td>
</tr>
<tr>
<td>36 Discuss with me the values and norms of the military</td>
<td>3.19</td>
<td>1.14</td>
</tr>
<tr>
<td>42 Help me learn to develop professional officer values</td>
<td>3.44</td>
<td>1.21</td>
</tr>
<tr>
<td>46 Acquaint me with the political dynamics and/or informal power structure of the military in general</td>
<td>3.04</td>
<td>1.14</td>
</tr>
<tr>
<td>69 Discuss with me the vision of our occupation (MOC) and of the CFMS/CFDS as a whole</td>
<td>3.57</td>
<td>1.14</td>
</tr>
<tr>
<td>6 Acquaint me with the political dynamics and/or informal power structure of my MOC and the CFMS/CFDS</td>
<td>3.42</td>
<td>1.20</td>
</tr>
<tr>
<td>68 Help me clarify my goals, dreams, as well as methods for implementing them</td>
<td>3.22</td>
<td>1.08</td>
</tr>
<tr>
<td>19 Provide me with opportunities to meet new fellow officers</td>
<td>2.97</td>
<td>1.11</td>
</tr>
</tbody>
</table>
Table 5

Alpha Coefficients, Percentages of the Variance Accounted for, Means, Standard Deviations, and Factor Loadings for the Mentoring Needs Measure (N = 369) (Continued)

<table>
<thead>
<tr>
<th>Factor Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 Provide me with the opportunity to observe him/her interacting with influential members of my profession and the military community</td>
<td>3.09</td>
<td>1.19</td>
<td>.40</td>
<td>.13</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>52 Use his/her influence to support my career interests and advancement</td>
<td>2.99</td>
<td>1.28</td>
<td>--</td>
<td>.86</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>75 Use his/her influence in the military for my benefit</td>
<td>2.55</td>
<td>1.28</td>
<td>.11</td>
<td>.77</td>
<td>--</td>
<td>-.18</td>
</tr>
<tr>
<td>3 Provide &quot;good press&quot; (representation) for me by discussing my accomplishments with his/her colleagues and other superiors</td>
<td>3.21</td>
<td>1.22</td>
<td>--</td>
<td>.67</td>
<td>--</td>
<td>.10</td>
</tr>
<tr>
<td>53 Ensure that I receive credit and recognition for the tasks and duties that I have accomplished</td>
<td>3.67</td>
<td>1.23</td>
<td>--</td>
<td>.63</td>
<td>.20</td>
<td>.29</td>
</tr>
<tr>
<td>61 Recognize and treat me as a competent professional</td>
<td>3.40</td>
<td>1.16</td>
<td>.25</td>
<td>.52</td>
<td>.11</td>
<td>.25</td>
</tr>
<tr>
<td>56 Encourage respect and mutual admiration in the relationship</td>
<td>3.61</td>
<td>1.10</td>
<td>.15</td>
<td>--</td>
<td>.67</td>
<td>--</td>
</tr>
<tr>
<td>51 Recognize and treat me as a competent professional</td>
<td>4.08</td>
<td>.95</td>
<td>--</td>
<td>.16</td>
<td>.66</td>
<td>.18</td>
</tr>
<tr>
<td>55 Be a person I can confide in</td>
<td>3.80</td>
<td>1.13</td>
<td>--</td>
<td>--</td>
<td>.61</td>
<td>--</td>
</tr>
<tr>
<td>48 Keep feelings and doubts I share with him/her in strict confidence</td>
<td>4.25</td>
<td>1.08</td>
<td>--</td>
<td>--</td>
<td>.58</td>
<td>--</td>
</tr>
<tr>
<td>54 Encourage me to discuss my mistakes without fears of repercussions</td>
<td>3.80</td>
<td>1.07</td>
<td>.20</td>
<td>--</td>
<td>.57</td>
<td>.19</td>
</tr>
<tr>
<td>44 Be the kind of person I can trust completely</td>
<td>4.08</td>
<td>1.07</td>
<td>--</td>
<td>--</td>
<td>.52</td>
<td>--</td>
</tr>
<tr>
<td>65 Genuinely care about me as a person</td>
<td>3.47</td>
<td>1.19</td>
<td>--</td>
<td>--</td>
<td>.51</td>
<td>-.21</td>
</tr>
<tr>
<td>22 Provide a climate in which I feel encouraged to discuss and challenge his/her points of view</td>
<td>3.80</td>
<td>1.11</td>
<td>.13</td>
<td>-.13</td>
<td>.48</td>
<td>.28</td>
</tr>
</tbody>
</table>
### Table 5

**Alpha Coefficients, Percentages of the Variance Accounted for, Means, Standard Deviations, and Factor Loadings for the Mentoring Needs Measure (N = 369)** (Continued)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Item</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>Have a positive influence on my self-esteem</td>
<td>3.38</td>
<td>1.14</td>
<td>--</td>
<td>.15</td>
<td>.41</td>
<td>--</td>
<td>.19</td>
<td>--</td>
</tr>
<tr>
<td>73</td>
<td>Act as a &quot;sounding board&quot; for my ideas</td>
<td>3.59</td>
<td>1.06</td>
<td>.15</td>
<td>--</td>
<td>.37</td>
<td>.18</td>
<td>--</td>
<td>.10</td>
</tr>
<tr>
<td>43</td>
<td>Value my ideas and suggestions</td>
<td>3.67</td>
<td>1.03</td>
<td>--</td>
<td>--</td>
<td>.35</td>
<td>.22</td>
<td>.23</td>
<td>.20</td>
</tr>
<tr>
<td>24</td>
<td>Assist me in learning the technical aspects of my work</td>
<td>3.43</td>
<td>1.23</td>
<td>.13</td>
<td>--</td>
<td>--</td>
<td>.66</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>31</td>
<td>Set challenging standards for me</td>
<td>3.60</td>
<td>1.15</td>
<td>.17</td>
<td>--</td>
<td>.11</td>
<td>.57</td>
<td>--</td>
<td>.21</td>
</tr>
<tr>
<td>25</td>
<td>Ask for my suggestions concerning problems that he/she is</td>
<td>3.08</td>
<td>1.09</td>
<td>--</td>
<td>--</td>
<td>.19</td>
<td>.52</td>
<td>.26</td>
<td>-.15</td>
</tr>
<tr>
<td></td>
<td>encountering at work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>Help me with tasks/projects that would otherwise be difficult to</td>
<td>3.20</td>
<td>1.11</td>
<td>.11</td>
<td>.12</td>
<td>--</td>
<td>.49</td>
<td>.20</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>complete on my own</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Give me feedback regarding my overall performance</td>
<td>3.92</td>
<td>1.17</td>
<td>--</td>
<td>.15</td>
<td>.17</td>
<td>.47</td>
<td>--</td>
<td>.12</td>
</tr>
<tr>
<td>34</td>
<td>Inform me of opportunities to get involved in challenging tasks</td>
<td>3.79</td>
<td>1.08</td>
<td>.16</td>
<td>.23</td>
<td>.17</td>
<td>.47</td>
<td>-.14</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td>that would allow me to learn new skills and test my abilities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Entrust me with confidential work-related information</td>
<td>3.02</td>
<td>1.23</td>
<td>-.13</td>
<td>.17</td>
<td>--</td>
<td>.45</td>
<td>.26</td>
<td>--</td>
</tr>
<tr>
<td>13</td>
<td>Teach me how to improve my professional skills</td>
<td>4.00</td>
<td>1.07</td>
<td>.30</td>
<td>--</td>
<td>--</td>
<td>.42</td>
<td>-.10</td>
<td>.24</td>
</tr>
<tr>
<td>35</td>
<td>Provide me with advice on how to solve military or work related</td>
<td>3.68</td>
<td>1.05</td>
<td>.18</td>
<td>--</td>
<td>--</td>
<td>.41</td>
<td>.17</td>
<td>.19</td>
</tr>
<tr>
<td></td>
<td>problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>Suggest specific strategies for accomplishing my work objectives</td>
<td>3.31</td>
<td>1.04</td>
<td>.20</td>
<td>.16</td>
<td>--</td>
<td>.36</td>
<td>.20</td>
<td>.15</td>
</tr>
<tr>
<td>47</td>
<td>Provide me with opportunities to discuss my anxiety and concerns</td>
<td>2.78</td>
<td>1.16</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>.67</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>related to personal issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 5

Alpha Coefficients, Percentages of the Variance Accounted for, Means, Standard Deviations, and Factor Loadings for the Mentoring Needs Measure (N = 369) (Continued)

<table>
<thead>
<tr>
<th>Factor Item</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>27 Provide me with opportunities to discuss my anxiety and concerns regarding conflicts between my military work and my personal life</td>
<td>3.12</td>
<td>1.21</td>
</tr>
<tr>
<td>33 Encourage a climate for our relationship to develop into a friendship</td>
<td>2.70</td>
<td>1.14</td>
</tr>
<tr>
<td>60 Interact with me socially outside of work</td>
<td>1.90</td>
<td>.98</td>
</tr>
<tr>
<td>39 Serve as a role-model or example for me to follow</td>
<td>3.87</td>
<td>1.15</td>
</tr>
<tr>
<td>14 Demonstrate leadership and ethical behaviours that I would try to emulate</td>
<td>4.18</td>
<td>1.05</td>
</tr>
<tr>
<td>30 Display ethical values that I want to adopt as my own</td>
<td>3.93</td>
<td>1.14</td>
</tr>
<tr>
<td>4 Display values and attitudes similar to my own</td>
<td>3.50</td>
<td>1.11</td>
</tr>
</tbody>
</table>

Note. Response options for mentoring needs ranged from 1 = "not at all important" to 5 = "very important". Factor 1 = need for professional development; factor 2 = need for sponsorship and recognition; factor 3 = need for equal partnership; factor 4 = need for coaching on work; factor 5 = need for friendship; and factor 6 = need for a role-model. Factors were derived using Maximum Likelihood extraction with Oblimin rotation. The overall alpha coefficient for the 45 items was .97 and the total percentage of variance accounted for was 56.75%.
Table 6

Means, Standard Deviations, and Alpha Coefficients for the Sub-Scales of Mentoring Needs and Mentoring Occurrences

<table>
<thead>
<tr>
<th>Construct</th>
<th>Mentoring Needs</th>
<th></th>
<th></th>
<th>Mentoring Occurrences</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Alpha</td>
<td>Mean</td>
<td>SD</td>
<td>Alpha</td>
</tr>
<tr>
<td>Professional Development</td>
<td>3.21</td>
<td>.87</td>
<td>.93</td>
<td>2.09</td>
<td>.71</td>
<td>.92</td>
</tr>
<tr>
<td>Sponsorship and recognition</td>
<td>3.16</td>
<td>1.00</td>
<td>.87</td>
<td>2.27</td>
<td>.86</td>
<td>.88</td>
</tr>
<tr>
<td>Equal Partnership</td>
<td>3.78</td>
<td>.82</td>
<td>.92</td>
<td>2.72</td>
<td>.95</td>
<td>.95</td>
</tr>
<tr>
<td>Friendship</td>
<td>2.63</td>
<td>.86</td>
<td>.76</td>
<td>2.08</td>
<td>.80</td>
<td>.79</td>
</tr>
<tr>
<td>Coaching on Work Issues</td>
<td>3.50</td>
<td>.81</td>
<td>.90</td>
<td>2.34</td>
<td>.75</td>
<td>.90</td>
</tr>
<tr>
<td>Role-Modeling</td>
<td>3.87</td>
<td>.91</td>
<td>.83</td>
<td>2.76</td>
<td>.98</td>
<td>.90</td>
</tr>
<tr>
<td>Overall Scale</td>
<td>3.36</td>
<td>.71</td>
<td>.97</td>
<td>2.38</td>
<td>.75</td>
<td>.98</td>
</tr>
</tbody>
</table>
It is understood that the inferences made from this comparison are to be interpreted with caution because the scales for both measures were not analogous. Indeed, a rating of "1" on the needs scale did not have an identical meaning as a rating of "1" on the frequency scale. Nonetheless, both measures used a five-point Likert scale in increasing order of importance or frequency. Furthermore, increments between response options on both scales were equivalent. Finally, the psychometric properties of both instruments were superior to those reported in most studies of this nature. Consequently, it was felt that there were compelling conceptual and statistical reasons for comparing the two constructs.

Factor scores of the six mentoring needs and the six mentoring occurrences were computed using simple unit weights. Statistical tests of the differences between the six factor scores on both measures were then performed using t-tests. Results revealed that all tests were significant at $p < .001$. Hence, for every type of mentoring function, protégés reported needing significantly more than what they received.

(5) Profile of Respondents' Mentors

In describing their mentors, overall, respondents indicated that their mean age was 44.66 years ($s.d. = 8.10$). The average age of respondents was 37.51 years ($s.d. = 7.28$). Thus, it appears that protégés tended to be mentored by mentors approximately seven years older than them, on average. There was no sex difference in the number of mentors: male respondents reported having an average of 2.30 mentors ($s.d. = 1.61$) whereas female respondents indicated having an average of 2.36 mentors ($s.d. = 1.71$).

The following are additional descriptions of the respondents' mentors: 66.6% were male and 33.4% were female; 68.2% were in the same military occupation, 24.3% were in a different
military occupation, and 7.5% were civilian; 17.1% were at the same hierarchical level as they were (note that a few individuals indicated that their mentor was junior to them). 52.2% were one level higher, 20.2% were two levels higher, 7.9% were three levels higher, and 2.6% were four or more levels higher. With regards to their supervisory relationship, 17.2% indicated that their mentor was currently their supervisor, 56.6% that their mentor had once been their supervisor, and 26.2% that they were never in a supervisor/subordinate relationship.

In terms of distance, 58.7% were in the same geographical area and 41.3% were a considerable distance apart (which suggests that mentoring may be also occurring via the phone and/or electronically). To the question on the state of their mentorship, 36.9% answered that their relationship with their mentor was still ongoing, 23.5% almost over, and 39.7% over. The average duration of their mentoring relationship with their mentor was 3.55 years (s.d. = 4.2). Communications with their mentor occurred several times a week (33.3%), several times a month (26.7%), once a month (14.5%), less than once a month (12.5%), and hardly ever (11.3%). The last percentage may partly represent mentoring relationships which are now over.

(6) Profile of Respondents' Protégés

In describing their protégés, overall, respondents indicated that their mean age was 32.79 years (s.d. = 6.71). Given that the average age of respondents was 37.51 years (s.d. = 7.28), there was a tendency for respondents to mentor protégés who were approximately five years younger than them, on average.

The following are descriptions of the respondents' protégés: 54.6% were male and 45.4% were female; 75.7% were in the same military occupation whereas 24.3% were not; 22.7% were at the same hierarchical level, 55.3% were one level lower, 10.6% were two levels lower, 3.7%
were three levels lower, and 7.7% were four or more levels lower. In terms of their supervisory relationship, 18.2% of respondents indicated that their protégés were currently their subordinate, had once been their subordinate (52.5%), and were never in a supervisor/subordinate relationship (29.3%).

With regards to distance, 55.4% were in the same geographical area and 44.6% were a considerable distance apart. Respondents reported their relationship with their protégé to be still ongoing (40.3%), almost over (28.9%), and over (30.8%). The average duration of their mentoring relationship with their protégé was 2.93 years (s.d. = 2.85). Communications with their protégé occurred several times a week (47.8%), several times a month (18.7%), once a month (16.9%), less than once a month (9.9%), and hardly ever (6.7%). The last percentage may partly represent mentoring relationships which are now over.

(7) Mentoring Needs as a Function of Demographic Variables

Recall that the factor structure of mentoring needs revealed six types of mentoring needs: (1) professional development, (2) sponsorship and recognition, (3) equal partnership, (4) friendship, (5) coaching on work issues, and (6) role-modeling. Analyses of variance were initially performed to determine the impact of the following demographic variables on the mentoring needs sub-scales: sex of the protégé; sex of the mentor; age; tenure; education; rank; and language.

Sex of the protégé. Women expressed significantly greater mentoring needs than men on all aspects except for the need for friendship. Specifically, female protégés reported greater needs for professional development ($F(1,361) = 16.02, p < .001, M = 3.44, s.d. = .77$), sponsorship and recognition ($F(1,362) = 4.57, p = .033, M = 3.30, s.d. = .88$), equal partnership
(F(1,362) = 19.26, p < .001, M = 4.00, s.d. = .63), coaching on work issues (F(1,365) = 23.96, p < .001, M = 3.76, s.d. = .62), and role-modeling (F(1,364) = 21.70, p < .001, M = 4.15, s.d. = .68) than did male protégés (M = 3.06, s.d. = .89, M = 3.07, s.d. = 1.08, M = 3.62, s.d. = .89, M = 3.34, s.d. = .88, and M = 3.70, s.d. = .99, respectively).

**Sex of the mentor.** The mentor's sex had no impact on protégés' reported mentoring needs. In other words, the extent to which protégés expressed mentoring needs was not influenced by their mentor's sex.

**Sex of the mentor and the protégé.** When the sex of both parties were incorporated in the analyses, ANOVAs revealed that protégés in cross-sex mentoring relationships (M = 3.69, s.d. = .63, n = 75) reported a greater need for coaching on work issues (F(1,306) = 4.121, p = .043) compared to protégés in same-sex relationships (M = 3.50, s.d. = .77, n = 231).

**Age.** The respondents' age significantly affected their reported needs for professional development (F(31,360) = 1.971, p = .002), equal partnership (F(31,360) = 1.732, p = .011), and for coaching on work issues (F(31,360) = 1.889, p = .004). Two other needs approached significance, namely the need for friendship (F(31,360) = 1.435, p = .067) and the need for role-modeling (F(31,360) = 1.382, p = .090). As expected, as age increased, the respondents' mentoring needs decreased.

---

5 For age and tenure, analyses were conducted in two ways: (1) using the variable which had been categorized (i.e., five degrees of freedom), and (2) using the unmodified variable (i.e., 31 degrees of freedom for age and 51 for tenure). An examination of the graphs revealed that the significant results found with the categorized variable lead to misinterpretation. In other words, the graphs revealed unusual patterns simply by virtue of where the cut-off was made between one category and the other. This pattern was not evidenced when examining graphs using the uncategorized variables. Thus the more conservative approach was taken in using all the degrees of freedom.
Tenure. The number of years respondents had served significantly affected their reported needs for equal partnership ($F(51,366) = 1.638, p = .006$) and for role-modeling ($F(51,366) = 1.452, p = .031$). The need for coaching on work issues also approached significance ($F(51,366) = 1.294, p = .098$). Similar to the pattern for age, as respondents had more years of service in the military, their mentoring needs decreased.

Education. Education level did not seem to affect mentoring needs, although two subscales approached significance: need for coaching on work issues ($F(3,360) = 2.28, p = .079$) and need for role-modeling ($F(3,360) = 2.34, p = .073$). As the education level of respondents increased from a technical certificate to a doctorate degree, their mentoring needs tended to decrease. Incidentally, this pattern was similar for all mentoring needs, although individuals with a doctorate seemed to report an increased need for friendship compared to their less well educated counterparts.

Rank. Rank significantly affected the need for professional development ($F(5,359) = 3.85, p = .002$) and for coaching on work issues ($F(5,359) = 3.11, p = .009$). In both cases, reported mentoring needs decreased as rank increased. However, it must be noted that a graphical representation revealed that the colonels ($n = 4$, the highest ranking sub-group) indicated a sharp increase for professional development needs, as well as sponsorship and recognition, equal partnership, and role-modeling. This suggests that their mentoring needs may be distinct from the other health care officers. Individuals who have attained the rank of Colonel perform at the executive level, thus are involved in administrative work almost devoid of technical content. Moreover, the rank of Colonel is considered a senior appointment short of the
promotion to General. This means that Colonels are generalists and the affiliation with their occupation is de-emphasized.

**Language.** Mentoring needs did not seem to be affected by the language of the respondent, although the need for friendship approached significance (F(1,364) = 3.71, p = .055). Francophones (M = 2.75, s.d. = .80) indicated a stronger tendency to report greater friendship needs than anglophones (M = 2.57, s.d. = .88). An examination of the means indicates that this pattern seemed to hold for most of the other mentoring needs.

(8) **Mentoring Occurrences as a Function of Demographic Variables**

Similarly to mentoring needs, composite scores were computed for each of the mentoring occurrences sub-scales using the same items as those of the mentoring needs sub-scales. Analyses of variance were then performed on the mentoring occurrences sub-scales to determine the impact of the following demographic variables: sex of the protégé; sex of the mentor; age; tenure; education; rank; and language.

**Sex of the protégé.** With regards to mentoring occurrences, only one sex difference was found. Women reported receiving significantly more role-modeling (F(1,327) = 6.11, p = .014, M = 2.95, s.d. = 1.05) than did male respondents (M = 2.67, s.d. = .96). Although not significant, a cursory examination of the means revealed the same response pattern for most of the mentoring occurrences sub-scales.

**Sex of the mentor.** The mentor's sex had an impact on only one type of mentoring function, namely the frequency of sponsorship and recognition (F(1,284) = 4.48, p = .035). Those who had a male mentor (M = 2.45, s.d. = .89) reported significantly more sponsorship and recognition than respondents whose mentor was a woman ((M = 2.83, s.d. = .74). Here again, a
cursory examination of the means reveals the same pattern for the other mentoring functions, suggesting that male mentors may provide more mentoring than female mentors.

**Sex of the mentor and the protégé.** When the sex of both parties were incorporated in the analyses, ANOVAs revealed no differences in reported frequencies of mentoring occurrences between protégés in same-sex and in cross-sex mentoring relationships.

**Age.** Contrary to mentoring needs, the respondents' age had no impact on reported mentoring occurrences.

**Tenure.** The number of years respondents had served significantly affected reported occurrences of friendship ($F(49,333) = 1.504, p = .023$) and approached significance with regards to coaching on work issues ($F(49,333) = 1.305, p = .096$). As tenure increased, reported frequencies of friendship decreased.

**Education.** According to the ANOVA results, respondents' education level did not affect their reported frequencies of mentoring behaviours received.

**Rank.** Similarly, the respondents' rank did not affect reported mentoring behaviours received, although sponsorship and recognition occurrences approached significance ($F(5,326) = 1.87, p = .099$). Senior officers tended to report increased occurrences of sponsorship and recognition.

**Language.** Contrary to mentoring needs, reported mentoring occurrences were affected by the language of the respondent. The response pattern indicated that francophones reported receiving less mentoring than anglophones, with three functions being significant. Specifically, francophones received less coaching on work issues ($F(1,329) = 6.32, p = .012, M = 2.18, s.d. = .70$), friendship ($F(1,329) = 5.73, p = .017, M = 1.92, s.d. = .68$), and equal partnership
(F(1,329) = 4.25, p = .040, M = 2.55, s.d. = .93) compared to their anglophone counterparts 
(M = 2.41, s.d. = .78, M = 2.15, s.d. = .84, and M = 2.79, s.d. = .96, respectively).

(9) Comparison Between Protégés and Non-Protégés

Given the number of participants who had not been mentored, it was possible to compare this group with those who had received mentoring. Information on such differences are important because several researchers have empirically demonstrated that mentored individuals reported more favourable outcomes than their non-mentored counterparts (e.g., Chao, Walz, & Gardner, 1992; Dreher & Ash, 1990; Riley & Wrench, 1985).

For these analyses, the sample was divided in two groups: those who reported not having experienced a mentoring relationship (n = 61, i.e., 16.2%) and those who reported having at least one mentor (n = 326, i.e., 83.8%). There were no differences on demographic variables. Means were then calculated for the two groups for each of the mentoring needs sub-scales, and for the mentoring occurrences sub-scales, as well as both overall scales. T-tests were computed to compare protégés and non-protégés on the mentoring factors. Results are provided in Table 7 for mentoring needs and in Table 8 for mentoring occurrences. Interestingly, protégés have expressed significantly stronger mentoring needs than their non-mentored counterparts, except for the need for friendship and the need for sponsorship and recognition, which were not significant but in the same direction. With regards to mentoring occurrences, as would be expected, protégés have overwhelmingly reported receiving more mentoring compared to non-protégés, and this was the case for all types of mentoring functions. Incidentally, respondents who had been on the receiving end of a mentoring relationship reported having more protégés
Table 7

*Table* Values for the Differences Between Protégés (N = 316) and Non-Protégés (N = 61) on Mentoring Needs

<table>
<thead>
<tr>
<th></th>
<th>Protégés</th>
<th>Non-Protégés</th>
<th>T value</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>s.d.</td>
<td>n</td>
</tr>
<tr>
<td>Professional development</td>
<td>3.27</td>
<td>.81</td>
<td>311</td>
</tr>
<tr>
<td>Sponsorship and recognition</td>
<td>3.20</td>
<td>.97</td>
<td>312</td>
</tr>
<tr>
<td>Equal partnership</td>
<td>3.83</td>
<td>.73</td>
<td>313</td>
</tr>
<tr>
<td>Friendship</td>
<td>2.64</td>
<td>.85</td>
<td>314</td>
</tr>
<tr>
<td>Coaching on work issues</td>
<td>3.54</td>
<td>.75</td>
<td>314</td>
</tr>
<tr>
<td>Role-modeling</td>
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<td>.82</td>
<td>313</td>
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<tr>
<td>Overall mentoring needs</td>
<td>3.41</td>
<td>.63</td>
<td>309</td>
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</tbody>
</table>

*Note:* Protégés indicated having at least one mentor whereas non-protégés clearly indicated not having any mentor. T values were significant at * p < .05 and *** p < .001.
Table 8

T Values for the Differences Between Protégés (N = 316) and Non-Protégés (N = 61) on Mentoring Occurrences

<table>
<thead>
<tr>
<th></th>
<th>Protégés</th>
<th></th>
<th></th>
<th>Non-Protégés</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>s.d.</td>
<td>n</td>
<td>Mean</td>
<td>s.d.</td>
<td>n</td>
</tr>
<tr>
<td>Professional development</td>
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<td>290</td>
<td>1.64</td>
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<td>47</td>
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<tr>
<td>Sponsorship and recognition</td>
<td>2.35</td>
<td>.85</td>
<td>293</td>
<td>1.80</td>
<td>.78</td>
<td>48</td>
</tr>
<tr>
<td>Equal partnership</td>
<td>2.83</td>
<td>.91</td>
<td>291</td>
<td>2.11</td>
<td>.94</td>
<td>47</td>
</tr>
<tr>
<td>Friendship</td>
<td>2.13</td>
<td>.78</td>
<td>296</td>
<td>1.70</td>
<td>.77</td>
<td>47</td>
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<tr>
<td>Coaching on work issues</td>
<td>2.42</td>
<td>.72</td>
<td>297</td>
<td>1.86</td>
<td>.74</td>
<td>48</td>
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<tr>
<td>Role-modeling</td>
<td>2.87</td>
<td>.95</td>
<td>293</td>
<td>2.14</td>
<td>.97</td>
<td>47</td>
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<tr>
<td>Overall mentoring frequencies</td>
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<td>.72</td>
<td>285</td>
<td>1.87</td>
<td>.72</td>
<td>47</td>
</tr>
</tbody>
</table>

Note: Protégés indicated having at least one mentor whereas non-protégés clearly indicated not having any mentor. All t values were significant at *** p < .001.
than non-protégés \( \bar{M} = 1.02, \text{s.d.} = 2.15; F(1,344) = 10.339, p = .001 \), a fact which is also consistent with the literature.

(10) Correlational Findings

Table 9 displays the means, standard deviations, as well as the correlations among the six mentoring needs factor scores (needs and occurrences) as well as the following demographic variables: sex, age, first official language, rank, number of years of service in the military (tenure), and education. Table 10 illustrates the same correlations as they relate to mentoring occurrences. Finally, Table 11 provides the means and standard deviations on mentoring needs and mentoring occurrences for each occupation.

Relationships between demographic variables. As expected, a few demographic variables were significantly correlated with each other. For example, age was significantly related to rank \( (r = .487, p < .01) \) and tenure \( (r = .822, p < .01) \). Similarly, tenure was significantly related to rank \( (r = .464, p < .01) \) and rank significantly related to education \( (r = .272, p < .01) \). Results, however, reveal an inverse relationship between education and age \( (r = -.110, p < .05) \) as well as education and tenure \( (r = -.130, p < .05) \), indicating that older and senior respondents were less educated than their younger and junior counterparts. This may be explained by a high proportion of senior nurses with technical degrees in a study which also incorporated junior medical doctors and dentists with doctorates.

Interestingly, sex was negatively correlated with rank \( (r = -.152, p < .01) \), tenure \( (r = -.154, p < .01) \), and education \( (r = -.289, p < .01) \), thereby indicating that male health care professionals in the military were higher ranking, longer tenured, and better educated than their female counterparts (men were coded as "1" and women as "2").
Table 9

Means, Standard Deviations, and Intercorrelations of Study Variables and Mentoring Needs Factors (N = 387)

<table>
<thead>
<tr>
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<th>8</th>
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<th>10</th>
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<td>-.154**</td>
<td>.822**</td>
<td>.023</td>
<td>.464**</td>
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<td>-.049</td>
<td>.272**</td>
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</table>

Note: Sex was coded 1 for males and 2 for females. Language was coded 1 for English and 2 for French. Rank was coded from 1 (Officer Cadet) to 6 (Colonel). Tenure represented number of years in the service. Education was coded from 1 (technical diploma) to 4 (doctorate). NPD = need for professional development. NSR = need for sponsorship and recognition. NEP = need for equal partnership. NF = need for friendship. NCW = need for coaching on work issues. NRM = need for role-modeling. Correlations were significant at *p<.05 and **p<.01.
Table 10
Means, Standard Deviations, and Intercorrelations of Study Variables and Mentoring Occurrences Factors (N = 387)

<table>
<thead>
<tr>
<th></th>
<th>M</th>
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<tbody>
<tr>
<td>1. Sex</td>
<td>1.39</td>
<td>.49</td>
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<tr>
<td>2. Age</td>
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<td>3. Lang</td>
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<td>5. Tenure</td>
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<td>6. Educ</td>
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<td>.044</td>
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<td>.774**</td>
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<td>-.106</td>
<td>-.132*</td>
<td>-.025</td>
<td>-.141**</td>
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<td>.662**</td>
<td>.572**</td>
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</table>

Note: Sex was coded 1 for males and 2 for females. Language was coded 1 for English and 2 for French. Rank was coded from 1 (Officer Cadet) to 6 (Colonel). Tenure represented number of years in the service. Education was coded from 1 (technical diploma) to 4 (doctorate). FPD = frequency of professional development. FSR = frequency of sponsorship and recognition. FEP = frequency of equal partnership. FF = frequency of friendship. FCW = frequency of coaching on work issues. FRM = frequency of role-modeling. Correlations were significant at *p<.05 and **p<.01.
Table 11

Means and Standard Deviations on Mentoring Needs and Mentoring Occurrences for each Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Nurses</th>
<th>Doctors</th>
<th>HCAs*</th>
<th>Dentists</th>
<th>HSOs</th>
<th>Pharmacists</th>
<th>MAOs</th>
<th>Physio</th>
<th>SocWork*</th>
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</thead>
<tbody>
<tr>
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<td>3.37 (.76)</td>
<td>2.89 (.96)</td>
<td>3.21 (.89)</td>
<td>3.31 (.79)</td>
<td>3.35 (.99)</td>
<td>3.24 (.60)</td>
<td>3.37 (.79)</td>
<td>3.55 (.84)</td>
<td>2.60 (.90)</td>
</tr>
<tr>
<td>NSR</td>
<td>3.21 (.87)</td>
<td>2.86 (1.05)</td>
<td>3.22 (1.13)</td>
<td>3.43 (.92)</td>
<td>3.22 (1.15)</td>
<td>2.93 (.70)</td>
<td>3.62 (.93)</td>
<td>3.63 (1.22)</td>
<td>2.55 (.88)</td>
</tr>
<tr>
<td>NEP</td>
<td>3.99 (.62)</td>
<td>3.49 (.93)</td>
<td>3.64 (.88)</td>
<td>3.96 (.67)</td>
<td>3.89 (.89)</td>
<td>3.64 (.63)</td>
<td>3.67 (.85)</td>
<td>4.01 (.64)</td>
<td>3.44 (1.33)</td>
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<tr>
<td>NF</td>
<td>2.73 (.78)</td>
<td>2.69 (.85)</td>
<td>2.56 (1.00)</td>
<td>2.66 (.87)</td>
<td>2.52 (.83)</td>
<td>2.35 (.79)</td>
<td>2.42 (1.00)</td>
<td>2.71 (1.13)</td>
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<td>3.20 (.92)</td>
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<td>3.35 (.92)</td>
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<td>FPR</td>
<td>2.08 (.71)</td>
<td>2.09 (.74)</td>
<td>1.96 (.75)</td>
<td>2.20 (.56)</td>
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<td>1.95 (.68)</td>
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<td>2.69 (.97)</td>
<td>2.45 (.98)</td>
<td>2.88 (.86)</td>
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<td>2.60 (.89)</td>
<td>2.77 (.60)</td>
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<td>1.96 (.73)</td>
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<td>FCW</td>
<td>2.40 (.70)</td>
<td>2.32 (.83)</td>
<td>2.24 (.85)</td>
<td>2.33 (.61)</td>
<td>2.41 (.70)</td>
<td>2.28 (.80)</td>
<td>2.38 (.30)</td>
<td>2.37 (.90)</td>
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<tr>
<td>FRM</td>
<td>2.84 (1.01)</td>
<td>2.72 (.96)</td>
<td>2.48 (1.03)</td>
<td>2.99 (.82)</td>
<td>2.89 (1.01)</td>
<td>2.67 (1.04)</td>
<td>2.69 (.86)</td>
<td>3.04 (1.33)</td>
<td>2.59 (1.00)</td>
</tr>
<tr>
<td>FMENT</td>
<td>2.42 (.72)</td>
<td>2.37 (.80)</td>
<td>2.19 (.78)</td>
<td>2.48 (.63)</td>
<td>2.60 (.75)</td>
<td>2.28 (.77)</td>
<td>2.33 (.47)</td>
<td>2.43 (1.00)</td>
<td>2.50 (1.16)</td>
</tr>
</tbody>
</table>

Note: * Health Care Administrators. b Health Services Officers. c Medical Administration Officers. d Physiotherapists. e Social Workers. NPD = need for professional development, NSR = need for sponsorship and recognition, NEP = need for equal partnership, NF = need for friendship, NCW = need for coaching on work issues, NRM = need for role-modeling, NMENT = overall mentoring needs, FPD = frequency of professional development, FSR = frequency of sponsorship and recognition, FEP = frequency of equal partnership, FF = frequency of friendship, FCW = frequency of coaching on work issues, FRM = frequency of role-modeling, FMENT = overall mentoring frequencies (occurrences).
Relationships between mentoring sub-scales. All the mentoring needs factors were significantly correlated with each other (p < .01 and p < .05, two-tailed). Values ranged from \( r = .393 \) to \( .758 \), indicating a unidimensional mentoring needs construct, contrary to Kram's (1985a) two-dimensional model. Similarly, all intercorrelations among the mentoring occurrences factors were significant (p < .01, two-tailed), with values ranging from \( r = .572 \) to \( .824 \), again suggesting a unidimensional mentoring occurrences construct.

An examination of the relationships between the mentoring needs and the mentoring occurrences factors revealed ten significant correlations out of the 36 possibilities. Four of the six mentoring needs functions correlated significantly with their comparable occurrence function, specifically: professional development, sponsorship and recognition, friendship, and role-modeling (all at p < .01, two-tailed). In other words, as reported needs for professional development increased, for example, so did reported occurrences of this mentoring function. Although it is not clear which came first, it appears that as mentoring needs increased, so did reported mentoring functions.

Caution must be exercised, however, in interpreting these results since the magnitude of the relationships is small. For example, the correlation of need for role-modeling with frequency of role-modeling (\( r = .186 \), p < .01) only explains 3.46% of the variance.

(11) Characteristics of the Mentoring Dyads

Recall that respondents were given the opportunity to describe up to six mentors. It was assumed that the first mentor they indicated was the mentor who had the greatest impact on the respondent. Indeed, if asked to list people who have been very influential in our professional lives, it would make sense that one would start by describing the person who had the greatest
impact on our career and professional development. Although a directive to that effect in the survey would have eliminated any doubts, all analyses in this chapter were recalculated using the second mentor to verify the validity of results (after which the sample sizes were too small to make any meaningful inferences). Recall that on average respondents indicated having two mentors. Results using the second mentor were essentially identical to those obtained by using the first mentor. Therefore, "mentor 1" was used in subsequent analyses with regards to the sex composition of the mentoring dyad (that is, respondent's sex and mentor's sex).

The sample was composed of 75 (24.4%) cross-sex mentorships and 233 (75.6%) same-sex mentorships. Proportions of dyad compositions were equivalent to other studies (e.g., Sosik & Godshalk, in press), although studies conducted with health care professionals revealed a somewhat greater proportion of cross-sex mentorships (36% in Koberg, Boss, & Goodman, 1998). Dyads were composed as follows in this study:

<table>
<thead>
<tr>
<th></th>
<th>male mentor</th>
<th>female mentor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>male protégé (participants)</td>
<td>159 (83.7%)</td>
<td>31 (16.3%)</td>
<td>190 (61.7%)</td>
</tr>
<tr>
<td></td>
<td>51.6%</td>
<td>10.1%</td>
<td></td>
</tr>
<tr>
<td>female protégé (participants)</td>
<td>44 (37.3%)</td>
<td>74 (62.7%)</td>
<td>118 (38.3%)</td>
</tr>
<tr>
<td></td>
<td>14.3%</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>203 (65.9%)</td>
<td>105 (34.1%)</td>
<td>308</td>
</tr>
</tbody>
</table>

The gender composition of mentoring dyads by occupation is provided in Table 12.

After coding for the four dyad subgroups, one-way ANOVAs were performed to determine the effects of age, tenure, education, rank, length of the relationship, and frequency of
Table 12

Gender Composition of Dyads by Occupation

<table>
<thead>
<tr>
<th>Occupation/Dyad</th>
<th>MM-MP</th>
<th>MM-FP</th>
<th>FM-FP</th>
<th>FM-MP</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total sample</td>
<td>159</td>
<td>44</td>
<td>74</td>
<td>31</td>
<td>308</td>
</tr>
<tr>
<td>Nurses</td>
<td>9</td>
<td>15</td>
<td>47</td>
<td>13</td>
<td>84</td>
</tr>
<tr>
<td>Medical Doctors</td>
<td>50</td>
<td>6</td>
<td>8</td>
<td>6</td>
<td>70</td>
</tr>
<tr>
<td>Health Care Administrators</td>
<td>34</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>41</td>
</tr>
<tr>
<td>Dentists</td>
<td>34</td>
<td>6</td>
<td>1</td>
<td>0</td>
<td>41</td>
</tr>
<tr>
<td>Health Service Officers</td>
<td>12</td>
<td>3</td>
<td>10</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>Medical Administration Officers</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Physiotherapists</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Social Workers</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

Note: There are four MM-FP and two FM-FP missing because respondents did not indicate their occupation. MM-MP = male protégé with a male mentor, MM-FP = female protégé with a male mentor, FM-FP = female protégé with a female mentor, and FM-MP = male protégé with a female mentor.
communications on dyad composition. Additional analyses were conducted, such as a chi-square test to assess the relationship between language and dyad, and ANOVAs to examine the representation of the four sample dyads by demographic variables.

**Age.** Analysis of variance revealed an almost significant difference in age across dyads ($F(3,305) = 2.473, \ p = .062)$. The means indicate that male protégés partnered with male mentors tended to be older ($M = 37.99, s.d. = 6.90$) and that female protégés partnered with male mentors tended to be younger ($M = 35.22, s.d. = 7.18$).

**Tenure.** A significant difference in tenure was found across dyads ($F(3,308) = 5.246, \ p < .01$). Tukey HSD's post hoc tests ($p < .05$) reveal the following differences: male protégés with male mentors ($M = 16.64, s.d. = 7.44$) had more years of service than female protégés with male mentors ($M = 12.61, s.d. = 5.87$) and more years of service than male protégés with female mentors ($M = 13.02, s.d. = 7.14$). In other words, male protégés in same-sex mentorships had significantly greater tenure than male and female protégés in cross-sex mentorships. Similarly to age, results suggest that female protégés partnered with male mentors tend to be the most junior in the organization, and consequently have the least amount of work experience compared to protégés in other dyads.

**Education.** A significant difference in education was found among the dyads ($F(3,304) = 14.198, \ p < .001$). Tukey HSD's post hoc tests ($p < .05$) revealed the following: male protégés partnered with male mentors ($M = 2.84, s.d. = 1.11$) had more education than male protégés partnered with female mentors ($M = 2.19, s.d. = .83$) and than female protégés partnered with female mentor ($M = 1.96, s.d. = .82$). Moreover, female proteges partnered with male mentors ($M = 2.43, s.d. = .97$) had more education than female protégés with female mentors. In other
words, protégés with higher education, whether they were male or female, tended to have male mentors. Education was measured on an ascending scale from "1" technical certificate/diploma to "4" doctorate.

**Rank.** A significant difference in rank was also found across dyads ($F(3,305) = 3.487, p < .05$). Tukey HSD's post hoc tests, however, did not reveal significant differences at the .05 level. Thus, it can only be concluded that there was a tendency for male protégés with male mentors to be higher ranked than male protégés with female mentors ($p = .065$). In other words, protégés with male mentors tended to be at a higher rank whereas their counterparts with female mentors tended to be at a lower rank level. Female protégés, on the other hand, did not differ in rank based on the gender of their mentor. Rank was measured on ascending scale from "1" Officer Cadet to "6" Colonel.

**Length of the relationship.** Although no significant effect was found with respect to the length of the mentorship, numbers seemed to indicate that same-sex mentorships engaged in longer relationships than cross-sex mentorships, with the shortest relationship held by male protégés with female mentors.

**Frequency of communications.** Finally, on the aspect of frequency of mentor-protégé interactions, respondents' ratings ranged from 1 "several times a week" to 5 "hardly ever". Protégés in cross-sex mentorships ($M = 2.04, s.d. = 1.20$) tended to report more frequent interactions compared to protégés in same-sex mentorships ($F(1,304) = 3.365, p = .068, M = 2.38, s.d. = 1.47$). Testing was conducted to determine whether there were any significant differences in frequencies of interactions across dyads. This was not the case. In other words, the fact that protégés in certain dyads expressed greater mentoring needs and reported receiving
more mentoring behaviours was not related to an increased frequency of communications between them and their mentor, but rather to the nature of the mentorship itself.

Language. Crosstabs revealed that the proportion of anglophones and francophones in each of the four dyads were equivalent ($\chi^2(3,308) = 2.729$, n.s.).

Additional analyses. Analyses were also conducted to examine gender of the protégé by language by seniority with gender of the mentor as the dependent variable. These analyses revealed an interaction effect of protégé gender by seniority. In other words, as the protégé's seniority increased, he or she engaged more frequently in same-sex rather than cross-sex mentoring relationships ($F(4,308) = 2.813, p < .05$). The same interaction effect was found with age: older protégés engaged more frequently in same-sex rather than cross-sex mentoring relationships ($F(4,308) = 2.552, p < .05$).

(12) The Role of Dyad Composition on Mentoring Needs and Occurrences

Analyses of covariance: Mentoring needs. A composite score was calculated for overall mentoring needs by computing the average of the six needs. The analysis of variance showed a significant dyad effect ($F(3,301) = 3.940$, $p = .009$). Analyses of covariance (ANCOVAs) were then performed on overall mentoring needs while controlling for age, tenure, language, rank, and education (five covariates). The same results were obtained ($F(3,292) = 3.985, p = .008$), thus indicating that the dyad effect was strong. Post hoc Dunnett T3 tests (Levene's test of equality of error variances was significant) revealed that female protégés with male mentors ($M = 3.64$, $s.d. = .47$) reported overall greater mentoring needs than male protégés with male mentors
(M = 3.32, s.d. = .72, p = .005) and than male protégés with female mentors (M = 3.27, s.d. = .49, p = .012).

The next step involved performing ANCOVAs on each of the dependent variables (mentoring needs factors) examining dyad composition (independent variable) and controlling for age, language, rank, tenure, and education as covariates. Results revealed significant dyad effects for the following mentoring needs: need for professional development (F (3, 294) = 4.068, p = .007), need for equal partnership (F (3, 296) = 4.182, p = .006), need for coaching on work (F (3, 297) = 3.598, p = .014), and need for role-modeling (F (3, 296) = 5.526, p = .001).

Post hoc comparisons were conducted using the Tukey HSD test when Levene's test of equality of error variances was not significant (that is, the error variance of the dependent variable is assumed to be equal across groups), and using Dunnett's T3 test when Levene's test was significant. For all of the factors specified above, namely professional development, equal partnership, coaching on work issues, and role-modeling, female protégés partnered with male mentors reported significantly stronger mentoring needs than male protégés partnered with male mentors. Female protégés who had a male mentor also expressed a significantly stronger need for equal partnership (and to a great extent for professional development) than male protégés who had a female mentor. Moreover, when female protégés were partnered with a female mentor, they reported significantly stronger mentoring needs for coaching on work issues as well.

---

6 The Tukey HSD method uses the Studentized range statistic to make all pairwise comparisons between groups and sets the experimentwise error rate to the error rate for the collection for all pairwise comparisons. The Dunnett's T3 test performs pairwise comparison tests based on the Studentized maximum modulus.
as role-modeling than male protégés with a male mentor, suggesting differential needs in same-
sex mentorships based on gender of the dyad. Hence, in no case did male protégés express
significantly stronger mentoring needs than female protégés for these four types of mentoring
needs, whether they were involved in a same-sex or cross-sex mentorships. A complete
description of means, standard deviations, and results of post-hoc tests on mentoring needs as a
function of dyad composition is provided in Table 13.

Recall that these results were obtained by categorizing dyads on the basis of "mentor 1".
To ensure that they were not due to chance, the same analyses were conducted using "mentor 2";
they are provided in Table 14. As with analyses conducted with the first mentor, the ANOVA
showed a significant dyad effect for overall mentoring needs ($F(3,243) = 3.642, p = .013$) and so,
too, did the ANCOVA controlling for age, tenure, language, rank, and education ($F(3,237) =
3.264, p = .022$), thus indicating that the dyad effect was also strong when using "mentor 2".
Post hoc Dunnett T3 tests revealed that female protégés with male mentors ($M = 3.61, s.d. = .42$)
reported overall greater mentoring needs than male protégés with male mentors ($M = 3.31,
s.d. = .66, p = .005$). Post hoc tests were also conducted on each of the mentoring needs with
"mentor 2". Except for one dyad effect which did not appear with the second mentor (on the
need for equal partnership), all the others were identical to the first set of analyses. This is strong
evidence for the generalizability of the findings obtained with "mentor 1".

Analyses of covariance: Mentoring occurrences. Subsequently, analyses were conducted
to examine whether the dyads who had reported greater mentoring needs differentiated on the
actual frequencies of mentoring received. As with mentoring needs, a composite score was
<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>MM - MP</th>
<th>MM - FP</th>
<th>FM - FP</th>
<th>FM - MP</th>
<th>Post Hoc Tests</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need for Professional development</td>
<td>3.12</td>
<td>3.59</td>
<td>3.42</td>
<td>3.12</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.006</td>
</tr>
<tr>
<td></td>
<td>(.85)</td>
<td>(.73)</td>
<td>(.69)</td>
<td>(.70)</td>
<td>MM-FP &gt; FM-MP</td>
<td>.058</td>
</tr>
<tr>
<td>Need for Career Coaching</td>
<td>3.15</td>
<td>3.45</td>
<td>3.22</td>
<td>3.03</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>(1.06)</td>
<td>(.83)</td>
<td>(.84)</td>
<td>(.94)</td>
<td>MM-FP &gt; FM-MP**</td>
<td>.003</td>
</tr>
<tr>
<td>Need for Equal Partnership</td>
<td>3.73</td>
<td>4.10</td>
<td>3.98</td>
<td>3.63</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>(.82)</td>
<td>(.52)</td>
<td>(.62)</td>
<td>(.56)</td>
<td>MM-FP &gt; FM-MP**</td>
<td>.025</td>
</tr>
<tr>
<td>Need for Friendship</td>
<td>2.63</td>
<td>2.64</td>
<td>2.68</td>
<td>2.52</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>(.90)</td>
<td>(.82)</td>
<td>(.84)</td>
<td>(.69)</td>
<td>FM-FP &gt; MM-MP*</td>
<td>.002</td>
</tr>
<tr>
<td>Need for Coaching on Work Issues</td>
<td>3.38</td>
<td>3.83</td>
<td>3.74</td>
<td>3.51</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>(.82)</td>
<td>(.53)</td>
<td>(.57)</td>
<td>(.71)</td>
<td>FM-FP &gt; MM-MP*</td>
<td>.012</td>
</tr>
<tr>
<td>Need for Role-modeling</td>
<td>3.76</td>
<td>4.22</td>
<td>4.22</td>
<td>3.84</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>(.93)</td>
<td>(.59)</td>
<td>(.56)</td>
<td>(.80)</td>
<td>FM-FP &gt; MM-MP**</td>
<td>.002</td>
</tr>
<tr>
<td>Overall Mentoring Needs</td>
<td>3.32</td>
<td>3.64</td>
<td>3.50</td>
<td>3.27</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>(.72)</td>
<td>(.47)</td>
<td>(.53)</td>
<td>(.49)</td>
<td>MM-FP &gt; FM-MP*</td>
<td>.012</td>
</tr>
</tbody>
</table>

Note. The sample for "mentor 1" was composed of 159 male mentors with male protégés (MM-MP), 44 male mentors with female protégés (MM-FP), 74 female mentors with female protégés (FM-FP), and 31 female mentors with male protégés (FM-MP), for a total of 308. Standard deviations appear in parentheses below each mean. Responses represent protégé ratings of mentoring needs. Post hoc tests were significant at * p < .05 and ** p < .01, except where indicated.
Table 14
Means, Standard Deviations, and Results of Post-Hoc Comparisons of Dyad Effects on Mentoring Needs (Mentor 2)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>MM - MP</th>
<th>MM - FP</th>
<th>FM - FP</th>
<th>FM - MP</th>
<th>Post Hoc Tests</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Need for Professional development</td>
<td>3.15</td>
<td>3.52</td>
<td>3.47</td>
<td>3.08</td>
<td>MM-FP &gt; MM-MP*</td>
<td>.047</td>
</tr>
<tr>
<td></td>
<td>(.82)</td>
<td>(.70)</td>
<td>(.77)</td>
<td>(.95)</td>
<td>FM-FP &gt; MM-MP</td>
<td>.082</td>
</tr>
<tr>
<td>Need for Career Coaching</td>
<td>3.11</td>
<td>3.40</td>
<td>3.29</td>
<td>3.17</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.009</td>
</tr>
<tr>
<td></td>
<td>(1.05)</td>
<td>(1.81)</td>
<td>(1.92)</td>
<td>(1.10)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for Equal Partnership</td>
<td>3.75</td>
<td>4.09</td>
<td>4.01</td>
<td>3.68</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.009</td>
</tr>
<tr>
<td></td>
<td>(.76)</td>
<td>(.54)</td>
<td>(.62)</td>
<td>(.92)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for Friendship</td>
<td>2.64</td>
<td>2.72</td>
<td>2.71</td>
<td>2.61</td>
<td>MM-FP &gt; MM-MP*</td>
<td>.021</td>
</tr>
<tr>
<td></td>
<td>(.88)</td>
<td>(.79)</td>
<td>(.82)</td>
<td>(.79)</td>
<td>FM-FP &gt; MM-MP*</td>
<td>.023</td>
</tr>
<tr>
<td>Need for Coaching on Work Issues</td>
<td>3.40</td>
<td>3.68</td>
<td>3.75</td>
<td>3.44</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>(.76)</td>
<td>(.45)</td>
<td>(.70)</td>
<td>(1.01)</td>
<td>FM-FP &gt; MM-MP*</td>
<td>.027</td>
</tr>
<tr>
<td>Need for Role-modeling</td>
<td>3.84</td>
<td>4.26</td>
<td>4.18</td>
<td>3.78</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>(.88)</td>
<td>(.53)</td>
<td>(.62)</td>
<td>(1.00)</td>
<td>FM-FP &gt; MM-MP*</td>
<td>.097</td>
</tr>
<tr>
<td>Overall Mentoring Needs</td>
<td>3.31</td>
<td>3.61</td>
<td>3.55</td>
<td>3.29</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>(.66)</td>
<td>(.42)</td>
<td>(.57)</td>
<td>(.86)</td>
<td>FM-FP &gt; MM-MP</td>
<td></td>
</tr>
</tbody>
</table>

Note. The sample using "mentor 2" was composed of 127 male mentors with male protégés (MM-MP), 44 male mentors with female protégés (MM-FP), 51 female mentors with female protégés (FM-FP), and 26 female mentors with male protégés (FM-MP), for a total of 248. Standard deviations appear in parentheses below each mean. Responses represent protégé ratings of mentoring needs. Post hoc tests were significant at * p < .05 and ** p < .01, except where indicated.
calculated for overall mentoring occurrences. The analysis of variance showed a significant dyad effect \( (E(3,277) = 2.979, p = .032) \). Analyses of covariance (ANCOVAs) were then performed with the same variables while controlling for the five covariates, namely age, language, rank, tenure, and education. The same results were obtained \( (E(3,268 = 2.664, p = .048) \), thus suggesting that the dyad effect was strong.

Post hoc comparisons were conducted using the Tukey HSD test when the Levene's test of equality of error variances was not significant and using the Dunnett's T3 test when it was. Post hoc Tukey HSD tests revealed that female protégés with male mentors reported overall greater mentoring frequencies \( (M = 2.77, s.d. = .69) \) than male protégés with female mentors \( (M = 2.28, s.d. = .75, p = .031) \), and to some extent, than male protégés with male mentors \( (M = 2.46, s.d. = .72, p = .074) \), and than female protégés with female mentors \( (M = 2.42, s.d. = .68, p = .077) \).

The next step involved performing ANCOVAs on each of the dependent variables (mentoring occurrences factors) examining dyad composition (independent variable) and controlling for the same five covariates. Results revealed significant dyad effects for the following mentoring occurrences: frequency of sponsorship and recognition \( (E (3,276) = 4.563, p = .004) \), frequency of role-modeling \( (E (3,276) = 4.618, p = .004) \), and to some extent frequency of coaching on work issues \( (E (3,280) = 2.627, p = .051) \).

For all of the three factors specified above, namely sponsorship and recognition, coaching on work issues, and role-modeling, female protégés partnered with male mentors reported receiving significantly more mentoring behaviours than male protégés partnered with male mentors. The same group, women who have a male mentor, also reported receiving more
sponsorship and recognition than the other two dyads, and more role-modeling than male protégés who have a female mentor. A complete description of means, standard deviations, and results of post-hoc tests on the mentoring occurrences is provided in Table 15.

There were no significant dyad effects on overall mentoring occurrences when analyses were conducted using "mentor 2" (ANOVA: $F(3,226) = 1.713, p = .165$, and ANCOVA controlling for age, tenure, language, rank, and education: $F(3,220) = 1.563, p = .199$). For the individual factors, findings on the mentoring occurrences with the second mentor were similar and in the same direction to those obtained with the first mentor, but only one comparison reached significance. These results are provided in Table 16. As illustrated in this table, female protégés with male mentors seemed to have the highest means on all of the mentoring occurrences factors compared to all the other dyads. The results obtained with the second mentor tend to corroborate the response pattern of those obtained with the first mentor.

Subsequent discussions of the comparison of mentoring needs and occurrences will focus on results of analyses conducted with the first mentor on two grounds: (1) the reasons mentioned above pertaining to the natural tendency one would have to start by describing the person who has most influenced our career and professional development; and (2) analyses performed with the first mentor consisted of a greater sample size than those with the second mentor (308 versus 248).

(13) Occupational Analyses

The distribution of mentoring needs and occurrences was examined in each occupational group. The differences were not beyond chance level. At the dyad level, cell sizes were too small to make any analysis reliable for several occupations.
Table 15

Means, Standard Deviations, and Results of Post-Hoc Comparisons of Dyad Effects on Mentoring Occurrences (Mentor 1)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>MM - MP</th>
<th>MM - FP</th>
<th>FM - FP</th>
<th>FM - MP</th>
<th>Post Hoc Tests</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of Professional development</td>
<td>2.17</td>
<td>2.36</td>
<td>2.10</td>
<td>2.05</td>
<td>MM-FP &gt; FM-MP**</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>(.70)</td>
<td>(.68)</td>
<td>(.66)</td>
<td>(.73)</td>
<td>MM-FP &gt; FM-FP**</td>
<td>.007</td>
</tr>
<tr>
<td>Frequency of Career Coaching</td>
<td>2.32</td>
<td>2.81</td>
<td>2.28</td>
<td>2.10</td>
<td>MM-FP &gt; MM-MP*</td>
<td>.010</td>
</tr>
<tr>
<td></td>
<td>(.90)</td>
<td>(.79)</td>
<td>(.74)</td>
<td>(.77)</td>
<td>MM-FP &gt; MM-MP</td>
<td></td>
</tr>
<tr>
<td>Frequency of Equal Partnership</td>
<td>2.81</td>
<td>3.16</td>
<td>2.81</td>
<td>2.66</td>
<td>MM-FP &gt; MM-MP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.90)</td>
<td>(.91)</td>
<td>(.90)</td>
<td>(.94)</td>
<td>MM-FP &gt; MM-MP</td>
<td></td>
</tr>
<tr>
<td>Frequency of Friendship</td>
<td>2.13</td>
<td>2.28</td>
<td>2.11</td>
<td>2.03</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.043</td>
</tr>
<tr>
<td></td>
<td>(.81)</td>
<td>(.82)</td>
<td>(.78)</td>
<td>(.73)</td>
<td>MM-FP &gt; MM-MP</td>
<td>.053</td>
</tr>
<tr>
<td>Frequency of Coaching on Work Issues</td>
<td>2.38</td>
<td>2.73</td>
<td>2.39</td>
<td>2.28</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.002</td>
</tr>
<tr>
<td></td>
<td>(.72)</td>
<td>(.70)</td>
<td>(.71)</td>
<td>(.78)</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.008</td>
</tr>
<tr>
<td>Frequency of Role-modeling</td>
<td>2.81</td>
<td>3.36</td>
<td>2.91</td>
<td>2.53</td>
<td>MM-FP &gt; MM-MP**</td>
<td>.061</td>
</tr>
<tr>
<td></td>
<td>(.87)</td>
<td>(.90)</td>
<td>(1.06)</td>
<td>(.98)</td>
<td>MM-FP &gt; MM-MP**</td>
<td></td>
</tr>
<tr>
<td>Overall Mentoring Frequencies</td>
<td>2.46</td>
<td>2.77</td>
<td>2.42</td>
<td>2.29</td>
<td>MM-FP &gt; MM-MP</td>
<td>.031</td>
</tr>
<tr>
<td></td>
<td>(.72)</td>
<td>(.69)</td>
<td>(.68)</td>
<td>(.75)</td>
<td>MM-FP &gt; MM-MP</td>
<td>.074</td>
</tr>
</tbody>
</table>

Note. The sample for "mentor 1" was composed of 159 male mentors with male protégés (MM-MP), 44 male mentors with female protégés (MM-FP), 74 female mentors with female protégés (FM-FP), and 31 female mentors with male protégés (FM-MP), for a total of 308. Standard deviations appear in parentheses below each mean. Responses represent protégé ratings of mentoring occurrences. Post hoc tests were significant at * p < .05 and ** p < .01, except where indicated.
Table 16
Means, Standard Deviations, and Results of Post-Hoc Comparisons of Dyad Effects on Mentoring Occurrences (Mentor 2)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>MM - MP</th>
<th>MM - FP</th>
<th>FM - FP</th>
<th>FM - MP</th>
<th>Post Hoc Tests</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency of Professional development</td>
<td>2.22</td>
<td>2.26</td>
<td>2.14</td>
<td>2.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.68)</td>
<td>(.69)</td>
<td>(.70)</td>
<td>(.71)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of Career Coaching</td>
<td>2.43</td>
<td>2.63</td>
<td>2.40</td>
<td>2.08</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.89)</td>
<td>(.77)</td>
<td>(.82)</td>
<td>(.85)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of Equal Partnership</td>
<td>2.90</td>
<td>3.17</td>
<td>2.81</td>
<td>2.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.87)</td>
<td>(.98)</td>
<td>(.87)</td>
<td>(.93)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of Friendship</td>
<td>2.18</td>
<td>2.32</td>
<td>2.05</td>
<td>2.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.83)</td>
<td>(.85)</td>
<td>(.73)</td>
<td>(.57)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of Coaching on Work Issues</td>
<td>2.43</td>
<td>2.62</td>
<td>2.45</td>
<td>2.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.71)</td>
<td>(.73)</td>
<td>(.75)</td>
<td>(.61)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of Role-modeling</td>
<td>2.94</td>
<td>3.39</td>
<td>2.91</td>
<td>2.51</td>
<td>MM-FP &gt; FM-MP**</td>
<td>.008</td>
</tr>
<tr>
<td></td>
<td>(.86)</td>
<td>(1.06)</td>
<td>(.99)</td>
<td>(.90)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Mentoring Frequencies</td>
<td>2.53</td>
<td>2.71</td>
<td>2.46</td>
<td>2.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.70)</td>
<td>(.72)</td>
<td>(.70)</td>
<td>(.68)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note.** The sample using "mentor 2" was composed of 127 male mentors with male protégés (MM-MP), 44 male mentors with female protégés (MM-FP), 51 female mentors with female protégés (FM-FP), and 26 female mentors with male protégés (FM-MP), for a total of 248. Standard deviations appear in parentheses below each mean. Responses represent protégé ratings of mentoring occurrences. Only one post hoc test was significant at **p < .01.
Table 12 revealed that nurses showed a disproportionate number of female protégés partnered with a female mentor. While this is to be expected in the nursing profession, it was important to verify whether results from nurses affected the overall results. A cursory examination of frequencies and descriptive statistics provided in Tables 3 and 4 reveals that nurses seemed no different from other occupations. Furthermore, their means on the various mentoring needs and mentoring occurrences sub-scales were similar to those of other occupations. However, when a separate category for "non-nurses" (i.e., all occupations except nurses) was created and the composite scores of nurses and non-nurses were compared for each mentoring needs and mentoring occurrences factor, results revealed that nurses differed from the non-nurses. Specifically, nurses expressed significantly greater needs for professional development ($M = 3.37, \text{ s.d.} = .76, p < .05$), equal partnership ($M = 3.99, \text{ s.d.} = .62, p < .01$), coaching on work issues ($M = 3.73, \text{ s.d.} = .64, p < .001$), role-modeling ($M = 4.08, \text{ s.d.} = .68, p < .01$), and overall mentoring needs ($M = 3.52, \text{ s.d.} = .54, p < .01$) compared to non-nurses ($M = 3.14, \text{ s.d.} = .90, M = 3.68, \text{ s.d.} = .87, M = 3.41, \text{ s.d.} = .85, M = 3.78, \text{ s.d.} = .97$, and $M = 3.29, \text{ s.d.} = .76$, respectively).

Although nurses as a group expressed greater mentoring needs, responses in the female protégé - female mentor dyads, which had the highest proportion of nurses, were not different from those of the non-nurses. Furthermore, when analyses of variance were conducted to compare the pattern of results on mentoring needs for dyads in the nurses group and the non-nurses, no difference was found. Consequently, although nurses expressed stronger mentoring needs than non-nurses, their responses did not affect the overall sample results at the dyad level.
With respect to mentoring occurrences, the pattern of responses for nurses was no different from that of the non-nurses. In other words, when differences were computed, none came out as significant.

DISCUSSION

The purpose of the first research question was to determine what constituted mentoring needs. This study has demonstrated the existence of six types of mentoring needs expressed by protégés in a work context, namely professional development (learning about professional values, about the organization and its political dynamics, and how to improve one's skills and knowledge), sponsorship and recognition (getting visibility, good press, and recognition for one's work), equal partnership (trusting the mentor, being able to discuss sensitive issues such as fears, mistakes and doubts), friendship (engaging in social interactions with the mentor as well as discussing personal issues, concerns, such as how to balance family and work conflicts), coaching on work issues (getting assistance on day-to-day work activities such as technical aspects or suggested work strategies, and receiving feedback on one's performance), and role-modeling (having a role-model with respect to leadership, ethics, values, and attitudes).

First, it is clear that the factor structure of mentoring needs does not support Kram's (1985a) two dimensional mentoring model, namely one composed of career development and psychosocial mentoring functions. Instead, mentoring needs were expressed in terms of a combination of career development and psychosocial functions within one dimension (given their high inter-correlations). In fact, an examination of Table 1 reveals that the six mentoring factors encompass the behaviours reported by other researchers, such as providing the protégé with
exposure and visibility, coaching on professional development issues, acting as a role-model, demonstrating acceptance and confirmation (equal partnership), and providing friendship.

However, this study also revealed that mentoring functions which protégés valued as important for their career and professional development were different from what they were currently receiving. Results illustrated that for each of the six types of mentoring functions, protégés reported receiving significantly less than what they needed. This finding raises a number of questions, such as the possible differential outcomes that could result from protégés receiving the mentoring benefits they believe they need. Given the recognized benefits of mentoring to the protégé, the mentor, and the organization alike, the significant gap between mentoring needs and occurrences found in this research provides further support for the assessment of mentoring needs as a valuable tool for organizational leaders. A substantial gap between needed mentoring behaviours and those currently provided to protégés may be a reflection of poor or inappropriate leadership, and may affect employee productivity and morale.

When protégés and non-protégés were compared, it was found that those who had not experienced the benefits of mentoring had lower mentoring needs than their mentored counterparts. This may explain why they did not seek out a mentor. Conversely, if non-protégés were approached by a mentor and started to experience the benefits from such a relationship, it is possible that, after time, their needs would increase. As expected, protégés in this study also reported receiving significantly more mentoring functions than non-protégés. This finding is consistent with the literature on mentoring which provides ample empirical evidence demonstrating that protégés experience more long term benefits compared to their non-mentored
counterparts (e.g., Chao & al., 1992; Dreher & Ash, 1990; Fagenson, 1988; Riley & Wrench, 1985; Whitely, Dougherty, & Dreher, 1991).

This research is the first to compare mentoring needs between protégés and non-protégés. Interestingly, protégés expressed stronger mentoring needs compared to their non-mentored counterparts. This may be because protégés had been exposed to the benefits of mentoring and therefore acknowledged its value. The only research which examined how protégés and non-protégés differed in terms of needs was conducted by Fagenson (1992, 1994), however, she examined manifest needs rather than mentoring needs. Using the Manifest Needs Questionnaire developed by Steers and Braunstein (1976), Fagenson found that protégés reported significantly higher needs for power and need for achievement compared to non-protégés. No differences were found on their needs for autonomy and for affiliation. One explanation for this phenomenon may be that mentors are performing the functions that match the needs of the protégés by enhancing their power and helping them achieve their career and development goals (Fagenson, 1988, 1989; Scandura, 1992). The link between mentoring needs and the need for power as well as the need for achievement will be discussed in the next chapter.

Having determined the nature of mentoring needs, the next important step was to examine how each mentoring need (and mentoring occurrence) varied as a function of demographic variables, especially gender composition of the dyad. This was the objective of the second research question.

As expected, initial analyses of variance on demographic variables revealed that mentoring needs decreased as respondents' age, tenure, rank, and education increased. The effect
was not as clear on mentoring occurrences. In most cases, age, tenure, rank, and education did not impact on reported mentoring frequencies.

One aspect of the cultural background of respondents, which was measured by their first official language, seemed to have an influence on mentoring occurrences but not on mentoring needs. Whereas francophones only reported a tendency to have a stronger need for friendship than anglophones, they indicated receiving significantly less mentoring than their counterparts, especially with regards to coaching on work issues, equal partnership, and friendship. Results do not support earlier findings by the writer (Knackstedt & Kwak, 1996). This study revealed that francophone Officer Cadets attending Military College reported greater expectations of being treated as a peer than anglophones, a mentoring behaviour equivalent to equal partnership in this study. Furthermore, the 1996 study revealed that anglophones reported greater expectations for role-modeling, counselling, and coaching behaviours than francophones. Nevertheless, the two populations cannot be deemed similar simply based on their military affiliation. Officer Cadets had served for an average of two years in the military whereas respondents in this study reported an average of 15 years of service and came from professional occupations. At the very least, the issue of language deserves further attention to ascertain whether cultural differences shape mentoring needs and occurrences.

Results revealed that women expressed greater mentoring needs than male respondents, supporting the conclusions drawn by Fitt and Newton (1981) from their interviews with female managers. Indeed, women require additional support to have access to senior organizational positions because they face more structural and systemic barriers than do men (Morrison et al., 1987; Ragins & Cotton, 1991). Consequently, they may be more prone to express these needs in
a mentoring relationship. With regards to mentoring occurrences, women indicated receiving more role-modeling than men. This partially supports Laviolette's (1994) and Burke's (1984) findings that women protégés were more likely than men to receive psychosocial mentoring benefits.

In contrast to protégé sex, the mentor's sex had no effect on reported mentoring needs. In terms of frequencies, however, male mentors were said to provide more sponsorship and recognition than female mentors. Most other studies, however, found no evidence that male mentors were associated with more career developmental functions than female mentors (e.g., Ragins & Cotton, 1999; Ragins & McFarlin, 1990; Struthers, 1995). An explanation for this finding cannot be based on mentor sex differences in age, frequency of communication with their protégés, nor hierarchical level. Male and female mentors were of the same age (on average), communicated with their protégés in the same frequencies, and were at the same hierarchical levels (in the same proportions). It is not clear why male mentors would provide their protégés with more sponsorship and recognition than female mentors. It is possible that such a phenomenon is best explained by examining the gender composition of the dyad.

As indicated in the introduction, the importance of determining the role played by the gender composition of the dyad was prompted by the work of Ragins (1995, 1997a, 1997b) on diversified mentoring relationships. This aspect was examined at length in the present study. Key findings emerged with regard to dyad composition of the mentoring relationship. First, the

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7 Incidentally, protégés in cross-sex mentorships reported a tendency to communicate more frequently with their mentor compared to those in same-sex mentorships. This could be a function of the way men and women communicate with each other, which may be different from communicating with a person of one's own sex. The increased frequencies of interactions could also be related to an emotional/physical attraction between the two sexes.
results provide quantitative evidence for dyadic effects in reported mentoring needs and reported mentoring occurrences. Specifically, *women protégés with male mentors* expressed stronger *needs* for professional development, equal partnership, coaching on work issues, and role-modeling compared to male protégés who had male mentors. Women protégés with male mentors also reported *receiving* more sponsorship and recognition, coaching on work issues, and role-modeling.

Logic would suggest that one needs what one does not receive, however, this reasoning does not seem consistent with the fact that non-protégés reported lower mentoring needs. Surprisingly, findings in the present study revealed that women protégés partnered with male mentors expressed greater mentoring needs and also reported receiving *more*. This may partially be explained in light of the need fulfilment theories. A *need* is generally defined as an internal state that makes certain outcomes appear attractive (Robbins, 1993). Tension is created when a need is unsatisfied. This stimulates internal drives within the individual to satisfy the need and consequently to reduce the tension. Based on an extensive review of motivational theories in the work context, Kanfer (1990) determined that the need-motive-value paradigm theories of motivation "emphasize the role of personality, stable dispositions, and values as a basis for behavioral variability" (p. 81). Some of the earlier research in this field was done by Maslow and Alderfer. Maslow's (1943, 1954) need hierarchy theory and Alderfer's (1969) existence-relatedness-growth theory focus on the relation between need fulfilment and need salience. Both theories posit that behaviour is directed toward the satisfaction of unmet needs ordered in a hierarchy. Maslow developed the "prepotency process principle" which states that individuals
must satisfy a lower order need prior to being motivated to attain the next higher need. Alderfer, on the other hand, proposed that the different need states could operate simultaneously.

According to both theories, individuals keep striving to eventually attain the highest level need, which is the self-actualization need (Maslow, 1943, 1954) or the growth need (Alderfer, 1969). Maslow's self-actualization need is defined as the drive to become what one is capable of becoming and includes aspects of growth, achieving one's potential, and self-fulfilment (Robbins, 1993). Alderfer's growth need is defined as an intrinsic desire for personal development (Robbins, 1993). The parallel between mentoring needs and higher order needs is quite apparent. Furthermore, Alderfer's theory addresses the need for relatedness, the desire to maintain important personal interpersonal relationships, which is also an integral part of the mentoring relationship.

Reinforcement theory (Skinner, 1953) may also explain why protégés express greater needs for mentoring after having received it. Positive reinforcement, a component of instrumental conditioning theory, postulates that the probability of the behaviour (for example, looking for a mentor or expressing mentoring needs) increases as the individual receives a positive reinforcement (such as the frequency of mentoring behaviours on the part of the mentor). In essence, as protégés receive mentoring and recognize how valuable it is to their career and professional development, they express a greater need to receive more.

Thus, the two need fulfilment theories suggest that individuals are never fully satisfied and strive for more, whereas reinforcement theory suggests that an individual will express greater needs after having experienced its benefits. In other words, the more one receives, the more one desires. Furthermore, results of this study revealed only positive correlations between mentoring
occurrences and mentoring needs, many of which were significant. Hence, instead of needing what one does not receive, this study has demonstrated that, for mentoring behaviours, protégés need more of what they are already receiving.

In addition to the positive relationship between mentoring needs and occurrences found in this study, an examination of dyad effects revealed that the female protégé - male mentor dyad had the highest level of mentoring needs and mentoring occurrences in every significant finding (see Tables 12 and 14). In fact, the female protégé - male mentor dyad also had the largest mean in almost all cases where significance was not found, except for the need for friendship. With regards to friendship, a distinct aspect of mentoring, no dyad effect was found on either mentoring needs nor occurrences. This suggests that friendship was felt to be an important aspect of the mentorship and that it occurred equally, regardless of the gender composition of the dyad.

Two issues need to be addressed. The first is why this particular dyad, women protégés who have male mentors, have the highest reports of mentoring needs and occurrences. The second is the relationship between mentoring needs and occurrences with regards to dyad effects.

In a thorough review of the literature on the linkages between diversity and organizational mentorship from a power perspective, Ragins (1997b) pointed out the importance of recognizing that "minority" groups (women in this case) have different developmental and career needs than men (Kanter, 1977), face discriminatory barriers to advancement (Ragins & Sundstrom, 1989), are often excluded from informal networks and role-modeling (Ibarra, 1993), and are alienated as minority members in organizations (Kanter, 1977). It is possible, then, that male mentors are cognisant of the realities their female protégés are facing in a workplace where the top echelons
are essentially male-dominated. Consequently, male mentors may attempt to meet their female protégés' needs by compensating for these barriers, such as providing them with more instrumental and psychosocial mentoring than they give their male protégés. For example, they may make additional efforts in providing women with sound advice on career moves, or teaching them about the informal politics of the organization normally obtained through the "old boys" networks (Ragins, 1989). They may also provide them with more role-modeling given the lack of female role models for female protégés in a male-dominated environment such as the military.

The other area of interest was the comparison of dyad effects between specific mentoring needs and occurrences. In order to make this comparison, t-tests of the differences between factor scores on both needs and occurrences measures were computed for the male mentor - female protégé dyad (i.e., six t-tests). All were significant at the .001 or .002 level, and friendship at the .014 level. In other words, for every type of mentoring function, women protégés who had a male mentor reported needing significantly more than what they received.

Next, results on Tables 12 and 14 were compared. For two mentoring functions, namely coaching on work issues and role-modeling, female protégés with male mentors reported significantly stronger needs and significantly greater frequencies of mentoring than male protégés with male mentors. In other words, women who had a male mentor received more coaching on work issues and more role-modeling and also reported needing more of these two types of mentoring functions, thereby illustrating the positive link between frequencies and occurrences for these two types of mentoring functions.

Conversely, although female protégés with male mentors expressed stronger needs for professional development and equal partnership than male protégés with male mentors, the two
mentoring functions were not reported as occurring significantly more for this dyad compared to other dyads. It is possible that for these two types of mentoring functions, the positive link between needs and occurrences is not as clear, although the means for the female protégé - male mentor dyad are the highest for both needs and occurrences.

Similarly, although female protégés who had a male mentor reported significantly more occurrences of sponsorship and recognition than the three other dyads, they did not express significantly greater needs for this type of mentoring behaviour (it must be noted that the mean for sponsorship and recognition was again the highest for the female protégé - male mentor dyad, albeit not significant). One possibility for this phenomenon is related to the explanation provided above: with regards to such aspects as learning about career moves, or getting recognition and visibility, for example, women may still hold the belief that hard work will earn them the recognition they deserve (Kanter, 1977). Being more politically astute, their male mentors might compensate by providing more coaching on career issues, thus explaining why more occurrences and not more needs are reported by their female protégés.

On the other hand, although female protégés partnered with male mentors expressed a greater need for professional development and equal partnership than the other dyads, this tendency was not statistically reflected in mentoring occurrences. Yet, the female protégé - male mentor dyad had the highest mean for these two types of mentoring functions on occurrences. Therefore the same pattern of high needs associated with high frequencies of mentoring functions seemed to repeat itself again for professional development and equal partnership.

The other key findings related to the gender composition issue were that female protégés with both male and female mentors expressed stronger needs for coaching on work issues and for
role-modeling than male protégés with male mentors. Thus, women protégés reported higher needs for these two types of mentoring behaviours, regardless of the sex of their mentor.

Finally, for most mentoring needs and for all mentoring occurrences, there seemed to be a pattern of lowest means for the male protégé - female mentor dyad. In other words, men who had female mentors seemed to express the lowest mentoring needs and reported receiving less mentoring than the other dyads. It is possible, as suggested by Erkut and Mokros (1984), that male protégés may be less likely to seek and value a mentor of the opposite gender than female protégés.

In sum, this study has identified six types of mentoring needs, namely professional development, sponsorship and recognition, equal partnership, friendship, coaching on work issues, and role-modeling. Given that researchers to date have almost exclusively examined mentoring prevalence, the investigation and operationalization of mentoring needs is a unique contribution. Results of this study have also illustrated that women protégés expressed substantially greater mentoring needs compared to their male colleagues, especially when their mentor was a man. Furthermore, it was found that male mentors provided more mentoring to their female protégés in contrast with the other three dyads. Finally, for two mentoring functions, coaching on work issues and role-modeling, women protégés expressed stronger needs regardless of their mentor's sex. Why is it then, that in every other significant case, women protégés with male mentors both expressed a greater need for mentoring and also reported receiving more mentoring than their peers? Are there any additional characteristics that may distinguish the female protégé who is partnered with a male mentor from the other dyads? In order to answer these questions, a follow-up study was conducted, which will be the object of the next chapter.
This research has raised a number of questions, which will be the object of a second study. The first goal will be to determine whether there are unique characteristics and attributes that distinguish the female protégé who has a male mentor from her counterparts, with the aim of understanding why this group generally expressed stronger mentoring needs and reported receiving more mentoring than the other dyads (excluding friendship). Two additional goals will be pursued, namely inquiring about which resource persons protégés select to meet specific career developmental and psychosocial needs, and examining whether the dyad composition impacts on career satisfaction.

Study 1 revealed that women who had a male mentor expressed stronger needs for professional development, equal partnership, coaching on work issues, and role-modeling than male protégés whose mentor was a man. Female protégés with male mentors also reported receiving more sponsorship and recognition, coaching on work issues, and role-modeling. It is quite apparent that the female protégé - male mentor dyad is different from the others.

When the situation is examined from the standpoint of the protégé alone, it must be noted that in all comparisons reaching significance, women protégés expressed stronger mentoring needs than male protégés. In Gilbert' s (1985) study conducted in an academic setting, women were found to rate the role-model relationship and the model's personal attributes and values as more important than their male counterparts. Furthermore, according to theories of women's career and personal development, women expect more benefits from their relationships at work.
than men (Powell & Maniero, 1992) and report "a greater reliance on work relationships as a source of development and learning" (Velsor & Hughes, 1990; cited in Ragins & Scandura, 1994, p. 960).

Another reason which may explain why women protégés expressed greater mentoring needs than their male colleagues could be women's propensity to be more vocal about their needs and desires than men. Much research on interactions between men and women has been conducted, including studies of self-disclosure in cross-gender relationships. Overall, studies have shown a tendency for men to be more self-disclosing to women than they are to other men (e.g., Deaux & Major, 1987). This is partly because they feel in competition with their male friends and because confiding in a male may be perceived as childish (West & Zimmerman, 1987). Furthermore, men talked at greater length to women than to men when the discussion was of an informal nature (Graddol & Swann, 1989), which supports the increased frequencies of cross-gender interactions found in the first study. A meta-analysis conducted by Dindia and Allen (1992) revealed that women disclosed more in cross-gender interactions than did men, however, the effect size was very small ($d = .08$). A thorough review of the literature on this subject led Aries (1996) to conclude that "the sex of the target mediates gender differences in self-disclosure" (p. 156) and that the frequency of interactions may be based on reciprocity. Reciprocity occurs when the self-disclosure of one person influences the other to match his or her level of self-disclosure (Spence & Sawin, 1985, cited in Aries, 1996). This would result in men disclosing more when interacting with women than they would with other males.

Thus, if women are indeed more prone than men to express their desires as a result of a learned socialization pattern, they may equally be more comfortable in openly discussing their
relationships and what they have derived from them. Consequently, women would also be more vocal in reporting mentoring occurrences than their male colleagues. Because it is difficult to measure the extent to which people are vocal when expressing their needs, a more objective measure is the extent to which they seek help. Consequently, the following research questions is posed:

**RQ1a**: Are women more inclined to seek help compared to men?

The answer to this research question does not clarify why the same pattern is not occurring with all mentoring functions, independently of the mentor's gender. Clearly, having a male mentor distinguishes the female protégé's response pattern from the other groups, including from her female counterparts partnered with female mentors. Therefore, it is necessary to address the following:

**RQ1b**: Are female protégés who have a male mentor more inclined to seek help compared to protégés in other dyads?

Another approach in attempting to explain the dyad effects consists of examining personal rather than demographic characteristics. Two phenomena may be occurring concurrently which may explain why female protégés with male mentors report significantly greater mentoring needs and occurrences than other dyads. First, it is possible that the women who are more ambitious than their colleagues seek out male mentors because they perceive men to hold more organizational power. Secondly, as women partnered with male mentors experience the benefits of mentoring, they learn to value and appreciate the outcomes they derive from their relationship with their male mentor. Consequently, these women are more prone to communicate greater needs for further mentoring behaviours.
Aries (1996) contends that the perception that men hold more power in the organization is nothing else than a product of our held stereotypes. A meta-analysis on how men and women evaluate male and female leaders has shown that women assigned to leadership roles and other stereotypically masculine roles will display the same behaviour as men (Eagly, Makhijani, & Klonsky, 1992). In spite of this fact, the social role theory developed by Eagly (1987; Eagly & Mladinic, 1989) suggests that our expectations play an important role on shaping men and women's behaviours: the expectations that men should be dominant and that women should be nurturant and expressive. Summarizing the extensive research she reviewed on this issue, Aries (1996) states: "We attribute masculine characteristics like intelligence and competence to men, and feminine characteristics like friendliness and sincerity to women, even when the behavior of men and women are identical. ... We expect and notice behavior that is gender stereotypic; it provides further confirmation for our beliefs. We give less salience to behavior that does not fit our stereotypes, or we develop a subtype of men and women to cover the exceptions, thereby keeping overall stereotypes in place." (p. 193).

Thus, men may be perceived as possessing more organizational power than women (c.f. review by Ragins & Sundstrom, 1989). Consequently, in many organizations, particularly in male-dominated ones such as the military, it is likely that employees perceive men as being more competent to teach them political savvy, as well as holding the power required to assist them in their career. Although male mentors were not associated with more career development in Ragins and Cotton's (1999) recent study, other studies in similar settings have found that male mentors provided more career development (Sosik & Godshalk, in press) and more instrumental mentoring (e.g., McGuire, 1999) than female mentors. Given that the tendency to view men as
holding power may still prevail, particularly in the military, the following hypotheses will be tested:

**H1a**: *Both male and female protégés select men as the ideal senior organizational members to discuss issues related to professional development, career advancement, and the political dynamics of the organization.*

**H1b**: *Both male and female protégés select men as the ideal senior organizational members whom they believe would have the power to influence their career.*

With regards to psychosocial functions, results have been inconsistent. Even though some research found that same-sex mentorships reported more psychosocial functions than cross-sex mentorships (Koberg et al., 1998), this was not always supported (Ensher & Murphy, 1997). Ragins and Cotton's (1999) extensive study of over 1000 professionals indicated a tendency for more psychosocial mentoring functions to occur in same-sex mentoring relationships, however, they failed to achieve significance. In fact, research in organizational settings found empirical evidence indicating that female protégés received more psychosocial functions when their mentor was a woman (Burke & McKeen, 1996), but this did not replicate for male protégés with male mentors (Sosik & Godshalk, in press).

Some effects have been noted when specific psychosocial functions were examined. Burke, McKeen, and McKenna (1990), for example, found that female mentors provided more friendship, counseling, and personal support in same-gender dyads than in any other dyad composition. Female mentors were also found to provide more counselling to both male and female protégés compared to male mentors. This supports the notion that female mentors may provide more psychosocial functions to women in general, while also providing more counseling
to both male and female protégés. However, recent research in this area has failed to find evidence for the above conclusions (e.g., Ensher & Murphy, 1997; Ragins & Cotton, 1999). Conversely, theories of social identity (Tajfel, 1978), the similarity attraction paradigm (Byrne, 1971) and the relational demography perspective (Tsui, Egan, & O'Reilly, 1989) would suggest that individuals are more comfortable and more prone to discuss personal issues with a person whom they would identify with, that is, of the same sex, thus favouring same-sex relationships when discussing personal issues. In light of inconsistent findings in this area so far, the hypotheses proposed are based on theoretical knowledge:

**H2a:** Male protégés select men as the preferred persons with whom to discuss personal issues.

**H2b:** Female protégés select women as the preferred persons with whom to discuss personal issues.

The same theories would also predict more perceived similarity, identification, and role-modeling in same-gender relationships. In other words, women would be more comfortable in seeking a female role-model and men would prefer a male role-model (Ricketts Gaskill, 1991). Several studies have not supported this hypothesis, however. For example, female mentors were found to provide more role-modeling to their protégés in same-sex and cross-sex mentorships compared to male mentors (Sosik & Godshalk, in press). In a study on undergraduates, male students were found to favour male role-models, even though they indicated having no gender preference (Gumbiner, 1998). The same-sex preference for a role-model was not evidenced with female students. Another recent study (Gibson & Cordova, 1999) consisting of in-depth interviews with men and women of varied ages, as well as surveys, found that even though men
indicated not having a gender preference for their role-model, they overwhelmingly chose male role-models. Women on the other hand, were as likely to identify both male and female role-models. What differentiated them were the specific attributes they looked for in a role-model. These studies were conducted in a mentoring context and examined dyad effects, which closely approximates the conditions of the present research. Consequently, in keeping with previous findings, the following hypotheses are posed:

**H2c**: *Women protégés select men and women equally as their role-models.*

**H2d**: *Male protégés select men as their role-models.*

In order to determine what distinguishes the female protégé with a male mentor from protégés in other dyads, specific characteristics or attributes will be measured. For example, it was intimated earlier that women who are more ambitious than their colleagues seek out male mentors because they perceive men to hold more organizational power. The literature has suggested that sex differences on achievement-related motives and behaviours are small to non-existent (Brief & Oliver, 1976; and Brief, Rose, & Aldag, 1977; both cited in Spence & Helmreich, 1983). However, it is hypothesized that women who are more ambitious than their colleagues purposely seek out powerful individuals in the organization who can have a direct influence on their professional development and career advancement, that is, male mentors senior to them. Thus, female protégés who are more ambitious may purposely select male mentors.

In addition to investigating whether ambition is related to the gender composition of the dyad, it was felt that mentoring needs and having a male mentor may also be linked to several of the manifest needs, such as the need for power and the need for achievement. A number of studies have indeed assessed manifest needs in a work setting (e.g., Parker & Chusmir, 1991) and
a few have linked them with mentoring (e.g., Fagenson, 1992). Steers and Braunstein (1976) developed the Manifest Needs Questionnaire which measured four types of needs in the work setting: (1) the need for power - also referred to as the need for dominance - (a desire to influence and control one's environment); (2) the need for affiliation (a desire for companionship, approval, and reassurance from others); (3) the need for autonomy (a desire to be in control and independent); and (4) the need for achievement (a desire to excel, accomplish challenging tasks, and seek feedback on one's performance). Several researchers (e.g., Fagenson, 1989, 1992; Hunt & Michael, 1983; Roche, 1978) postulated that protégés, compared to non protégés, would exhibit significantly more of the four manifest needs given the unique aspects of mentoring relationships. In fact, both the need for power and the need for achievement differentiated protégés from non-protégés. Fagenson (1992) found that protégés expressed greater needs for power and greater needs for achievement compared to their non-mentored counterparts. In an academic context, high autonomy needs predicted students' readiness to become protégés (Rice & Brown, 1990).

Individuals who have high ambitions also have strong needs for power (dominance) and achievement (Steers & Braunstein, 1976). Furthermore, the needs for achievement and for power are both positively related to success strivings for status/wealth and to professional fulfilment (Parker & Chusmir, 1991). If ambitious individuals seek out male mentors, and given that ambition is related to a strong need for power and achievement, those with a strong need for power and for achievement should also seek men as their mentors. In other words, if men are perceived as holding the power to provide benefits related to career success, those with higher
needs for power and achievement, including female protégés, will engage in a relationship with a male mentor.

A case could have been made for testing the need for affiliation and its link to mentoring and dyad composition. This was purposely left out because the measure's internal consistency coefficient has repeatedly been low (e.g., Fagenson, 1992; Parker & Chusmir, 1991). In fact, Dreher and Mai-Dalton (1983) conducted a review of studies in which the Manifest Needs Questionnaire was reported and found the reliability estimates for the need for affiliation scale ranging from -.17 to .56, with the majority below .30, thus warranting caution with regards to its use.

Lastly, given that competitive people are described as those who enjoy interpersonal competition, have a great desire to win and be better than others (Spence & Helmreich, 1983), it is argued that competitive people also have strong needs for achievement, and perhaps for power, and thus would likely engage in mentoring relationships with male mentors. Consequently, based on previous research and theory, the following hypothesis is posed, summarizing the above discussion:

**H3: Female protégés who have a male mentor are more ambitious, have a greater need for power, have a greater need for achievement, and are more competitive than protégés in other dyads.**

Finally, although career satisfaction has been positively linked to mentoring (Koberg, Boss, Chappell, & Ringer, 1994; Riley & Wrench, 1985; Roche, 1979) and other career outcomes such as job performance and promotions (Greenhaus, Parasuraman, & Wormley,
1990), it has not yet been examined with a dyadic perspective. This warrants the second research question:

**RQ2**: Do reports of career satisfaction vary as a function of dyad composition?

Thus, the next study, which will be conducted using the same population of military health care professionals, will attempt to explain the tendency for female protégés who have a male mentor to express greater mentoring needs and report receiving more mentoring functions compared to the other dyads. To answer this question, several characteristics will be examined, namely ambition, competitiveness, need for power, and need for achievement, to ascertain, for example, whether they are linked with having a male mentor and the beliefs of who holds the power in an organization. Other issues will be examined as well, such as the propensity for women to engage in help-seeking behaviours, and the link between overall career satisfaction and dyad composition.

To summarize, in order to further the understanding of mentoring needs from the protégé's perspective, the goals of the second study were essentially three-fold: (1) to get a better understanding of any unique characteristics and attributes of the female protégé - male mentor dyad; (2) to inquire about which resource persons protégés would select to meet their mentoring needs related to specific career developmental and psychosocial issues; and (3) to examine career satisfaction as a function of dyad composition. The sample consisted of military health care professionals who may have participated in the first study, thus, there was an element of retest.
METHOD

Test Instrument and Measures

As in the previous study, an information sheet on mentoring was provided. A copy of the covering letter along with the questionnaire are provided in Appendix D.

In addition to mentoring needs, the questionnaire inquired about current occurrences of mentoring functions, a description of the participants' most influential mentor, a number of attributes related to ambition and career satisfaction, what individuals they would approach for specific needs, and finally any suggestions or feedback they had about mentoring, the survey, or other general aspects which concerned them.

Similar to the first questionnaire, the first page of the mentoring survey provided a definition of the following terms: "mentoring", "mentor", and "protégé". It was divided into eight parts: (1) mentoring needs; (2) current mentoring situation; (3) experience as a protégé; (4) personal attributes; (5) career satisfaction; (6) resource persons; (7) demographic information; and (8) feedback and suggestions.

Mentoring needs. The revised mentoring needs measure, which contained 45 items (rather than 75) was used. Recall that the shortened version was derived from the factor analysis described in Chapter 2. The items used are those presented in Table 5 and a copy of the questionnaire is provided in Appendix D. Participants rated mentoring needs on a five-point Likert-type scale ranging from 1 = "not at all important" to 5 = "very important".

Psychometric properties of the mentoring needs and mentoring occurrences sub-scales were found to be as good as those of the first study. Internal consistency coefficients for mentoring needs ranged from .77 to .93 with an overall Cronbach alpha of .96. Internal
consistency coefficients for mentoring occurrences ranged from .76 to .95 with an overall Cronbach alpha of .97. Specifically, Cronbach alphas for each of the mentoring factors, first needs followed by occurrences, were as follows: (1) professional development: .92, .93; (2) sponsorship and recognition: .87, .87; (3) equal partnership: .93, .95; (4) friendship: .77, .76; (5) coaching on work issues: .86, .87; and (6) role-modeling: .78, .87.

Current mentoring situation. As for the first study, participants rated the current frequency of each mentoring behaviour on the same 45 items, using a five-point Likert-type scale ranging from 1 = "never" to 5 = "very frequently".

Experience as a protégé. In this section, participants were requested to provide information about the person who had the greatest influence on their career and professional development (they may or may not have referred to this person as a mentor). Information such as gender, age, status, hierarchical level, supervisory relationship, distance, state of the relationship, and frequency of communications were gathered.

Personal attributes. This section of 24 questions contained items measuring five constructs, namely: (1) need for power; (2) need for achievement; (3) competitiveness; (4) ambition; and (5) help-seeking behaviours. Items for the constructs were randomly ordered. They were all rated using a five-point Likert-type scale ranging from 1 = "strongly agree" to 5 = "strongly disagree", and several were reverse-coded. Thus, a high score meant lower levels for each of the above attributes.

Need for power. This measure, also termed need for dominance, was developed by Steers and Braunstein (1976) as part of a larger instrument, the Manifest Needs Questionnaire, which was designed to measure needs in work settings. The authors reported an internal consistency
coefficient of .83 using a sample of management students who were working full- or part-time in a variety of jobs. Examples of items include: "I seek an active role in the leadership of a group" and "I strive to gain more control over the events around me at work". The need for power measure has since been used by a number of researchers. Parker and Chusmir (1991), for example, report a coefficient alpha of .75 using workers in a variety of service industries. With regards to mentoring, one study found protégés to express a significantly stronger need for power than non-protégés (Fagenson, 1992). The author reported an alpha coefficient of .84 based on a sample of individuals working in two service companies. For the present study, the alpha coefficient was .67 for the five items, which is considered acceptable. According to Nunnally and Bernstein (1994), the internal consistency coefficient should, at the very minimum, exceed .40 so as to explain at least 15% of the variance. Furthermore, a coefficient of .65 is usually recommended in order to make any inferences, and of .70 to generate any conclusions.

**Need for achievement.** This measure was also developed by Steers and Braunstein (1976) as part of the Manifest Needs Questionnaire, with a reported internal consistency coefficient of .66. Examples of items include: "I do my best work when my job assignments are fairly difficult" and "I try to perform better than my co-workers". Reported alpha coefficients for this measure were similar, namely .62 in a study by Parker and Chusmir (1991) and .69 in one by Fagenson (1992). For this study the alpha coefficient was .58 for the five items.

**Competitiveness.** This measure was developed by Spence and Helmreich (1983) and describes "the enjoyment of interpersonal competition and the desire to win and be better than others" (p. 41). Examples of items include: "It annoys me when other people perform better than
I do" and "I feel that winning is important in both work and games". In this survey, the internal consistency coefficient was .66 for the five items.

**Ambition.** A measure of ambition was developed for this study and consisted of the following four items: "My goal is to reach the highest rank which is possible given my occupation"; "It is more important for me to be satisfied with my job than to get promoted quickly" (reverse-coded); "The responsibilities associated with a promotion are not worth it" (reverse-coded); and "I consider myself as very ambitious". The internal consistency coefficient here was .54.

**Help-seeking behaviours.** This measure was also developed specifically for this study and consisted of the following five items: "At work, I am more likely to ask for help when I need it rather than try and deal with it on my own"; "When I have worries or concerns at work, it is important for me to share them with someone I trust"; "I prefer dealing with my problems and concerns myself rather than ask anyone to get involved" (reverse-coded); "I am comfortable in consulting a person senior in rank when I need help"; and "I don't mind approaching someone I trust at work to assist me with a difficult situation I am experiencing". The internal consistency coefficient was .42. Consequently, inferences made from this scale will have to be made with some caution.

**Career satisfaction.** In this section, participants were requested to rate the extent to which they were satisfied with various aspects of their career progression. The measure was developed by Greenhaus, Parasuraman, and Wormley (1990) using a large sample of managers and supervisors from various industries. They report an alpha coefficient of .88. Examples of items include: "I am satisfied with the success I have achieved in my career" and "I am satisfied with
the progress I have made toward meeting my goals for the development of new skills". Two additional items were developed and added to the scale, namely "I am satisfied with the level and scope of my responsibilities" and "I am satisfied with my future opportunities for advancement". In this study, the internal consistency coefficient for the five original items was .85, and .86 for the seven items. It was thus decided to keep the two additional items as part of the career satisfaction measure for further analyses.

Skewness values for the six additional scales (the five personal attributes and career satisfaction) ranged from -1.908 to 1.675 ($M = 0.422$) and kurtosis values ranged from -1.447 to 3.476 ($M = -0.093$). The highest kurtosis value (3.476) was associated with the following item "It is more important for me to be satisfied with my job than to get promoted quickly". The majority of respondents (89.4%) answered that they agreed with this sentence, explaining the item's strong kurtosis. The only other item with a high kurtosis (3.225) was "I try very hard to improve on my past performance at work", which reacted similarly: 88.5% answered agreeing with this statement. Overall, the skewness and kurtosis values for the instrument's measures were considered acceptable.

**Resource persons.** Part 6 of the questionnaire asked respondents to indicate who they would select, trust, and approach for specific career developmental and psychosocial needs. For each issue, the respondent indicated: (1) whether the selected person is, has been, or never was the protégé's supervisor; (2) the person's hierarchical level compared to the protégé's; and 3) the person's sex. The seven types of issues inquired about were: professional development, career advancement, work related issues, role-modeling, political dynamics and/or informal power
structure at higher levels of the organization, personal issues, and having the power to assist the protégé in his/her career.

Demographic information. Information about the participants’ gender, age, official language, rank, military element (Army, Navy, or Air), occupation, tenure, and education were gathered in this section.

Feedback and suggestions. The final part allowed participants to provide qualitative feedback, comments, or suggestions with regards to the issue of mentoring for military health care professionals or any concerns they wished to raise.

Participants

As in the previous study, participants represented military health care professionals from the nine following professions: medical doctors, nurses, physiotherapists, dentists, pharmacists, health care administrators, medical administration officers (in non military terms: biomedical professionals), and health services officers. A total of 162 respondents participated in the second survey.

Respondents were on average 38.94 years old (s.d. = 7.87, ranging from 23 to 55 years), had served 16.62 years in the military (s.d. = 7.11, ranging from 2.5 to 35 years), and consisted of 60.4% males (aged 39.74, s.d. = 7.21, ranging from 23 to 55 years), 40.9% females (aged 37.75, s.d. = 8.68, ranging from 23 to 54 years), 68.8% anglophones and 31.2% francophones. There were 45.8% of the participants in the Army, 35.9% in the Air force, and 18.3% in the Navy. They served as medical doctors (14.7%), nurses (30.1%), physiotherapists (5.8%), dentists (0.6%), pharmacists (5.1%), health care administrators (28.2%), medical administration officers (6.4%), and health services officers (9.0%). In increasing order of authority, they were composed
of officer-cadets and second-lieutenants (4.1%), lieutenants (10.1%), captains (51.4%), majors (27.7%), lieutenant-colonels (6.1%), and colonels (0.7%). One out of five participants (20.1%) had completed a technical certificate/diploma or college diploma, 57% held a university degree, 8.7% a master's degree, and 14.1% a doctorate degree. Overall, the proportion of respondents by age, language, rank, and environment was essentially identical to that of the first study, and relatively equivalent to that of the total population of military health care professionals as well as of the Canadian Forces. Again, there was a greater proportion of women in the health care professions compared to the Canadian Forces as a whole. Moreover, the level of education of the respondents in the second study was slightly lower than that of the first study. This is probably attributable to the sampling method which was not able to incorporate social workers (and only one dentist) in the second study.

Finally, 69.4% of respondents indicated having participated in a mentoring survey within the last two years (study 1, in all likelihood). It was not possible to match participants of the two studies, however, because the same alpha-numeric codes were used by more than one respondent in the first study. Basic frequencies and descriptives were computed to compare both groups, namely those had previously taken part in a mentoring study and those who participated for the first time. The only notable difference was related to the number of mentors: those who partook in a previous mentoring study reported having more mentors ($M = 2.19$, $s.d. = 1.24$) than respondents who did not ($M = 1.57$, $s.d. = 1.73$). Several explanations may account for this: (1) a chance effect; (2) repeat participants were perhaps more familiar with the concept of mentoring and thus, were able to better identify those who had served as mentors in their career; or (3) those with no mentors were less likely to participate in Study 1.
Procedure

Questionnaires were made available to over 300 military health care officers who took part in a major conference on operational medical readiness. During this conference, they received an informative presentation on mentoring. The officers were encouraged to complete the survey (which would take them approximately 15 to 20 minutes). The questionnaire was accompanied with a covering letter signed by the Medical Branch Advisor, as well as a more detailed factual sheet about mentoring. Their participation was voluntary, no incentives were offered, and their anonymity and confidentiality were guaranteed. They were also assured that the results, in an aggregate format, would subsequently be published in their monthly bulletin.

Participants were asked to return the sealed envelope in a box designed to that effect. The box was emptied every hour. Of the officers present at the conference, 74 returned the filled questionnaire (for an initial return rate of 24.7%).

Many officers indicated that they were too busy to complete the questionnaire at the conference and suggested it be sent to their home base. Consequently, questionnaires (with the same covering letter and a pre-addressed return envelope) were sent to the four biggest military medical bases in Canada, and a coordinator on each base was in charge of distributing them. Furthermore, each occupational advisor was contacted by the researcher to reiterate the importance of this study. Most occupational advisors took it upon themselves to send an e-mail to their personnel encouraging their participation while also reminding them it was voluntary, anonymous, and that their non participation had no career impact. The second data gathering procedure yielded an additional 88 returns, for a total of 162 completed surveys.
Data Analysis

Preliminary Analyses. Preliminary analyses were first conducted in order to detect missing data and outliers, as well as to ensure acceptable levels of skewness and kurtosis.

Statistical Analyses. Confirmatory factor analyses on both the mentoring needs and mentoring occurrences scales could not be performed because such a procedure requires a larger sample size, usually over 200 (Bentler & Chou, 1987; MacCallum, 1986, 1998). Therefore the internal consistency coefficients for each sub-scale and the overall mentoring scales were calculated to ensure they were acceptable and replicated those in the first study.

Zero-order correlations were then computed and examined to assess the general pattern of relationships among the study variables. Next, analyses of covariance (ANCOVAs) were conducted on each of the dependent variables (ambition, competitiveness, help-seeking behaviours, need for power, need for achievement, and career satisfaction) to examine gender composition of the mentoring dyad while controlling for age, language, tenure, education, and rank as covariates. Again, the dyad variable was composed of four categories: (1) male protégé with male mentor; (2) female protégé with male mentor; (3) female protégé with female mentor; and (4) male protégé with female mentor. Finally, analyses on other aspects of the questionnaire were performed, such as those pertaining to the profile of respondents' mentors or the resource person they approached for specific mentoring needs.

RESULTS

Results will be presented in the following order: (1) help-seeking behaviours; (2) resource persons meeting the career developmental and psychosocial needs of protégés; (3) the effects of
personal attributes on dyad composition; (4) the effects of dyad composition on career satisfaction; and (5) additional findings.

The sample included 28 (21.2%) cross-sex mentorships and 104 (78.8%) same-sex mentorships. Proportions of dyad compositions were equivalent to the first study as well as other studies (e.g., Sosik & Godshalk, in press), although studies conducted with health care professionals revealed a somewhat greater proportion of cross-sex mentorships (36% in Koberg et al., 1998). Specifically, dyads for the second study were composed as follows:

<table>
<thead>
<tr>
<th></th>
<th><strong>male mentor</strong></th>
<th><strong>female mentor</strong></th>
<th><strong>Total</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>male protégé</td>
<td>66 (83.5%)</td>
<td>13 (16.5%)</td>
<td>79 (59.8%)</td>
</tr>
<tr>
<td>(respondent)</td>
<td>81.4%</td>
<td>25.5%</td>
<td></td>
</tr>
<tr>
<td>female protégé</td>
<td>15 (37.3%)</td>
<td>38 (62.7%)</td>
<td>53 (38.3%)</td>
</tr>
<tr>
<td>(respondent)</td>
<td>18.5%</td>
<td>74.5%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td><strong>81 (61.4%)</strong></td>
<td><strong>51 (38.6%)</strong></td>
<td><strong>132</strong></td>
</tr>
</tbody>
</table>

Correlational tables are provided at this stage because they will be useful in answering several research questions and hypotheses. Table 17 presents the means, standard deviations, as well as the correlations among the six mentoring **needs** factor scores, the additional variables of this study (need for power, need for achievement, competitiveness, ambition, help-seeking behaviours, and career satisfaction) and demographic variables (gender, age, first official language, rank, number of years in the military, and education). Table 18 represents the same correlations, but with the six mentoring **occurrences** factor scores. Analyses at the dyad level at the occupational level was deemed inappropriate given the small number of cases by category.
Table 17

Means, Standard Deviations, and Intercorrelations of Study Variables and Mentoring Needs Factors (N = 162)

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>6</th>
<th>7</th>
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<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Sex</td>
<td>1.41</td>
<td>0.49</td>
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<tr>
<td>2.Age</td>
<td>38.56</td>
<td>7.55</td>
<td>-1.19</td>
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<tr>
<td>3.Lang</td>
<td>1.31</td>
<td>0.46</td>
<td>.049</td>
<td>-0.57</td>
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<tr>
<td>4.Rank</td>
<td>3.22</td>
<td>0.86</td>
<td>-0.65</td>
<td>.493**</td>
<td>.035</td>
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<tr>
<td>5.Tenure</td>
<td>16.56</td>
<td>6.81</td>
<td>-2.45**</td>
<td>.806**</td>
<td>-1.32</td>
<td>.458**</td>
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<td>6.Educ</td>
<td>2.15</td>
<td>0.92</td>
<td>-0.75</td>
<td>-0.27</td>
<td>-0.95</td>
<td>.340**</td>
<td>-0.08</td>
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<tr>
<td>7.NPD</td>
<td>3.41</td>
<td>0.78</td>
<td>.139</td>
<td>-3.28**</td>
<td>.137</td>
<td>-0.204*</td>
<td>-2.92**</td>
<td>-0.028</td>
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<tr>
<td>8.NSR</td>
<td>3.42</td>
<td>0.94</td>
<td>.012</td>
<td>-1.31</td>
<td>.066</td>
<td>-1.197*</td>
<td>-0.085</td>
<td>-0.35</td>
<td>.510**</td>
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<td>9.NF</td>
<td>2.85</td>
<td>0.85</td>
<td>-0.002</td>
<td>-1.92*</td>
<td>.314</td>
<td>-1.46</td>
<td>-2.00*</td>
<td>.107</td>
<td>.641**</td>
<td>.496**</td>
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<tr>
<td>10.NEP</td>
<td>3.99</td>
<td>0.71</td>
<td>.178*</td>
<td>-0.207*</td>
<td>.025</td>
<td>-1.48</td>
<td>-1.183*</td>
<td>-0.036</td>
<td>.656**</td>
<td>.507**</td>
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<tr>
<td>11.NCW</td>
<td>3.74</td>
<td>0.63</td>
<td>.152</td>
<td>-1.74*</td>
<td>.037</td>
<td>-2.37**</td>
<td>-1.52</td>
<td>-0.092</td>
<td>.676**</td>
<td>.670**</td>
<td>.620**</td>
<td>.751**</td>
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<tr>
<td>12.NRM</td>
<td>4.08</td>
<td>0.71</td>
<td>.264**</td>
<td>-0.015</td>
<td>.015</td>
<td>-0.099</td>
<td>-1.13</td>
<td>-0.87</td>
<td>.600**</td>
<td>.462**</td>
<td>.704**</td>
<td>.594**</td>
<td>-1.10</td>
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<tr>
<td>13.Comp</td>
<td>3.36</td>
<td>0.75</td>
<td>.155</td>
<td>.227**</td>
<td>.051</td>
<td>.046</td>
<td>.199*</td>
<td>-0.040</td>
<td>-1.190*</td>
<td>-1.197*</td>
<td>-1.287**</td>
<td>-1.175*</td>
<td>-1.223**</td>
<td>-1.110</td>
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<tr>
<td>14.NPow</td>
<td>2.41</td>
<td>0.70</td>
<td>.140</td>
<td>.082</td>
<td>.070</td>
<td>-1.137</td>
<td>.001</td>
<td>-2.38**</td>
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<td>-2.50**</td>
<td>-2.08*</td>
<td>-1.34</td>
<td>-1.044</td>
<td>.408**</td>
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<td>15.NAch</td>
<td>2.28</td>
<td>0.63</td>
<td>.000</td>
<td>.088</td>
<td>-0.046</td>
<td>.004</td>
<td>.048</td>
<td>.064</td>
<td>-1.177*</td>
<td>-2.69**</td>
<td>-0.086</td>
<td>-1.127*</td>
<td>-2.36**</td>
<td>-1.105</td>
<td>.474**</td>
<td>.433**</td>
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<td></td>
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<tr>
<td>16.Ambit</td>
<td>3.23</td>
<td>0.77</td>
<td>.034</td>
<td>.272**</td>
<td>.037</td>
<td>.166*</td>
<td>.142</td>
<td>.089</td>
<td>-2.65**</td>
<td>-2.38**</td>
<td>-2.27**</td>
<td>-2.46**</td>
<td>-2.12*</td>
<td>-1.163</td>
<td>.467**</td>
<td>.342**</td>
<td>.372**</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>17.Help</td>
<td>2.37</td>
<td>0.57</td>
<td>-0.011</td>
<td>.068</td>
<td>-0.09</td>
<td>-0.094</td>
<td>.090</td>
<td>-0.084</td>
<td>-1.126</td>
<td>-0.090</td>
<td>-1.174*</td>
<td>-1.115</td>
<td>-1.181*</td>
<td>-0.070</td>
<td>.052</td>
<td>.137</td>
<td>.178*</td>
<td>-0.035</td>
<td>---</td>
</tr>
<tr>
<td>18.CarSat</td>
<td>2.34</td>
<td>0.82</td>
<td>-0.037</td>
<td>-.092</td>
<td>-1.136</td>
<td>-2.79**</td>
<td>1.01</td>
<td>-0.91</td>
<td>.000</td>
<td>.225**</td>
<td>.078</td>
<td>.118</td>
<td>.118</td>
<td>.023</td>
<td>-1.133</td>
<td>-.067</td>
<td>-.028</td>
<td>-.064</td>
<td>.148</td>
</tr>
</tbody>
</table>

Note: Sex was coded 1 for males and 2 for females. Language was coded 1 for English and 2 for French. Rank was coded from 1 (Officer Cadet) to 6 (Colonel). Tenure represented number of years in the service. Education was coded from 1 (technical diploma) to 4 (doctorate). NPD = need for professional development. NSR = need for sponsorship and recognition. NEP = need for equal partnership. NF = need for friendship. NCW = need for coaching on work issues. NRM = need for role-modeling. Comp = Competitiveness. NPow = Need for power. NAch = Need for achievement. Ambit = Ambition. Help = Help-seeking behaviours. CarSat= Career satisfaction. Mentoring needs variables were rated from 1 "not at all important" to 5 "very important". Variables Comp to CarSat were rated from 1 "strongly agree" to 5 "strongly disagree". Correlations were significant at *p<.05 and **p<.01.
Means, Standard Deviations, and Intercorrelations of Study Variables and Monitoring Outcome Factors (N = 162)

Table 18
(1) Help-Seeking Behaviours

RQ1a: Are women more inclined to seek help compared to men?

The first research question inquired about women's propensity to seek help compared to men. An initial examination of Table 17 reveals that participants' sex was not related to help-seeking behaviours. Furthermore, the ANOVA examining the effect of sex on help-seeking behaviours revealed no significant effect: women were not more prone to seek help than men. In fact, the means for help-seeking behaviours were practically identical (men: $M = 2.34, \text{s.d.} = .61$ and women: $M = 2.33, \text{s.d.} = .51$), thus revealing more similarities than differences among the sexes.

RQ1b: Are female protégés who have a male mentor more inclined to seek help compared to protégés in other dyads?

Next, an ANCOVA controlling for age, language, rank, tenure, and education to examine the effect of dyad composition on help-seeking behaviours was conducted and revealed to be non significant. Therefore, women who had a male mentor were not more prone to seek help than protégés in other dyads.

(2) Resource Persons Meeting the Career Developmental and Psychosocial Needs of Protégés

A section of the questionnaire ascertained who the respondent would ideally approach in specific situations, and some of the characteristics of that person. Table 19 provides a summary of the frequencies in percentages for each issue. About half of the respondents consulted a resource person who was currently their supervisor or had previously been. This was the case for every type of issue. Interestingly, a large proportion of respondents (ranging from 40.8% to 54.8%) consulted resource persons who had never been their supervisor, for all types of issues.
Table 19

Frequencies of Responses (in Percentages) Related to Resource Persons Consulted on Seven Issues (N = 162)

<table>
<thead>
<tr>
<th></th>
<th>PD</th>
<th>CA</th>
<th>WI</th>
<th>RM</th>
<th>PP</th>
<th>PI</th>
<th>PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current supervisor</td>
<td>29.9</td>
<td>23.9</td>
<td>43.8</td>
<td>13.6</td>
<td>22.6</td>
<td>24.7</td>
<td>27.3</td>
</tr>
<tr>
<td>Previous supervisor</td>
<td>29.3</td>
<td>25.2</td>
<td>16.3</td>
<td>35.0</td>
<td>26.7</td>
<td>20.5</td>
<td>20.1</td>
</tr>
<tr>
<td>Never been supervisor</td>
<td>40.8</td>
<td>51.0</td>
<td>40.0</td>
<td>51.4</td>
<td>50.7</td>
<td>54.8</td>
<td>52.5</td>
</tr>
<tr>
<td>Same hierarchical level</td>
<td>9.0</td>
<td>10.5</td>
<td>19.0</td>
<td>10.6</td>
<td>7.6</td>
<td>30.8</td>
<td>4.3</td>
</tr>
<tr>
<td>One level higher</td>
<td>52.9</td>
<td>47.1</td>
<td>57.6</td>
<td>46.1</td>
<td>45.1</td>
<td>44.5</td>
<td>44.3</td>
</tr>
<tr>
<td>Two levels higher</td>
<td>32.9</td>
<td>34.0</td>
<td>22.2</td>
<td>32.6</td>
<td>36.1</td>
<td>21.2</td>
<td>38.6</td>
</tr>
<tr>
<td>Three levels higher</td>
<td>3.2</td>
<td>5.9</td>
<td>0.6</td>
<td>6.4</td>
<td>10.4</td>
<td>1.4</td>
<td>9.3</td>
</tr>
<tr>
<td>More than three levels higher</td>
<td>1.9</td>
<td>2.6</td>
<td>0.6</td>
<td>3.5</td>
<td>0.7</td>
<td>0.7</td>
<td>3.6</td>
</tr>
</tbody>
</table>

Note. Respondents were asked who they would approach for discussing specific issues. PD = professional development. CA = career advancement. WI = work related issues. RM = role-modeling. PP = political dynamics and/or informal power structure at higher levels of the organization. PI = personal issues. PC = power to assist the protégé in his/her career.
For the most part, the resource person consulted was one or two hierarchical levels higher than the protégé, although a fair proportion (30.8%) consulted their peers on personal issues.

**H1a**: Both male and female protégés select men as the ideal senior organizational members to discuss issues related to professional development, career advancement, and the political dynamics of the organization.

**H1b**: Both male and female protégés select men as the ideal senior organizational members whom they believe would have the power to influence their career.

With regards to instrumental mentoring functions, it was hypothesized that respondents would approach men, regardless of their sex. Analyses on these variables using a two by two approach (sex of the protégé by sex of the resource person) reveal an interesting pattern. The percentages of frequencies by sex of both parties and chi-square results are provided in Table 20. As illustrated in this table, male protégés predominantly chose men as the senior organizational members whom they would approach to discuss professional development issues, to discuss career advancement issues, who could teach them about the political dynamics and/or informal power structure at the higher levels of the organization (H1a), and who would have the power to influence their career (H1b), whereas female protégés did not indicate any preference on these issues: half of the women selected men and half selected women. Thus, it can be stated that male and female protégés report engaging in different consultation patterns with regards to the sex of the person approached on instrumental matters. Consequently, hypotheses H1a and H1b were partially confirmed.

**H2a**: Male protégés view men as the preferred persons with whom to discuss personal issues.
Table 20

Frequencies (in Percentages) of Sex of Resource Person Consulted on Specific Issues According to Protégé Sex

<table>
<thead>
<tr>
<th>Sex of person Consulted</th>
<th>PD M</th>
<th>PD F</th>
<th>CA M</th>
<th>CA F</th>
<th>WI M</th>
<th>WI F</th>
<th>RM M</th>
<th>RM F</th>
<th>PP M</th>
<th>PP F</th>
<th>PI M</th>
<th>PI F</th>
<th>PC M</th>
<th>PC F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>78.9</td>
<td>21.1</td>
<td>78.3</td>
<td>21.7</td>
<td>72.2</td>
<td>27.8</td>
<td>82.7</td>
<td>17.3</td>
<td>76.9</td>
<td>23.1</td>
<td>80.3</td>
<td>19.7</td>
<td>80.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Female</td>
<td>47.4</td>
<td>52.6</td>
<td>50.0</td>
<td>50.0</td>
<td>54.8</td>
<td>45.2</td>
<td>42.6</td>
<td>57.4</td>
<td>49.1</td>
<td>50.9</td>
<td>29.8</td>
<td>70.2</td>
<td>52.8</td>
<td>47.2</td>
</tr>
<tr>
<td>$\chi^2$(df, N)</td>
<td>(1,133)</td>
<td>(1,145)</td>
<td>(1,141)</td>
<td>(1,129)</td>
<td>(1,131)</td>
<td>(1,133)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\chi^2$(value)</td>
<td>14.357</td>
<td>12.716</td>
<td>4.550</td>
<td>22.434</td>
<td>10.867</td>
<td>34.167</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\chi^2$(p)</td>
<td>.000***</td>
<td>.000***</td>
<td>.033*</td>
<td>.000***</td>
<td>.001***</td>
<td>.000***</td>
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</tr>
</tbody>
</table>

Note. M = male and F = female. PD = professional development. CA = career advancement. WI = work related issues. RM = role-modeling. PP = political dynamics and/or informal power structure at higher levels of the organization. PI = personal issues. PC = power to assist the protégé in his/her career. Chi-squares were significant at *** $p < .001$, ** $p < .01$, and * $p < .05$. 
H2b: Female protégés view women as the preferred persons with whom to discuss personal issues.

These two hypotheses proposed that individuals would be more comfortable and more prone to discuss personal issues with a person of the same sex, as suggested by the theories of social identity (Tajfel, 1978), the similarity attraction paradigm (Byrne, 1971) and the relational demography perspective (Tsui, Egan, & O'Reilly, 1989). As shown in Table 20, results confirm hypotheses H2a and H2b.

H2c: Women protégés view men and women equally as their role-models.

H2d: Male protégés view men as their role-models.

Based on increasing evidence found in mentoring research, the same directional postulates were not formulated for role-modeling in spite of the above theories. Female protégés were hypothesized to view men and women equally as their role-models (H2c), whereas male protégés were hypothesized to view men as their role-models (H2d). As illustrated in Table 20, both hypotheses were confirmed.

Thus, it can be stated that male protégés approached men whereas female protégés approached women for personal issues. This clearly suggests a same-sex preference to discuss non-work related issues. Conversely, with regards to instrumental issues, male protégés selected men while half of the female protégés approached men and the other half approached women. In other words, women protégés did not report a gender preference for a same-sex resource person when it came to non-personal issues. Men, on the other hand, always preferred consulting men, regardless of the nature of the issue. Finally, while men selected a male role-model, the sex of the role-model did not matter to women.
The Effects of Personal Attributes on Dyad Composition

Initial analyses reveal that two attributes approached significance when sex was used as the independent variable. First, there was a tendency for men ($M = 3.27, \text{s.d.} = .69$) to be more competitive than women ($M = 3.50, \text{s.d.} = .84$; $F(1,144) = 3.489, p = .064$) (a lower mean indicates a stronger agreement with the attribute). Second, there was a slight tendency for men ($M = 2.33, \text{s.d.} = .61$) to express a greater need for power than women ($M = 2.53, \text{s.d.} = .81$; $F(1,141) = 2.780, p = .098$).

**H3:** Female protégés who have a male mentor are more ambitious, have a greater need for power, have a greater need for achievement, and are more competitive than protégés in other dyads.

Analyses of covariance controlling for age, language, rank, tenure, and education were then conducted to examine the effect of dyad composition on personal attribute variables, namely ambition, need for power, need for achievement, and competitiveness. None were significant, thus H3 was not supported. Women who had a male mentor were not more ambitious, did not have a greater need for power or achievement, and were not more competitive than protégés in other dyads.

The Effects of Dyad Composition on Career Satisfaction

**RQ2:** Do reports of career satisfaction vary as a function of dyad composition?

The second and last research question inquired whether career satisfaction varied as a function of dyad composition. The analysis of covariance (controlling for the same five
variables) conducted was not significant. Therefore no differences were found among dyads on reported levels of career satisfaction.

(5) Additional Findings

Additional correlational findings. A few correlations were worth mentioning. Ambition was significantly related to age ($r = .272, p < .01$) and rank ($r = .166, p < .05$), indicating that participants' reported ambition decreased as they got older and attained higher rank levels (recall that a high score on these variables indicates a strong disagreement). More educated participants also expressed a greater need for power ($r = -.238, p < .01$) and their reported level of career satisfaction increased as they progressed in rank ($r = -.279, p < .01$).

An examination of mentoring needs factors in relation to the variables measuring ambition, competitiveness, need for power and need for achievement reveals that many were significantly correlated, except for the need for role-modeling which seemed to be unrelated to any of these variables. Participants who expressed greater mentoring needs also reported being more competitive, more ambitious, having a greater need for power and a greater need for achievement (see Table 17). Those who reported a greater need for friendship and for coaching on work issues also indicated being more prone to seek help ($r = -.174$ and $r = -.181, p < .01$, respectively). Finally, participants who expressed stronger needs for sponsorship and recognition reported lower career satisfaction ($r = .225, p < .01$).

Mentoring occurrences factors were found to be significantly related to only one variable, namely career satisfaction. The more they received mentoring behaviours (friendship excluded), the more satisfied they were with their career (correlations ranging from $r = -.188$ to $r = -.290$, most with $p < .01$). Thus, participants who reported *receiving* more mentoring also reported
greater levels of career satisfaction. Comparing these correlations with mentoring needs, it is noted that the direction of the relationship between career satisfaction and mentoring needs, particularly for sponsorship and recognition, was opposite to that found with mentoring occurrences.

Additional correlations were calculated with other variables, such as the demographic variables related to the respondent's mentor. Although the mentor's sex was not associated with any mentoring need or occurrence, results indicate that less competitive individuals tended to have a female mentor ($r = .206, p < .05$). Conversely, most mentoring needs and occurrences were significantly negatively correlated with the mentor's age. Therefore, respondents with older mentors expressed fewer mentoring needs and occurrences whereas those with younger mentors indicated the contrary. Moreover, older, higher ranking, and more tenured respondents tended to have older mentors ($r = .619, p < .01, r = .509, p < .01,$ and $r = .638, p < .01,$ respectively) and they tended to be less ambitious than respondents who had younger mentors ($r = .213, p < .05$). In other words, younger, lower ranking, and more junior protégés chose younger mentors and declared themselves more ambitious than older peers ($r = .272, p < .01,$ reported earlier) and than peers who had older mentors. Finally, respondents who expressed a greater need for achievement had mentors at higher hierarchical levels ($r = -.193, p < .05$).

**Same- versus cross-sex effects on mentoring needs and occurrences.** When same versus cross-sex mentorships were examined, respondents in cross-gender mentoring relationships tended to report greater mentoring needs overall ($M = 3.86, s.d. = .66; F(1,118) = 3.859, p = .052$) compared to respondents in same-sex mentorships ($M = 3.58, s.d. = .61$). More specifically, protégés in cross-sex relationships reported significantly greater needs for
professional development ($M = 3.81, \text{s.d.} = .78; F(1,120) = 8.177, p = .005$) and for sponsorship and recognition ($M = 3.75, \text{s.d.} = 1.06; F(1,123) = 4.090, p = .045$) than protégés in same-gender mentoring relationships ($M = 3.31, \text{s.d.} = .76$; and $M = 3.32, \text{s.d.} = .89$, respectively).

No significant effects were found on overall mentoring frequencies, nor on the specific mentoring occurrences factors. In other words, whether protégés were engaged in same-or cross-sex mentoring relationships, there were no differences in reported frequencies of mentoring functions received.

**Post-hoc tests on the characteristics of women.** In the second section, findings related to the resource person approached for specific mentoring functions were discussed. To recapitulate, women protégés did not report a gender preference for a same-sex resource person when it came to career developmental issues, whereas men preferred consulting men, regardless of the nature of the issue. Half of the women preferred approaching men and the other half preferred approaching women. In order to further investigate the findings related to women's responses with regards to career developmental issues, post hoc exploratory $t$-tests were conducted. Specifically, the attributes (i.e., ambition, competitiveness, need for power, need for achievement) of women who chose men were compared to those of women who chose women for each of the four career developmental issues (i.e., professional development, career advancement, learning about political dynamics, and having the power to assist the protégé in his/her career). Results indicate that women protégés who approached men for career advancement issues ($M = 2.09, \text{s.d.} = 0.58$) also reported a greater need for achievement than the women who approached women ($M = 2.41, \text{s.d.} = 0.57; t = 2.05, p < .05$).
Interestingly, women who approached men to discuss day-to-day work-related issues ($M = 2.14, \text{s.d.} = 0.79$) tended to report a higher level of career satisfaction than women who approached women ($M = 2.53, \text{s.d.} = 0.77; t = 1.81, p < .10$). The women who approached men for work-related issues were also more educated ($M = 2.24, \text{s.d.} = 0.70$) than those who approached women ($M = 1.84, \text{s.d.} = 0.58; t = 2.06, p < .05$). Moreover, women who approached men for career advancement issues tended to be younger ($M = 35.74$ years, \text{s.d.} = 9.37) and less tenured ($M = 13.33$ years, \text{s.d.} = 6.88) than women who approached women (age: $M = 39.86$ years, \text{s.d.} = 7.64; $t = 1.83, p < .10$; tenure: $M = 16.31$ years, \text{s.d.} = 6.15; $t = 1.87, p < .10$).

DISCUSSION

As indicated earlier, the aim of this study was three-fold: (1) to get a better understanding of unique characteristics and attributes of the female protégé - male mentor dyad; (2) to inquire about which resource persons protégés would select to meet their mentoring needs related to specific career developmental and psychosocial issues; and (3) to examine career satisfaction as a function of dyad composition.

Unique attributes and characteristics of the female protégé - male mentor dyad were examined to determine whether protégé ambition, competitiveness, need for power and achievement, and help-seeking behaviours explained results found in the first study. For example, in order to determine why women who had a male mentor expressed greater mentoring needs than protégés in other dyads, it was hypothesized that women were more vocal about their needs, and therefore more prone to seek help. The first research question addressed this issue in two parts, first whether women were more inclined to seek help compared to men (RQ1a), and
second, whether women who had a male mentor were more inclined to seek help compared to protégés in other dyads (RQ1b). No differences were found in either analyses. Men and women displayed no differences in terms of help-seeking behaviours. In fact, their means were practically identical, suggesting more similarities than differences between men and women with regards to the preponderance of seeking help. The absence of a dyad effect further indicates that, for women, help-seeking behaviours were not related to having a male mentor. Interestingly, according to correlational findings, those who were more inclined to seek help also expressed a greater need for friendship and for coaching on work issues. It must be noted that the internal consistency coefficient of the help-seeking measure was somewhat low (.42), hence these conclusions are made with some reservation.

An additional approach for understanding the dyadic findings of the first study was to examine the perception of who holds the power in an organization. To this effect, hypotheses H1a and H1b postulated that both men and women viewed men as the ideal senior organizational members whom they would approach to discuss professional development issues, to discuss career advancement issues, who could teach them about the political dynamics and/or informal power structure at the higher levels of the organization (H1a), and who would have the power to influence their career (H1b). These hypotheses were confirmed for male protégés, but not for female protégés. Specifically, on issues which are normally believed to be the domain of senior organizational men, men consulted men whereas women reported no preference with regards to the sex of the resource person they consulted. This may be due to the fact that the military population is predominantly male, consequently there are fewer women available for female protégés to consult on organizational issues.
Subsequent analyses were conducted to find out whether there were any differences between the women who consulted men and those who consulted women. For career advancement issues, women who preferred consulting men were younger, less tenured, had a greater need for achievement and tended to have a greater need for power than women who consulted women. These findings suggest that the female protégé who approaches a male mentor, specifically for career advancement issues, distinguishes herself from the female protégé who consults a female mentor. Although not all were significant, the means for competitiveness, need for power, need for achievement, and career satisfaction were in the same direction with regards to issues on professional development, political dynamics of the organization, and the power to affect the protégé's career. In other words, women who approached men reported having higher levels on these attributes and characteristics than those who approached women.

With regards to personal issues, same-sex preferences were reported: women consulted women and men consulted men. This supports Koberg et al.'s (1998) research findings in which protégés in same-sex mentorships reported more psychosocial functions than those in cross-sex mentorships.

In addition to the discussion of personal issues, another psychosocial mentoring function is role-modeling. Supporting hypotheses H2c and H2d, female respondents in this study reported selecting both men and women as their role-models, whereas men clearly indicated a preference for male role-models. This finding may be interpreted in several ways. First, analyses reveal that protégés whose mentor was female expressed greater role-modeling needs than protégés whose mentor was male. Furthermore, protégés who reported a preference for consulting a female role-model also expressed more mentoring needs overall. This may be the case because these female
mentors tend to be at lower organizational levels than men, and thus have less power to influence career development related matters for their protégés. Second, female protégés in this study have expressed greater role-modeling needs than male protégés and reported no sex preference when selecting a role-model. This supports the findings from an earlier study on mentoring conducted by the author where female protégés reported significantly stronger expectations for role-modeling compared to male protégés (Knackstedt & Kwak, 1996). Finally, using a dyadic approach, the first study revealed that women expressed significantly stronger needs for role-modeling compared to men regardless of the gender of their mentor (see Table 12), and this finding approached significance in the second study (see Table 13).

Several personal attributes were measured to examine their relation to the gender of the dyad composition. It was hypothesized (H3) that women who had a male mentor were also more ambitious, more competitive, and had greater needs for power and achievement than protégés in other dyads. Results revealed that none were supported. Therefore, women who possessed these attributes were not more likely to have a male mentor than the other protégés. Interestingly, however, correlational findings also revealed that participants who expressed greater mentoring needs also reported being more competitive, more ambitious, having a greater need for power and a greater need for achievement. In order to examine this further, ANCOVAs were conducted with overall mentoring needs as the dependent variable on each of the attributes, while controlling for sex, age, language, rank, tenure, and education. None were significant, suggesting that even though correlations were significant their effect was not strong enough to warrant making such inferences.
Finally, the last research question aimed to ascertain whether career satisfaction was affected by the gender composition of the dyad (RQ2). This was not the case. In fact, there were no differences in career satisfaction between men and women, nor between same-sex and cross-sex mentorships. In other words, there are stronger influences on career satisfaction than the gender composition of the mentoring relationship.
Chapter 4

DISCUSSION

This research attempted to determine what constituted mentoring needs from the protégé's perspective in an organizational setting, as well as to investigate how mentoring needs and occurrences, as perceived by protégés, differed as a function of various demographic variables, especially gender composition of the dyad. The results of the two studies conducted will be discussed in light of these research questions. For each of the two issues, theoretical and practical implications will be addressed. Next, limitations of the two studies will be examined, followed by directions for future mentoring research.

What are Mentoring Needs?

A number of researchers have attempted to operationalize the mentoring construct, that is, clearly identify the functions and roles involved in mentoring. Kram (1983, 1985a), for example, suggested that mentoring relationships were differentiated along two dimensions, career development and psychosocial functions. Jacobi (1991), who summarized the variety of ways in which mentoring has been defined within higher education, management, and psychology, found 15 functions or roles that have been ascribed to mentors. A updated review conducted for this thesis revealed nineteen distinct mentoring functions provided by mentors in an organizational context (see Table 1).

Research on the operationalization of mentoring functions remains inconclusive. The fact that researchers have been measuring mentoring using different instruments which incorporated different mentoring functions may partly explain why their findings have, at times, been
contradictory. Another possible explanation for the disparity in findings may be related to protégé needs. Mentoring needs, as expressed by the protégé, may influence the actual mentoring functions provided by the mentor. It is only recently that attention has been drawn to mentoring needs (Allen et al., 1998; Ragins, 1997; Ragins & Cotton, 1999), though no such measure has been used.

In the present research, a mentoring needs instrument was developed. The nineteen functions identified in Table 1 were measured, as well as functions related to organizational socialization which have been empirically linked to mentoring roles (Chao, 1997; Ostroff & Kozlowski, 1993). The existence of six types of mentoring needs expressed by protégés in a work context were demonstrated, namely professional development (learning about professional values, about the organization and its political dynamics, and how to improve one's skills and knowledge), sponsorship and recognition (having one's career interests supported, getting visibility, good press, and recognition for one's work), equal partnership (trusting the mentor, being able to discuss sensitive issues such as fears, mistakes and doubts), friendship (engaging in social interactions with the mentor as well as discussing personal issues, concerns, such as how to balance family and work conflicts), coaching on work issues (getting assistance on day-to-day work activities such as technical aspects or suggested work strategies, and receiving feedback on one's performance), and role-modeling (having a role-model with respect to leadership, ethics, values, and attitudes). The internal consistency coefficients for the sub-scales were high and in the same range for both studies, thus providing further evidence for the mentoring needs construct as being composed of six sub-scales.
From a theoretical perspective, the six types of mentoring needs disconfirm Kram's (1983, 1985) two-dimensional model of mentoring. This was further demonstrated by the high intercorrelations among the sub-scales, suggesting a general factor for mentoring. Some overlap was found between the various types of mentoring functions reported in the literature and the six types of mentoring needs. This was expected since a number of the items measuring needs were derived from past research. Of particular interest was the comparison between mentoring needs and occurrences. Each item was rated twice: once for need and once for frequency. Thus, both measures were based on the same scale. A factor analytic procedure conducted on the mentoring occurrences measure (see Appendix C) revealed four types of mentoring functions different from the six types of mentoring needs. In fact, only about half the items derived from both scales overlapped when the final factor analytical solutions of both measures were compared, suggesting a high proportion of mentoring functions unique to each measure. In other words, the mentoring behaviours identified as important were significantly different from those reported as occurring. What protégés need is different from what they receive.

This is an important step in mentoring research, since only measures of occurrences have been used so far. The consequences of such a finding for mentoring theory are important since it is possible that mentoring needs may be a moderating variable of mentoring occurrences, thereby shedding some light on the inconsistent findings described in the literature. To illustrate this point, the two factors with the highest level of need compared to the other mentoring factors in both studies, namely the need for equal partnership and the need for role-modeling, were also the two that were reported as occurring more frequently. It could simply be that mentors adapted their behaviours based on what their protégés needed. Given that protégé needs may influence
their mentor's behaviours, and that mentoring behaviours have empirically been related to a number of outcomes (for example, increased organizational socialization and productivity), measuring mentoring needs will help in understanding the link between mentoring and the various outcomes, whether they affect the protégé, the mentor, or the organization as a whole.

Finally, it must be noted that both studies revealed a significant difference between reported mentoring needs and mentoring occurrences. The gap between mentoring needs and mentoring frequencies is clear and should be of concern to organizational leaders.

**Why Should Mentoring Needs be Assessed?**

The assessment of mentoring needs in an organizational context is important for a number of reasons, as discussed in the introduction. First, different employees may have different needs for mentoring behaviours. Second, mentors provide different mentoring functions to their protégés according to their own skills, abilities, personal style, and motivation. Third, mentoring is a recognized means for matching individual and organizational needs (Schein, 1978). Fourth, mentors are ideally suited to ease the tension caused by organizational change and restructuring, thus the identification of employee needs would further facilitate the transition process (Kram & Hall, 1991). Fifth, knowing about their personnel's mentoring needs can help organizational leaders to feel the pulse of their employees' concerns and ambitions, as well as to complement an organizational climate survey. Finally, determining mentoring needs is especially important when organizations wish to implement a mentoring program. To ensure the success of a formalized program where mentors and protégés are matched, the needs of the protégé must be identified. Furthermore, this information would identify the required training and development for potential mentors.
Consequently, organizational leaders have many reasons to assess mentoring needs. Given that mentoring is a form of training, the mentoring needs analysis can easily be conducted as a sub-component of the training needs assessment which many organizations already conduct on a regular basis. Thus, this research highlights the importance of the mentoring needs analysis as a tool in meeting the organization's strategic human resources objectives.

Study 1 has demonstrated that the factor structures of mentoring occurrences and mentoring needs are different. In other words, what protégés need is different from what they receive. Furthermore, with regards to the military health care population, the significant gap between the mentoring functions needed and received, as evidenced in both studies, provides further support for the importance of assessing mentoring needs. Here, health care professionals were not receiving what they needed, suggesting a general dissatisfaction related to mentoring, and perhaps leadership issues. This could not have been discovered by measuring mentoring occurrences alone. Hence, this research has provided theoretical and practical evidence for a mentoring needs analysis in an organizational context.

What are the Factors that Influence the Mentoring Process?

Having examined the mentoring needs construct and determined its importance, the second objective was to investigate how mentoring needs and occurrences, as perceived by protégés, differed as a function of various demographic variables, such as gender composition of the dyad, as well as personal characteristics and attributes of the protégé. First, a general description of the mentoring relationship will be provided and compared with the current literature. Then individual differences and dyad effects as they pertain to mentoring needs and
occurrences will be discussed. Finally, brief comments will be made on the additional findings resulting from the second study, namely those related to the characteristics and attributes of the protégé, as well as who protégés approach for specific mentoring functions.

The mentoring relationship. Consistent with the literature, the average age gap between mentors (about 45 years old) and protégés (about 38 years old) was seven years. Overall, the population studied was rather experienced, having served for about 16 years in the military. The median length of reported mentoring relationships was 2 years, and the average length was between 3.55 (study 1) and 3.85 (study 2) years. This seems somewhat lower than what is described in the mentoring literature. Experts on mentoring describe the initial phase (the development of the relationship into a mentorship) as lasting from six months to a year, followed by the cultivation phase (the optimization of the mentoring benefits to all parties), lasting anywhere from two to five years (Chao, 1997; Kram, 1983, 1986; Kram & Bragar, 1992). It is possible that mentoring relationships in the military would have a longer duration if it were not for frequent career moves from one geographic location to another. Interestingly, correlational findings in this research suggest that the longest mentoring relationships involved older mentors as well as older protégés. With regards to the mentor's age, the combination of their acquired wisdom and experience may have led the more senior mentors to keep in touch with their protégés, even when geographically apart as a result of postings. Similarly, protégés who had older mentors may have particularly valued the benefits from their relationship and maintained it for a longer period of time. With regards to the protégé's age, it may be that as they grow older (and gain experience), protégés know what they want and will invest more time in a mentoring relationship that provides them the benefits they are seeking, including the aspect of friendship.
The proportion of mentoring relationships which involved a current or past supervisor was higher than what is reported in the literature. Mentoring research usually describes anywhere from 30% to 50% of supervisors as being involved in a mentoring relationship. Here, 74% of the mentors described in the two studies were past or current supervisors. The higher proportion of supervisory mentoring relationships may be occurring for several reasons. First, the notion of respecting the "chain of command" is quite strong, especially in the Army and in the Navy, and may discourage individuals from approaching potential mentors outside their immediate work environment. Second, it is possible that individuals tend to join the military for a longer career term than they normally would compared to other types of civilian organizations (most leave the military after having served for an average of twenty years). Given the strong hierarchical military hierarchy, and given a more formalized career system, they would tend to engage in career developmental discussions more frequently with their immediate supervisors.

Eighty-four percent of respondents indicated having experienced a mentoring relationship. This is higher than what is reported in the literature. For example, Ragins and Cotton (1998) found that 47% of their sample, composed of journalists, social workers, and engineers, reported not having a mentor. In other words, although almost half of Ragins and Cotton's respondents indicated not having experienced the benefits of a mentoring relationship, this was the case for only one sixth of the military health care professionals. Although the findings are based on different occupations, this can be viewed in a positive light, suggesting the possibility that the military climate, especially of the health care professional group, may be more conducive to the development of mentoring relationships. If this is the case, it is not clear why certain occupations may be more prone to develop mentorships over others.
Individual differences. When comparisons were made between male and female respondents, no sex differences were found on the number of mentors reported. Female mentors, however, tended to be at lower hierarchical levels than their male counterparts. This is not entirely surprising given that the military is still a male-dominated environment, including the health care professions. An examination of dyads further revealed that the highest hierarchical levels were held by male mentors who had female protégés whereas the lowest levels were held by female mentors, regardless of the sex of their protégé. There was also a tendency for female protégés who had male mentors to be most junior (least tenured) compared to protégés in other dyads. Finally, protégés who were in cross-sex mentorships reported communicating more frequently with their mentor than their counterparts.

Several demographic variables influenced reported mentoring needs and occurrences. For example, older, more tenured, and higher ranking protégés expressed decreased mentoring needs for a number of functions (such as coaching on work issues). Conversely, mentoring occurrences did not seem to be affected by protégé characteristics, and consequently did not exhibit the same pattern.

Of interest was the examination of language effects on mentoring needs and occurrences. There were no significant effects for needs. Francophones, however, reported receiving less coaching on work issues, friendship, and equal partnership than anglophones. These effects were not replicated with the second study, even though the sample size was sufficiently large to detect any difference. Findings on mentoring related to language remain inconclusive. It is possible that this phenomenon may be more complex. For example, mentoring behaviours may be affected by the culture (including official language use) of the working environment. They may
also be influenced by the language of the mentor, suggesting that protégés in cross-language dyads may communicate differently than protégés in same-language dyads. Future research should be devoted to ascertain whether there are any cultural differences that may shape mentoring needs and occurrences, for example by comparing same- and cross-language dyads.

With regards to differences based on sex, women were found to express greater needs for professional development, equal partnership, coaching on work issues, and role-modeling, compared to men. A recent meta-analysis of all tests published since 1950 revealed that women of all ages and of all statuses consistently obtain higher dependency scores than do men in objective dependency tests (Bornstein, 1995). Objective dependency tests, such as the two studies conducted for this thesis, are measures tapping in self-attributed motives, that is, "motives that the individual openly acknowledges as being characteristic of his or her day-to-day functioning and experience" (Bornstein, 1995, p. 320). In other words, Bornstein explains that "women are more willing than men to acknowledge their dependency needs openly on self-report tests " (p. 320). These conclusions support sex role socialization theory (Spence & Helmreich, 1978) and Kaplan's (1983, cited in Bornstein, 1995) suggestion that men express dependency needs in a more indirect and disguised manner than do women.

Next, same-sex versus cross-sex mentorships were compared. Protégés in cross-sex mentoring relationships from the first study reported needing more coaching on work issues than their counterparts in same-sex mentorships. In the second study they reported needing more professional development. An important aspect must be noted, nevertheless. The pattern of means for both studies was analogous in all cases: protégés in cross-sex mentoring relationships
always expressed greater mentoring needs than those in same-sex mentorships. Conversely, no
same-versus cross-sex effects were found with regards to reported mentoring frequencies.

**Dyad effects.** Because of inconclusive findings in the mentoring literature regarding
protégé and mentor sex, dyad effects were investigated. Indeed, examining the role of gender
composition of the dyad on mentoring processes and outcomes has been recommended by
several prominent mentoring researchers (e.g., Allen et al., 1998; Burke & McKeen, 1990;
Dreher & Ash, 1990; Ragins & Cotton, 1999; Noe, 1988b; Sosik and Godshalk, in press). The
present research reported a number of significant and important findings. Female protégés who
had a male mentor distinguished themselves from their peers in that they expressed stronger
mentoring needs than male protégés with male mentors, particularly for professional
development, equal partnership, coaching on work issues, and role-modeling. They also reported
receiving more mentoring functions compared to protégés in other dyads, specifically
sponsorship and recognition, coaching on work issues, and role-modeling. Again, the pattern of
means for both mentoring needs and occurrences was identical to that of the first study.

It seemed that the group who received the most mentoring was also the group who
expressed the greatest needs. The need fulfilment theories developed by Maslow (1943, 1954)
and Alderfer (1969), as well as reinforcement theory (Skinner, 1953) partly explain the findings.
The two need fulfilment theories suggest that individuals are never fully satisfied and strive for
more, whereas reinforcement theory suggests that an individual will express greater needs after
having experienced its benefits. In other words, the more one receives, the more one desires. It
is important to note that mentoring was found to impact on growth needs, as defined by Maslow
and Alderfer (this was not tested on primary needs). A similar pattern of increased needs and occurrences was evidenced when comparing responses of those who had a mentor and those who did not. Protégés expressed stronger mentoring needs than their non-mentored counterparts, possibly because protégés had been exposed to the benefits of mentoring and therefore, acknowledging its value, wanted more.

**Characteristics and attributes of the protégé.** The second study was conducted in order to test some hypotheses regarding the female protégé who had a male mentor. Several characteristics and attributes of protégés involved in a mentoring relationship were measured, such as help-seeking behaviours, ambition, competitiveness, need for power, need for achievement, and career satisfaction.

Study one revealed that women protégés expressed greater mentoring needs and occurrences when their mentor was a male. It also revealed that protégés in cross-sex mentorships interacted more frequently compared to protégés in same-sex mentorships. It is possible that the way men and women communicate with each other involves different types of interactions than those generally occurring in same-sex relationships. In her widely acclaimed book, Tannen (1990) argues that men and women fail to understand each other because they have developed different rules for communicating. In an attempt to explain this finding, the second study hypothesized that women were more prone to express their needs and desires than men, suggesting that women were more vocal than men. This was tested with a measure of help-seeking behaviours (in addition to measuring the frequency of interactions). The results did not support the hypothesis, revealing a surprising similarity between men and women on self-reports...
of help-seeking behaviours (the means were identical). Furthermore, responses were no different when the sex of the mentor was factored in the analyses.

It is possible that the increased frequencies of interactions in cross-sex mentoring relationships was attributable to another factor. For example, it could be related to an emotional/physical attraction between the two sexes. Sexual attraction is always a possibility in cross-gender mentorships: nearly 26% of the 381 professionals surveyed in a study conducted by Collins (1983) reported that they had sex with their mentors. One of the female managers interviewed by Fitt and Newton's (1981) stated that there was "... a greater tendency for sexual attachment when the mentor is supportive and the environment isn't" (p. 60).

The second study also hypothesized that women protégés who had a male mentor would report higher levels of ambition, competitiveness, need for power and need for achievement compared to protégés in the other dyads. None of the hypotheses were supported, suggesting that the dyad composition, female protégé with a male mentor, was not related to self-perceptions on these attributes. Although ANOVAs revealed some tendencies for male protégés to describe themselves as more competitive and in greater need for power compared to female protégés, these did not reach significance. Consequently, on a theoretical perspective, this research is in keeping with other literature which suggests that sex differences on achievement-related motives and behaviours are small to non existent (Brief & Oliver, 1976; and Brief, Rose, & Aldag, 1977; both cited in Spence & Helmreich, 1983).

Resource persons approached for specific mentoring needs. Another attempt to explain the dyadic findings was to examine whom protégés would approach for specific career developmental and psychosocial functions. First, men always preferred consulting men,
regardless of the nature of the issue. With regards to instrumental issues, such as professional
development, career advancement, the teaching of political dynamics, and having the power to
assist the protégé in his or her career, men unequivocally approached men whereas women
reported no preference with regards to the sex of the resource person they consulted. Such issues
are often believed to be the domain of senior organizational men.

Further analyses revealed that women who preferred consulting men for career
advancement issues were younger, less tenured, had a greater need for achievement, and tended
to have a greater need for power than women who consulted women. The pattern was similar for
other attributes, although only approaching significance: women who approached men tended to
be more competitive, have greater needs for power and achievement, and report higher career
satisfaction than women who approached women. These findings suggest that female protégés
who have male mentors distinguish themselves from female protégés who have female mentors,
particularly when the issues discussed pertain to career advancement. If men are perceived as
holding the power to provide benefits related to career success, women who exhibit higher needs
for power and achievement will engage in a relationship with the senior organizational men who
hold that power.

Conversely, with regards to personal issues, women preferred approaching women and
men preferred approaching men, thus indicating a same-sex preference for discussing non-work
related subjects. These findings support the theories of social identity (Tajfel, 1978), the
similarity attraction paradigm (Byrne, 1971) and the relational demography perspective (Tsui,
Egan, & O'Reilly, 1989) which would suggest that individuals are more comfortable and more
prone to discuss personal issues with a person whom they would identify with, that is, of the same sex.

Finally, with regards to role-modeling, results seemed to indicate that men had a preference for approaching men whereas women did not have a gender preference. Although this contradicts the above theories, it is consistent with recent findings linking mentoring and role-modeling (e.g., Gumbiner, 1998; Gibson & Cordova, 1999; Sosik & Godshalk, in press). Post hoc analyses did not reveal significant findings, although the pattern was in the same direction in every case: women who approached men as their role-model tended to describe themselves as more competitive, more ambitious, in greater need for power and achievement, and having higher career satisfaction compared to women who approached women as their role-models.

Comparing the Mentoring Needs of Protégés and Non-Protégés

Lastly, it must be noted that this research is the first to compare mentoring needs between protégés and non-protégés. Most respondents (84%) indicated having benefited from a mentoring relationship. Results revealed that protégés expressed greater mentoring needs, particularly for professional development, equal partnership, coaching on work issues, and role-modeling, compared to their non-mentored counterparts. This is consistent with Fagenson's (1992, 1994) findings, namely that protégés have higher needs for power and for achievement compared to non-protégés. Furthermore, protégés have distinctively reported receiving more mentoring compared to non-protégés. These findings further support the importance of conducting a needs analysis. They also suggest that mentoring has to be pursued by both parties: some individuals are not interested in or do not need mentoring.
Limitations of this Research

External validity. Several limitations of this research should be mentioned, the first one being sample size. A larger sample size in the first study would have permitted a larger variable-to-subject ratio in the exploratory factor analysis. Furthermore, the relatively small sample size of the second study did not allow for the possibility of a confirmatory factor analysis and may have precluded more replications of the first study's findings. A cautionary note should also be added with reference to possible occupational effects. Although responses from nurses did not affect overall group dyad findings, nurses expressed stronger mentoring needs compared to non-nurses. Consequently, generalizations from the group findings to the various occupations must be made with some reservation.

The fact that participation in this research was voluntary (especially in the second study where participants were given the survey during a conference) may have contributed to restriction of range. Finally, larger and equal cell sizes for each of the dyads would have been ideal and resulted in stronger analyses. This was one of Carden's (1990) criticisms of the current mentoring studies that have used a dyadic approach. Realistically, given usually lower frequencies of cross-sex mentorships, particularly male protégés with female mentors, this is something which is difficult to achieve. Nevertheless, it may be possible with very large sample sizes incorporating occupations which are gender-balanced.

The two studies were restricted to the protégé's perceptions. Data on the mentors' perspective, preferably matched, would provide a more complete picture of the mentoring relationship and both parties' perceptions of protégé needs.
Internal validity. Given the statistical tools used is this research, causal inferences could not be attributed to the independent variables. A greater sample size would have been necessary, combined with more sophisticated tools such as structural equation modeling. Granted, the purpose here was not to test whether the sample fitted a mentoring model, nevertheless more causal modeling is necessary in mentoring research given the paucity of its theoretical framework.

Measurement. Even though the internal consistency coefficients for the mentoring needs and occurrences sub-scales were very strong, this cannot be said for all the scales. In particular, the measures of help-seeking behaviours and ambition exhibited somewhat low coefficients (.42 and .54, respectively), suggesting caution prior to making inferences using these constructs. Although the need for power and the need for achievement scales developed by Steers and Braunstein (1976) were acceptable in terms of alpha coefficients (.67 and .58, respectively), there has been some question among researchers whether more reliable measures could be used (Parker & Chusmir, 1991; Fagenson, 1992). Alpha coefficients above .70 are usually recommended in order to generate any conclusions (Nunnally & Bernstein, 1994).

Finally, the measures of need for power, need for achievement, ambition, competitiveness, and help-seeking behaviours were self-report measures, and, as with all self-report measures, they may have been influenced by social desirability to respond in a certain way (for example, it may appear desirable for a military officer to appear as ambitious, even though responses were anonymous and unidentifiable). As suggested by Bornstein (1995), "subjects' responses to these tests may be strongly influenced by a variety of self-presentation and self-report biases" (1995, p. 320).
Future Directions for Mentoring Research

This thesis has provided evidence for two directions of future mentoring research: (1) the importance of assessing mentoring needs in an organizational context; and (2) the importance of examining dyad effects as they relate to mentoring functions.

Given the novelty of assessing mentoring needs, the possibilities regarding future research are numerous. For example, mentoring needs could be examined as a function of career stages. The need for coaching on work issues, as an instance, should decrease as a person progresses towards more senior positions. Mentoring needs could be examined both as a function of occupation, as well as a function of the respondent's status. For example, there is a dearth of research on executive mentoring: At present nothing is known about the mentoring needs of executives, nor what functions they are currently receiving.

Mentoring needs could also be studied in a cross-cultural context, controlling for gender composition of the dyad. On a broader perspective, they ought to be examined as one of the antecedents of mentoring functions and linked with processes and outcomes of mentoring in organizations. For example, in addition to protégé needs, both the mentor's perception of the protégé's needs and the mentor's ability and motivation to meet them, should be investigated in future studies (Ragins, 1997). This would entail obtaining information from both mentorship parties. Furthermore, as suggested by Allen et al. (1998), additional research is warranted to examine the construct of "need for help" from the protégé's perspective. Here, in expressing greater needs, women may have signalled that they were in greater need for help than their male counterparts.
Second, research on mentoring must continue examining dyad effects. It is now clear from this and recent research that analyzing data by examining the sex of only one of the two partners will yield biased results. Ideally, sample sizes should be large enough to allow for greater dyad cell sizes, thus increasing the power of the ANCOVAs. Specifically, the unique characteristics of the female protégé - male mentor dyad should be further investigated. First, studies should assess whether this effect only occurs in more traditionally male-dominated organizations such as the military or whether it replicates in other settings, including civilian health care environments. Second, whereas the focus here has mainly been on the female protégé who has a male mentor, characteristics and attributes of the male mentor who has a female protégé should be examined concurrently. It is possible that these men engage in certain behaviours or possess certain attributes which make them behave differently (which includes the initiation phase) with female protégés. Finally, based on the work of Tannen (1990) on male-female communication, examining how the mentoring pairs communicate using discourse analysis may reveal interesting dyad differences.

Another criticism about the mentoring research in general is that it relies mainly on survey methodology (Chao, 1998). Parallel analyses using in-depth interviews with pairs of mentors and protégés will strengthen the findings. Several important aspects could be clarified verbally, such as perceptions of the relationship by both parties and the protégé's mentoring needs. In addition to collecting data from both sides of the mentoring relationship, the perspective from observers and the organization as a whole could be sought (Chao, 1998). This may prove to be quite a challenge.
Perhaps the reason why francophones reported receiving less mentoring functions (specifically coaching on work issues, equal partnership, and friendship) than anglophones may be related to the language of the mentor. In order to understand the potential cultural influence on mentoring functions, future research should examine same-language versus cross-language dyads and how such relationships affect reported mentoring needs. The Canadian military environment, although bilingual, is still dominated by the English culture. Consequently, it is suspected that there would be a greater proportion of francophones in cross-language dyads than in same-language dyads, which, in turn, may have affected reported mentoring needs and occurrences.

A major drawback of mentoring research is that the respondent's mentoring stage is not taken into account. Kram (1985a) described four mentoring phases: the initiation of the relationship, the cultivation of the relationship (when most mentoring benefits take place), the separation of the relationship when the protégé and the mentor feel that mentoring is no longer required, and the redefinition when friendship is maintained (and often the protégé wishes to become a mentor in turn). Depending on the phase, different mentoring functions may be operating. For example, Chao (1997) found that protégés reported receiving significantly less career developmental and psychosocial functions during the initiation stage. Furthermore, most interactions will likely occur during the cultivation phase. Therefore, it is important that mentoring models incorporate the stage of the mentoring relationship. To this effect, Chao (1999) has identified effective ways of measuring these stages. Moreover, this research revealed that career satisfaction was not affected by dyad composition. Incorporating the mentoring phase as a moderating variable may shed further light on this issue.
The above recommendation leads to the final point. Although there has been an explosion of research on mentoring in the last three decades, the literature is still practically devoid of any sound theoretical framework. Most of the research has been correlational. Instead, more causal models are required in mentoring research, preferably incorporating some of the previous suggestions.

To conclude, this thesis has clearly demonstrated the value of assessing mentoring needs in a organizational context and the importance of examining the gender composition of the mentoring dyad in future research.
REFERENCES


Lord, R. G., & Maher, K. J. (1992). Cognitive theory in industrial and organizational psychology. In M. D. Dunnette and L. M. Hough (Eds.) Handbook of industrial and


APPENDIX A

SURVEY EVALUATION PACKAGE FOR THE PILOT GROUP
8 September 1998

Dear

Thank you for agreeing to participate in the pretesting of the CFMS Mentoring Needs Analysis survey. Your input given your extensive expertise and your role as MOC advisor are invaluable in making this project a success.

As you know, this needs analysis is the first of several phases. Once the results are collected and analyzed, decisions will be made as to whether the CFMS wishes to establish a mentoring process and its degree of formality.

Attached you will find the following documents:

1) the covering letter (unformatted)
2) the needs analysis survey
3) an evaluation form of the needs analysis

Please complete the entire survey as would other respondents and then complete the evaluation form attached. You may wish to make comments on the questionnaire as you go along, or mark the areas requiring modification and get back to them later. Plan for approximately one hour of uninterrupted time. I encourage you to be very "picky"! Your feedback is very important as it will shape the final form of the questionnaire and thus impact directly on subsequent measures and results.

As indicated to you earlier, as per ethical standards, your anonymity and the confidentiality of your responses will be guaranteed. Please call me if you have any concerns you wish to discuss personally (561-6913). As soon as you are done, please give the documents to LCdr Peggy Béchard.

Once I receive your feedback, the survey will be modified and then sent for translation. The translated version will be pre-tested by two francophone MOC advisors. After incorporating their feedback, both English and French versions will be reproduced and sent to all CFMS Officers. Your prompt assistance with this project is sincerely appreciated.

Janine Knackstedt
(561-6913)
EVALUATION FORM

Name of evaluator: ___________________________ Phone number: ___________________________

Approximate time it took you to fill out the survey: ___________________________

Please write any item modifications directly on the questionnaire.

Please comment on the following aspects of the survey:

- Length
- Clarity of purpose
- Overall format
- Flow/layout
- Clarity of instructions
- Content

- Did you find it difficult to stay focussed throughout the survey?

- Was there a part you found more difficult to answer than others? Please comment.

- Are there concerns you think may be raised by some respondents (CFMS officers at any level, including in your MOC)?
COVERING LETTER
Do you have any comments on the covering letter?

NEEDS ANALYSIS SURVEY: COVERING PAGE
Do you have any comments on this page?

PART 1: MENTORING NEEDS
Did you encounter any difficulties in rating your mentoring needs? Please comment.

PART 2: CURRENT SITUATION
Did you encounter any difficulties in rating the current frequency of mentoring behaviours received? Please comment.

PART 3: EXPERIENCE AS A PROTEGE
Did you encounter any difficulties in identifying your mentor(s)?

Did you encounter any difficulty in answering any of the questions associated with each mentor?

PART 4: EXPERIENCE AS A MENTOR
Did you encounter any difficulties in identifying your protégé(s)?

Did you encounter any difficulty in answering any of the questions associated with each protégé?
PART 5: INTEREST IN A MENTORING PROCESS
Did you encounter any difficulty or concerns in answering the questions in this part? Please comment.

PART 6: GENERAL INFORMATION ABOUT YOU
Do you have any comments on this part?

PART 7: FEEDBACK AND SUGGESTIONS
Do you have any comments on this part?

PAGE 15/15: INTEREST IN PARTICIPATING IN FOLLOW-UP STUDY
Did you encounter any difficulty in understanding the purpose of the code?

... Did you encounter any difficulty in understanding the instructions with reference to the code?

"PAGE 16": FOLLOW-UP STUDY RESPONSE (ATTACHED PAGE)
Do you have any comments on this part?

- General comments related to the survey or its administration:

- Any final comments or concerns you wish to inform the researcher about...

THANK YOU FOR YOUR FEEDBACK AND SUGGESTIONS!
APPENDIX B

COVERING LETTER, QUESTIONNAIRE, AND REMINDER LETTERS (STUDY 1)
MENTORING INITIATIVE FOR THE CFMS

1. The purpose of the enclosed needs analysis is three-fold: (a) to determine current mentoring needs for all officers within our Branch; (b) to assess the extent to which mentoring is already occurring on an informal basis; and (c) to ascertain interests and preferences regarding the establishment of a mentoring process within the CFMS. For your benefit, a short information sheet on mentoring is attached.

2. Numerous civilian and military organizations are currently reaping the advantages of mentoring. Our American military colleagues have openly spoken and written about mentoring in the military. The CF is also keenly interested in mentoring since one of its goals is the development of future leaders (as opposed to managers). Within the coming year, a CF Mentoring Handbook will be available to anyone interested within DND. Some occupations (e.g., AERE) have been pro-active and have already initiated their own mentoring process. The CFMS also wishes to take a similar initiative; however, before establishing any mentoring process, it is important that your specific needs and interests be identified, which is the purpose of this needs analysis. Note that while the potential establishment of a mentoring process is being examined for officers, a
similar initiative is currently being considered for NCMs.

3. This initiative has been endorsed by the Director General Health Services, BGen Auger. It will consist of the following phases: (a) needs analysis; (b) establishment of a mentoring process based on the results; (c) implementation of the process (participation will be entirely voluntary); and (e) validation and on-going monitoring of the mentoring process over the next five years.

4. Your opinions and feedback on this subject are important. They will determine whether or not a mentoring process will be established, and, if yes, its degree of formality. In this respect, we encourage you to participate in this survey and return it completed within the next ten working days. (It will take you approximately 45-60 minutes to fill it out). Your participation is, of course, voluntary. You may decline answering any question you feel you do not wish to answer. While we encourage and endorse mentoring at all levels within the CFMS, we understand that it may not be for everyone and that there may also be some drawbacks associated with such relationships. We will respect your wishes in terms of the structure, or absence of it, according to your responses. Even though some of you may not be committed to a long term career with the CF, or may not be interested in a mentoring process, your opinions on this subject are highly valued.

d’établir un processus de mentorat est examinée non seulement pour les officiers, mais aussi pour les MR dans le cadre d’un projet similaire.

3. L’initiative a été approuvée par le bgén Auger, Directeur général des Services de santé. Elle comprendra les étapes suivantes: a) analyse de besoins; b) établissement d’un processus de mentorat en fonction des résultats de l’analyse; c) mise en œuvre du processus (la participation sera entièrement volontaire); d) validation et surveillance continue du processus de mentorat au cours des cinq prochaines années.

4. Vos opinions et commentaires à ce sujet sont importants. Ils détermineront si un processus de mentorat sera établi ou non et, le cas échéant, dans quelle mesure il s’agira d’un processus officiel. C’est pourquoi nous vous encourageons à participer au sondage et à renvoyer le questionnaire dûment rempli dans les dix prochains jours ouvrables. (Il vous faudra environ 45-60 minutes pour le remplir). Bien sûr, vous êtes entièrement libres de participer ou non. Vous pouvez sauter toute question à laquelle vous ne souhaitez pas répondre. Bien que nous encourageions et apprécions le mentorat à tous les niveaux au sein du SSFC, nous comprenons qu’il ne convient peut-être pas à tout le monde et qu’il peut aussi entraîner certains inconvénients. Nous respecterons vos désirs en ce qui a trait à la structure, ou à l’absence de celle-ci, suivant vos réponses. Même si certains d’entre vous ne se sentent peut-être pas engagés à poursuivre une longue carrière au sein des FC ou ne sont pas nécessairement intéressés par un processus de mentorat, nous accordons beaucoup d’importance à vos opinions sur la question.
5. The results of the survey will be published in the monthly CFMG Bulletin and Fang Gazette as soon as the data are compiled and analyzed. In order to guarantee your anonymity and the confidentiality of your responses, participants' names are not requested. All surveys will be opened, analyzed, and retained by the researcher. Only aggregate results will be reported. The subject matter expert who is assisting us on this project is Major Janine Knackstedt. She is a Personnel Selection Officer presently undertaking her doctoral studies on mentoring at the University of Waterloo under the supervision of Dr Patricia Rowe. This project has been reviewed and received ethics clearance by the Office of Research Ethics at the University of Waterloo. Any questions regarding your participation in this study can be directed to this office at (519) 888-4567, ext. 6005. If you wish to discuss mentoring issues, you may contact LCdr Peggy Béchard at (613) 945-6784, or your MOC advisor, or the researcher, Maj Janine Knackstedt at (819) 561-6913 (day time home phone number), or Banyan e-mail, or non-military e-mail: eric.gagnon2@sympatico.ca.

6. Again, we encourage you to take this opportunity to provide your input and we thank you for taking the time to do so.

5. Les résultats du sondage seront publiés dans le bulletin mensuel du GMFC et Les crocs vedettes dès que les données auront été compilées et analysées. Afin de respecter l’anonymat des répondants et la confidentialité des réponses, nous ne demandons pas les noms des participants. Tous les questionnaires seront ouverts, analysés et conservés par la recherchiste. Les résultats seront présentés sous forme de résumé seulement. L’experte en la matière qui nous aide dans le cadre de ce projet est le major Janine Knackstedt. C’est un officier de sélection du personnel qui poursuit actuellement des études de doctorat sur le mentorat à l’Université de Waterloo, sous la supervision de Dr Patricia Rowe. Ce projet a été examiné et approuvé par le bureau d’éthique en recherche de l’Université de Waterloo. Toute question concernant votre participation à l’étude peut être transmise à ce bureau, au (519) 888-4567, poste 6005. Si vous désirez discuter de questions concernant le mentorat, vous pouvez communiquer avec le lcdr Peggy Béchard, au (613) 945-6784, ou avec votre conseiller du GPM, ou avec la recherchiste, le maj Janine Knackstedt, par téléphone, au (819) 561-6913 (numéro à la maison pendant le jour), ou par le courrier électronique Banyan, ou par courrier électronique non militaire : eric.gagnon2@sympatico.ca.

6. Encore une fois, nous vous encourageons à profiter de l’occasion pour nous transmettre vos idées et nous vous remercions de prendre le temps de le faire.
Conseiller de la Branche médicale
Colonel

M.S. Gagné
Colonel
Medical Branch Advisor

Enclosures: 2
Distribution List
Action
All CFMS Officers
Information
Director General Health Services

Pièces jointes: 2
Liste de distribution
Action
Tous les officiers du SSFC
Information
Directeur général des Services de santé
MENTORING: SOME FACTS

Mentoring is a developmental relationship between a mentor and a protégé. The mentor is usually a senior person in terms of experience and knowledge who serves as a role-model and a guide for the protégé. The protégé is usually a more junior person who wishes to learn from the experience and knowledge of the mentor, as well as exchange ideas and discuss professional values with him/her. It is quite possible for a person to be both, i.e., a mentor for a more junior person while also being a protégé with a person senior to oneself.

Research has demonstrated that organizational socialization, values, and culture are faster and best transferred through the mentoring process. Such relationships allow the sharing of corporate knowledge. They can promote, complement, and augment existing Branch professional development. Ultimately, the aim is to fully develop the potential of our future leaders.

Benefits for the mentor include: exposure to new and different thinking styles, knowledge and perspectives, helping to develop future leaders while honing your own leadership skills, personal satisfaction and gratification, and occasion to reflect on important issues, both personal and organizational. Protégés often derive the following benefits: sound advice, guidance and encouragement, exposure to the decision making and leadership styles of more senior and experienced individuals, access to organizational knowledge and networking.

QUELQUES RENSEIGNEMENTS SUR LE MENTORAT

Le mentorat est une relation de perfectionnement qui s'établit entre un mentor et une personne encadrée. Le mentor est habituellement une personne qui a beaucoup d'expérience et de connaissances et qui sert de modèle et de guide à la personne encadrée. La personne encadrée est généralement un membre du personnel moins chevronné qui souhaite acquérir de l'expérience et des connaissances auprès du mentor, ainsi qu'échanger des idées et discuter de valeurs professionnelles avec lui. Il est très possible d'être le mentor d'une personne moins expérimentée tout en étant encadré par une personne ayant plus d'ancienneté.

Des recherches ont montré que les capacités de socialisation, les valeurs et la culture organisationnelles sont transmises plus rapidement et mieux au moyen du processus de mentorat. Ce genre de relation permet de partager les connaissances de l'organisation. Le mentorat peut promouvoir, compléter et renforcer le perfectionnement professionnel assuré au sein de la Branche. Le but ultime est de développer pleinement les capacités de nos futurs chefs.

Parmi les avantages que retire le mentor, mentionnons: l'exposition à des connaissances, des perspectives et des styles de pensée nouveaux et différents, la possibilité d'aider à former de futurs chefs tout en perfectionnant ses propres compétences au niveau du leadership, une satisfaction et un contentement personnels ainsi que l'occasion de réfléchir à d'importantes questions, tant personnelles qu'organisationnelles. Pour leur part, les personnes encadrées bénéficient souvent des avantages suivants: de bons conseils,
opportunities, and aid in developing professional skills. The organization also reaps its share of advantages, namely more knowledgeable members with broader perspectives, a visible commitment to developing and retaining leaders, improved communications and sharing professional values, as well as a more effective and motivating workplace.

Not everyone feels the necessity to have a mentor. Moreover, as in any relationship, there are some risks involved resulting in potential drawbacks to mentoring. For example, risks for the protégé include having a mentor who takes credit for the protégé's work, who cannot keep commitments, or who gives unrealistic expectations about advancement. Protégés may also feel they are the object of jealousy and gossip from their peers. Potential mentors may feel pressure to take on a role they are not comfortable with, due to lack of skills and/or time. Mentors may also fear that protégés will play mentor against supervisor or are not able to take responsibility for their own development. Finally, on an organizational level, such programs require resources, time, and commitment of those involved.

Tout le monde ne ressent pas la nécessité d'avoir un mentor. En outre, comme dans toute relation, le mentorat comporte certains risques qui peuvent entraîner des inconvénients. Par exemple, il peut y avoir des mentors qui s'attribuent le mérite du travail effectué par la personne encadrée, qui ne peuvent pas respecter leurs engagements ou qui donnent des espoirs irréalistes quant à l'avancement. Les personnes encadrées peuvent aussi avoir l'impression qu'elles suscitent de la jalousie chez leurs collègues et qu'elles font l'objet de bavardages. Les mentors éventuels peuvent se sentir obligés d'accepter un rôle dans lequel ils ne se sentent pas à l'aise, en raison d'un manque de compétences et/ou de temps. Ils peuvent également craindre que les personnes encadrées ne créent des conflits entre le mentor et le superviseur ou ne soient pas capables d'assumer la responsabilité de leur propre perfectionnement. Enfin, au niveau organisationnel, les programmes comme le mentorat exigent des ressources, du temps et un engagement de la part des intéressés.
Nevertheless, your mentoring relationship will be what you make of it. The benefits to the protégé, the mentor, and the organization usually outweigh the potential drawbacks, especially when the mentorship evolves in a professional manner. Indeed, being a good mentor is an integral part of officership. It is a way to contribute to the professional development of more junior members and to show appreciation for what the organization has given you. Having a mentor is a bit like having one's own professional development officer and allows you to stay in touch with the core values and vision of your Branch.
Mentoring: Needs Analysis

A Survey for the Medical and Dental Branches
1998
Mentoring is a supportive learning relationship between an individual - the mentor - who shares his or her knowledge, experience, and insights with another less-experienced person - the protégé - who is willing and ready to benefit from this exchange. The nature of the relationship varies with the personal styles of each partner.

A mentor is an organizational member with advanced experience and knowledge who serves as a role-model and a guide and who is committed to assist the protégé in his or her professional development.

A protégé is a less experienced individual who wishes to learn from the experience and knowledge of a more senior organizational member as well as partake in the sharing of ideas and professional values.

The purpose of the enclosed needs analysis is three-fold:

1) to determine current mentoring needs for all officers within the Medical and Dental Branches;
2) to assess the extent to which mentoring is already occurring on an informal basis; and
3) to ascertain interests and preferences regarding the establishment of a mentoring process within the CFMS/CFDS.

(Note that the items listed in Part 1 are meant to determine needs and not to create expectations)

The questionnaire is divided in the following sections:

PART 1. MENTORING NEEDS
PART 2. CURRENT SITUATION
PART 3. EXPERIENCE AS A PROTÉGÉ
PART 4. EXPERIENCE AS A MENTOR
PART 5. INTEREST IN A MENTORING PROCESS
PART 6. GENERAL INFORMATION ABOUT YOU
PART 7. FEEDBACK AND SUGGESTIONS

Note: La version française de ce questionnaire se trouve à l'endos de ce document.

Thank you for your participation!
PART 1. MENTORING NEEDS

You may not have experienced mentoring in a formalized manner but informally at some point in your career or even currently, you may be relating to someone who provides you with personal support as well as shows interest in your career development.

Imagine for a moment that you are a protégé in search of an excellent mentor who will meet YOUR CURRENT NEEDS. What would you EXPECT from this person?

- As you can see by the two columns, each sentence will be rated twice.
- Using the five point-scale provided in the left-hand box, please choose one number which corresponds to the extent you wish your mentor to demonstrate each of the following behaviours.
- Circle the appropriate number in the left-hand column. (Do not circle any number in the right-hand column yet).

Remember, it is important that you rate your NEEDS at this point in time in your career!

- Part 1 and Part 2 are the lengthiest components of this questionnaire. You may wish to take a short break after completing Part 1 and/or Part 2.

### What I NEED is a mentor who will...

<table>
<thead>
<tr>
<th>1 = not at all important</th>
<th>2 = not very important</th>
<th>3 = important</th>
<th>4 = fairly important</th>
<th>5 = very important</th>
</tr>
</thead>
</table>

### Presently, there is someone who does...

<table>
<thead>
<tr>
<th>1 = never</th>
<th>2 = rarely</th>
<th>3 = occasionally</th>
<th>4 = frequently</th>
<th>5 = very frequently</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>1. Provide me with opportunities to discuss my anxiety and concerns related to military career issues.</th>
<th>1 2 3 4 5</th>
<th>1 2 3 4 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Provide me with support and encouragement during stressful times.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. Provide &quot;good press&quot; (representation) for me by discussing my accomplishments with his/her colleagues and other superiors.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4. Display values and attitudes similar to my own.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5. Arrange for me to meet with people who could be helpful in my career.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6. Acquaint me with the political dynamic and/or informal power structure of my MOC and the CFMS/CFDS.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7. Nominate/recommend me for tasks that increase my contact and visibility with senior members of my MOC and the military in general.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8. Consider and treat me more as an equal or peer rather than as a subordinate or a trainee.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>9. Provide me with visibility and exposure, for instance by accompanying me to an important meeting or a professional conference.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
10. Share his/her personal experiences as an alternate perspective to my problems. 

11. Provide me with the opportunity to observe him/her interacting with influential members of my profession and the military community. 

12. Keep me informed of what is going on at higher levels in the organization. 

13. Teach me how to improve my professional skills. 

14. Demonstrate leadership and ethical behaviours that I would try to emulate. 

15. Encourage me to have high expectations of myself. 

16. Provide me with opportunities to discuss my questions or concerns regarding feelings of competence. 

17. Advise me on career moves (e.g., changing occupation or making the transition to a civilian career). 

18. Have a positive influence on my self-confidence. 

19. Provide me with opportunities to meet new fellow officers. 

20. Give me feedback regarding my overall performance. 

21. Discuss with me the values and norms of my profession. 

22. Provide a climate in which I feel encouraged to discuss and challenge his/her points of view. 

23. Suggest specific strategies for achieving my career goals. 

24. Assist me in learning the technical aspects of my work. 

25. Ask me for my suggestions concerning problems that he/she is encountering at work. 

26. Help me bypass bureaucracy in order to meet deadlines on tasks/projects. 

27. Provide me with opportunities to discuss my questions or concerns regarding conflicts between my military work and my personal life.
What I NEED is a mentor who will...
1 = not at all important
2 = not very important
3 = important
4 = fairly important
5 = very important

Presently, there is someone who does...
1 = never
2 = rarely
3 = occasionally
4 = frequently
5 = very frequently

28. Entrust me with confidential work-related information. 1 2 3 4 5
29. Coach me on how to improve my leadership skills. 1 2 3 4 5
30 Display ethical values that I want to adopt as my own. 1 2 3 4 5
31. Set challenging standards for me. 1 2 3 4 5
32. Introduce me to influential members of the military. 1 2 3 4 5
33. Encourage a climate for our relationship to develop into a friendship. 1 2 3 4 5
34. Inform me of opportunities to get involved in challenging tasks that would allow me to learn new skills and test my abilities. 1 2 3 4 5
35. Provide me with advice on how to solve military or work related problems. 1 2 3 4 5
36. Discuss with me the values and norms of the military. 1 2 3 4 5
37. Help me with tasks/projects that would otherwise be difficult to complete on my own. 1 2 3 4 5
38. Introduce me to his/her colleagues. 1 2 3 4 5
39. Serve as a role-model or example for me to follow. 1 2 3 4 5
40. Give me advice on how to attain recognition. 1 2 3 4 5
41. Encourage me by voicing his/her confidence in my skills and abilities. 1 2 3 4 5
42. Help me learn to develop professional officer values. 1 2 3 4 5
43. Value my ideas and suggestions. 1 2 3 4 5
44. Be the kind of person I can trust completely. 1 2 3 4 5
45. Suggest specific strategies for accomplishing my work objectives. 1 2 3 4 5
46. Acquaint me with the political dynamic and/or informal power structure of the military in general. 1 2 3 4 5
47. Provide me with opportunities to discuss my anxiety and concerns related to personal issues. 1 2 3 4 5
48. Keep feelings and doubts I share with him/her in strict confidence. 1 2 3 4 5
What I Need is a mentor who will...

1 = not at all important
2 = not very important
3 = important
4 = fairly important
5 = very important

Presently, there is someone who does...
1 = never
2 = rarely
3 = occasionally
4 = frequently
5 = very frequently

49. Have a positive influence on my self-esteem.
50. Introduce me to influential members of my profession.
51. Recognize and treat me as a competent professional.
52. Use his/her influence to support my career interests and advancement.
53. Ensure that I receive credit and recognition for the tasks and duties I have accomplished.
54. Encourage me to discuss my mistakes without fears of repercussions.
55. Be a person I can confide in.
56. Encourage respect and mutual admiration in the relationship.
57. Advise me on advancement/promotional opportunities.
58. Inform/teach me about other aspects of the military.
59. Provide me with feedback on how to better conform to military expectations.
60. Interact with me socially outside of work.
61. Provide me with opportunities and experiences that will improve my credentials.
62. Help me in planning my career.
63. Provide me with opportunities to discuss my questions or concerns regarding my relationships with other professionals, military and civilian.
64. Advise me how to improve my military skills and knowledge.
65. Genuinely care about me as a person.
66. Ensure that I am included in informal networks or gatherings of people within my military profession.
67. Provide me with opportunities to observe how he/she deals with difficult work-related issues.
68. Help me clarify my goals, dreams, as well as methods for implementing them.
<table>
<thead>
<tr>
<th>What I NEED is a mentor who will...</th>
<th>Presently, there is someone who does...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = not at all important</td>
<td>1 = never</td>
</tr>
<tr>
<td>2 = not very important</td>
<td>2 = rarely</td>
</tr>
<tr>
<td>3 = important</td>
<td>3 = occasionally</td>
</tr>
<tr>
<td>4 = fairly important</td>
<td>4 = frequently</td>
</tr>
<tr>
<td>5 = very important</td>
<td>5 = very frequently</td>
</tr>
</tbody>
</table>

69. Discuss with me the vision of our occupation (MOC) and of the CFMS/CFDS as a whole. 1 2 3 4 5 1 2 3 4 5

70. Discuss my questions or concerns regarding feelings of commitment to the military. 1 2 3 4 5 1 2 3 4 5

71. Share some of his/her career history with me. 1 2 3 4 5 1 2 3 4 5

72. Positively influence the development of my values and attitudes regarding my profession. 1 2 3 4 5 1 2 3 4 5

73. Act as a "sounding board" for my ideas. 1 2 3 4 5 1 2 3 4 5

74. Shield me from potentially damaging contacts with other persons of influence. 1 2 3 4 5 1 2 3 4 5

75. Use his/her influence in the military for my benefit. 1 2 3 4 5 1 2 3 4 5

Please add any other needs you have that have not been expressed above:

76. ______________________________________________________ 1 2 3 4 5 1 2 3 4 5

77. ______________________________________________________ 1 2 3 4 5 1 2 3 4 5

78. ______________________________________________________ 1 2 3 4 5 1 2 3 4 5

79. ______________________________________________________ 1 2 3 4 5 1 2 3 4 5

80. ______________________________________________________ 1 2 3 4 5 1 2 3 4 5

**PART 2. CURRENT SITUATION**

Once you have rated your mentoring needs in the left-hand column, please rate the frequency of their occurrence in the right-hand column. In other words, for each statement listed above, please rate in the right-hand column the extent to which you are actually receiving these behaviours, be they through people and superiors at your current workplace or through members of the CFMS/CFDS (in or out of your MOC). It is likely that you are receiving some of these behaviours from several people whom you may not consider as your mentors.
The following questions will assist us in determining the extent to which mentoring is already occurring on an informal basis.

Think of your entire career as a military officer in the CFMS/CFDS. Given the definition of mentoring provided on the first page, have you experienced (or are you currently experiencing) the benefits of a mentoring relationship?

During my career as a military officer in the CFMS/CFDS, I would say that I have experienced a mentoring relationship with _____ mentor(s), even though we may not have used the term mentoring in our conversations.

In the first column below, please write the initials of your mentors (this is for you, you can write a fictitious name if you prefer). These details will assist you in answering the following questions. Note that it is quite possible that you have/had fewer than six mentors. If you have/had more than six mentors, please choose the six individuals who influenced you the most in your military career.

- For each mentor referred to below, please answer the questions provided on the following page by filling the appropriate box with the corresponding number.
- If you think that you have never experienced a relationship with a mentor during your military career in the CFMS/CFDS, please go to Part 4.

<table>
<thead>
<tr>
<th>MENTOR INITIALS</th>
<th>(a) GENDER</th>
<th>(b) AGE</th>
<th>(c) STATUS</th>
<th>(d) LEVEL</th>
<th>(e) RELATION</th>
<th>(f) DISTANCE</th>
<th>(g) STATE</th>
<th>(h) DURATION</th>
<th>(i) FREQUENCY</th>
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</table>

If you never had a mentor (i.e., you answered "0 mentor" above), please indicate why you think this is so:
For each mentor referred to on the previous page, please answer the following questions by filling the appropriate box with the corresponding number.

a) mentor's gender?
   1 = male
   2 = female

b) mentor's age?  This mentor is presently ______ years old (best guess if you don't know).

c) mentor's military/civilian status? (Note: If you are a HSO, answer in terms of your former MOC)
   1 = same MOC as me
   2 = different MOC than me
   3 = civilian

d) mentor's level? This mentor is ______ hierarchical level(s) higher than me in the organization:
   1 = one level
   2 = two levels
   3 = three levels
   4 = more than three levels
   5 = same level as me

e) supervisory/subordinate relationship?
   1 = this mentor is presently my supervisor
   2 = this mentor has once been my supervisor
   3 = we have never been in a supervisor/subordinate relationship

f) distance?
   1 = we work in the same geographical area
   2 = we are a considerable distance apart

g) current state of the mentoring relationship?
   1 = it is still ongoing
   2 = it is pretty well over now
   3 = we are no longer in contact with each other

h) duration?  Our mentoring relationship has been going on for ______ years.
   (If less than a year, indicate by a fraction, e.g., 6 months = .5 years)

i) frequency of communications? On average, how often did/do you communicate with this person (for mentoring reasons)?
   1 = several times a week
   2 = several times a month
   3 = about once a month
   4 = less than once a month
   5 = hardly ever
Given the seniority and extensive experience that many of you have acquired, it is likely that you may have acted as a mentor without really thinking of it in these terms.

Think of your relationships with other military officers in the CFMS/CFDS only.

During my career as a military officer in the CFMS/CFDS, I would qualify myself as a mentor for _______ individual(s), even though we may not have used the term mentoring in our conversations.

As in Part 3, please write the initials of your protégés (again, this is for you, you can write a fictitious name if you prefer) and answer the following short questions. It is possible that you have/had fewer than six protégés. If you have/had more than six protégés, please choose the six individuals on whom you think you have/had the greatest influence.

* For each protégé referred to below, please answer the questions provided on the following page by filling the appropriate box with the corresponding number.

* If you think that you have never been a mentor during your military career in the CFMS/CFDS, please go to Part 5.

<table>
<thead>
<tr>
<th>PROTÉGÉ INITIALS</th>
<th>(a) GENDER</th>
<th>(b) AGE</th>
<th>(c) STATUS</th>
<th>(d) LEVEL</th>
<th>(e) RELATION</th>
<th>(f) DISTANCE</th>
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If you never had a protégé (i.e., you answered "0 protégé" above), please indicate why you think this is so:
For each protégé referred to on the previous page, please answer the following questions by filling the appropriate box with the corresponding number.

a) protégé's gender?
   1 = male
   2 = female

b) protégé's age? This protégé is presently ______ years old (best guess if you don't know).

c) protégé's MOC? (Note: If you are a HSO, answer in terms of your former MOC)
   1 = same MOC as me
   2 = different MOC than me

d) protégé's level? This protégé is _____ hierarchical level(s) lower than me in the organization:
   1 = one level
   2 = two levels
   3 = three levels
   4 = more than three levels
   5 = same level as me

e) supervisory/subordinate relationship?
   1 = I presently supervise him/her
   2 = I used to be his/her supervisor
   3 = we have never been in a supervisor/subordinate relationship

f) distance?
   1 = we work in the same geographical area
   2 = we are a considerable distance apart

g) current state of the mentoring relationship?
   1 = it is still ongoing
   2 = it is pretty well over now
   3 = we are no longer in contact with each other

h) duration? Our mentoring relationship has being going on for ______ years.
   (If less than a year, indicate by a fraction, e.g., 6 months = .5 years)

i) frequency of communications? On average, how often did/do you communicate with this person (for mentoring reasons)?
   1 = several times a week
   2 = several times a month
   3 = about once a month
   4 = less than once a month
   5 = hardly ever
Before establishing any mentoring process, we need to know what your needs and interests are. Please answer the following questions as honestly as possible, with constructive suggestions to aid us in our decision-making. Your opinion is very important!

For sections A and B, choose one of the three proposed answers and provide an explanation for your choice.

A. How do you feel about the establishment of a mentoring process?

   (a) I think it's a good idea because...

   (b) I disagree because...

   (c) I don't really care because...

B. Would you be interested in participating in a mentoring process?

   (a) I am very interested because....

   (b) I am not interested because...

   (c) I am indifferent to the matter because...
C. If you were to participate in a mentoring process,

1) it would be as...
   (a) a mentor
   (b) a protégé
   (c) both, if possible

2) if you were to participate as a protégé, would you prefer your mentor to be...
   (a) within your MOC
   (b) in an MOC within the CFMS/CFDS is OK
   (c) either or
   (d) non applicable to me

3) if you were to participate as a mentor, would you prefer your protégé to be...
   (a) within your MOC
   (b) in an MOC within the CFMS/CFDS is OK
   (c) either or
   (d) non applicable to me

4) would you feel more comfortable if your mentor/protégé was...
   (a) male
   (b) female
   (c) honestly, it really doesn't matter

5) would you feel more comfortable if your mentor/protégé was...
   (a) anglophone
   (b) francophone
   (c) honestly, it really doesn't matter

6) would you feel more comfortable if your mentor/protégé was...
   (a) military
   (b) civilian
   (c) honestly, it really doesn't matter

7) if, you were at a small unit and there were no mentor/protégé available in your MOC, would you prefer your mentor/protégé to be...
   (a) in the same MOC but in another location
   (b) in another MOC (within the CFMS/CFDS) but in the same location

D. In terms of structure, mentoring can range from being very informal (as is probably happening already) to very formal. What degree of structure would you feel comfortable with?

(a) don't do anything at all
(b) have information sessions, a handbook on mentoring, a volunteer "OPI" in each MOC, but keep it informal
(c) semi-formal: have a mentoring committee, a volunteer "OPI" in each MOC, organize meetings where potential mentors and protégés can meet, and monitor how mentoring relationships are going on a confidential basis (e.g., without identifying their partner, individuals in mentoring relationships could report - say twice a year - on how it is working, whether they have questions, the benefits and drawbacks they encountered, etc.), perhaps even initiate a short CFMS/CFDS mentoring newsletter.
(d) formal: all the above, the committee and OPIs could have a list of volunteer mentors and protégés with their preferences and interests, careful matching would be done, as well as regular monitoring and evaluation of the process.
PART 6. GENERAL INFORMATION ABOUT YOU

Reminder: This portion will help us understand the needs of particular groups and is required for statistical purposes. Results will be reported in an aggregate format so that no one can be identified. Surveys will be analyzed and retained only by the researcher.

Sex:  male  female

Age: ________

First official language:  English  French

Rank: ________

Your element:  Army  Navy  Air

Current MOC: ________

Previous MOC if also within the CFMS/CFDS: ________

Number of years in the CF (as military, including reserve time if any): ________

Number of years in present MOC: ________

Number of years in previous MOC if also within the CFMS/CFDS: ________

Highest education completed: (please write the title of your diploma or degree)

Technical certificate/diploma or college diploma: ________________________________

Bachelor: ________________________________

Master: ________________________________

Doctorate: ________________________________

If you joined the Forces under a subsidized university education program (e.g., ROTP, MOTP, DOTP), how many years were you subsidized? ________
Please use this page to convey any issues that are of concern to you. They will be summarized by the researcher to ensure that you cannot be identified, and will be passed on to your Branch Advisor in an aggregate format. Any constructive suggestions regarding the establishment of a mentoring process within the CFMS/CFDS are welcome.
Thank you very much for your participation in this needs analysis. Your opinions count and your assistance with this study is truly appreciated! This is the first step towards defining mentoring needs within the CFMS/CFDS and by MOC.

The results of this needs analysis will be published in the monthly CFMG Bulletin, most likely during the spring of 1999.

Other factors associated with mentoring will be explored in subsequent research (for example, the effect of organizational climate and mentor/protégé characteristics on mentoring needs).

- If you wish to participate in a subsequent study, please indicate your name and work address where you can be reached on the separate sheet enclosed. (Those who will participate will receive the results of the second study).
- You may want to send this sheet separately or enclose it with this questionnaire. As per ethical research guidelines, be assured that your anonymity will be maintained.

In order to match your responses in this questionnaire with those of the second one while maintaining your anonymity, you are asked to provide a four digit alpha-numerical code. In other words, when you will be contacted again in several months, you will be asked to identify yourself only with your code.

Please write a four digit alpha-numerical code here: ____ ____ ____ ____ (a mix of numbers and letters, as you prefer). Now write the same code:
- (1) on the top half of the separate sheet enclosed with your name and address, as well as
- (2) on the detachable bottom half of that sheet which you will keep in a place you will find in several months (such as in your personal file)

Should you have any questions concerning any aspect of this survey, or mentoring in general, please contact Major Janine Knackstedt at:

(819) 561-6913 (day time home number)
Banyan e-mail: Maj J.Knackstedt@SHRA
Non-military e-mail: eric.gagnon2@sympatico.ca

THANK YOU VERY MUCH FOR YOUR PARTICIPATION IN THIS NEEDS ANALYSIS!

Please insert the filled questionnaire in the pre-addressed envelope and put in the internal military mail.
I am interested in participating in a subsequent study related to mentoring. This is not, however, a firm commitment on my part. In keeping with ethical research guidelines, it is understood that my responses will be kept anonymous. I will also receive a copy of the results of this study whether I participate in it or not.

My four digit alpha-numerical code: ___ ___ ___ ___

I would prefer receiving the survey in (circle appropriate one): French English

NAME and MILITARY ADDRESS where I can be reached:

You may wish to enclose the top half of this sheet with the completed questionnaire in the return envelope provided. Envelopes are opened only by the researcher and the sheets will be separated from the surveys immediately, before any data are recorded. Alternatively, you may send this sheet directly to the researcher at the following address:

Major Janine Knackstedt
DHRRE / PRT
Ref: Mentoring Study
Export Blg, 16th floor
NDHQ, Ottawa
K1A OK2

My four digit alpha-numerical code: ___ ___ ___ ___

Please enter your code, tear off this portion of the page, and keep it in a location that you will find several months from now (such as your personal file, for example). The next time that you will be contacted you will be asked to identify yourself only with your code.

THANK YOU FOR PARTICIPATION!
Le Mentorat : Analyse de besoins

Une Enquête pour la Branche médicale et la Branche dentaire
1998
Le mentorat est une relation de soutien à des fins d'apprentissage établie entre une personne - le mentor - qui partage ses connaissances, son expérience et ses vues avec une autre personne moins expérimentée - la personne encadrée - qui est disposée et prête à tirer profit de cet échange. La nature de la relation varie selon le style de chaque participant.

1. Un mentor est un membre de l'organisation ayant beaucoup d'expérience et de connaissances qui sert de modèle et de guide et qui s'est engagé à aider la personne encadrée dans son perfectionnement professionnel.

2. Une personne encadrée est un membre du personnel moins expérimenté qui souhaite bénéficier de l'expérience et des connaissances d'un membre de l'organisation plus chevronné, ainsi que partager des idées et des valeurs professionnelles avec lui.

Le questionnaire d'analyse de besoins ci-joint vise un triple but :

1) déterminer les besoins actuels en matière de mentorat pour tous les officiers de la Branche médicale et dentaire;
2) évaluer dans quelle mesure le mentorat s'exerce déjà de façon non officielle;
3) déterminer les intérêts et les préférences en ce qui a trait à l'établissement d'un processus de mentorat au sein du SSFC/SDFC.

(Veuillez noter que les items énumérés dans la partie 1 ont pour but de déterminer les besoins et non de créer des attentes)

Le questionnaire comprend les sections suivantes :

- PARTIE 1. BESOINS EN MATIÈRE DE MENTORAT
- PARTIE 2. SITUATION ACTUELLE
- PARTIE 3. EXPÉRIENCE EN TANT QUE PERSONNE ENCADRÉE
- PARTIE 4. EXPÉRIENCE EN TANT QUE MENTOR
- PARTIE 5. INTÉRÊT À L'ÉGARD D'UN PROCESSUS DE MENTORAT
- PARTIE 6. RENSEIGNEMENTS GÉNÉRAUX À VOTRE SUJET
- PARTIE 7. COMMENTAIRES ET SUGGESTIONS

Note: The English version of the survey is on the reverse side this booklet.

Merci de votre participation!
PARTIE 1. BESOINS EN MATIÈRE DE MENTORAT

Vous n’avez peut-être pas eu l’occasion de participer à un processus de mentorat officialisé, mais il se peut qu’au cours de votre carrière, vous ayez entretenu des rapports informels ou que vous en entreteniez actuellement avec une personne qui vous fournit du soutien personnel et manifeste de l’intérêt pour votre perfectionnement professionnel.

Imaginez pendant un moment que vous êtes à la recherche d’un excellent mentor qui répondra à vos besoins actuels. Quelles seraient vos attentes à l’égard de cette personne?

- Comme l’indiquent les deux colonnes, chaque énoncé sera coté deux fois.
- En vous servant de l’échelle de cinq points fournie dans l’encadré de gauche, indiquez le chiffre qui correspond à la mesure dans laquelle vous souhaitez que votre mentor adopte les comportements indiqués ci-dessous.
- Encerclez le chiffre approprié dans la colonne de gauche. (N’encerclez aucun chiffre dans la colonne de droite à ce stade-ci.)

N’oubliez pas : Il est important que vous évaluiez les besoins que vous avez à cette étape-ci de votre carrière!

Les parties 1 et 2 sont les composantes les plus longues du questionnaire. Vous voudrez peut-être prendre une petite pause après les avoir remplis.

<table>
<thead>
<tr>
<th>Ce dont j’ai besoin, c’est un mentor qui...</th>
<th>Présentement, il y a quelqu’un qui...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = pas du tout important</td>
<td>1 = jamais</td>
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<tr>
<td>2 = pas très important</td>
<td>2 = rarement</td>
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<tr>
<td>3 = important</td>
<td>3 = à l’occasion</td>
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<tr>
<td>4 = assez important</td>
<td>4 = fréquemment</td>
</tr>
<tr>
<td>5 = très important</td>
<td>5 = très fréquemment</td>
</tr>
</tbody>
</table>

1. M’offre des occasions de discuter de mon inquiétude et de mes préoccupations au sujet de questions liées à la carrière militaire. 1 2 3 4 5 1 2 3 4 5
2. Me soutient et m’encourage au cours des périodes de tension. 1 2 3 4 5 1 2 3 4 5
3. Me fait une bonne réputation en discutant de mes réalisations avec ses collègues et d’autres supérieurs. 1 2 3 4 5 1 2 3 4 5
4. Affiche des valeurs et des attitudes semblables au miennes. 1 2 3 4 5 1 2 3 4 5
5. Fait en sorte que je rencontre des personnes susceptibles de m’aider dans ma carrière. 1 2 3 4 5 1 2 3 4 5
6. Me fait connaître la dynamique politique et/ou la structure de pouvoir informelle de mon GPM et du SSFC/SDFC. 1 2 3 4 5 1 2 3 4 5

2/16
7. Me propose comme candidat ou me recommande pour l'exécution de tâches qui me permettent d'être davantage en contact avec les membres supérieurs de mon GPM et des Forces en général. 1 2 3 4 5 1 2 3 4 5

8. Me considère et me traite davantage comme son égal(e) ou l'un de ses pairs plutôt que comme un(e) subordonné(e) ou un(e) stagiaire. 1 2 3 4 5 1 2 3 4 5

9. M'assure une visibilité et un contact avec le milieu, par exemple en m'accompagnant à une réunion importante ou à une conférence professionnelle. 1 2 3 4 5 1 2 3 4 5

10. Partage ses expériences personnelles pour me donner une perspective différente relativement à mes problèmes. 1 2 3 4 5 1 2 3 4 5

11. Me donne l'occasion de l'observer lorsqu'il/elle interagit avec des membres influents de ma profession et de la collectivité militaire. 1 2 3 4 5 1 2 3 4 5

12. Me tient au courant de ce qui se passe aux niveaux supérieurs de l'organisation. 1 2 3 4 5 1 2 3 4 5

13. M'enseigne comment améliorer mes compétences professionnelles. 1 2 3 4 5 1 2 3 4 5

14. Manifeste du leadership et des comportements éthiques que j'essaierais/j'essaie d'imiter. 1 2 3 4 5 1 2 3 4 5

15. M'encourage à avoir des attentes élevées envers moi-même. 1 2 3 4 5 1 2 3 4 5

16. Me fournit des occasions de discuter de mes questions et de mes préoccupations concernant mon sentiment de compétence. 1 2 3 4 5 1 2 3 4 5

17. Me conseille au sujet des décisions reliées aux changements de carrière (par ex., changer d'occupation ou faire la transition à une carrière civile). 1 2 3 4 5 1 2 3 4 5

18. A une influence positive sur ma confiance en moi. 1 2 3 4 5 1 2 3 4 5

19. Me fournit des occasions de rencontrer de nouveaux collègues officiers. 1 2 3 4 5 1 2 3 4 5

20. Me fournit une rétroaction relativement à mon rendement en général. 1 2 3 4 5 1 2 3 4 5

21. Discute avec moi des valeurs et des normes de ma profession. 1 2 3 4 5 1 2 3 4 5

22. Établit un climat dans lequel je me sens encouragé(e) à discuter et à mettre en question ses points de vue. 1 2 3 4 5 1 2 3 4 5

23. Me propose des stratégies particulières pour atteindre mes buts professionnels. 1 2 3 4 5 1 2 3 4 5
24. M'aide à apprendre les aspects techniques de mon travail. 1 2 3 4 5 1 2 3 4 5
25. Me demande des suggestions relativement à des problèmes auxquels il/elle fait face au travail. 1 2 3 4 5 1 2 3 4 5
26. M'aide à contourner la bureaucratie afin de respecter les échéances fixées pour des tâches/des projets. 1 2 3 4 5 1 2 3 4 5
27. Me donne des occasions de discuter de mes questions ou de mes préoccupations au sujet des conflits existant entre ma vie professionnelle au sein des Forces et ma vie personnelle. 1 2 3 4 5 1 2 3 4 5
28. Me confie des renseignements confidentiels liés au travail. 1 2 3 4 5 1 2 3 4 5
29. Me montre comment améliorer mes compétences en matière de leadership. 1 2 3 4 5 1 2 3 4 5
30. Affiche des valeurs éthiques que je voudrais adopter. 1 2 3 4 5 1 2 3 4 5
31. Me fixe des normes stimulantes. 1 2 3 4 5 1 2 3 4 5
32. Me présente à des membres influents des Forces. 1 2 3 4 5 1 2 3 4 5
33. Favorise l'établissement d'un climat dans lequel notre relation peut devenir une amitié. 1 2 3 4 5 1 2 3 4 5
34. M'informe des opportunités de participer dans des tâches stimulantes qui me permettent d'acquérir de nouvelles compétences et de mettre mes capacités à l'essai. 1 2 3 4 5 1 2 3 4 5
35. Me fournit des conseils sur la façon de résoudre des problèmes militaires ou liés au travail. 1 2 3 4 5 1 2 3 4 5
36. Discute avec moi des valeurs et des normes des Forces. 1 2 3 4 5 1 2 3 4 5
37. M'aide sur des tâches/des projets qu'il me serait autrement difficile de terminer par moi-même. 1 2 3 4 5 1 2 3 4 5
38. Me présente à ses collègues. 1 2 3 4 5 1 2 3 4 5
39. Me sert de modèle ou d'exemple. 1 2 3 4 5 1 2 3 4 5
40. Me donne des conseils quant à la façon de faire reconnaître mes réalisations. 1 2 3 4 5 1 2 3 4 5
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<tr>
<th>Ce dont j'ai BESOIN, c'est un mentor qui...</th>
<th>Présentement, il y a quelqu'un qui...</th>
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<td>2 = pas très important</td>
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<td>3 = important</td>
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<td>4 = assez important</td>
<td>4 = fréquemment</td>
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<td>5 = très important</td>
<td>5 = très fréquemment</td>
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42. M'aide à apprendre à développer des valeurs d'officier professionnel.  
43. Accorde de l'importance à mes idées et suggestions.  
44. Est le genre de personne à qui je peux faire entièrement confiance.  
45. Me propose des stratégies particulières pour atteindre mes objectifs de travail.  
46. Me fait connaître la dynamique politique et/ou la structure de pouvoir informelle des Forces en général.  
47. Me fournit des occasions de discuter de mon inquiétude et de mes préoccupations en ce qui a trait à des questions personnelles.  
48. Ne divulgue à personne les sentiments et les doutes dont je lui fait part.  
49. A une influence positive sur mon amour propre.  
50. Me présente à des membres influents de ma profession.  
51. Me reconnaît et me traite comme un(e) professionnel(le) compétent(e).  
52. Utilise son influence pour appuyer mes intérêts et mon cheminement de carrière.  
53. Veille à ce que je sois reconnu(e) pour les tâches et les fonctions que j'ai exécutées.  
54. M'encourage à discuter de mes erreurs sans que j'aie à craindre des conséquences.  
55. Est une personne à qui je peux me confier.  
56. Encourage le respect et l'admiration mutuelle dans le cadre de notre relation.  
57. Me conseille au sujet des possibilités d'avancement/de promotion.  
58. Me donne de l'information/de l'enseignement en ce qui a trait à d'autres aspects des Forces.  
59. Me fournit une rétroaction sur la façon de mieux me conformer aux attentes militaires.
Ce dont j'ai BESOIN, c'est un mentor qui... | Présentement, il y a quelqu'un qui...
--- | ---
1 = pas du tout important | 1 = jamais
2 = pas très important | 2 = rarement
3 = important | 3 = à l'occasion
4 = assez important | 4 = fréquemment
5 = très important | 5 = très fréquemment

60. Entretient des relations sociales avec moi à l'extérieur du travail. | 1 2 3 4 5 | 1 2 3 4 5
61. Me fournit des occasions et me fait faire des expériences qui me permettront d'améliorer mes titres de compétence. | 1 2 3 4 5 | 1 2 3 4 5
62. M'aide à planifier ma carrière. | 1 2 3 4 5 | 1 2 3 4 5
63. Me fournit des occasions de discuter de mes questions ou de mes préoccupations en ce qui a trait aux rapports que j'entretiens avec d'autres professionnels, qu'ils soient militaires ou civils. | 1 2 3 4 5 | 1 2 3 4 5
64. Me conseille sur les façons d'accroître mes compétences et mes connaissances militaires. | 1 2 3 4 5 | 1 2 3 4 5
65. S'intéresse sincèrement à moi en tant que personne. | 1 2 3 4 5 | 1 2 3 4 5
66. Veille à ce que je sois inclus(e) dans des réseaux ou des rassemblements informels de personnes au sein de ma profession militaire. | 1 2 3 4 5 | 1 2 3 4 5
67. Me fournit des occasions d'observer comment il/elle traite des questions difficiles liées au travail. | 1 2 3 4 5 | 1 2 3 4 5
68. M'aide à clarifier mes buts et mes aspirations ainsi qu'à déterminer des méthodes pour les concrétiser. | 1 2 3 4 5 | 1 2 3 4 5
69. Discute avec moi de la vision de notre groupe professionnel militaire (GPM) et de l'ensemble du SSFC/SDFC. | 1 2 3 4 5 | 1 2 3 4 5
70. Discute de mes questions ou de mes préoccupations en ce qui a trait à mon sentiment d'engagement envers les Forces. | 1 2 3 4 5 | 1 2 3 4 5
71. Me parle de certains événements de sa propre carrière. | 1 2 3 4 5 | 1 2 3 4 5
72. A une influence positive sur le développement de mes valeurs et attitudes en ce qui a trait à ma profession. | 1 2 3 4 5 | 1 2 3 4 5
73. Est la première personne à qui je demande un «son de cloche» au sujet de mes idées. | 1 2 3 4 5 | 1 2 3 4 5
74. Me protège de contacts avec d'autres personnes influentes, qui risquent de me nuire. | 1 2 3 4 5 | 1 2 3 4 5
75. Utilise son influence au sein des Forces à mon profit. | 1 2 3 4 5 | 1 2 3 4 5
**PARTIE 2. SITUATION ACTUELLE**

Une fois que vous avez coté vos besoins en matière de mentorat dans la colonne de gauche, veuillez indiquer dans la colonne de droite à quelle fréquence ces comportements se manifestent. En d'autres termes, pour chacun des énoncés présentés ci-dessus, indiquez dans la colonne de droite dans quelle mesure les comportements mentionnés sont adoptés à votre égard, que ce soit par des personnes ou des supérieurs à votre lieu de travail actuel ou par des membres du SSFC/SDFC (au sein ou à l'extérieur de votre GPM). Certains de ces comportements sont probablement adoptés envers vous par plusieurs personnes que vous ne considérez peut-être pas comme vos mentors.
PARTIE 3. EXPÉRIENCE EN TANT QUE PERSONNE ENCADRÉE

Les questions suivantes nous aideront à déterminer dans quelle mesure le mentorat s'exerce déjà de façon non officielle.

Pensez à l'ensemble de votre carrière d'officier au sein du SSFC/SDFC. Compte tenu de la définition du terme «mentorat» fournie à la première page, avez-vous fait l'expérience (ou faites-vous actuellement l'expérience) des avantages d'une relation de mentorat?

Au cours de ma carrière d'officier au sein du SSFC/SDFC, je dirais que j'ai fait l'expérience d'une relation de mentorat avec ______ mentor(s), bien que nous n'ayons peut-être pas utilisé le terme «mentorat» dans nos conversations.

Dans la première colonne figurant ci-dessous, veuillez inscrire les initiales de vos mentors (Ces données sont pour vous; vous pouvez donc inscrire un nom fictif si vous le préférez,) Ces détails vous aideront à répondre aux questions qui suivent. Notez qu'il est très possible que vous avez eu moins de six mentors. Si vous avez eu plus de six mentors, choisissez les six personnes qui vous ont le plus influencé(e) au cours de votre carrière militaire.

> Pour chacun des mentors indiqués ci-dessous, veuillez répondre aux questions posées à la page suivante en inscrivant le chiffre approprié dans la case réservée à cet effet.

> Si vous croyez n'avoir jamais fait l'expérience d'une relation de mentorat au cours de votre carrière militaire au sein du SSFC/SDFC, veuillez passer à la partie 4.

<table>
<thead>
<tr>
<th>INITIALES DU MENTOR</th>
<th>(a) SEXE</th>
<th>(b) ÂGE</th>
<th>(c) STATUT</th>
<th>(d) NIVEAU</th>
<th>(e) RAPPORT</th>
<th>(f) DISTANCE</th>
<th>(g) ÉTAT</th>
<th>(h) DURÉE</th>
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Si vous n'avez jamais eu un mentor (vous avez répondu "0" à la question du haut), veuillez indiquer les raisons selon vous:
Pour chacun des mentors indiqués à la page précédente, veuillez répondre aux questions suivantes en inscrivant le chiffre approprié dans la case réservée à cet effet.

a) Sexe du mentor?
   1 = homme
   2 = femme

b) Âge du mentor? **Ce mentor à actuellement _____ ans.** (Âge approximatif si vous n'êtes pas certain)

c) Statut du mentor (militaire/civil)? (Nota : Si vous êtes un OSS (HSO), répondez en fonction de votre ancien GPM.)
   1 = même GPM que moi
   2 = GPM différent du mien
   3 = civil

d) Niveau du mentor? **Ce mentor se trouve à _____ niveau(x) hiérarchique(s) au-dessus du mien dans l’organisation.**
   1 = un niveau
   2 = deux niveaux
   3 = trois niveaux
   4 = plus de trois niveaux
   5 = au même niveau que moi

e) Rapport superviseur/subordonné?
   1 = ce mentor est présentement mon superviseur
   2 = ce mentor a déjà été mon superviseur
   3 = nous n'avons jamais entretenu de rapport superviseur/subordonné

f) Distance?
   1 = nous travaillons dans la même région
   2 = une distance considérable nous sépare

g) Où en est rendue la relation de mentorat?
   1 = en cours
   2 = pratiquement terminée
   3 = nous ne sommes plus en contact

h) Durée? **Notre relation de mentorat dure depuis _____ ans.**
   (Si la durée est de moins d’un an, indiquez-la au moyen d’une fraction décimale, p. ex. 6 mois = 0,5 an.)

i) Fréquence des communications dans le cadre du mentorat? **En moyenne, à quelle fréquence communiquez-vous/communiquez-vous avec cette personne?**
   1 = plusieurs fois par semaine
   2 = plusieurs fois par mois
   3 = environ une fois par mois
   4 = moins d’une fois par mois
   5 = presque jamais
PARTIE 4. EXPÉRIENCE EN TANT QUE MENTOR

Étant donné l'ancienneté et la vaste expérience que beaucoup d'entre vous ont acquises, vous ayez probablement exercé les fonctions de mentor sans vraiment les désigner de cette façon.

Réfléchissez aux rapports que vous avez entretenus avec d'autres officiers du SSFC/SDFC seulement.

Au cours de ma carrière d'officier au sein du SSFC/SDFC, je dirais que j'ai exercé les fonctions de mentor auprès de ______ personne(s), bien que nous n'ayons peut-être pas utilisé le terme « mentorat » dans nos conversations.

Comme dans la partie 3, veuillez inscrire les initiales des personnes encadrées. (Encore une fois, ces données sont pour vous; vous pouvez donc inscrire un nom fictif si vous le préférez.) Puis, répondez aux courtes questions qui suivent. Il est possible que vous encadriez/ayez encadré moins de six personnes. Si vous en encadrez/avez encadré plus de six, choisissez les six personnes sur lesquelles vous croyez avoir/avoir eu le plus d'influence.

- Pour chacune des personnes encadrées qui sont indiquées ci-dessous, veuillez répondre aux questions posées à la page suivante en inscrivant le chiffre approprié dans la case réservée à cet effet.
- Si vous croyez que vous n'avez jamais exercé les fonctions de mentor au cours de votre carrière militaire au sein du SSFC/SDFC, veuillez passer à la partie 5.

<table>
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<tr>
<th>INITIALES DE LA PERSONNE ENCADRÉE</th>
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Si vous n'avez jamais eu de personne encadrée (vous avez répondu "0" à la question du haut), veuillez indiquer les raisons selon vous:
Pour chacune des personnes encadrées qui sont mentionnées à la page précédente, veuillez répondre aux questions suivantes en inscrivant le chiffre approprié dans la case réservée à cet effet.

a) Sexe de la personne encadrée?
   1 = homme
   2 = femme

b) Âge de la personne encadrée? La personne encadrée a actuellement _____ ans. (Âge approximatif si vous n’êtes pas certain)

c) GPM de la personne encadrée? (Nota: Si vous êtes un OSS (HSO), répondez en fonction de votre ancien GPM)
   1 = même GPM que moi
   2 = GPM différent du mien

d) Niveau de la personne encadrée? La personne encadrée est à _____ niveau(x) hiérarchique(s) au-dessous du mien dans l’organisation.
   1 = un niveau
   2 = deux niveaux
   3 = trois niveaux
   4 = plus de trois niveaux
   5 = au même niveau que moi

e) Rapport superviseur/subordonné?
   1 = je supervise présentement cette personne
   2 = j’ai déjà été son superviseur
   3 = nous n’avons jamais entretenu de rapport superviseur/subordonné

f) Distance?
   1 = nous travaillons dans la même région
   2 = une distance considérable nous sépare

g) Où en est rendue la relation de mentorat?
   1 = en cours
   2 = pratiquement terminée
   3 = nous ne sommes plus en contact

   (Si la durée est de moins d’un an, indiquez-la au moyen d’une fraction décimale, p. ex. 6 mois = 0,5 an.)

i) Fréquence des communications dans le cadre du mentorat? En moyenne, à quelle fréquence communiquiez-vous/communiquerez-vous avec cette personne?
   1 = plusieurs fois par semaine
   2 = plusieurs fois par mois
   3 = environ une fois par mois
   4 = moins d’une fois par mois
   5 = presque jamais
PARTIE 5. INTÉRÊT À L'ÉGARD D'UN PROCESSUS DE MENTORAT

Avant d'établir tout processus de mentorat, il nous faut connaître vos besoins et intérêts. Veuillez répondre aux questions suivantes le plus honnêtement possible et faire des suggestions constructives afin de nous aider dans notre prise de décision. Votre opinion est très importante!

- Pour les sections A et B, choisissez l'une des trois réponses proposées et expliquez votre choix.

A. Que pensez-vous de l'établissement d'un processus de mentorat?
   a) Je crois que c'est une bonne idée parce que...
   
   b) Je ne suis pas d'accord parce que...
   
   c) Cela ne m'intéresse pas vraiment parce que...

B. Seriez-vous intéressé(e) à participer à un processus de mentorat?
   a) Je suis très intéressé(e) parce que...
   
   b) Je ne suis pas intéressé(e) parce que...
   
   c) Cette question m'indiffère parce que...
Pour les sections C et D, veuillez encercler la réponse qui correspond le mieux à votre opinion.

Si vous êtes certain(e) de ne pas être intéressé(e) à participer à un processus de mentorat, veuillez passer directement à la section D.

C. Si vous participez à un processus de mentorat,

1) ce serait à titre...
   a) de mentor
   b) de personne encadrée
   c) de mentor et de personne encadrée, dans la mesure du possible

2) Si vous y participez comme personne encadrée, préférez-vous que votre mentor...
   a) appartienne à votre GPM
   b) appartienne à un GPM au sein du SSFC/SDFC
   c) appartienne à votre GPM ou à un autre GPM au sein du SSFC/SDFC
   d) sans objet

3) Si vous y participez comme mentor, préférez-vous que la personne encadrée...
   a) appartienne à votre GPM
   b) appartienne à un GPM au sein du SSFC/SDFC
   c) appartienne à votre GPM ou à un autre GPM au sein du SSFC/SDFC
   d) sans objet

4) Seriez-vous plus à l'aise si le mentor/la personne encadrée était...
   a) un homme
   b) une femme
   c) honnêtement, ça n'a vraiment pas d'importance

5) Seriez-vous plus à l'aise si votre le mentor/la personne encadrée était...
   a) anglophone
   b) francophone
   c) honnêtement, ça n'a vraiment pas d'importance

6) Seriez plus à l'aise si le mentor/la personne encadrée était...
   a) un militaire
   b) un civil
   c) honnêtement, ça n'a vraiment pas d'importance

7) Si vous faisiez partie d'une petite unité et qu'il n'y avait pas de mentor/de personne encadrée disponible au sein de votre GPM, préférez-vous que votre mentor/personne encadrée soit...
   a) dans le même GPM, mais à un autre endroit que vous
   b) dans un autre GPM (au sein du SSFC/SDFC), mais au même endroit que vous

D. Le mentorat est un processus dont la structure peut varier beaucoup, allant de très informelle (comme c'est probablement le cas déjà) à très officielle. Dans quelle mesure le mentorat devrait-il être structuré pour que vous vous sentiez à l'aise?

a) aucune structure
b) avoir des séances d'information, un guide sur le mentorat et un BPR volontaire dans chaque GPM, mais garder une structure informelle
c) structure semi-officielle : avoir un comité du mentorat et un BPR volontaire dans chaque GPM, organiser des réunions où les mentors éventuels et les personnes à encadrer peuvent se rencontrer, et surveiller comment se déroulent les relations de mentorat en toute confidentialité (p. ex. sans identifier leur partenaire, les personnes participant à un processus de mentorat pourraient faire rapport - disons deux fois par année - sur la façon dont va la relation, indiquer si elles ont des questions, mentionner les avantages et les inconvénients que comporte la relation, etc.), et peut-être même publier un court bulletin de nouvelles portant sur le mentorat au sein du SSFC/SDFC
d) structure officielle : intégrer tous les éléments mentionnés ci-dessus. De plus, le comité et les BPR pourraient avoir une liste de volontaires souhaitant être mentors ou personnes encadrées, avec leurs préférences et leurs intérêts, à partir de laquelle ils pourraient procéder à un jumelage judicieux. Le processus ferait aussi l'objet d'une surveillance et d'une évaluation régulières.
Rappel : Cette partie nous aidera à comprendre les besoins de groupes particuliers et doit être remplie à des fins statistiques. Les résultats seront présentés sous forme de résumé, de façon que personne ne puisse être identifié. Les questionnaires seront analysés et conservés uniquement par la recherchiste.

Sexe : homme    femme

Âge : _______

Première langue officielle : anglais    français

Grade : _______

Service : Armée de terre    Marine    Force aérienne

GPM actuel : ______

Ancien GPM s'il était aussi au sein du SSFC/SDFC : _______

Nombre d'années de service dans les FC (en tant que militaire, y compris le service dans la Réserve, le cas échéant) : _______

Nombre d'années de service dans le GPM actuel : _______

Nombre d'années de service dans l'ancien GPM s'il est également au sein du SSFC/SDFC : _______

Dernier niveau d'études terminé (veuillez inscrire le titre de votre diplôme ou grade universitaire)

Certificat/diplôme technique ou diplôme d'études collégiales: __________________________________________

Baccalauréat : _________________________________________

Maîtrise : ___________________________________________

Doctorat : ___________________________________________

Si vous vous êtes enrollé dans les FC sous un programme de formation d'études universitaires subventionnées (par ex., PFOR/ROTP, PIMM/MOTP, PIMD/DOTP), pendant combien d'années avez vous été subventionné?
PARTIE 7. COMMENTAIRES ET SUGGESTIONS

Veuillez utiliser cette page pour nous faire part de toutes les questions qui vous préoccupent. Celles-ci seront résumées par notre recherchiste de façon à ce que vous ne puissiez pas être identifié et elles seront transmises sous forme de sommaire à votre conseiller de la Branche. Toute suggestion constructive concernant l'établissement d'un processus de mentorat au sein du SSFC/SDFC est la bienvenue.

VEUILLEZ LIRE LA PAGE SUIVANTE!
Merci beaucoup d'avoir participé à l'analyse de besoins. Vos opinions comptent, et nous vous sommes sincèrement reconnaissants de l'aide fournie dans le cadre de la présente étude ! C'est la première étape en vue de définir les besoins en matière de mentorat au sein du SSFC/SDFC et par GPM.

Les résultats de l'analyse de besoins seront publiés dans le bulletin mensuel du GMFC, fort probablement au cours du printemps de 1999.

D'autres facteurs liés au mentorat seront étudiés dans le cadre d'une recherche subséquente (par exemple, les effets de l'atmosphère organisationnelle et des traits caractéristiques du mentor/de la personne encadrée sur les besoins en matière de mentorat).

- Si vous désirez participer à une étude ultérieure, veuillez indiquer votre nom et votre adresse au travail sur la feuille en annexe. (Les participants recevront les résultats de la deuxième étude).
- Cette feuille peut être envoyée séparément ou jointe au présent questionnaire. Conformément aux lignes directrices sur la recherche éthique, l'anonymat des participants sera assuré.

Pour que nous puissions établir un lien entre les réponses fournies dans le présent questionnaire et celles que vous donnerez dans le second, tout en assurant votre anonymat, nous vous demandons de nous fournir un code alphanumérique de quatre éléments. En d'autres mots, lorsque nous communiquerons avec vous de nouveau dans quelques mois, nous vous demanderons de vous identifier uniquement au moyen de votre code.

Veuillez inscrire un code alphanumérique de quatre éléments ici : ____ ____ ____ ____ (combinaison de chiffres et de lettres, à votre choix). Maintenant, inscrivez le même code:
- 1) dans la partie supérieure de la feuille ci-jointe, avec votre nom et adresse, et
- 2) dans la partie détachable de la feuille, que vous conserverez dans un endroit dont vous vous souviendrez dans quelques mois (par exemple, dans votre dossier personnel)

Si vous avez des questions concernant tout aspect du questionnaire ou sur le mentorat en général, veuillez communiquer avec le major Janine Knackstedt de la façon suivante :

- Téléphone : (819) 561-6913 (à la maison, pendant le jour)
- Courrier électronique Banyan : Maj J.Knackstedt@SHRA
- Courrier électronique non militaire : eric.gagnon2@sympatico.ca

MERCI BEAUCOUP DE VOTRE PARTICIPATION À L'ANALYSE DE BESOINS!

Veuillez placer le questionnaire dûment rempli dans l'enveloppe pré-adressée et l'envoyer par courrier militaire interne.
MENTORING NEEDS ANALYSIS FOR THE CFMS - REMINDER

1. Approximately two weeks ago we asked you for your assistance in completing a needs analysis on mentoring in the CFMS. On behalf of the Director General Health Services, I would like to take this opportunity to thank those of you who have replied. I also wish to thank you for your valuable feedback and recommendations with regard to the potential establishment of a mentoring process within the CFMS.

2. Your input on this subject is very important. This needs analysis is the first of four phases. Subsequent phases comprise the establishment of a mentoring process, the implementation of a voluntary mentoring process, and the validation and monitoring of the mentoring process over the next five years.

3. To those recipients who have not responded yet, we are still eager to listen to your needs, and thus, we encourage you to take the time within the next few days to complete and return the survey. Even though some of you may not be committed to a long

ANALYSE DE BESOINS EN MATIÈRE DE MENTORAT POUR LE COMPTE DU SSFC - RAPEL

1. Il y a environ deux semaines, nous vous avons demandé de nous aider à effectuer une analyse de besoins en matière de mentorat au SSFC. Au nom du Directeur général des Services de santé, j’aimerais profiter de l’occasion pour remercier ceux d’entre vous qui nous ont répondu. Je désire aussi vous exprimer notre reconnaissance pour vos précieux commentaires et recommandations en ce qui a trait à la possibilité d’établir un processus de mentorat au sein du SSFC.

2. Votre contribution est très importante. L’analyse de besoins constitue la première de quatre étapes. Les trois suivantes sont l’établissement d’un processus de mentorat, la mise en œuvre d’un processus de mentorat faisant appel à des volontaires ainsi que la validation et la surveillance du processus au cours des cinq prochaines années.

3. Par ailleurs, nous demeurons impatients de connaître les besoins de ceux qui ne nous ont pas encore répondu, et c’est pourquoi nous encourageons ces personnes à prendre le temps de remplir et de renvoyer le questionnaire dans les jours qui viennent.
term career with the CF, or may not be interested in a mentoring process, your opinions on this subject are highly valued.

4. If for one reason or another you have decided not to participate in the needs analysis, it would be appreciated if you would complete Part 6, provide a brief explanation for your decision not to participate in Part 7, and then return the questionnaire. This will allow us to determine the total number of outstanding responses and to gain basic information on the non-respondent population.

5. The results of the survey will be published in an aggregate format in the monthly CFMG Bulletin, probably in the Spring of 1999. Should you have any questions regarding your participation in this study or on mentoring issues in general, you are encouraged to contact either LCdr Peggy Béchard at (613) 945-6784, or your MOC advisor, or the researcher, Maj Janine Knackstedt at (819) 561-6913 (day time home phone number), or Banyan e-mail, or non-military e-mail: eric.gagnon2@sympatico.ca.

6. Again, we thank those of you who have already provided us with valuable information and we encourage you to express your needs and opinions if you have not already done so. The time and effort you are committing to this endeavour are

Même si certains parmi vous ne sont peut-être pas engagés à poursuivre une longue carrière au sein des FC ou ne sont pas nécessairement intéressés par un processus de mentorat, nous accordons beaucoup d’importance à vos opinions sur la question.

4. Si, pour une raison ou une autre, vous avez décidé de ne pas prendre part à l’analyse de besoins, nous vous saurions gré de bien vouloir remplir la partie 6 du questionnaire, de fournir une brève explication à la partie 7 quant à votre décision de ne pas participer et de nous renvoyer le questionnaire. Nous pourrons ainsi déterminer le nombre total de réponses non fournies et obtenir des renseignements de base sur les non-répondants.

5. Les résultats du sondage seront publiés sous forme de résumé dans le bulletin mensuel du GMFC, probablement au printemps de 1999. Si vous avez des questions au sujet de la participation à cette étude ou sur le mentorat en général, nous vous invitons à communiquer avec le lecdr Peggy Béchard, au (613) 945-6784, ou avec votre conseiller du GPM, ou avec la recherchiste, le maj Janine Knackstedt, par téléphone, au (819) 561-6913 (numéro à la maison pendant le jour), ou par courrier électronique Banyan, ou par courrier électronique non militaire : eric.gagnon2@sympatico.ca.

6. Nous remercions encore une fois ceux qui nous ont déjà fourni de précieux renseignements et nous vous encourageons à exprimer vos besoins et opinions si ce n’est déjà fait. Nous vous sommes reconnaissants du temps et des efforts que vous consacrez à
appreciated.  

Conseiller de la Branche médicale  
Colonel

M.S. Gagné  
Colonel  
Medical Branch Advisor

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APPENDIX C

EXPLORATORY FACTOR ANALYSIS OF MENTORING OCCURRENCES
Factor Analysis: Mentoring Occurrences Measure

An exploratory factor analysis (EFA) using the Maximum Likelihood extraction with Oblimin rotation was performed on the sample of 334 respondents. The Bartlett's test of sphericity ($\chi^2_{320} = 11079.05, p<.001$) suggested that the measure's matrix was factorable and the Kaiser-Meyer-Olkin measure of sampling adequacy (.97) provided a favourable indication of the reliability of the relationships between pairs of variables.

The initial analysis yielded a total of nine eigenvalues greater than one. A visual inspection of the scree plot, however, suggested the presence of three factors. Consequently, two, three, four, and five-factor solutions were examined in greater detail. The two, four, and five-factor solutions were rejected because several dimensions did not make conceptual sense and because several solutions offered one or more factors composed of very few or no items with a loading above .35. The three-factor solution was initially deemed more interpretable and more statistically appropriate. Further examination of this solution resulted in the removal of 24 items from the analyses based on the criteria stated above. The first factor, however, was composed of 29 items, which violates the parsimony principle.

A second EFA using Maximum Likelihood extraction with direct Oblimin rotation was thus performed on the remaining 51 items to assess the stability of the three-factor solution. A visual inspection of the scree plot suggested a four-factor solution, therefore three, four, and five-factor solutions were assessed. Because the final four-factor solution contained a great number of items (51), the two criteria used to retain an item were slightly more conservative than those of the previous EFA: (1) the item had to have a factor loading equal or greater than .40; and (2) the item could not have a factor loading equal or greater to .30 on any other factor. Consequently, an
additional ten items were eliminated from the analyses. In order to reassess the stability of the final four-factor solution, the 41 items that defined the factor loadings were reanalyzed. This resulted in a total of five eigenvalues greater than one, however, the fifth factor did not contain any items with a factor loading greater than .35, thereby confirming the presence of only four factors.

The four interpretable factors accounted for 63.76% of the total variance in mentoring occurrences items. The first factor, **psycho-social mentoring**, comprised 15 items, accounted for 49.62% of the variance, and had an internal consistency reliability coefficient of .96. It included aspects related to having a trusted mentor who was also a role-model as well as being treated as an equal partner. The second factor, **providing networks and teaching organizational politics**, was composed of 11 items, accounted for 5.63% of the variance, and had a Cronbach Alpha of .93. This factor essentially reflected mentoring activities that involved introducing the protégé to influential others as well as teaching about the informal politics of the organization. The third factor, **discussing personal issues related to work**, comprised five items, accounted for 2.35% of the variance, and had a Cronbach Alpha of .87. Here items specifically measured the opportunity to engage in more sensitive discussions with the mentors, such as feelings of competence, concerns, career issues as well as how to handle family-work conflicts. Finally, the fourth factor, **career and work coaching**, was composed of ten items which accounted for 2.27% of the variance and had a Cronbach Alpha of .94. It included items about giving advice on work-related aspects such as feedback, how to improve one's skills, as well as more broadly oriented guidance such as career advice and professional development.

The internal consistency reliability coefficients for the four factors therefore ranged from
.96 to .87, with an overall Cronbach Alpha of .98 on the 41 items. A summary of item
descriptions, means, standard deviations, alpha coefficients, and factor loadings for mentoring
occurrences is provided in the following table.

A different factorial structure between mentoring needs and mentoring occurrences was
thus found in this population, which was to be predicted. Mentoring needs encompassed six
dimensions whereas mentoring occurrences was explained by four dimensions. The overlap in
content was of 26 items (slightly above half), indicating that a high proportion of items were
unique to each measure. In other words, behaviours which participants rated as important
(mentoring needs) were significantly different from the mentoring behaviours they reported
receiving.
### Table 15

**Alpha Coefficients, Percentages of the Variance Accounted for, Means, Standard Deviations, and Factor Loadings for the Mentoring Occurrences Measure (N = 334)**

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha Coefficient</td>
<td>.96</td>
<td>.93</td>
<td>.87</td>
<td>.94</td>
</tr>
<tr>
<td>Percentage of the variance accounted for</td>
<td>49.62%</td>
<td>5.63%</td>
<td>2.35%</td>
<td>2.27%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>44 Be the kind of person I can trust completely</td>
<td>2.77</td>
<td>1.21</td>
<td>.89</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>30 Display ethical values that I want to adopt as my own</td>
<td>2.70</td>
<td>1.15</td>
<td>.81</td>
<td>.16</td>
<td>-.16</td>
<td>--</td>
</tr>
<tr>
<td>39 Serve as a role-model or example for me to follow</td>
<td>2.59</td>
<td>1.13</td>
<td>.75</td>
<td>.11</td>
<td>-.13</td>
<td>-.17</td>
</tr>
<tr>
<td>51 Recognize and treat me as a competent professional</td>
<td>3.22</td>
<td>1.17</td>
<td>.72</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>56 Encourage respect and mutual admiration in the relationship</td>
<td>2.77</td>
<td>1.12</td>
<td>.71</td>
<td>-.15</td>
<td>.20</td>
<td>-.11</td>
</tr>
<tr>
<td>48 Keep feelings and doubts I share with him/her in strict confidence</td>
<td>2.86</td>
<td>1.27</td>
<td>.67</td>
<td>--</td>
<td>.11</td>
<td>--</td>
</tr>
<tr>
<td>43 Value my ideas and suggestions</td>
<td>2.88</td>
<td>1.11</td>
<td>.65</td>
<td>.12</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>4 Display values and attitudes similar to my own</td>
<td>3.02</td>
<td>1.07</td>
<td>.64</td>
<td>.17</td>
<td>.11</td>
<td>.17</td>
</tr>
<tr>
<td>14 Demonstrate leadership and ethical behaviours that I would try to emulate</td>
<td>2.77</td>
<td>1.16</td>
<td>.63</td>
<td>.22</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>55 Be a person I can confine in</td>
<td>2.65</td>
<td>1.21</td>
<td>.62</td>
<td>-.15</td>
<td>.26</td>
<td>-.15</td>
</tr>
<tr>
<td>22 Provide a climate in which I feel encouraged to discuss and challenge his/her points of view</td>
<td>2.44</td>
<td>1.19</td>
<td>.60</td>
<td>--</td>
<td>.11</td>
<td>--</td>
</tr>
<tr>
<td>65 Genuinely care about me as a person</td>
<td>2.77</td>
<td>1.13</td>
<td>.58</td>
<td>--</td>
<td>.21</td>
<td>-.13</td>
</tr>
<tr>
<td>8 Consider and treat me more as an equal or peer rather than as a subordinate or trainee</td>
<td>2.95</td>
<td>1.25</td>
<td>.51</td>
<td>.16</td>
<td>.22</td>
<td>.14</td>
</tr>
<tr>
<td>49 Have a positive influence on my self-esteem</td>
<td>2.56</td>
<td>1.07</td>
<td>.49</td>
<td>--</td>
<td>.24</td>
<td>-.19</td>
</tr>
</tbody>
</table>
Table 15

Alpha Coefficients, Percentages of the Variance Accounted for, Means, Standard Deviations, and Factor Loadings for the Mentoring Occurrences Measure (N = 334) (Continued)

<table>
<thead>
<tr>
<th>Item</th>
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<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>41 Encourage me by voicing his/her confidence in my skills and abilities</td>
<td>2.53</td>
<td>1.09</td>
<td>.43</td>
<td>--</td>
<td>.18</td>
<td>-.21</td>
</tr>
<tr>
<td>32 Introduce me to influential members of the military</td>
<td>1.78</td>
<td>.86</td>
<td>--</td>
<td>.78</td>
<td>--</td>
<td>-.12</td>
</tr>
<tr>
<td>7 Nominate/recommend me for tasks that increase my contact and visibility with senior members of y MOC and the military in general</td>
<td>2.16</td>
<td>1.07</td>
<td>.14</td>
<td>.75</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>5 Arrange for me to meet with people who could be helpful in my career</td>
<td>1.80</td>
<td>.92</td>
<td>--</td>
<td>.72</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>50 Introduce me to influential members of my profession</td>
<td>1.93</td>
<td>.92</td>
<td>--</td>
<td>.70</td>
<td>--</td>
<td>-.21</td>
</tr>
<tr>
<td>19 Provide me with opportunities to meet new fellow officers</td>
<td>2.19</td>
<td>.95</td>
<td>--</td>
<td>.68</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>6 Acquaint me with the political dynamics and/or informal power structure of y MOC and the CFMS/CFDS</td>
<td>2.03</td>
<td>.98</td>
<td>--</td>
<td>.65</td>
<td>.17</td>
<td>--</td>
</tr>
<tr>
<td>38 Introduce me to his/her colleagues</td>
<td>2.08</td>
<td>.93</td>
<td>--</td>
<td>.64</td>
<td>.11</td>
<td>--</td>
</tr>
<tr>
<td>9 Provide me with visibility and exposure, for instance by accompanying me to an important meeting or a professional conference</td>
<td>1.67</td>
<td>.92</td>
<td>--</td>
<td>.61</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>66 Ensure that I am included in informal networks or gatherings of people within my military profession</td>
<td>2.19</td>
<td>1.02</td>
<td>.16</td>
<td>.50</td>
<td>--</td>
<td>-.16</td>
</tr>
</tbody>
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Table 15
Alpha Coefficients, Percentages of the Variance Accounted for, Means, Standard Deviations, and Factor Loadings for the Mentoring Occurrences Measure (N = 334) (Continued)

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<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Provide me with the opportunity to observe him/her interacting with influential members of my profession and the military community</td>
<td>.94</td>
<td>.97</td>
<td>--</td>
<td>.47</td>
<td>.13</td>
<td>--</td>
</tr>
<tr>
<td>3</td>
<td>Provide &quot;good press&quot; (representation) for me by discussing my accomplishments with his/her colleagues and other superiors</td>
<td>2.38</td>
<td>1.03</td>
<td>.21</td>
<td>.47</td>
<td>.14</td>
<td>--</td>
</tr>
<tr>
<td>4</td>
<td>Provide me with opportunities to discuss my anxiety and concerns related to military career issues</td>
<td>2.60</td>
<td>1.03</td>
<td>.11</td>
<td>.12</td>
<td>.66</td>
<td>--</td>
</tr>
<tr>
<td>2</td>
<td>Provide me with support and encouragement during stressful times</td>
<td>2.47</td>
<td>1.05</td>
<td>--</td>
<td>--</td>
<td>.65</td>
<td>--</td>
</tr>
<tr>
<td>16</td>
<td>Provide me with opportunities to discuss my questions or concerns regarding feelings of competence</td>
<td>2.19</td>
<td>1.05</td>
<td>--</td>
<td>.13</td>
<td>.63</td>
<td>-.10</td>
</tr>
<tr>
<td>47</td>
<td>Provide me with opportunities to discuss my anxiety and concerns related to personal issues</td>
<td>2.13</td>
<td>1.03</td>
<td>--</td>
<td>--</td>
<td>.60</td>
<td>-.17</td>
</tr>
<tr>
<td>27</td>
<td>Provide me with opportunities to discuss my anxiety and concerns regarding conflicts between my military work and my personal life</td>
<td>2.01</td>
<td>1.01</td>
<td>--</td>
<td>--</td>
<td>.57</td>
<td>-.11</td>
</tr>
<tr>
<td>59</td>
<td>Provide me with feedback on how to better conform to military expectations</td>
<td>2.06</td>
<td>.88</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-.71</td>
</tr>
<tr>
<td>64</td>
<td>Advise me on how to improve my military skills and knowledge</td>
<td>2.15</td>
<td>.94</td>
<td>.11</td>
<td>--</td>
<td>--</td>
<td>-.71</td>
</tr>
<tr>
<td>42</td>
<td>Help me learn to develop professional officer values</td>
<td>2.18</td>
<td>.97</td>
<td>.16</td>
<td>--</td>
<td>--</td>
<td>-.70</td>
</tr>
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Alpha Coefficients, Percentages of the Variance Accounted for, Means, Standard Deviations, and Factor Loadings for the Mentoring Occurrences Measure (N = 334) (Continued)

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</tr>
</thead>
<tbody>
<tr>
<td>58 Inform/teach me about other aspects of the military</td>
<td>2.07</td>
<td>.93</td>
<td>--</td>
<td>.17</td>
<td>.13</td>
<td>-.64</td>
</tr>
<tr>
<td>62 Help me in planning my career</td>
<td>2.14</td>
<td>1.02</td>
<td>.16</td>
<td>.18</td>
<td>--</td>
<td>-.56</td>
</tr>
<tr>
<td>29 Coach me on how to improve my leadership skills</td>
<td>2.04</td>
<td>.93</td>
<td>--</td>
<td>.20</td>
<td>--</td>
<td>-.54</td>
</tr>
<tr>
<td>68 Help me clarify my goals, dreams, as well as methods for</td>
<td>1.95</td>
<td>.91</td>
<td>--</td>
<td>.14</td>
<td>.23</td>
<td>-.50</td>
</tr>
<tr>
<td>implementing them</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 Suggest specific strategies for achieving my career goals</td>
<td>2.14</td>
<td>.99</td>
<td>.17</td>
<td>.18</td>
<td>.11</td>
<td>-.44</td>
</tr>
<tr>
<td>45 Suggest specific strategies for accomplishing my work objectives</td>
<td>2.30</td>
<td>.92</td>
<td>.24</td>
<td>--</td>
<td>.11</td>
<td>-.44</td>
</tr>
<tr>
<td>36 Discuss with me the values and norms of the military</td>
<td>2.09</td>
<td>.92</td>
<td>--</td>
<td>.22</td>
<td>.14</td>
<td>-.39</td>
</tr>
</tbody>
</table>

Note. Response options for mentoring occurrences ranged from 1 = "never" to 5 = "very frequently". Factor 1 = psycho-social mentoring; factor 2 = providing networks and teaching organizational politics; factor 3 = discussing personal issues related to work; factor 4 = career and work coaching. Factors were derived using Maximum Likelihood extraction with Oblimin rotation. The overall alpha coefficient for the 41 items was .98 and the total percentage of variance accounted for was 63.76%.
APPENDIX D

COVERING LETTER AND QUESTIONNAIRE (STUDY 2)
Mentoring Initiative for the CFMS/CFDS - Phase II

1. As you are aware, the initiative to establish a mentoring process within the CFMS/CFDS has been endorsed by the Surgeon General, BGen Auger. To this end, you have been invited to respond to a mentoring needs analysis around this time last year and results were made available a few months later, as promised. This study, which is independent of the first one, consists of the second phase prior to the implementation of any mentorship initiative. The purpose of the enclosed mentoring survey is to validate the mentoring needs and occurrences as expressed by officers who responded to the first study, and thus, to have a better understanding of your preferences and attributes. For your benefit, a short information sheet on mentoring is attached.

2. Your opinions and feedback on this subject are important. It will take you approximately 20 minutes to fill out this survey. Your participation is, of course, voluntary. You may decline answering any question you feel you do not wish to answer. While we encourage and endorse mentoring at all levels within the CFMS/CFDS, we understand that it may not be for everyone. For these reasons, this short investment in your time will allow you to express your needs and convey your thoughts about mentoring, as well as other career-related issues.

3. The results of the survey will be made available to you as soon as the data are compiled and analyzed, either through the CFMG Communiqué, the CFMG homepage, or the most efficient means depending on your MOC. In order to guarantee your anonymity and the confidentiality of your responses, participants' names are not requested. All surveys will be opened, analyzed, and retained solely by the researcher. Only aggregate results will be reported. The subject matter expert who is assisting us on this project is Major Janine Knackstedt. She is a Personnel Selection Officer presently completing her doctoral studies on mentoring at the University of Waterloo under the supervision of Dr. Patricia Rowe. This project has been
reviewed and received ethics clearance by the Office of Research Ethics at the University of Waterloo. Any questions regarding your participation in this study can be directed to this office at (519) 888-4567, ext. 6005. If you wish to discuss mentoring issues, you may contact your MOC advisor, or the researcher, Maj Janine Knackstedt at (819) 561-6913 (day time home phone number), non-military e-mail: eric.gagnon2@sympatico.ca.

4. Again, we strongly encourage you to take this opportunity to provide your input and we thank you for taking the time to do so. Your participation to this survey is entirely voluntary: a non participation will have no impact on your career.

M.S. Gagné
Colonel
Medical Branch Advisor

Attachments: 2

Dist List

Action

CFMS/CFDS Officers

Surgeon General
MENTORING: SOME FACTS

Mentoring is a developmental relationship between a mentor and a protégé. The mentor is usually a senior person in terms of experience and knowledge who serves as a role-model and a guide for the protégé. The protégé is usually a more junior person who wishes to learn from the experience and knowledge of the mentor, as well as exchange ideas and discuss professional values with him/her. It is quite possible for a person to be both, i.e., a mentor for a more junior person while also being a protégé with a person senior to oneself.

Research has demonstrated that organizational socialization, values, and culture are faster and best transferred through the mentoring process. Such relationships allow the sharing of corporate knowledge. They can promote, complement, and augment existing Branch professional development. Ultimately, the aim is to fully develop the potential of our future leaders.

Benefits for the mentor include: exposure to new and different thinking styles, knowledge and perspectives, helping to develop future leaders while honing your own leadership skills, personal satisfaction and gratification, and occasion to reflect on important issues, both personal and organizational. Protégés often derive the following benefits: sound advice, guidance and encouragement, exposure to the decision making and leadership styles of more senior and experienced individuals, access to organizational knowledge and networking opportunities, and aid in developing professional skills. The organization also reaps its share of advantages, namely more knowledgeable members with broader perspectives, a visible commitment to developing and retaining leaders, improved communications and sharing professional values, as well as a more effective and motivating workplace.

Not everyone feels the necessity to have a mentor. Moreover, as in any relationship, there are some risks involved resulting in potential drawbacks to mentoring. For example, risks for the protégé include having a mentor who takes credit for the protégé’s work, who cannot keep commitments, or who gives unrealistic expectations about advancement. Protégés may also feel they are the object of jealousy and gossip from their peers. Potential mentors may feel pressure to take on a role they are not comfortable with, due to lack of skills and/or time. Mentors may also fear that protégés will play mentor against supervisor or are not able to take responsibility for their own development. Finally, on an organizational level, such programs require resources, time, and commitment of those involved.

Nevertheless, your mentoring relationship will be what you make of it. The benefits to the protégé, the mentor, and the organization usually outweigh the potential drawbacks, especially when the mentorship evolves in a professional manner. Indeed, being a good mentor is an integral part of officership. It is a way to contribute to the professional development of more junior members and to show appreciation for what the organization has given you. Having a mentor is a bit like having one’s own professional development officer and allows you to stay in touch with the core values and vision of your Branch.
Quartier général Groupe médical des Forces canadiennes,
1745 Promenade Alta Vista
Ottawa, Ontario K1A 0K6P

5000-1 (CEMA Form)

le 25 octobre 1999

Liste de distribution

INITIATIVE DE MENTORAT AU SSFC - PHASE II

1. Comme vous le savez, l’initiative concernant l’adoption d’un programme de mentorat au sein du SSFC/SDFC a été endossée par le Chef des Services de santé, le bgén Auger. À cette fin, vous avez été invité à répondre à une analyse de besoin en mentorat. Cette analyse a eu lieu à ce temps-ci l’an dernier et les résultats ont été présentés, tel que promis, quelques mois plus tard. L’étude actuelle, qui est indépendante de la première, est la seconde phase du projet menant à la mise en œuvre de toute initiative de mentorat. Le questionnaire ci-joint nous aidera à déterminer les besoins actuels de mentorat ainsi que leur fréquence au sein du SSFC/SDFC et de mieux comprendre les préférences et attributs des officers qui en font partie. Une courte feuille de renseignements sur le mentorat a été annexée à votre intention.

2. Votre opinion et commentaires à ce sujet sont très important. Il vous faudra environ 20 minutes pour remplir ce questionnaire. Bien sûr, vous êtes entièrement libres de participer ou non. Vous pouvez sauter toute question à laquelle vous ne souhaitez pas répondre. Bien que nous encouragions et approuvions le mentorat à tous les niveaux au sein du SSFC, nous comprenons qu’il ne convient peut-être pas à tout le monde et qu’il peut aussi entraîner certains inconvénients. En conséquence on vous demande de bien vouloir investir un peu de votre temps pour exprimer vos besoins et nous transmettre votre opinion sur le mentorat et sur d’autres sujets touchant votre carrière.

3. Les résultats du sondage seront disponibles dès que les données seront compilées et analysées; ces résultats seront soient publiés dans le bulletin mensuel du GMFC, dans le site d’intranet du GMFC, ou par le biais de toute autre méthode jugée la plus efficace selon votre GPM. Afin de respecter l’anonymat des répondants et la confidentialité des réponses, nous ne demandons pas les noms des participants. Tous les questionnaires seront ouverts, analysés et
conservés par la recherchiste. Les résultats seront présentés sous forme de résumé seulement.
L’experte en la matière qui nous aide dans le cadre de ce projet est le major Janine Knackstedt.
C’est un officier de sélection du personnel qui poursuit actuellement des études de doctorat sur le
mentorat à l’Université de Waterloo, sous la supervision de Mme Patricia Rowe. Ce projet a été
examiné et approuvé par le bureau d’éthique en recherche de l’Université de Waterloo. Toute
question concernant votre participation à l’étude peut être transmise à ce bureau, au
(519) 888-4567, poste 6005. Si vous désirez discuter de questions concernant le mentorat, vous
pouvez communiquer avec votre conseillère du GPM, ou avec la recherchiste, le
maj Janine Knackstedt, par téléphone, au (819) 561-6913 (numéro à la maison pendant le jour)
z ou par courrier électronique non militaire : eric.gagnon2@sympatico.ca.

4. Encore une fois, nous vous encourageons à profiter de l’occasion pour nous transmettre
vos idées et nous vous remercions de prendre le temps de le faire. Vous êtes entièrement libres
de participer à cette étude ; un refus de participer n’entraînera aucune conséquence fâcheuse pour
vous.

Conseiller de la Branche médicale
Colonel

M.S. Gagné
Pièces jointes : 2

Liste de distribution

Action
Les officiers du SSFC/SDFC

Information
Chef des Services de santé
QUELQUES RENSEIGNEMENTS SUR LE MENTORAT

Le mentorat est une relation de perfectionnement qui s'établit entre un mentor et une personne encadrée. Le mentor est habituellement une personne qui a beaucoup d'expérience et de connaissances et qui sert de modèle et de guide à la personne encadrée. La personne encadrée est généralement un membre du personnel moins chevronné qui souhaite acquérir de l'expérience et des connaissances auprès du mentor, ainsi qu'échanger des idées et discuter de valeurs professionnelles avec lui. Il est très possible d'être le mentor d'une personne moins expérimentée tout en étant encadré par une personne ayant plus d'ancienneté.

Des recherches ont montré que les capacités de socialisation, les valeurs et la culture organisationnelles sont transmises plus rapidement et mieux au moyen du processus de mentorat. Ce genre de relation permet de partager les connaissances de l'organisation. Le mentorat peut promouvoir, compléter et renforcer le perfectionnement professionnel assuré au sein de la Branche. Le but ultime est de développer pleinement les capacités de nos futurs chefs.

Parmi les avantages que retire le mentor, mentionnons: l'exposition à des connaissances, des perspectives et des styles de pensée nouveaux et différents, la possibilité d'aider à former de futurs chefs tout en perfectionnant ses propres compétences au niveau du leadership, une satisfaction et un contentement personnels ainsi que l'occasion de réfléchir à d'importantes questions, tant personnelles qu'organisationnelles. Pour leur part, les personnes encadrées bénéficient souvent des avantages suivants: de bons conseils, une orientation et des encouragements, l'exposition aux styles de leadership et de prise de décision de personnes chevronnées, l'accès à des connaissances organisationnelles et à des possibilités d'établissement de réseaux, ainsi que de l'aide sur le plan du perfectionnement professionnel. L'organisation aussi retire sa part d'avantages, notamment la présence de membres du personnel mieux informés et aux perspectives élargies, un engagement concret en ce qui a trait à la formation de chefs et à leur maintien à l'effectif, des communications améliorées et le partage des valeurs professionnelles, ainsi que la création d'un milieu de travail plus efficace et plus stimulant.

Tout le monde ne ressent pas la nécessité d'avoir un mentor. En outre, comme dans toute relation, le mentorat comporte certains risques qui peuvent entraîner des inconvénients. Par exemple, il peut y avoir des mentors qui s'attribuent le mérite du travail effectué par la personne encadrée, qui ne peuvent pas respecter leurs engagements ou qui donnent des espoirs irréalistes quant à l'avancement. Les personnes encadrées peuvent aussi avoir l'impression qu'elles suscitent de la jalousie chez leurs collègues et qu'elles font l'objet de bavardages. Les mentors éventuels peuvent se sentir obligés d'accepter un rôle dans lequel ils ne se sentent pas
à l'aide, en raison d'un manque de compétences et/ou de temps. Ils peuvent également craindre que les personnes encadrées ne créent des conflits entre le mentor et le superviseur ou ne soient pas capables d'assumer la responsabilité de leur propre perfectionnement. Enfin, au niveau organisationnel, les programmes comme le mentorat exigent des ressources, du temps et un engagement de la part des intéressés.

Néanmoins, la qualité de la relation de mentorat dépend de vous. Les avantages retirés par la personne encadrée, le mentor et l'organisation surpassent habituellement les inconvénients possibles, particulièrement lorsque le mentorat évolue d'une façon professionnelle. En fait, être un bon mentor fait partie intégrante des fonctions d'un officier. C'est une façon de contribuer au perfectionnement professionnel de membres du personnel moins expérimentés et de montrer votre reconnaissance pour ce que l'organisation vous a donné. Avoir un mentor, c'est un peu comme avoir son propre officier de perfectionnement professionnel et cela vous permet de demeurer en contact avec les valeurs et la vision fondamentales de votre Branche.
The purpose of the enclosed survey is to examine the current mentoring needs and occurrences within the CFMS/CFDS and thus, to have a better understanding your preferences and attributes.

Mentoring is a supportive learning relationship between an individual - the mentor - who shares his or her knowledge, experience, and insights with another less-experienced person - the protégé - who is willing and ready to benefit from this exchange. The nature of the relationship varies with the personal styles of each partner.

> A mentor is an organizational member with advanced experience and knowledge who serves as a role-model and a guide and who is committed to assist the protégé in his or her professional development.

> A protégé is a less experienced individual who wishes to learn from the experience and knowledge of a more senior organizational member as well as partake in the sharing of ideas and professional values.

The questionnaire is divided in the following sections:

PART 1. MENTORING NEEDS
PART 2. CURRENT SITUATION
PART 3. EXPERIENCE AS A PROTÉGÉ
PART 4. PERSONAL ATTRIBUTES
PART 5. CAREER SATISFACTION
PART 6. RESOURCE PERSONS
PART 7. GENERAL INFORMATION ABOUT YOU
PART 8. FEEDBACK AND SUGGESTIONS

Note: Une copie de la version française de ce questionnaire est également disponible.

Thank you for your participation!

1/9
PART 1. MENTORING NEEDS

You may not have experienced mentoring in a formalized manner but informally at some point in your career or even currently, you may be relating to someone who provides you with personal support as well as shows interest in your career development.

Imagine for a moment that you are a protégé in search of an excellent mentor who will meet YOUR CURRENT NEEDS. What would you EXPECT from this person?

As you can see by the two columns, each sentence will be rated twice.

Using the five point-scale provided in the left-hand box, please choose one number which corresponds to the extent you wish your mentor to demonstrate each of the following behaviours.

Circle the appropriate number in the left-hand column. (Do not circle any number in the right-hand column yet).

Remember, it is important that you rate your NEEDS at this point in time in your career!

<table>
<thead>
<tr>
<th>What I NEED is a mentor who will...</th>
<th>Presently, there is someone who does...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = not at all important</td>
<td>1 = never</td>
</tr>
<tr>
<td>2 = not very important</td>
<td>2 = rarely</td>
</tr>
<tr>
<td>3 = important</td>
<td>3 = occasionally</td>
</tr>
<tr>
<td>4 = fairly important</td>
<td>4 = frequently</td>
</tr>
<tr>
<td>5 = very important</td>
<td>5 = very frequently</td>
</tr>
</tbody>
</table>

1. Provide "good press" (representation) for me by discussing my accomplishments with his/her colleagues and other superiors.  
   1 2 3 4 5 1 2 3 4 5

2. Display values and attitudes similar to my own.  
   1 2 3 4 5 1 2 3 4 5

3. Acquaint me with the political dynamic and/or informal power structure of my MOC and the CFMS/CFDS.  
   1 2 3 4 5 1 2 3 4 5

4. Provide me with the opportunity to observe him/her interacting with influential members of my profession and the military community.  
   1 2 3 4 5 1 2 3 4 5

5. Teach me how to improve my professional skills.  
   1 2 3 4 5 1 2 3 4 5

6. Demonstrate leadership and ethical behaviours that I would try to emulate.  
   1 2 3 4 5 1 2 3 4 5

7. Provide me with opportunities to meet new fellow officers.  
   1 2 3 4 5 1 2 3 4 5

8. Give me feedback regarding my overall performance.  
   1 2 3 4 5 1 2 3 4 5

9. Provide a climate in which I feel encouraged to discuss and challenge his/her points of view.  
   1 2 3 4 5 1 2 3 4 5

10. Assist me in learning the technical aspects of my work.  
    1 2 3 4 5 1 2 3 4 5
What I NEED is a mentor who will...

1 = not at all important  
2 = not very important  
3 = important  
4 = fairly important  
5 = very important

Presently, there is someone who does...

1 = never  
2 = rarely  
3 = occasionally  
4 = frequently  
5 = very frequently

<p>| | | | | | | | |</p>
<table>
<thead>
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</tr>
</thead>
<tbody>
<tr>
<td>11. Ask me for my suggestions concerning problems that he/she is encountering at work.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>12. Provide me with opportunities to discuss my questions or concerns regarding conflicts between my military work and my personal life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13. Entrust me with confidential work-related information.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14. Display ethical values that I want to adopt as my own.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>15. Set challenging standards for me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>16. Encourage a climate for our relationship to develop into a friendship.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>17. Inform me of opportunities to get involved in challenging tasks that would allow me to learn new skills and test my abilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>18. Provide me with advice on how to solve military or work related problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>19. Discuss with me the values and norms of the military.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20. Help me with tasks/projects that would otherwise be difficult to complete on my own.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21. Serve as a role-model or example for me to follow.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>22. Help me learn to develop professional officer values.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>23. Value my ideas and suggestions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>24. Be the kind of person I can trust completely.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>25. Suggest specific strategies for accomplishing my work objectives.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>26. Acquaint me with the political dynamic and/or informal power structure of the military in general.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>27. Provide me with opportunities to discuss my anxiety and concerns related to personal issues.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>28. Keep feelings and doubts I share with him/her in strict confidence.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>29. Have a positive influence on my self-esteem.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>30. Recognize and treat me as a competent professional.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
### PART 2. CURRENT SITUATION

Once you have rated your mentoring needs in the left-hand column, please rate the frequency of their occurrence in the right-hand column. In other words, for each statement listed above, please rate in the right-hand column the extent to which you are actually receiving these behaviours, be they through people and superiors at your current workplace or through members of the CFMS/CFDS (in or out of your MOC). It is likely that you are receiving some of these behaviours from several people whom you may not consider as your mentors.

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<th>Presently, there is someone who does...</th>
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</tr>
<tr>
<td><strong>5 = very important</strong></td>
<td><strong>5 = very frequently</strong></td>
</tr>
</tbody>
</table>

31. Use his/her influence to support my career interests and advancement.  
1 2 3 4 5  1 2 3 4 5  

32. Ensure that I receive credit and recognition for the tasks and duties I have accomplished.  
1 2 3 4 5  1 2 3 4 5  

33. Encourage me to discuss my mistakes without fears of repercussions.  
1 2 3 4 5  1 2 3 4 5  

34. Be a person I can confide in.  
1 2 3 4 5  1 2 3 4 5  

35. Encourage respect and mutual admiration in the relationship.  
1 2 3 4 5  1 2 3 4 5  

36. Inform/teach me about other aspects of the military.  
1 2 3 4 5  1 2 3 4 5  

37. Provide me with feedback on how to better conform to military expectations.  
1 2 3 4 5  1 2 3 4 5  

38. Interact with me socially outside of work.  
1 2 3 4 5  1 2 3 4 5  

39. Provide me with opportunities and experiences that will improve my credentials.  
1 2 3 4 5  1 2 3 4 5  

40. Advise me how to improve my military skills and knowledge.  
1 2 3 4 5  1 2 3 4 5  

41. Genuinely care about me as a person.  
1 2 3 4 5  1 2 3 4 5  

42. Help me clarify my goals, dreams, as well as methods for implementing them.  
1 2 3 4 5  1 2 3 4 5  

43. Discuss with me the vision of our occupation (MOC) and of the CFMS/CFDS as a whole.  
1 2 3 4 5  1 2 3 4 5  

44. Act as a "sounding board" for my ideas.  
1 2 3 4 5  1 2 3 4 5  

45. Use his/her influence in the military for my benefit.  
1 2 3 4 5  1 2 3 4 5
PART 3. EXPERIENCE AS A PROTÉGÉ

The following questions will assist us in determining the extent to which mentoring is already occurring on an informal basis.

Think of your entire career as a military officer in the CFMS/CFDS. Given the definition of mentoring provided on the first page, have you experienced (or are you currently experiencing) the benefits of a mentoring relationship?

During my career as a military officer in the CFMS/CFDS, I would say that I have experienced a mentoring relationship with ______ mentor(s), even though we may not have used the term mentoring in our conversations.

If you never had a mentor (i.e., you answered "0 mentor" above), please indicate why you think this is so:

Think about the person who has had the greatest influence on your career and professional development. This person may have been your mentor in the past or your mentoring relationship may still be ongoing. You probably did not refer to this person as a "mentor", however, this is/was a person of trust who has been supportive of your goals, and who has taught you about organizational and professional aspects beyond the scope of your everyday work activities.

- Referring to this person, please answer the questions provided below by circling the most appropriate response. Please circle only one answer for each question.

- If you think that you have never experienced a relationship with a mentor during your military career in the CFMS/CFDS, please go to Part 4.

a) mentor’s gender? 
   1 = male  
   2 = female

b) mentor’s age? This mentor is presently ______ years old (best guess if you don’t know).

c) mentor’s military/civilian status? (during the mentorship) 
   1 = same MOC as me  
   2 = different MOC than me  
   3 = civilian

d) mentor’s level? This mentor is ______ hierarchical level(s) higher than me in the organization: 
   1 = same level as me  
   2 = one level  
   3 = two levels  
   4 = three levels  
   5 = more than three levels

e) supervisory/subordinate relationship? 
   1 = this mentor is presently my supervisor  
   2 = this mentor has once been my supervisor  
   3 = we have never been in a supervisor/subordinate relationship  

f) distance? (during the mentorship) 
   1 = we work(ed) in the same geographical area  
   2 = we were a considerable distance apart

g) current state of the mentoring relationship? 
   1 = it is still ongoing  
   2 = it is pretty well over now  
   3 = we are no longer in contact with each other

h) duration? 
Our mentoring relationship has been going on for ______ years. (If less than a year, indicate by a fraction, e.g., 6 months = .5 years)

i) frequency of communications? 
On average, how often did/do you communicate with this person (for mentoring reasons)? 
   1 = several times a week  
   2 = several times a month  
   3 = about once a month  
   4 = less than once a month  
   5 = hardly ever
PART 4. PERSONAL ATTRIBUTES

Please indicate the extent to which you agree or disagree with the following statements:

1. I do not enjoy working in situations involving competition with others
2. I strive to gain more control over the events around me at work
3. I seek an active role in the leadership of a group
4. At work, I am more likely to ask for help when I need it rather than try and deal with it on my own
5. I try to influence those around me to see things my way
6. It annoys me when other people perform better than I do
7. My goal is to reach the highest rank which is possible given my occupation
8. I try to perform better than my co-workers
9. I try very hard to improve on my past performance at work
10. When I have worries or concerns at work, it is important for me to share them with someone I trust
11. I find myself organizing and directing the activities of others
12. I try harder when I am in competition with other people
13. It is more important for me to be satisfied with my job than to get promoted quickly
14. I prefer dealing with my problems and concerns myself rather than ask anyone to get involved
15. I take moderate risks and stick my neck out to get ahead at work
16. I strive to be "in command" when I am working in a group
17. I do my best work when my job assignments are fairly difficult
18. I am comfortable in consulting a person senior in rank when I need help
19. I feel that winning is important in both work and games
20. The responsibilities associated with a promotion are not worth it
21. I try to avoid any added responsibilities on my job
22. It is important to me to perform better than others on a task
23. I consider myself as very ambitious
24. I don't mind approaching someone I trust at work to assist me with a difficult situation I am experiencing

1 = strongly agree
2 = agree to some extent
3 = uncertain
4 = disagree to some extent
5 = strongly disagree
PART 5. CAREER SATISFACTION

Please indicate the extent to which you agree or disagree with the following statements:

1. I am satisfied with the progress I have made toward meeting my overall career goals
2. I am satisfied with the progress I have made toward meeting my goals for income
3. I am satisfied with the progress I have made toward meeting my goals for advancement
4. I am satisfied with the progress I have made toward meeting my goals for the development of new skills
5. I am satisfied with the success I have achieved in my career
6. I am satisfied with the level and scope of my responsibilities
7. I am satisfied with my future opportunities for advancement

1 = strongly agree
2 = agree to some extent
3 = uncertain
4 = disagree to some extent
5 = strongly disagree

PART 6. RESOURCE PERSONS

For each of the issues listed below, think of a person within the CFMS/CFDS who could best answer your questions or concerns (do not write the person’s name) and for each issue please circle the appropriate answer for the three questions:

1. The person I would talk to about professional development would be ...
   a) This person (1) is presently my supervisor (2) has once been my supervisor (3) was never my supervisor
   b) this person is ___ hierarchical levels higher than me:
      (1) same level as me; (2) one level; (3) two levels; (4) three levels
      (5) more than three levels (6) at a lower level than me
   c) this person is: (1) male (2) female

2. The person I would talk to about career advancement would be ...
   a) This person (1) is presently my supervisor (2) has once been my supervisor (3) was never my supervisor
   b) this person is ___ hierarchical levels higher than me:
      (1) same level as me; (2) one level; (3) two levels; (4) three levels
      (5) more than three levels (6) at a lower level than me
   c) this person is: (1) male (2) female
3. The person I would get advice from on work related issues would be ...
   a) This person (1) is presently my supervisor (2) has once been my supervisor
      (3) was never my supervisor
   b) this person is ___ hierarchical levels higher than me:
      (1) same level as me; (2) one level; (3) two levels; (4) three levels
      (5) more than three levels (6) at a lower level than me
   c) this person is: (1) male (2) female

4. The person who I believe is my role-model and whose behaviour and values and admire would be...
   a) This person (1) is presently my supervisor (2) has once been my supervisor
      (3) was never my supervisor
   b) this person is ___ hierarchical levels higher than me:
      (1) same level as me; (2) one level; (3) two levels; (4) three levels
      (5) more than three levels (6) at a lower level than me
   c) this person is: (1) male (2) female

5. The person who could teach me about the political dynamics and/or informal power structure at higher levels of the organization would be...
   a) This person (1) is presently my supervisor (2) has once been my supervisor
      (3) was never my supervisor
   b) this person is ___ hierarchical levels higher than me:
      (1) same level as me; (2) one level; (3) two levels; (4) three levels
      (5) more than three levels (6) at a lower level than me
   c) this person is: (1) male (2) female

6. The person I would feel most comfortable to discuss personal issues with would be...
   a) This person (1) is presently my supervisor (2) has once been my supervisor
      (3) was never my supervisor
   b) this person is ___ hierarchical levels higher than me:
      (1) same level as me; (2) one level; (3) two levels; (4) three levels
      (5) more than three levels (6) at a lower level than me
   c) this person is: (1) male (2) female

7. The person whom I believe has the most power to assist me in my career would be...
   a) This person (1) is presently my supervisor (2) has once been my supervisor
      (3) was never my supervisor
   b) this person is ___ hierarchical levels higher than me:
      (1) same level as me; (2) one level; (3) two levels; (4) three levels
      (5) more than three levels (6) at a lower level than me
   c) this person is: (1) male (2) female
PART 7. GENERAL INFORMATION ABOUT YOU

Reminder: This portion will help us understand the needs of particular groups and is required for statistical purposes. Results will be reported in an aggregate format so that no one can be identified. Surveys will be analyzed and retained only by the researcher.

Sex: (a) male  (b) female
Age: _______

First official language:  
(a) English  (b) French

Rank: _______

Element: 
(a) Army  (b) Navy  (c) Air

Current MOC: _______

Number of years in the CF (as military, including reserve time if any): _______

Number of years in present MOC: _______

Highest education completed: 
(a) Technical certificate/diploma or college diploma 
(b) Bachelor 
(c) Master 
(d) Doctorate

Have you filed out a questionnaire on mentoring in the last two years?  (a) yes  (b) no

Previous MOC if also within the CFMS/CFDS: _______

PART 8. FEEDBACK AND SUGGESTIONS

Please use the space provided below (and the back of this page if you wish) to convey any issues that are of concern to you. They will be summarized by the researcher to ensure that you cannot be identified, and will be passed on to your Branch Advisor in an aggregate format. Any constructive suggestions regarding the establishment of a mentoring process within the CFMS/CFDS are welcome.

Should you have any questions concerning any aspect of this survey, or mentoring in general, please contact Major Janine Knackstedt at:
(819) 561-6913 (day time home number)
Banyan e-mail: Knackstedt Maj JEU@DSHRC@NDHQ
Non-military e-mail: eric.gagnon2@sympatico.ca

THANK YOU VERY MUCH FOR YOUR PARTICIPATION IN THIS MENTORING SURVEY!
Le sondage ci-joint a pour objet d'examiner les besoins actuels en matière de mentorat et à quelle fréquence celui-ci s'exerce au sein du SSFC et du SDFC. Ainsi, nous aurons une meilleure idée de vos préférences et de vos attributs.

Le mentorat est une relation de soutien à des fins d'apprentissage établie entre une personne - le mentor - qui partage ses connaissances, son expérience et ses vues avec une autre personne moins expérimentée - la personne encadrée - qui est disposée et prête à tirer profit de cet échange. La nature de la relation varie selon le style de chaque participant.

- Un mentor est un membre de l'organisation ayant beaucoup d'expérience et de connaissances qui sert de modèle et de guide et qui s'est engagé à aider la personne encadrée dans son perfectionnement professionnel.

- Une personne encadrée est un membre du personnel moins expérimenté qui souhaite bénéficier de l'expérience et des connaissances d'un membre de l'organisation plus chevronné, ainsi que partager des idées et des valeurs professionnelles avec lui.

Le questionnaire comprend les sections suivantes :

- PARTIE 1. BESOINS EN MATIÈRE DE MENTORAT
- PARTIE 2. SITUATION ACTUELLE
- PARTIE 3. EXPÉRIENCE EN TANT QUE PERSONNE ENCADRÉE
- PARTIE 4. ATTRIBUTS PERSONNELS
- PARTIE 5. SASTISFACTION DE CARRIÈRE
- PARTIE 6. PERSONNES RESSOURCE
- PARTIE 7. RENSEIGNEMENTS GÉNÉRAUX À VOTRE SUJET
- PARTIE 8. COMMENTAIRES ET SUGGESTIONS

Note: An English version of this survey is also available.

Merci de votre participation!

1/10
Vous n'avez peut-être pas eu l'occasion de participer à un processus de mentorat officialisé, mais il se peut qu'au cours de votre carrière, vous ayez entretenus des rapports informels ou que vous en entreteniez actuellement avec une personne qui vous fournit du soutien personnel et manifeste de l'intérêt pour votre perfectionnement professionnel.

Imaginez pendant un moment que vous êtes à la recherche d'un excellent mentor qui répondra à VOS BESOINS ACTUELS. Quelles seraient vos ATTENTES à l'égard de cette personne?

- Comme l’indiquent les deux colonnes, chaque énoncé sera coté deux fois.
- En vous servant de l’échelle de cinq points fournie dans l’encadré de gauche, indiquez le chiffre qui correspond à la mesure dans laquelle vous souhaitez que votre mentor adopte les comportements indiqués ci-dessous.
- Encerclez le chiffre approprié dans la colonne de gauche. (N’encerclez aucun chiffre dans la colonne de droite à ce stade-ci.)

N’oubliez pas : Il est important que vous évaluez les BESOINS que vous avez à cette étape-ci de votre carrière!

<table>
<thead>
<tr>
<th>Ce dont j'ai BESOIN, c'est un mentor qui...</th>
<th>Présentement, il y a quelqu'un qui...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 = pas du tout important</td>
<td>1 = jamais</td>
</tr>
<tr>
<td>2 = pas très important</td>
<td>2 = rarement</td>
</tr>
<tr>
<td>3 = important</td>
<td>3 = à l'occasion</td>
</tr>
<tr>
<td>4 = assez important</td>
<td>4 = fréquemment</td>
</tr>
<tr>
<td>5 = très important</td>
<td>5 = très fréquemment</td>
</tr>
</tbody>
</table>

1. Me fait une bonne réputation en discutant de mes réalisations avec ses collègues et d'autres supérieurs. 1 2 3 4 5 1 2 3 4 5
2. Affiche des valeurs et des attitudes semblables au miennes. 1 2 3 4 5 1 2 3 4 5
3. Me fait connaître la dynamique politique et/ou la structure de pouvoir informelle de mon GPM et du SSFC/SDFC. 1 2 3 4 5 1 2 3 4 5
4. Me donne l'occasion de l'observer lorsqu'il/elle interagit avec des membres influents de ma profession et de la collectivité militaire. 1 2 3 4 5 1 2 3 4 5
5. M'enseigne comment améliorer mes compétences professionnelles. 1 2 3 4 5 1 2 3 4 5
6. Manifeste du leadership et des comportements éthiques que j'essaierais/j'essaie d'imiter. 1 2 3 4 5 1 2 3 4 5
7. Me fournit des occasions de rencontrer de nouveaux collègues officiers. 1 2 3 4 5 1 2 3 4 5
8. Me fournit du feedback relativement à mon rendement en général. 1 2 3 4 5 1 2 3 4 5
9. Établit un climat dans lequel je me sens encouragé(e) à discuter et à mettre en question ses points de vue. 1 2 3 4 5 1 2 3 4 5
10. M'aide à apprendre les aspects techniques de mon travail. 1 2 3 4 5 1 2 3 4 5
11. Me demande des suggestions relativement à des problèmes auxquels il/elle fait face au travail. 1 2 3 4 5 1 2 3 4 5
12. Me donne des occasions de discuter de mes questions ou de mes préoccupations au sujet des conflits existant entre ma vie professionnelle au sein des Forces et ma vie personnelle. 1 2 3 4 5 1 2 3 4 5
13. Me confie des renseignements confidentiels liés au travail. 1 2 3 4 5 1 2 3 4 5
14. Affiche des valeurs éthiques que je voudrais adopter. 1 2 3 4 5 1 2 3 4 5
15. Me fixe des normes stimulantes. 1 2 3 4 5 1 2 3 4 5
16. Favorise l'établissement d'un climat dans lequel notre relation peut devenir une amitié. 1 2 3 4 5 1 2 3 4 5
17. M'infore des opportunités de participer dans des tâches stimulantes qui me permettent d'acquérir de nouvelles compétences et de mettre mes capacités à l'essai. 1 2 3 4 5 1 2 3 4 5
18. Me fournit des conseils sur la façon de résoudre des problèmes militaires ou liés au travail. 1 2 3 4 5 1 2 3 4 5
19. Discute avec moi des valeurs et des normes des Forces. 1 2 3 4 5 1 2 3 4 5
20. M'aide sur des tâches/projets qu'il me serait autrement difficile de terminer par moi-même. 1 2 3 4 5 1 2 3 4 5
21. Me sert de modèle ou d'exemple. 1 2 3 4 5 1 2 3 4 5
22. M'aide à apprendre à développer des valeurs d'officier professionnel. 1 2 3 4 5 1 2 3 4 5
23. Accorde de l'importance à mes idées et suggestions. 1 2 3 4 5 1 2 3 4 5
24. Est le genre de personne à qui je peux faire entièrement confiance. 1 2 3 4 5 1 2 3 4 5
25. Me propose des stratégies particulières pour atteindre mes objectifs de travail. 1 2 3 4 5 1 2 3 4 5
26. Me fait connaître la dynamique politique et/ou la structure de pouvoir informelle des Forces en général. 1 2 3 4 5 1 2 3 4 5
27. Me fournit des occasions de discuter de mon inquiétude et de mes préoccupations en ce qui a trait à des questions personnelles.  
1 2 3 4 5 1 2 3 4 5

28. Ne divulgue à personne les sentiments et les doutes dont je lui fait part.  
1 2 3 4 5 1 2 3 4 5

29. A une influence positive sur mon amour propre.  
1 2 3 4 5 1 2 3 4 5

30. Me reconnaît et me traite comme un(e) professionnel(le) compétent(e).  
1 2 3 4 5 1 2 3 4 5

31. Utilise son influence pour appuyer mes intérêts et mon cheminement de carrière.  
1 2 3 4 5 1 2 3 4 5

32. Veille à ce que je sois reconnu(e) pour les tâches et les fonctions que j'ai exécutées.  
1 2 3 4 5 1 2 3 4 5

33. M'encourage à discuter de mes erreurs sans que j'aie à craindre des conséquences.  
1 2 3 4 5 1 2 3 4 5

34. Est une personne à qui je peux me confier.  
1 2 3 4 5 1 2 3 4 5

35. Encourage le respect et l'admiration mutuelle dans le cadre de notre relation.  
1 2 3 4 5 1 2 3 4 5

36. Me donne de l'information/de l'enseignement en ce qui a trait à d'autres aspects des Forces.  
1 2 3 4 5 1 2 3 4 5

37. Me fournit une rétroaction sur la façon de mieux me conformer aux attentes militaires.  
1 2 3 4 5 1 2 3 4 5

38. Entretient des relations sociales avec moi à l'extérieur du travail.  
1 2 3 4 5 1 2 3 4 5

39. Me fournit des occasions et des expériences qui me permettront d'améliorer mes titres de compétence.  
1 2 3 4 5 1 2 3 4 5

40. Me conseille sur les façons d'accroître mes compétences et mes connaissances militaires.  
1 2 3 4 5 1 2 3 4 5

41. S'intéresse sincèrement à moi en tant que personne.  
1 2 3 4 5 1 2 3 4 5

42. M'aide à clarifier mes buts et mes aspirations ainsi qu'à déterminer des méthodes pour les concrétiser.  
1 2 3 4 5 1 2 3 4 5

43. Discute avec moi de la vision de notre groupe professionnel militaire (GPM) et de l'ensemble du SSFC/SDFC.  
1 2 3 4 5 1 2 3 4 5

44. Est la personne à qui je demande un «son de cloche» au sujet de mes idées.  
1 2 3 4 5 1 2 3 4 5

45. Utilise son influence au sein des Forces à mon profit.  
1 2 3 4 5 1 2 3 4 5
PARTIE 2. SITUATION ACTUELLE

Une fois que vous avez coté vos besoins en matière de mentorat dans la colonne de gauche, veuillez indiquer dans la colonne de droite à quelle fréquence ces comportements se manifestent. En d'autres termes, pour chacun des énoncés présentés ci-dessus, indiquez dans la colonne de droite dans quelle mesure les comportements mentionnés sont adoptés à votre égard, que ce soit par des personnes ou des supérieurs à votre lieu de travail actuel ou par des membres du SSFC/SDFC (au sein ou à l'extérieur de votre GPM). Certains de ces comportements sont probablement adoptés envers vous par plusieurs personnes que vous ne considérez peut-être pas comme vos mentors.

PARTIE 3. EXPÉRIENCE EN TANT QUE PERSONNE ENCADRÉE

Les questions suivantes nous aideront à déterminer dans quelle mesure le mentorat s'exerce déjà de façon non officielle.

Pensez à l'ensemble de votre carrière d'officier au sein du SSFC/SDFC. Compte tenu de la définition du terme «mentorat» fournie à la première page, avez-vous fait l'expérience (ou faites-vous actuellement l'expérience) des avantages d'une relation de mentorat?

Au cours de ma carrière d'officier au sein du SSFC/SDFC, je dirais que j'ai fait l'expérience d'une relation de mentorat avec ______ mentor(s), bien que nous n'ayons peut-être pas utilisé le terme «mentorat» dans nos conversations.

Si vous n'avez jamais eu un mentor (vous avez répondu "0" à la question du haut), veuillez indiquer les raisons selon vous:
Pensez à la personne qui a eu le plus d'influence sur votre carrière et votre perfectionnement professionnel. Il se peut que cette personne ait été votre mentor par le passé ou que vos rapports de mentorat se poursuivent actuellement. Vous ne considérez probablement pas cette personne comme un «mentor», mais il s'agit d'une personne de confiance qui a appuyé vos buts et qui vous a appris des choses d'ordre organisationnel et professionnel qui dépassent vos activités quotidiennes.

En songeant à cette personne, veuillez répondre aux questions ci-dessous en encerclant la réponse la plus appropriée. Encerclez seulement une réponse dans le cas de chaque question.

Si vous croyez n'avoir jamais fait l'expérience d'une relation de mentorat au cours de votre carrière militaire au sein du SSFC/SDFC, veuillez passer à la partie 4.

a) Sexe du mentor?
   1 = homme
   2 = femme

b) Âge du mentor? Ce mentor a actuellement ______ ans. (Âge approximatif)

c) Statut du mentor (militaire/civil)? (lors de votre mentorat)
   1 = même GPM que moi
   2 = GPM différent du mien
   3 = civil

d) Niveau du mentor? Ce mentor se trouve à ______ niveau(x) hiérarchique(s) au-dessus du mien dans l'organisation.
   1 = au même niveau que moi
   2 = un niveau
   3 = deux niveaux
   4 = trois niveaux
   5 = plus de trois niveaux

e) Rapport superviseur/subordonné?
   1 = ce mentor est présentement mon superviseur
   2 = ce mentor a déjà été mon superviseur
   3 = ce mentor n'a jamais été mon superviseur

f) Distance? (lors de votre mentorat)
   1 = nous travaillions dans la même région
   2 = une distance considérable nous séparait

g) Où en est rendue la relation de mentorat?
   1 = en cours
   2 = pratiquement terminée
   3 = nous ne sommes plus en contact

h) Durée? Notre relation de mentorat dure depuis ______ ans. (Si la durée est de moins d'un an, indiquez-la au moyen d'une fraction décimale, par exemple, 6 mois = 0,5 an.)

Fréquence des communications dans le cadre du mentorat? En moyenne, à quelle fréquence communiquez-vous/communiquez-vous avec cette personne?
   1 = plusieurs fois par semaine
   2 = plusieurs fois par mois
   3 = environ une fois par mois
   4 = moins d'une fois par mois
   5 = presque jamais

PARTIE 4. ATTRIBUTS PERSONNELS

Veuillez indiquer dans quelle mesure chacune des affirmations suivantes vous décrit le mieux.

1. Je n'aime pas être dans des situations où je suis en compétition avec les autres
2. J'essaie d'exercer un plus grand contrôle sur les événements qui se produisent autour de moi au travail
3. Je cherche à jouer un rôle actif lorsqu'il s'agit de diriger un groupe
4. Au travail, j'ai tendance à demander de l'aide quand j'en ai besoin plutôt que de tenter de régler un problème moi-même

1 = tout à fait d'accord
2 = plutôt d'accord
3 = incertain(e)
4 = pas vraiment d'accord
5 = pas du tout d'accord
5. J'évite de tenter d'influencer les autres pour qu'ils voient les choses à ma façon  
6. Cela m'indispose quand d'autres personnes donnent un meilleur rendement que moi  
7. Mon but est d'atteindre le grade le plus élevé possible au sein de mon groupe professionnel  
8. J'essaie de donner un meilleur rendement que mes collègues  
9. Je tente vraiment d'améliorer mon rendement professionnel par rapport au passé  
10. Quand j'ai des inquiétudes ou des préoccupations au travail, j'aime les partager avec une personne en qui j'ai confiance  
11. J'organise et je dirige spontanément les activités des autres  
12. Je fais un plus grand effort quand je suis en compétition avec d'autres  
13. J'aime mieux être satisfait(e) de mon travail que d'être promu(e) rapidement  
14. Je préfère m'occuper moi-même de mes problèmes et de mes préoccupations plutôt que de demander l'avis d'une autre personne  
15. Je prends des risques modérés et je m'expose afin de progresser professionnellement  
16. J'essaie de «prendre les commandes» quand je travaille en groupe  
17. C'est lorsqu'on me confie des fonctions assez difficiles que je travaille le mieux  
18. Je suis à de consulter une personne d'un grade plus élevé que le mien lorsque j'ai besoin d'aide  
19. À mon avis, il est important de gagner à la fois quand je travaille et quand je participe à des jeux  
20. Les responsabilités liées à une promotion n'en valent pas la peine  
21. J'essaie d'éviter toute responsabilité qui s'ajoute à mes fonctions normales  
22. J'attribue une grande importance au fait d'exécuter une tâche mieux que les autres  
23. Je considère que j'ai beaucoup d'ambition  
24. Je n'hésite pas à demander l'aide d'une personne en qui j'ai confiance dans mon milieu de travail quand je suis confronté(e) à une situation difficile

1 = tout à fait d'accord  
2 = plutôt d'accord  
3 = incertain(e)  
4 = pas vraiment d'accord  
5 = pas du tout d'accord
PARTIE 5. SATISFACTION DE CARRIÈRE

Veuillez indiquer dans quelle mesure chacune des affirmations suivantes vous décrit le mieux.

1 = tout à fait d'accord
2 = plutôt d'accord
3 = incertain(e)
4 = pas vraiment d'accord
5 = pas du tout d'accord

1. Je suis satisfait(e) des progrès que j'ai accomplis en vue d'atteindre mes objectifs de carrière généraux
2. Je suis satisfait(e) des progrès que je fais en vue d'atteindre mes objectifs en matière de revenu
3. Je suis satisfait(e) des progrès que j'ai accomplis en vue d'atteindre mes objectifs d'avancement
4. Je suis satisfait(e) des progrès que j'ai accomplis en vue d'atteindre mes objectifs liés à l'acquisition de nouvelles compétences
5. Je suis satisfait(e) du succès que j'ai obtenu dans ma carrière
6. Je suis satisfait(e) du niveau et de l'ampleur de mes responsabilités
7. Je suis satisfait(e) de mes possibilités d'avancement futures

Dans le cas de chacune des questions ci-dessous, pensez à une personne du SSFC/SDFC qui pourrait bien répondre à vos questions et à qui vous feriez part de vos préoccupations (n'écrivez pas le nom de cette personne). Pour chacun de ces aspects, veuillez encercler la réponse qui convient le mieux aux trois questions.

1. La personne avec qui j'aimerais parler de perfectionnement professionnel est...
   a) cette personne (1) est actuellement mon superviseur (2) a déjà été mon superviseur
      (3) n'a jamais été mon superviseur
   b) cette personne se situe à _____ niveau(x) hiérarchique(s) par rapport à moi :
      (1) le même niveau que moi (2) un niveau plus élevé (3) deux niveaux plus élevés
      (3) trois niveaux plus élevés (4) quatre niveaux plus élevés
      (5) plus de trois niveaux plus élevés (6) un niveau moins élevé que moi
   c) cette personne est : (1) un homme (2) une femme

2. La personne avec qui j'aimerais parler d'avancement professionnel (relatif à ma carrière) est...
   a) cette personne (1) est actuellement mon superviseur (2) a déjà été mon superviseur
      (3) n'a jamais été mon superviseur
   b) cette personne se situe à _____ niveau(x) hiérarchique(s) par rapport à moi :
      (1) le même niveau que moi (2) un niveau plus élevé (3) deux niveaux plus élevés
      (3) trois niveaux plus élevés (4) quatre niveaux plus élevés
      (5) plus de trois niveaux plus élevés (6) un niveau moins élevé que moi
   c) cette personne est : (1) un homme (2) une femme
3. La personne dont j'aimerais obtenir des avis concernant les questions liées au travail est...
   a) cette personne (1) est actuellement mon superviseur       (2) a déjà été mon superviseur
      (3) n'a jamais été mon superviseur
   b) cette personne se situe à _____ niveau(x) hiérarchique(s) par rapport à moi :
      (1) le même niveau que moi   (2) un niveau plus élevé   (3) deux niveaux plus élevés
      (3) trois niveaux plus élevés (4) quatre niveaux plus élevés
      (5) plus de trois niveaux plus élevés (6) un niveau moins élevé que moi
   c) cette personne est :      (1) un homme             (2) une femme

4. La personne qui est mon modèle et dont j'admire le comportement et les valeurs est...
   a) cette personne (1) est actuellement mon superviseur       (2) a déjà été mon superviseur
      (3) n'a jamais été mon superviseur
   b) cette personne se situe à _____ niveau(x) hiérarchique(s) par rapport à moi :
      (1) le même niveau que moi   (2) un niveau plus élevé   (3) deux niveaux plus élevés
      (3) trois niveaux plus élevés (4) quatre niveaux plus élevés
      (5) plus de trois niveaux plus élevés (6) un niveau moins élevé que moi
   c) cette personne est :      (1) un homme             (2) une femme

5. La personne qui pourrait m'enseigner les choses au sujet de la dynamique politique et/ou de la structure de pouvoir non officielle des niveaux supérieurs de l'organisation est...
   a) cette personne (1) est actuellement mon superviseur       (2) a déjà été mon superviseur
      (3) n'a jamais été mon superviseur
   b) cette personne se situe à _____ niveau(x) hiérarchique(s) par rapport à moi :
      (1) le même niveau que moi   (2) un niveau plus élevé   (3) deux niveaux plus élevés
      (3) trois niveaux plus élevés (4) quatre niveaux plus élevés
      (5) plus de trois niveaux plus élevés (6) un niveau moins élevé que moi
   c) cette personne est :      (1) un homme             (2) une femme

6. La personne avec qui je discuterais le plus aisément de questions personnelles est...
   a) cette personne (1) est actuellement mon superviseur       (2) a déjà été mon superviseur
      (3) n'a jamais été mon superviseur
   b) cette personne se situe à _____ niveau(x) hiérarchique(s) par rapport à moi :
      (1) le même niveau que moi   (2) un niveau plus élevé   (3) deux niveaux plus élevés
      (3) trois niveaux plus élevés (4) quatre niveaux plus élevés
      (5) plus de trois niveaux plus élevés (6) un niveau moins élevé que moi
   c) cette personne est :      (1) un homme             (2) une femme

7. La personne qui, selon moi, a le plus de pouvoir de m'aider dans ma carrière serait ...
   a) cette personne (1) est actuellement mon superviseur       (2) a déjà été mon superviseur
      (3) n'a jamais été mon superviseur
   b) cette personne se situe à _____ niveau(x) hiérarchique(s) par rapport à moi :
      (1) le même niveau que moi   (2) un niveau plus élevé   (3) deux niveaux plus élevés
      (3) trois niveaux plus élevés (4) quatre niveaux plus élevés
      (5) plus de trois niveaux plus élevés (6) un niveau moins élevé que moi
   c) cette personne est :      (1) un homme             (2) une femme
PARTIE 6. RENSEIGNEMENTS GÉNÉRAUX À VOTRE SUJET

Rappel : Cette partie nous aidera à comprendre les besoins de groupes particuliers et doit être remplie à des fins statistiques. Les résultats seront présentés sous forme de résumé, de façon que personne ne puisse être identifié. Les questionnaires seront analysés et conservés uniquement par la recherchiste.

Sexe: (a) homme  (b) femme

Âge:_____

Première langue officielle:
(a) anglais  (b) français

Grade:_____

Service:  (a) Armée de terre
(b) Marine  (c) Force aérienne

GPM actuel:_____

Ancien GPM s'il était aussi au sein du SSFC/SDFC:_____

Nombre d'années de service dans les FC (en tant que militaire, y compris le service dans la Réserve, le cas échéant):_____

Nombre d'années de service dans le GPM actuel:_____

Dernier niveau d'études terminé:
(a) Certificat/diplôme technique ou diplôme d'études collégiales:
(b) Baccalauréat
(c) Maîtrise
(d) Doctorat

Avez-vous rempli un questionnaire sur le mentorat au cours des deux dernières années? (a) Oui (b) Non

PARTIE 7. COMMENTAIRES ET SUGGESTIONS

Veuillez utiliser l'espace ci-dessous (et ajouter une page au besoin) pour nous faire part de toutes les questions qui vous préoccupent. Celles-ci seront résumées par notre recherchiste de façon à ce que vous ne puissiez pas être identifié et elles seront transmises sous forme de sommaire à votre conseiller de la Branche. Toute suggestion constructive concernant l'établissement d'un processus de mentorat au sein du SSFC/SDFC est la bienvenue.

Si vous avez des questions concernant tout aspect du questionnaire ou sur le mentorat en général, veuillez communiquer avec le major Janine Knackstedt de la façon suivante :
  Téléphone : (819) 561-6913 (à la maison, pendant le jour)
  Courrier électronique Banyan : Knackstedt Maj JEU@DSHRC@NDHQ
  Courrier électronique non militaire : eric.gagnon2@sympatico.ca

MERCI BEAUCOUP DE VOTRE PARTICIPATION DANS CETTE ÉTUDE SUR LE MENTORAT!