

# Attrition Patterns of Women in the Canadian Armed Forces

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Women have been serving in Canada's military for more than 100 years (Government of Canada [GoC], 2014). Whereas they initially served only as nurses, there are no limits today on the career opportunities for women in the Canadian Armed Forces (CAF): all military occupations have been open to them since 1989, with the exception of submarine service, which has been open to women since 2000 (GoC, 2014). Since removing all limits on their military career opportunities, the representation rate of women in the CAF has increased from 11.4% in 2001 to 15.0% in late 2016 (GoC, 2016). Over the next ten years, by 2026, the CAF has set ambitious goals to increase representation across all occupations and ranks such that 25% of CAF members will be women (GoC, 2016).

## Background

The CAF is committed to “*recruiting and retaining quality candidates that reflect the face of Canada... [by] increasing diversity and promoting inclusiveness amongst its personnel*” (GoC, n.d., p.1). While the representation rate of women increased by almost 5% from 2001 to 2016, it remains much lower than the representation rate of women in the Canadian labour market. According to the 2011 Census and National Household Survey, 48% of Canada's employed labour force were women (GoC, 2013). However, a military career has a number of characteristics, known as the Military Factor, which not only set it apart from a civilian career, but may adversely impact the CAF's ability to achieve its representation goals for women (GoC, n.d.). These characteristics include “*unlimited liability that entails the threat of loss of life or serious injury in the performance of military duties, out-of-trade employment, posting turbulence, separation from family and a loss of freedoms associated with personal limitations and liabilities*” (GoC, n.d., p.2).

An important legal instrument that provides guidance to the CAF in striving towards and maintaining an inclusive and representative workforce is the Employment Equity Act (EEA); the CAF has been subject to the EEA since 2002 when the Canadian Forces Employment Equity Regulations were approved by the Governor in Council (GoC, 2015a).

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The purpose of the EEA is to...

achieve equality in the workplace so that no person shall be denied employment opportunities or benefits for reasons unrelated to ability and, in the fulfilment of that goal, to correct the conditions of disadvantage in employment experienced by women, aboriginal peoples, persons with disabilities and members of visible minorities by giving effect to the principle that employment equity means more than treating persons in the same way but also requires special measures and the accommodation of differences (GoC, 1995: Section 2).

As an employer subject to the EEA, the CAF must prepare an employment equity plan that, among other things, establishes long-term goals for increasing the representation of women in its workforce as well as a strategy for achieving its goals (GoC, 1995).<sup>1</sup>

To achieve its goal of having one in four CAF members be women by 2026, the CAF has been developing a new strategy that focuses on two key pillars : recruitment and retention (GoC, 2016). Director General Military Personnel Research and Analysis (DGMPPRA), a research organization within Canada's Department of National Defence (DND), is actively engaged in both recruitment and retention research related to the representation of women.

Recent research undertaken in support of the first pillar includes a series of focus groups being held across Canada with women currently serving in the CAF to better understand their reasons for joining, as well as a survey of the general population to better understand the perceptions of Canadian women regarding a career in the CAF (GoC, 2017 ; Earncliffe Strategy Group, 2017). The survey of the general female population found that, when asked which career is of least interest to them, the military was the second most common answer ranking behind only mining and tied with banking (Earncliffe Strategy Group, 2017). However, the survey also found that the "*pool of women likely to consider a career in the CAF triples if women discover it is possible for them to pursue their career of greatest interest within the Forces*" (Earncliffe Strategy Group, 2017: p. 6). This finding supports the CAF's current recruitment strategy focus on raising awareness of career opportunities within the CAF, which is done through a combination of "*advertising, job postings, media partnerships, social media, and individual recruiter efforts*" (GoC, 2016) as well as by engaging with "*key leaders, women's professional associations, educators, and other key influencers*" (GoC, 2016).

The purpose of this article is to present the findings of a recent research study undertaken in support of the second pillar, retention.

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<sup>1</sup> The CAF must also establish long-term goals for increasing the representation of aboriginal peoples and members of visible minorities, but "*is not required to establish Employment Equity goals for persons with disabilities due to the principle of Universality of Service*" (GoC, n.d., p.3). The principle of Universality of Service is also known as the "soldier first" principle and requires that CAF members be "*physically fit, employable and deployable for general operational duties*" (GoC, 2006).

## Outline

To inform the development of a new retention strategy, the Directorate of Research – Workforce Analytics within DGMPRA was asked to analyze the release reasons and attrition behaviour of women as compared to men over the past five to fifteen years. First, the data and scope are presented, followed by the analysis and then a discussion on how the attrition trends presented relate to other retention research and how they can be used to inform future retention strategies. The conclusion summarizes the main points and provides recommendations for further research.

## Data and Scope

The analysis in this article is based on administrative data extracted from DND's Human Resources Management System. The extracts consisted of annual population snapshots and releases that included the age, years of service (YoS), rank, occupation, environment, education level, marital status and other attributes of each member. Every release from the CAF is assigned a release reason code in accordance with Chapter 15 of the Queen's Regulations & Orders (QR&O) (GoC, 2015b), which can be grouped into five categories as shown in Table 1. In addition to the reasons listed therein, as per QR&O paragraph 15.01(2), members whose service is terminated by death will have their release reason coded as such.

**Table 1:** Release categories specified in the Queen's Regulations and Orders

<b>Item</b>	<b>Release Category</b>	<b>Release Reasons<sup>2</sup></b>	
1	<b>Misconduct</b>	1A	Sentenced to dismissal
		1B	Service misconduct
		1C	Illegally absent
		1D	Fraudulent statement on enrolment
2	<b>Unsatisfactory service</b>	2A	Unsatisfactory conduct
		2B	Unsatisfactory performance
3	<b>Medical</b>	3A	On medical grounds, being disabled and unfit to perform duties as a member of the Service
		3B	On medical grounds, being disabled and unfit to perform his duties in his present trade or employment, and not otherwise advantageously employable under existing service policy.
4	<b>Voluntary</b>	4A	On request – when entitled to an immediate annuity
		4B	On completion of a fixed period of service
		4C	On request – other causes
5	<b>Service completed</b>	5A	Retirement age
		5B	Reduction in strength
		5C	Completed service for which required
		5D	Not advantageously employable
		5E	Irregular enrolment
		5F	Unsuitable for further service

<sup>2</sup> Descriptions copied from the table to article 15.01 in the QR&Os.

Since the extracts consisted of annual snapshots, the analyses are presented or grouped by fiscal year (FY), which span from April 1<sup>st</sup> to March 31<sup>st</sup>. Table 2 presents the population sizes at the beginning of each FY as well as the number of releases during each FY broken down by sex. The first population snapshot, FY 01/02, is approximately one year after all occupations in the CAF, including submarine service, were opened to women. Since the purpose of the study is to inform future retention strategies, the analysis primarily focused on the past five to ten years rather than the past fifteen years since more recent attrition behaviour is expected to be more reflective of future behaviour. Additionally, since the sample sizes for women are relatively small, the data become sparse when analyzing release reasons by other attributes, such as age and YoS. Therefore, data were often aggregated over several years. Lastly, the analysis was limited to Regular Force (RegF) members of the CAF. Reserve Force members were outside the scope of the study.

**Table 2: Sample Sizes by Fiscal Year (FY)**

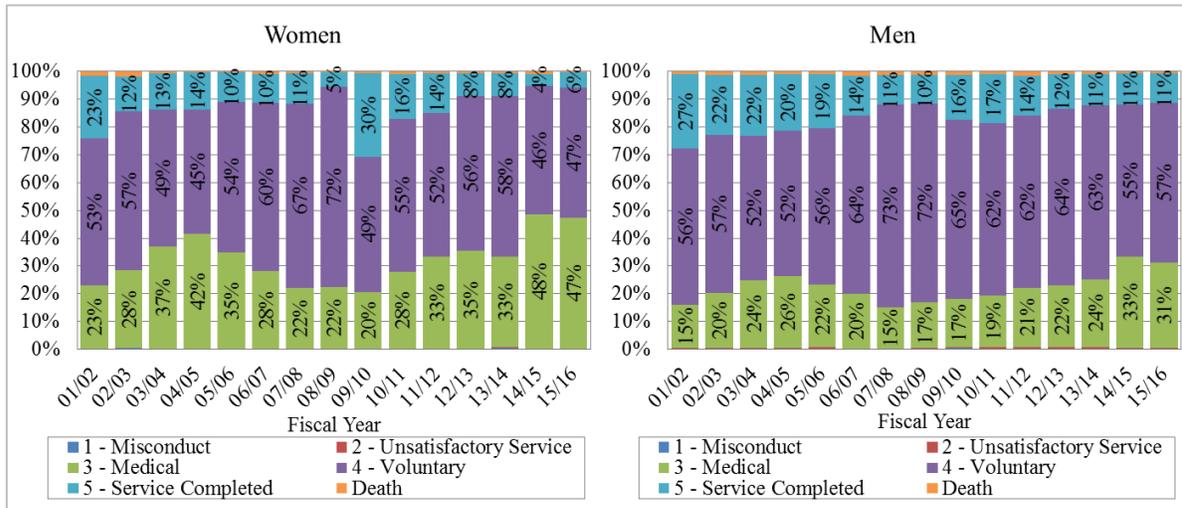
FY	Population at beginning of FY			Number of releases during the FY		
	Women	Men	Total	Women	Men	Total
01/02	6,598	51,008	57,606	447	3,172	3,619
02/03	7,059	52,325	59,384	497	3,451	3,948
03/04	7,481	53,696	61,177	509	3,348	3,857
04/05	7,616	53,957	61,573	480	3,777	4,257
05/06	7,772	53,867	61,639	507	3,913	4,420
06/07	8,195	54,992	63,187	630	4,892	5,522
07/08	8,528	55,632	64,160	819	5,322	6,141
08/09	8,782	56,056	64,838	736	5,504	6,240
09/10	9,097	56,873	65,970	816	4,501	5,317
10/11	9,378	58,808	68,186	653	4,020	4,673
11/12	9,382	58,895	68,277	557	3,682	4,239
12/13	9,368	58,582	67,950	568	4,049	4,617
13/14	9,511	58,170	67,681	660	4,267	4,927
14/15	9,527	57,612	67,139	719	4,771	5,490
15/16	9,421	56,469	65,890	651	4,169	4,820

## Analysis

Figure 1 (next page) presents the release distribution for men and women over a 15-year period by release category, from FY 01/02 through FY 15/16. Over this time period, only 1% of women and 2% of men were released as a result of misconduct, unsatisfactory service or death. Generally, in the past ten years, for both men and women, the most common release category was “voluntary” followed by “medical” and then “service completed”. There is one noticeable exception to this pattern for women in FY 09/10, not only because the proportion of

releases due to service completion (30%) was greater than those due to medical reasons (20%), but because the proportion of releases due to service completion is six times greater than in the prior FY.

**Figure 1: Release Category Distribution by FY and Sex**



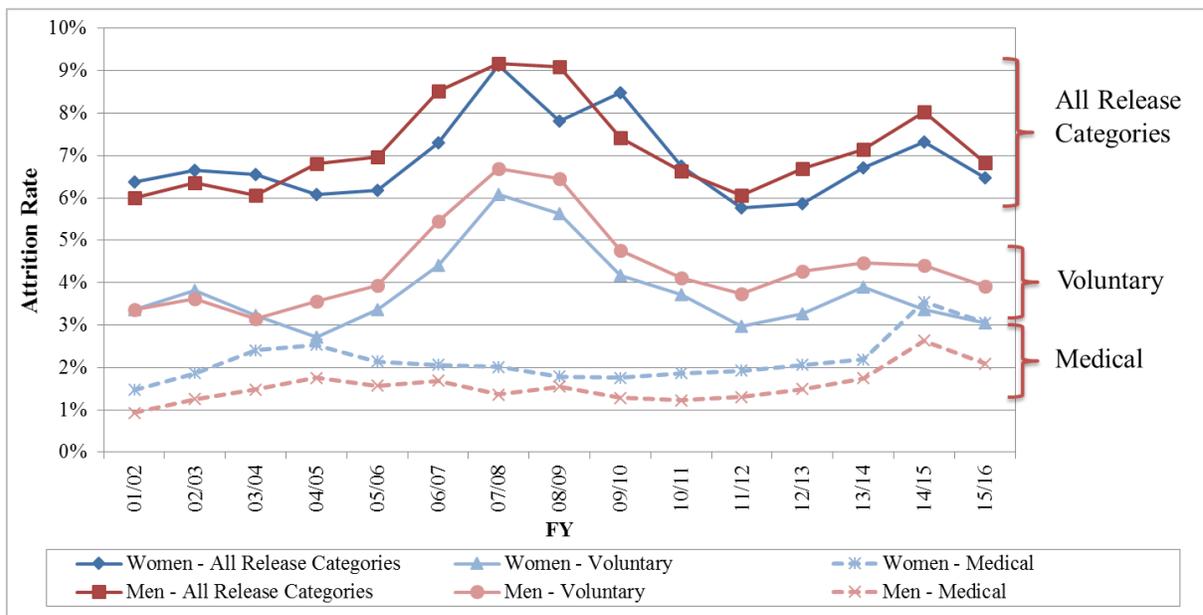
In FY 09/10, 85% of women that were released under item “5 – Service Completed” did so under item “5D – Not Advantageously Employed”. Since nearly all of these releases occurred within 90 days of enrolment while posted to the Canadian Forces Leadership and Recruit School (CFLRS), this sudden increase is likely related to a new fitness testing policy that was implemented on 1 April 2009, known as the Threshold Fitness Test (TFT) (GoC, 2009a, 2009b). The CFLRS provides basic military training to RegF recruits. At the time, upon arrival at the CFLRS, recruits completed the Canadian Forces Exercise Prescription Program (CF EXPRES) test. In the event of a failure, if the recruit met the TFT standard, they participated in a 90-day programme to improve their physical condition and re-try the CF EXPRES test. If the recruit did not meet the TFT standard, then they were released from the CAF. From FY 09/10 to FY 10/11, the number of female recruits dropped from over 1,000 to under 700, which likely contributed to the sudden drop in the proportion of service completion releases the following year. While less pronounced in Figure 1, an increase in the proportion of service completion releases was also observed for men, which, like women, was largely driven by an increase in “5D – Not Advantageously Employed” releases.

Figure 2 (next page) presents the overall attrition rates based on all release categories as well as the attrition rates for the medical and voluntary release categories for both men and women dating back to FY 01/02.<sup>3</sup> While the overall attrition rate is sometimes higher for women than men, and sometimes vice-versa (as has been the case in recent years), the

<sup>3</sup> Attrition rates were calculated using the methodology from (Okazawa, 2007), which includes a correction factor in the denominator to account for the fact that recruits are only present in the population for part of the year.

voluntary attrition rate has been consistently higher for men since the mid-2000s and the medical attrition rate has been consistently higher for women for at least 15 years. For both men and women, in general, medical attrition rates have been relatively stable<sup>4</sup> compared to the voluntary attrition rates. Voluntary attrition increased substantially from FY 04/05 to FY 07/08, reaching a high in the 15-year period analyzed of 6.1% for women and 6.7% for men. This period of increased attrition was, at least in part, the result of a period of increased recruitment that began in FY 05/06 as part of the government’s plan to expand the CAF from approximately 62,000 to 68,000 RegF members (DGMPPRA, 2016).

Figure 2: Attrition Rates by FY and Sex

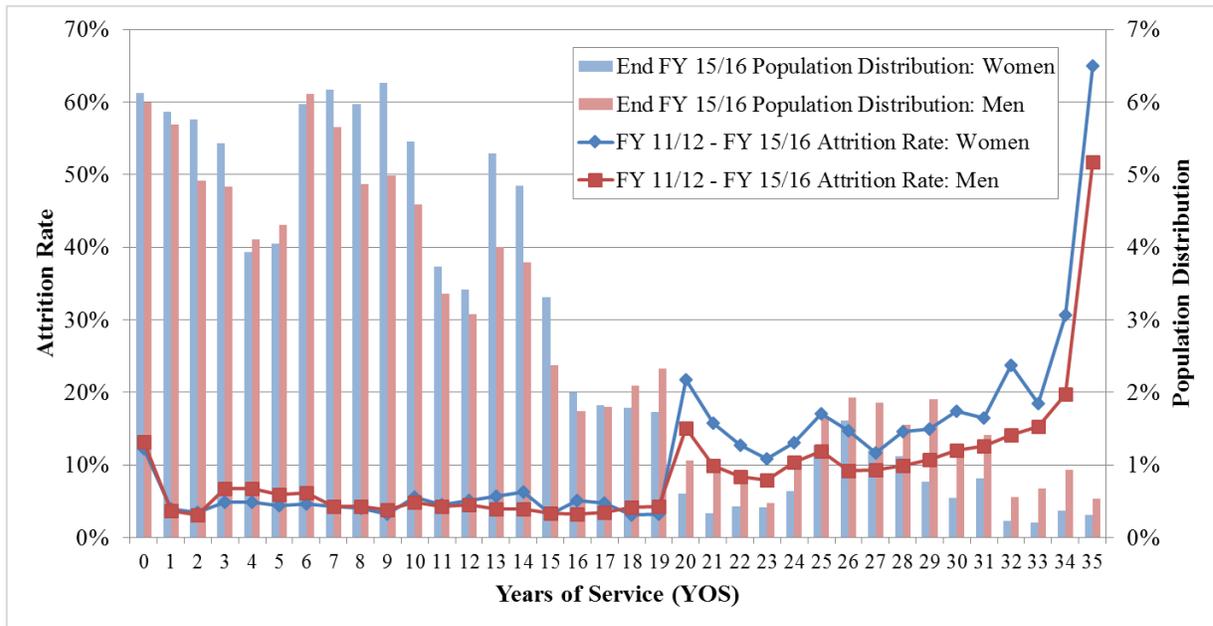


Recruitment levels increased from approximately 630 women and 3,700 men in FY 04/05 to nearly 1,100 women and 6,500 men in FY 09/10 when the expansion target was met. Since attrition rates are generally higher for untrained rather than trained personnel, increased attrition during this period of expansion was expected, but was higher than anticipated (GoC, 2008). During this time, changes to recruiting policies were implemented to support accelerated applicant processing goals, which likely also contributed to the increase in attrition (DGMPPRA, 2016). For instance, prior to October 2006, initial fitness testing was done prior to enrollment as part of the recruitment process using the Recruit Pre-enrolment Physical Fitness Test (GoC, 2009b). While this policy change may have increased the number of recruits being released due to training injuries or not being able to achieve minimum fitness standards, the driving force behind this period of increased attrition seems to be voluntary releases as can be

<sup>4</sup> The increased medical attrition rates observed in the last two FYs is, at least in part, due to the processing of a backlog of medical release files.

seen in Figure 2. Focus groups held with recruits in the process of voluntarily releasing from the CFLRS in FY 09/10 revealed that the most frequent reason for voluntary release was family, followed by personal injuries and the mechanisms in place for recovery, and realizing they were not suited for the CAF or had made a wrong career choice (Michaud, 2010).

**Figure 3:** Attrition Rates by YoS and Sex



While increased voluntary attrition volumes among new recruits (i.e. those in their first YoS) was the primary driver behind the period of increased attrition from FY 06/07 to FY 09/10, an increase in voluntary attrition volumes among those entitled to an immediate annuity (i.e. members with at least 20 YoS) was also observed during this time. As shown in Figure 3, attrition rates<sup>5</sup> are highest among members with zero YoS<sup>6</sup> and among members with 20 or more YoS. While this trend holds true for both men and women, attrition rates for women with 20 or more YoS are consistently and noticeably higher than those for men with 20 or more YoS. However, the proportion of the female population with 20 or more YoS is much smaller than that of men: as of 31 March 2016, approximately 11% of women had 20 or more YoS while approximately 19% of men were in the same seniority bracket. At the same time, approximately 50% of women had 8 or fewer YoS while approximately 50% of men had 9 or fewer YoS. Thus, while the median number of YoS of the male and female populations are similar, a greater proportion of the male population has at least 20 YoS, which is likely related to the fact that the CAF has been open to women for less than 30 years. These population

<sup>5</sup> Weighted-average attrition rates by YoS were calculated using the methodology in Okazawa, 2007.

<sup>6</sup> YoS was measured at the time of release and rounded down to the nearest year. Therefore, a member releasing with zero YoS is to be interpreted as someone that released within a year of enrolling in the CAF.

demographics partly contribute to the overall attrition rate of women from FY 11/12 to FY 15/16 being lower than that of men : 6.4% compared to 6.9%. Therefore, this trend may reverse in future years ; and this reversal will not necessarily be indicative of a change in attrition behaviours, but rather a change in demographics as more women enter into this high attrition zone.

Figure 4 : Voluntary Attrition Rates by YoS and Sex

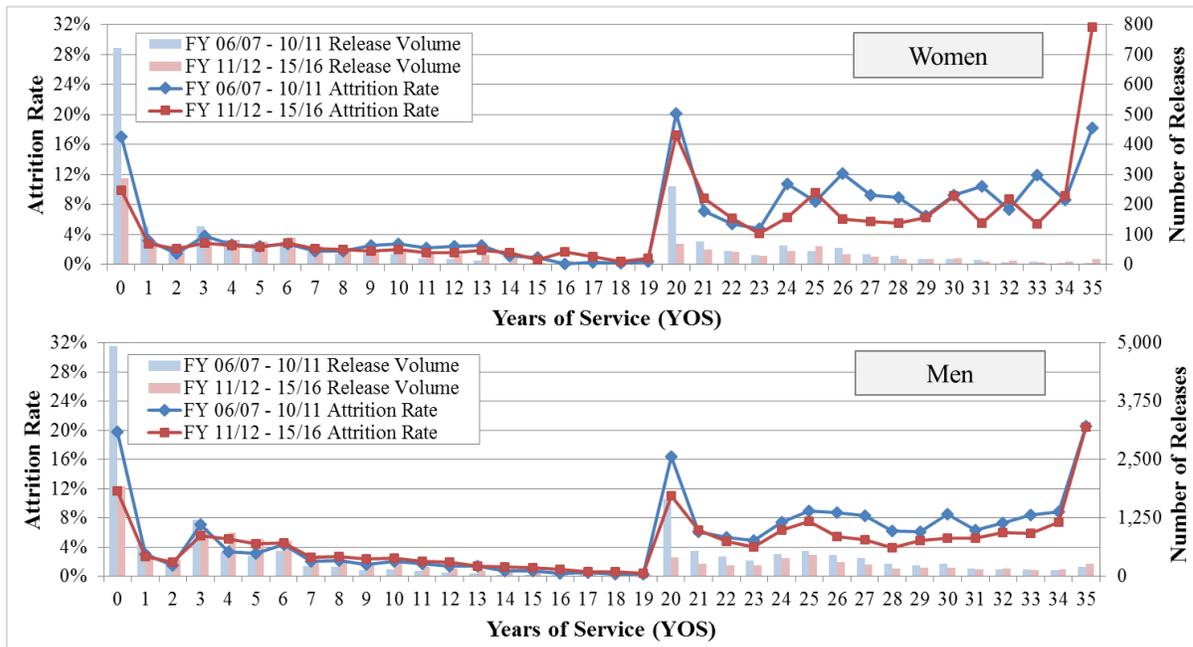


Figure 4 presents voluntary attrition rates by YoS for both men and women over two five-year time periods: FY 06/07 to FY10/11 and FY 11/12 to FY 15/16. The first time period includes the force expansion discussed above; therefore, it is not surprising to see a large drop between the voluntary attrition rate at zero YoS from the first to the second time period for both men and women. Between FY 06/07 and FY 10/11, the voluntary attrition rate at zero YoS was 17.0% for women and 19.8% for men. Over the past five years, these rates have dropped to 9.8% for women and 11.7% for men. The attrition rate at 20 YoS has also decreased from FY 06/07 to FY 10/11 for both men and women, but remains higher for women than men. The spike in attrition at 20 YoS is related to pension benefits. At 20 YoS, members serving under an Intermediate Engagement 20 are eligible for an immediate annuity. However, the Intermediate Engagement 20 was replaced by the Intermediate Engagement 25 when terms of service were revised in 2005 (GoC, 2005). Therefore, this spike in attrition is expected to shift from 20 YoS to 25 YoS, but not until members serving under the new terms of service begin to reach this level of experience over the next five to ten years. Since relatively few members serving on an Intermediate Engagement 25 have yet to reach the 20 YoS point, the decrease in the 20 YoS attrition rate may be related to terms of service revisions introduced in 2009 that provide more choice and greater flexibility for members to extend

their service beyond 20 YoS (GoC, 2009c). The overall voluntary attrition rate was 4.8% for women and 5.5% for men from FY 06/07 to FY 10/11; and 3.3% for women and 4.2% for men from FY 11/12 to FY 15/16.

Figure 5: Medical Attrition Rates by YoS and Sex

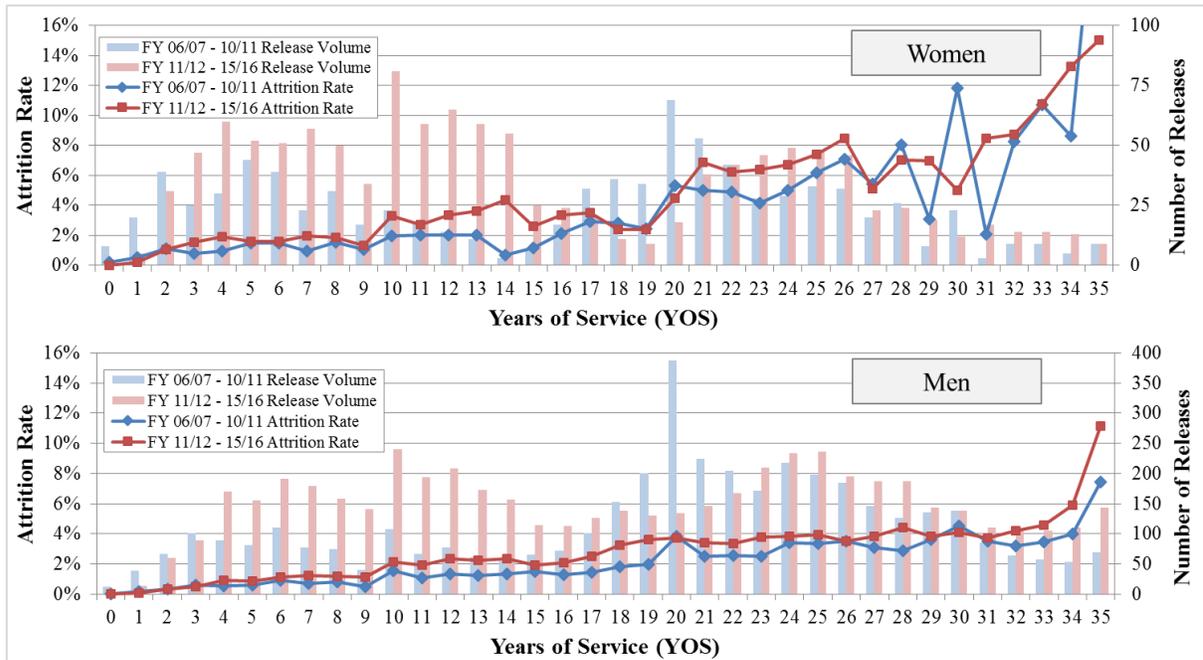


Figure 5 is similar to Figure 4, but presents medical rather than voluntary attrition rates. Medical attrition rates do not follow the same YoS patterns as voluntary attrition rates. Instead, medical attrition rates generally increase with increasing YoS. For both men and women, the medical attrition rates increased from the earlier timeframe (FY 06/07 to FY 10/11) to the later timeframe (FY 11/12 to FY 15/16) at most YoS points. The overall medical attrition rate increased from 1.9% to 2.6% for women and from 1.4% to 1.8% for men. The average age of the population has increased only very slightly over the two time periods. For women, the average age was 35.0 over FYs 05/06 to 10/11, and 36.2 over FYs 11/12 to 15/16. For men, these figures were 35.0 and 35.5, respectively. However, the proportion of the population age 50 or older has increased. Over FYs 05/06 to 10/11, it was 4.1% for women; over FYs 11/12 to 15/16, it increased to 8.0%. For men, these figures were 5.8% and 9.5%, respectively.<sup>7</sup> Age at recruitment has not changed significantly between the two time periods. For women, the median YoS at the time of their medical release was 18 between FY 06/07 and FY 10/11 compared to 13 between FY 11/12 and FY 15/16. This suggests that medical releases are occurring at earlier YoS points than they did in the past. A similar, but less

<sup>7</sup> It is possible this aging trend is related to members electing to change their compulsory retirement age (CRA) from 55 to 60. In 2004, the CRA was increased from 55 to 60 for all new RegF enrolments; however, those serving before 1 July 2004 have the option to elect CRA 60 (GoC, 2004).

pronounced change, was also observed for men: the median YoS at release was 20 between FY 06/07 and FY 10/11 and 19 between FY 11/12 and FY 15/16.<sup>8</sup>

With few exceptions, medical attrition was higher for women than men from zero to 35 YoS for the two time periods shown in Figure 5. Medical attrition was also found to be higher for women on an annual basis over the past 15 years (see Figure 2). To further explore medical release trends by sex, the proportion of men and the proportion of women releasing medically over the past five years were compared by age, rank, marital status, education and occupation authority.<sup>9</sup> The results are summarized in Table 3 and show that the proportion of women being medically released is systematically higher than the proportion of men across all attribute categories considered.

As can be seen in Table 3 (next page), for each occupation authority, the proportion of women releasing medically is greater than the proportion of men releasing medically. The medical release trends across occupation authorities are similar for both men and women in that Assistant Chief of Military Personnel (ACMP) had the highest proportion of medical releases, followed by the Canadian Army (CA), the Royal Canadian Navy (RCN) and the Royal Canadian Air Force (RCAF). However, the population distribution across occupation authorities is very different for men and women. From FY 11/12 to FY 15/16, on average, 71% of women were employed in ACMP, 13% in the RCAF, 9% in the CA and 8% in the RCN. At the same time, 23% of men were employed in ACMP, 23% in the RCAF, 40% in the CA and 14% in the RCN.

Anecdotal evidence within DND has suggested that the higher medical release rate from ACMP-managed occupations may be the result of members embarking on a second career within the CAF if they no longer meet the medical requirements for their initial RCAF-, RCN- or CA-managed occupation. However, this does not appear to be the case for the majority of ACMP medical releases: from FY 11/12 to FY 15/16, 73% of members that were medically released from an ACMP-managed occupation had only been employed in ACMP-managed occupations. Further breaking this down by sex, 89% of women that were medically released from an ACMP-managed occupation had only been employed in ACMP-managed occupations, compared to 63% of men that were medically released. This suggests that a second career in an ACMP-managed occupation is more common among men than women.

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<sup>8</sup> Over FYs 06/07 to 10/11, 15% of the female population had 20 YoS or more; over FYs 11/12 to 15/16, this proportion was 12%. Among men, these proportions were 25% and 21%, respectively.

<sup>9</sup> RegF members are employed in just over 100 different military occupations, which can be divided into four groups based on the organization responsible for force generation, known as occupation authorities : Royal Canadian Navy (RCN), Canadian Army (CA), Royal Canadian Air Force (RCAF) and Assistant Chief of Military Personnel (ACMP). The RCN, CA and RCAF manage the hard sea, land and air occupations while ACMP mainly manages the support occupations, such as logistics and health services.

**Table 3:** Proportion of Medical and Voluntary Releases According to Members' Attributes

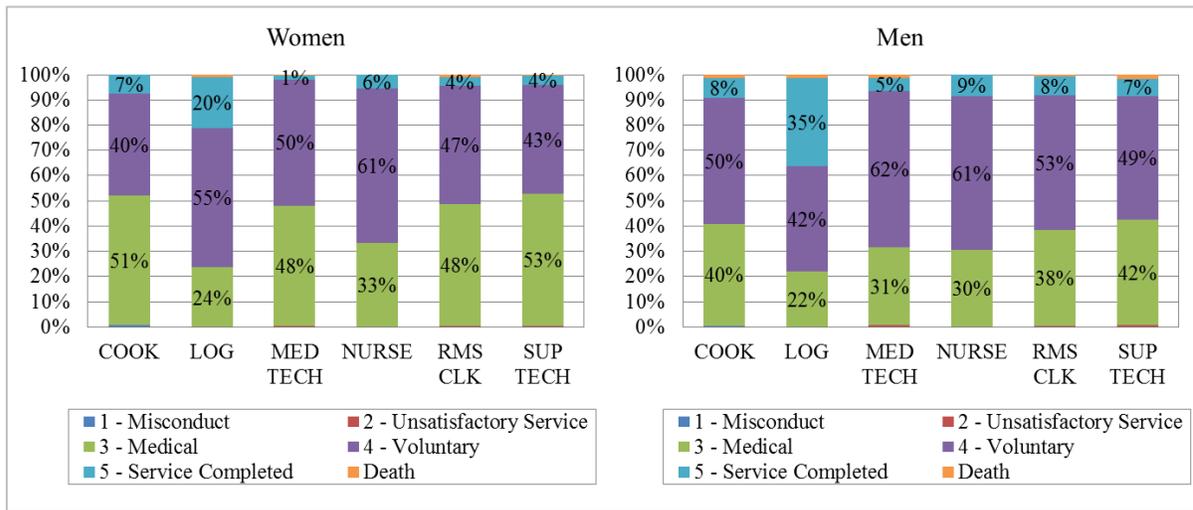
Attribute	Category	FY 11/12 to FY 15/16					
		Number of releases		% medical		% voluntary	
		Women	Men	Women	Men	Women	Men
Age at Release	16-20	142	1195	4%	1%	74%	84%
	21-25	339	3282	14%	6%	72%	81%
	26-30	448	3185	24%	16%	66%	74%
	31-35	380	1990	39%	32%	56%	60%
	36-40	386	1738	45%	42%	51%	52%
	41-45	478	2646	56%	41%	42%	56%
	46-50	488	2854	54%	39%	41%	53%
	51-55	368	2916	49%	33%	36%	39%
	56-60	121	1078	48%	29%	25%	25%
Rank	Junior NCM	2101	13607	46%	29%	48%	62%
	Junior Officer	480	2298	26%	18%	60%	58%
	Senior NCM	328	3230	35%	28%	61%	66%
	Senior Officer	242	1749	19%	14%	56%	34%
Marital Status	Common-Law	426	2826	45%	36%	50%	54%
	Divorced	191	552	50%	41%	39%	44%
	Married	1270	9043	44%	33%	50%	52%
	Separated	176	715	50%	42%	45%	47%
	Single	1044	7533	30%	14%	57%	74%
	Unknown	25	166	12%	6%	60%	72%
	Widowed	19	49	47%	35%	42%	53%
Education	Master's and above	179	970	30%	18%	51%	39%
	Bachelor's	488	1954	27%	17%	63%	55%
	College/Technical	591	2578	37%	23%	55%	68%
	High School	1385	10153	44%	26%	49%	63%
	Less than high school	375	4232	52%	36%	41%	53%
	Unknown	133	997	38%	27%	52%	60%
Occupation Authority	Assistant Chief of Military Personnel	2125	4618	44%	34%	48%	52%
	Royal Canadian Air Force	372	4166	27%	21%	61%	63%
	Canadian Army	365	9098	33%	26%	59%	62%
	Royal Canadian Navy	283	2889	31%	23%	57%	62%

While there are just over 100 occupations in the CAF, all of which are open to women, the majority of RegF women are serving in a small subset of occupations. In fact, between FY 11/12 and FY 15/16, 50% of all RegF women were employed in one of six ACMP-managed occupations: cook, logistics (LOG), nursing, resource management support clerk (RMS CLK),<sup>10</sup>

<sup>10</sup> In FY 16/17, this occupation was divided into two new occupations : human resources administrator and financial services administrator.

medical technician (MED TECH), and supply technician (SUP TECH). The release category distribution for each of these occupations is shown in Figure 6 for men and women from FY 11/12 to FY 15/16. Again, the proportion of women releasing medically is greater than the proportion of men releasing medically for each occupation shown, although the differences were quite small for nurses and logistics officers relative to the other four occupations. The logistics occupation also stands out from the other occupations shown in that 20% of women and 35% of men were released as a result of service completion. The majority of these service completion releases were due to members reaching retirement age<sup>11</sup> (i.e. release reason 5A).

Figure 6: Release Category Distribution by Occupation and Sex (FY 11/12 to FY 15/16)



## Discussion

The overall attrition rate for women has been lower than that of men over the past five years; however, on average throughout the same time period, attrition rates for women with 20 or more YoS have been higher than for men with 20 or more YoS. Given that a smaller proportion of RegF women have 20 or more YoS compared to men, targeting retention strategies at those with fewer YoS may have a greater impact on the overall retention of women, especially in the short term considering the increased recruitment goals for women over the next decade as part of the CAF’s plan to achieve its representation goal for women.

Over the past decade, in the CAF RegF, voluntary attrition rates have been higher for men than women. The CAF Exit Survey provides RegF members that are voluntarily releasing with an opportunity to share their “levels of satisfaction or agreement across a range of work and organizational issues, as well as the extent to which these issues influence decisions to release” (Michaud & Goldenberg, 2012, p.1). Analyses based on data collected from 2008 to

<sup>11</sup> The retirement age as defined in the QR&O, which may be earlier than a member’s CRA.

2012 found that men and women had “*very similar attitudes and perceptions of most work and organizational issues assessed*” (*ibid.*, p.16). While men and women did differ on a few issues, these issues did not represent the sources of greatest dissatisfaction, which were the same for both men and women : feeling of accomplishing meaningful work, the career management system, and time available to spend with family (Michaud & Goldenberg, 2012).

The CAF Retention Survey is another tool used to monitor levels of satisfaction with work and organizational factors, but gathers the perspectives of RegF members currently serving rather than of those in the process of being voluntarily released. Analyses of responses to the 2012 Retention Survey found that, “[*f*]or the most part, men and women had the same perceptions of the work and organization issues assessed. (...) Moreover, in the few cases in which gender differences were observed, women actually reported more positive attitudes and perceptions than men” (Human Resources Systems Group Ltd, 2013, p.145). Subsequent analyses found that...

women were less likely than men to indicate intent to leave the CAF within five years. The most commonly chosen reasons for leaving by both genders (excluding retirement or pension eligibility) were geographic stability, job dissatisfaction, and desire for more meaningful and satisfying work. Further, the rate at which each reason for leaving was chosen by both genders reveals no gender pattern that might indicate that one set of issues is more or less problematic for female RegF members than for male RegF members (Dekker, 2012, p.4).

A gender comparison based on the 2014 CAF Retention Survey also came to the same conclusion :

Male and female members reported similar levels of satisfaction across most work and organizational factors with only a few exceptions. Specifically, female members were slightly more satisfied with pay and benefits and reported slightly higher role ambiguity than did male members (Goldenberg & Laplante, 2015, p.2).

These findings provide some insights into the observed lower voluntary attrition rates for women than men. While men and women have similar levels of satisfaction, suggesting common retention strategies could be used, the differences in the population demographics for RegF men and women could be used to develop more targeted strategies for women. For instance, considering that half of RegF women are employed in one of six support occupations, retention strategies tailored to the concerns of these occupations could have a greater impact on the overall retention of women than a more general strategy.

Medical attrition has been higher for women than men for at least the past 15 years. Better understanding the underlying reasons for these medical releases would also help inform future retention strategies as it may be possible to implement prevention measures. The Recruit Health Questionnaire (RHQ) was designed to provide comprehensive health information on CAF recruits ; the health and lifestyle of recruits are “*potential determinants of*

*their health and deployability at later stages of their CAF career*” (Lee, Sumner & Hachey, 2015, p.i). A study of recruits enrolled between 2007 and 2009 based on the RHQ found that “*a higher proportion of female recruits screened positive for medium to severe somatic symptoms and panic disorder*” (Lee & Hachey, 2011, p.113). Somatic, or physical, symptoms, such as stomach pain, back pain, and headaches, have been found to be associated with post-deployment illnesses (e.g. post-traumatic stress disorder) as well as an increased risk of attrition from CAF basic training (Lee & Hachey, 2011). The study did not find differences by sex for the other health status indicators included in the RHQ (Lee & Hachey, 2011). A later study focusing on recruits enrolled between 2010 and 2012 found that “[w]here differences in health behaviours and conditions by sex were observed, female recruits generally demonstrated more favourable characteristics than male recruits” (Lee, Sumner & Hachey, 2015, p.35). There were some exceptions: in particular, as in the previous study, a higher proportion of women reported medium to severe physical symptoms than men. It is possible these higher self-reported physical symptoms are related to the higher medical attrition rates for women. Anecdotal evidence within DND has also suggested that women may be more likely to report health issues than men, which would also contribute to higher medical attrition rates among women.

## **Conclusion**

For the CAF, employment equity “*is not just a legal or moral issue; it is a matter of successfully adapting to Canada’s changing demographics and sustaining the operational effectiveness of the CAF into the future*” (GoC, n.d., p.1). In terms of the representation of women, the CAF has set ambitious goals to increase representation from 15% in 2016 to 25% by 2026. While voluntary attrition rates have been lower for women than men since the mid-2000s, retention strategies tailored to the population demographics of women could help the CAF in meeting its representation goals. Medical attrition rates, on the other hand, have been higher for women than men for at least the past 15 years. Future research to better understand the underlying illnesses and injuries behind these releases, and how they differ among men and women, could also help the CAF in developing new retention strategies, possibly in the form of preventative health measures, support programs or services.

## **References**

**DEKKER, I.**, *2012 Retention Survey: Gender Differences in Leave Intent and Reasons for Leaving*, Director General Military Personnel Research and Analysis Scientific Letter DRDC-RDDC-2015-L387, Ottawa, Ontario, Defence Research and Development Canada, 2015.

**DIRECTOR GENERAL MILITARY PERSONNEL RESEARCH AND ANALYSIS**, *Annual Report on Regular Force Attrition 2014/2015*, Director General Military Personnel Research and Analysis Reference Document DRDC-RDDC-2016-D045, Ottawa, Ontario, Defence Research and Development Canada, 2016.

EARNSCLIFFE STRATEGY Group, *Recruitment and Employment of Women in the Canadian Armed Forces: Research Report*, Director General Military Personnel Research and Analysis Contract Report DRDC-RDDC-2017-003, Ottawa, Ontario, Defence Research and Development Canada, 2017.

GOLDENBERG, I. & J. LAPLANTE, *2014 CAF Retention Survey: Research Highlights*, Director General Military Personnel Research and Analysis Scientific Brief DRDC-RDDC-2015-B013, Ottawa, Ontario, Defence Research and Development Canada, 2015.

GOVERNMENT OF CANADA, Department of Justice, *Employment Equity Act (c. 44)*, 1995 : <http://laws-lois.justice.gc.ca/eng/acts/E-5.401/page-1.html> (accessed 10 March 2017).

GOVERNMENT OF CANADA, National Defence and the Canadian Armed Forces, *The Canadian Forces (Regular Force and Primary Reserve) Compulsory Retirement Age 60*, ADM(HR-Mil) Instruction 14/04, 2004.

GOVERNMENT OF CANADA, National Defence and the Canadian Armed Forces, *The New CF Regular Force Terms of Service*, ADM(HR-Mil) Instruction 05/05, 2005.

GOVERNMENT OF CANADA, National Defence and the Canadian Armed Forces, *Universality of Service*, Defence Administrative Order and Directive 5023-0, 2006.

GOVERNMENT OF CANADA, National Defence and the Canadian Armed Forces, *Departmental Performance Report for the period ending March 31, 2008* [submitted to Treasury Board of Canada Secretariat], 2008 : <http://www.tbs-sct.gc.ca/dpr-rmr/2007-2008/inst/dnd/dnd-eng.pdf> (downloaded 6 March 2017).

GOVERNMENT OF CANADA, National Defence and the Canadian Armed Forces, *Physical Fitness Program for Untrained CF Personnel*, Canadian Forces General message (CANFORGEN) 174/09, 2009a.

GOVERNMENT OF CANADA, National Defence and the Canadian Armed Forces, *Physical Fitness Program for Untrained CF Personnel*, Canadian Forces Military Personnel Instruction, Number 06/09, 2009b.

GOVERNMENT OF CANADA, National Defence and the Canadian Armed Forces, *CF Retention Strategy – Revised Application of Terms of Service*, Canadian Forces General message (CANFORGEN) 031/09, 2009c.

GOVERNMENT OF CANADA, Statistics Canada, *Portrait of Canada's Labour Force*, Catalogue no. 99-012-X2011002, Minister of Industry, 2013 : <http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/99-012-x2011002-eng.cfm> (accessed 13 March 2017).

GOVERNMENT OF CANADA, National Defence and the Canadian Armed Forces, *Women in the Canadian Armed Forces*, Backgrounder, 2014 : <http://www.forces.gc.ca/en/news/article.page?doc=women-in-the-canadian-armed-forces/hie8w7rm> (accessed 9 March 2017).

GOVERNMENT OF CANADA, National Defence and the Canadian Armed Forces, *Canadian Armed Forces Employment Equity Plan 2015-2020*, 2015a.

GOVERNMENT OF CANADA, *Queen's Regulations and Orders for the Canadian Forces (QR&Os): Volume I - Chapter 15 Release*, 2015b : <http://www.forces.gc.ca/en/about-policies-standards-queens-regulations-orders-vol-01/ch-15.page> (accessed 28 February 2017).

GOVERNMENT OF CANADA, National Defence and the Canadian Armed Forces, *Women in the Canadian Armed Forces*, Backgrounder, 2016 : <http://www.forces.gc.ca/en/news/article.page?doc=women-in-the-canadian-armed-forces/ildcias0> (accessed 9 March 2017).

GOVERNMENT OF CANADA, National Defence and the Canadian Armed Forces, “On the Road to Greater Representation of Women in the CAF”, *The Maple Leaf*, vol. 20, n°3, March 2017, p.7.

GOVERNMENT OF CANADA, National Defence and the Canadian Armed Forces, *Canadian Armed Forces Employment Equity Report 2014-2015*, n.d.

**HUMAN RESOURCE SYSTEMS GROUP LTD**, *The 2012 CF Retention Survey : Descriptive Results*, Director General Military Personnel Research and Analysis Contract Report 2013-008, Ottawa, Ontario, Defence Research and Development Canada, 2013.

**LEE, J. & J. HACHEY**, *Descriptive Analyses of the Recruit Health Questionnaire: 2007-2009*, Director General Military Personnel Research and Analysis Technical Memorandum 2011-028, Ottawa, Ontario, Defence Research and Development Canada, 2011.

**LEE, J., M. SUMNER & J. HACHEY**, *Descriptive Analyses of the Recruit Health Questionnaire : Ten-Year Trends and 2010-2012 Update*, Director General Military Personnel Research and Analysis Scientific Report DRDC-RDDC-2015-R165, Ottawa, Ontario, Defence Research and Development Canada, 2015.

**MICHAUD, K.**, *Voluntary Attrition during Basic Military Qualification (BMQ) and Basic Military Officer Qualification (BMOQ): Focus Groups Findings*, Director General Military Personnel Research and Analysis Technical Memorandum 2010-019, Ottawa, Ontario, Defence Research and Development Canada, 2010.

**MICHAUD, K. & I. GOLDENBERG**, *Letter Report : Canadian Forces Exit Survey – A Gender Analysis*, Director General Military Personnel Research and Analysis Letter Report 1150-1, Ottawa, Ontario, Defence Research and Development Canada, 2012.

**OKAZAWA, S.**, *Measuring Attrition Rates and Forecasting Attrition Volume*, Centre for Operational Research and Analysis Technical Memorandum 2007-02, Ottawa, Ontario, Defence Research and Development Canada, 2007.