# Does Raising the Combat Exclusion Lead to Equality? 

Measuring the recruitment, retention, and promotion of women in Canada and New Zealand's defence forces

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## Executive Summary

This report brings together decades of data on gender integration in the New Zealand and Canadian Defence Forces to answer the following question: does removing the combat exclusion lead to greater gender equality?

This report shows evidence that lifting the combat ban does not have significant positive impacts on three core indicators of gender equality: recruitment (both generally and into combat roles), retention, and promotion rates.

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## Introduction

Most international militaries have officially excluded women from serving in so-called frontline combat roles, through a series of policies often referred to as the combat ban or "the combat exclusion." ${ }^{1}$ Approximately 20 countries in the world allow women to serve in combat, although the number of women serving in these roles is often low. ${ }^{2}$ Across international cases, justifications for restricting women from combat have included arguments that women are physically weaker than men and negatively impact troop cohesion and military effectiveness.

Internationally, there has been rapid developments related to the combat exclusion. The Australian Defence Force (ADF) announced an end to the combat exclusion in 2011, and the United States announced in 2015 that all combat positions would be open to women.

A range of presumed positive impacts have been linked to removing the combat exclusion; however, there has been minimal empirical analysis of the impacts of removing the combat exclusion. In this report, we focus on the Canadian Armed Forces (CAF) and New Zealand Defence Force (NZDF) because they opened combat roles to women in 1989 and 2000 respectively, allowing for longitudinal analysis. ${ }^{3}$

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## The Link Between the Combat Exclusion and Gender Equality

There are three assumed positive impacts associated with removing the combat exclusion:

Impact 1: Recruitment

Allowing women to work in more roles within the institution makes the defence force a more attractive employer.

## Impact 2: Retention

Lifting the combat exclusion will improve women's career progression possibilities and increase respect from colleagues and lower harassment and bullying.

## Impact 3: Promotion

Women's entry into combat positions will result in more women in leadership positions within the services, thereby breaking the socalled brass ceiling.

## Measurement

We measure these three indicators in the following way:

1. Recruitment: shifts in rates of representation and distribution across military occupations,
2. Retention: aggregate attrition rates, and;
3. Promotion: rank distributions and a calculated promotion rate. ${ }^{4}$
[^2]
## Research Findings from Canada

## Women's Representation in Canadian Armed Forces (CAF) ${ }^{5}$



Figure 1 and 2 include data signalling the extent to which the CAF has improved its recruitment of women since the removal of the combat exclusion. Figure 1 shows incremental progress, at best, in terms of improving the number of women in the CAF. It shows an annualized growth rate of 0.5 percent through the seventies and eighties, and an approximately 0.2 percent growth rate through the nineties and 2000s. This figure also shows that the Canadian Defence Forces (CAF) have never reached their stated goal of recruiting women to $25 \%$ of the total defence forces.

[^3]Figure 2: Regular force female representation Officers versus NCMs 1989-2016 ${ }^{6}$


Figure 2 shows there has been more growth in the proportion of female officers in the CAF, which is a positive sign in terms of leadership. However, this grown is very minor. Neither Figure 1 nor figure 2 indicate a significant positive acceleration of growth in the number of women in the CAF following the removal of the combat exclusion in 1989.

[^4]Figure 3: Distribution of CAF female officer military occupational specialties 1989-2015

$■$ Operations $\quad$ Engineering $■$ Medical/dental $\quad$ Support

Figures 3 and 4 show the distribution of female officers and NCMs across the military occupational specialties (MOCs) between 1989 and 2015. These figures also help answer whether removing the combat exclusion has improved recruitment rates for women as they illustrate how women are spread across the forces, rather than the percentage of women in each MOC. For officer data, operations include combat arms, as well as naval operations, air operations, and pilots. While there is not disaggregated combat arms data here, as of 2016, the percentage of female officers in combat arms was 4.6 percent. Over half of women in the CAF are still in support/logistics.

Figure 4: Distribution of female NCM military occupational specialties 1989-2015 ${ }^{7}$


Figures 3 and 4 show that there has not been substantial progress in recruiting women into combat roles or ensuring that women are distributed evenly through the forces and not concentrated in support roles.

Figure 5: Total regular force attrition CAF 1989-20158



Figures 5 and 6 show what the percentages of women and men leaving the CAF. This is a strong measure of retention, or the ability of the CAF to keep service members employed within the institution. The figures show that, as expected, attrition rates went up in Canada after 1995 when the CAF was offering exit packages as a means to cut costs. After that, the gap between men and women narrowed and, in the case of officers, the trend briefly and slightly inverts.
${ }^{7} 1989$ and 1997: Tanner (1997); all others Department of National Defence (2003-2015).
${ }^{8}$ Tanner (1999). 2004-2015 data calculated from dividing total force strength by releases, based on Department of National Defence (2003-2015).

Figure 6: Total officer attrition 2001-2015 ${ }^{9}$

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The findings on attrition, as a measure of retention, are mixed. The data shows signs that retention of women improved slightly; however, the results are not significant and suggest need for further investigation. It must not be forgotten that there are myriad other, gendered variables unrelated to the combat exclusion that impact female retention rates, including harassment, social isolation, or family reasons.

[^5]Figure 7: CAF Female Regular Force officer rank distribution 1989-2015


Figure 8: CAF Regular force female NCM rank distribution 1989-2015 ${ }^{10}$


Figure 7,8 , and 9 help illustrate the extent to which women have had more success in terms of promotion following the removal of the combat exclusion in Canada. Figure 7 and 8 captures the way women are distributed across the ranks, rather than the number/proportion of women at each rank. Figure 8 shows the shifts in the number of regular force female noncommissioned members by rank between 1989-2015. The greatest shift has occurred in the lower-middle ranks, with significant increases in the proportion of sergeants and master corporals, and a smaller increase in the number of warrant officers that nonetheless illustrates an upward trend. Women have still failed to break into the highest ranks. The most senior ranks of general, lieutenant general, major general, and brigadier general have been excluded from this graph because there were no women, or so few that the data is too small to depict. Despite these positive developments into the middle ranks, there is little evidence showing a shattering of the 'brass ceiling' that could be said to be tied to the raising of the ban.

Figure 9: CAF Proportion of women in regular force officer promotions 2004-2015


[^6]Figure 10: Proportion of women in regular force NCM promotions 2004-2015 ${ }^{11}$


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Figures 9 and 10 suggest that women are over-represented in officer promotions, as they consistently make up more than 17 percent of promotions (in dark) despite making up 16 percent of the forces (in green) before 2013 and in 2015. There are a few possible explanations for this trend, for example that the women that join and remain in the defence forces are a more self-selected and high-performing group than the men, or that women are over-represented in promotions from lower ranks into middle ranks. This finding represents an interesting future avenue of study.

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## Findings from New Zealand

Figure 11: Women's Representation in the New Zealand Defence Forces 1990-2015


Similar to the CAF, women's representation in the New Zealand Defence Forces (NZDF) has remained relatively stagnant since the removal of the combat exclusion. The NZDF annualized growth rate has averaged at 0 for over a decade and there is little indication that it will meet its goal of women making up $25 \%$ of the force.

Figure 12: Regular force percentage female by service 1990-2015 ${ }^{12}$


Again, Figures 11 and 12 agree with the Canadian data in showing that removing the combat exclusion has no discernable impact in terms of recruitment and the number of women in the defence forces. Data from both countries also indicate that neither country has made marked improvements in recruiting women and increasing the overall percentage of women in the ranks.

[^8]Figure 13: Attrition rates New Zealand regular force 2004-2013 ${ }^{13}$


Figure 13's data is unfortunately limited in its coverage, reflecting low data availability. Nevertheless, it is clear that there is a persistent gap between men's and women's attrition rates, or the number of men and women leaving the NZDF. This gap in attrition rates does not appear to narrow over the near decade-long period indicating that removing the combat exclusion did not improve retention rates for women in the NZDF.

[^9]Figure 14: Percentage of NZDF female regular force officers by descending rank 1998-2013 ${ }^{14}$


Figures 14 and 15 differ from the CAF data as they show the percentage of women as compared to men by rank, rather than the distribution of women across the ranks. As such, to indicate progress, movement on each of these measures upward would have to be observed. Note that in Figure 14, ranks not yet achieved by any woman (LTGEN and MAJGEN) have been excluded.

[^10]Figure 15: Percentage of female regular force NCMs by descending rank 1998-2013 ${ }^{15}$


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\backsim \text { WO }- \text { WO2 }- \text { SSGT } \leftarrow \text { SGT } \sim \text { CPL } \multimap \mathrm{LCPL} \longleftarrow \mathrm{PTE}
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The movements observed in these Figures 14 and 15 are not linear and are not trending upward. Instead, the representation of women in particularly middle and upper ranks tends rather to plateau, indicating a sustained 'brass ceiling' for women. This is similar to the CAF data and indicates that the removal of the combat exclusion does not improve promotion rates for women.

[^11]
## Analysis

Overall, this data paints a mixed picture which should dampen expectations around the impact of raising combat exclusions. Evidence is weakest that removing the combat exclusion has yielded higher recruitment rates. The most significant takeaway from the recruitment data for the CAF is that women are still not selecting combat roles as their occupations. This may create flow-on problems for promotions, which, while occurring steadily into the middle ranks, has not translated into the upper ranks. Retention shows extremely modest positive and patchy progress. As we have suggested, however, these slight improvements may not have resulted from the lifting of the combat ban per se, but because of other efforts to attract women and address gender inequality.

Overall, while the data indicates very modest progress with regard to the recruitment and promotion of women, these advancements are limited when put in the context of the goals the forces have set, and re-set, for themselves. What is most significant to this paper is not measuring the size of the impact of the raising of the combat ban, therefore, but rather showing that the lifting of the ban may not have triggered the flow-on effects that policymakers have stated it should have.
"...research indicates that attempting to integrate women into traditionally male-dominated roles without systematic efforts to improve the culture or change leadership practices can set women up for hardship and failures."

Policy tools such as lifting the combat exclusion are 'blunt', in that they assume that the means to achieving equality is to add more women and that more women will enter the military once formal barriers to participation are eased. In addition, the belief that removing the combat exclusion will lead to equality places extreme pressures on incoming women to 'be the solution.' Indeed, research indicates that attempting to integrate women into traditionally male-dominated roles without systematic efforts to improve the culture or change leadership practices can set women up for hardship and failures. ${ }^{16}$

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[^0]:    If you have questions about our publications, please contact Megan MacKenzie (m_mackenzie@sfu.ca). For more information, visit meganhmackenzie.com.

[^1]:    ${ }^{1}$ Megan MacKenzie. Beyond the Band of Brothers: The US Military and the Myth That Women Can't Fight. Cambridge: Cambridge University Press, 2015
    ${ }^{2}$ Sarah Percy. "What Makes a Norm Robust: The Norm Against Female Combat." Journal of Global Security Studies 4, 1 (2019): pp. 123-38.
    ${ }^{3}$ Canada removed the combat exclusion after two servicewomen took CAF to the Canadian Human Rights Tribunal in 1989, which ruled that the exclusion was discriminatory. In New Zealand, women were able to serve in combat roles in the Air Force as early as 1988. The General Chief of Staff issued a memo in 2000 that combat roles across the services would be fully integrated over the following four years; in 2007 a Human Rights (Women in Armed Forces) Amendment Act was issued, making restrictions on women's employment opportunities within the forces illegal.

[^2]:    ${ }^{4}$ Though we distinguish recruitment, retention, and promotion for the purposes of measurement, we acknowledge that these indicators can be overlapping and interconnected. As discussed above, promotion and recruitment rates influence retention rates. Furthermore, most forces link the challenges of recruitment and retention together, assuming that they can be targeted and improved via the same or similar policies, for example increased remuneration. For example, the NZDF's 2016 White Paper defines "recruitment and retention" as a singular goal.

[^3]:    ${ }^{5}$ Department of National Defence, "Canadian Armed Forces Employment Equity Report" (2003-2015); Department of National Defence. "Women in the Canadian Armed Forces," 18 March 2016.; ; Simpson, Suzanne, Doris Toole and Cindy Player. "Women in the Canadian Forces: Past, Present and Future" Atlantis. 4, II (1979): pp. 226-283.; Holden Nicola. "Canadian Forces 2001 Self-Identification Census: Methodology and Preliminary Results," Department of National Defence Canada, Ottawa, 2003.; Park, Jungwee. "A profile of the Canadian Forces," Statistics Canada, no. 75-001-X, 2008.; Soeters, Joseph L., and Jan Van Der Meulen, eds. Cultural Diversity in the Armed Forces. London: Routledge, 2007.

[^4]:    ${ }^{6}$ Tanner, Leesa. "Gender Integration in the Canadian Forces - a Quantitative and Qualitative Analysis." Department of National Defence: Ottawa, 1999, Tanner, Leesa "Female Participation in the Regular Force of the Canadian Forces (1989-1997)." Department of National Defence: Ottawa, 1997.; Tanner, Leesa "A Synopsis of Female Participation in the Regular force of the Canadian Forces." Department of National Defence: Ottawa, 1996.; Park, Jungwee. "A profile of the Canadian Forces," Statistics Canada, no. 75-001-X, 2008.; Statistics Canada. "Canadian Armed Forces Regular Force and Primary Reserve Members Who Witnessed or Experienced or Personally Experienced Sexualized or Discriminatory Behaviour, or Who Were Sexually Assaulted, 2016 and 2018," 22 May 2019. https://www150.statcan.gc.ca/n1/daily-quotidien/190522/cg-a002eng.htm.; Department of National Defence (2003-2015).

[^5]:    ${ }^{9}$ Bourgon, Lise. "The CF as an Employer of Choice: The Key for a Successful Gender Integration." Kingston: Canadian Forces College, 2007.; Department of National Defence (2016); 2006-2013 and 2015 data calculated from Department of National Defence (2006-13; 2015), dividing total force strength by releases. The dip between 1997 and 2004 may reflect that a different calculation method has been used.

[^6]:    ${ }^{10}$ Sources (for Figures 7 and 8): 1989, 1998: Tanner (1999); 2005: NATO (2006); all others Department of National Defence (2003-2015).

[^7]:    ${ }^{11}$ Department of National Defence (2003-2015), calculated.

[^8]:    ${ }^{12}$ Sources (for Figures 11 and 12): 1997, 2004: Burns and Hanson (2005, 88); all others Ministry of Defence (2014, 27, 54).

[^9]:    ${ }^{13}$ Source: Ministry of Defence $(2014,20)$.

[^10]:    ${ }^{14}$ Source: 2003-2013: Ministry of Defence (2014); 1998, 2000: Ministry of Defence $(2005,101)$. Between these two sources, there are discrepancies in the reported percentage of female officer cadets, which reflects the dip from 2000 to 2003. For example, the latter source reports the percentage of officer cadets in 2004 to be 23.5 percent. We have deemed the former source more accurate.

[^11]:    ${ }^{15}$ Source: 2003-2013: Ministry of Defence (2014); 1998, 2000: Ministry of Defence (2005, p. 102).

[^12]:    ${ }^{16}$ Sarah Childs, and Mona Lena Krook. "Should Feminists Give Up on Critical Mass? A Contingent Yes." Politics Gender 2, 4 (2006.): pp. 522-530.

