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Integration of Women into Ground Combat Unit

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STO TECHNICAL REPORT

TR-SAS-120

Integration of Women into Ground Combat Unit

(Intégration des femmes dans les unités de combat terrestre)

This report documents the activities and findings
of SAS-120, Research Task Group 058.



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The mission of the NATO Science & Technology Organization (STO) is to help position the Nations' and NATO's S&T investments as a strategic enabler of the knowledge and technology advantage for the defence and security posture of NATO Nations and partner Nations, by conducting and promoting S&T activities that augment and leverage the capabilities and programmes of the Alliance, of the NATO Nations and the partner Nations, in support of NATO's objectives, and contributing to NATO's ability to enable and influence security and defence related capability development and threat mitigation in NATO Nations and partner Nations, in accordance with NATO policies.

The total spectrum of this collaborative effort is addressed by six Technical Panels who manage a wide range of scientific research activities, a Group specialising in modelling and simulation, plus a Committee dedicated to supporting the information management needs of the organization.

- AVT Applied Vehicle Technology Panel
- HFM Human Factors and Medicine Panel
- IST Information Systems Technology Panel
- NMSG NATO Modelling and Simulation Group
- SAS System Analysis and Studies Panel
- SCI Systems Concepts and Integration Panel
- SET Sensors and Electronics Technology Panel

These Panels and Group are the power-house of the collaborative model and are made up of national representatives as well as recognised world-class scientists, engineers and information specialists. In addition to providing critical technical oversight, they also provide a communication link to military users and other NATO bodies.

The scientific and technological work is carried out by Technical Teams, created under one or more of these eight bodies, for specific research activities which have a defined duration. These research activities can take a variety of forms, including Task Groups, Workshops, Symposia, Specialists' Meetings, Lecture Series and Technical Courses.

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List of Acronyms

ADF	Australian Defence Force
ADKAR	Awareness, Desire, Knowledge, Ability, Reinforcement
AFCAS	Armed Forces Continuous Attitude Survey
AOR	Area Of Responsibility
CAF	Canadian Armed Forces
CBRN	Chemical, Biological, Radiological and Nuclear
CII	Combat Integration Initiative
CNA	Centre for Naval Analyses
CREW	Combat Related Employment of Women
DACOWITS	Defence Advisory Committee on Women in the Services
DEOCS	Defence Equal Opportunity Climate Survey
DEOMI	Defence Equal Opportunity Management Institute
DGCDAR	Direct Ground Combat Definition and Assignment Rule
ECM	Ethnic-Cultural Minorities
EDO	Equality and Diversity Officer
EU	European Union
EXORD	Executive Order
FRAGO	Fragmentary Order
FET	Female Engagement Team
FFI	Forsvarets Forsknings Institutt / Norwegian Defence Research Establishment
FJT	Fallskjermjegertroppen / Traditional all-male paratrooper platoon (Norway)
FOC	Full Operational Capability
FPVS	Norwegian Armed Forces Recruitment Office
FSK	Norwegian Special Operations Commando (NORSOC)
GCC	Ground Close Combat
GIS	Gender Integration Study
HFM	Human Factors and Medicine
HQDA	Headquarters, Department of the Army
IOC	Initial Operational Capability
JT	Jegertroppen / All-female SOF platoon (The “Hunter Troop” at NORSOC/TW)
JNCO	Junior Non-Commissioned Officer
MOS	Military Occupational Specialty
NAP	National Action Plan
NATO	North Atlantic Treaty Organization
NCO	Non-Commissioned Officer
NGO	Non-Government Organization
NorAF	Norwegian Armed Forces
NORSOF	Norwegian Special Operations Forces
NZDF	New Zealand Defence Force

OF3	NATO Officer (Level) 3
OPAT	Occupational Physical Assessment Test
PES	Physical Employment Standards
PP	Partnership for Peace
PME	Professional Military Education
PQO	Professionally Qualified Officer
RCT	Randomized Controlled Trial
ROTC	Reserve Officers' Training Corps
RTG	Research Task Group
SAPR	Sexual Assault Prevention and Response
SAPRO	Sexual Assault Prevention and Response Office
SAS	Systems Analysis Studies
SHARP	Sexual Harassment/Assault Response & Prevention (US)
SNCO	Senior Non-Commissioned Officer
SO2	Staff Officer (Level) 2
SOF	Special Operating Force / Special Operations Forces
SOI	School of Infantry
SPSP	Science for Peace and Security Programme
SWAT	Special Weapons and Tactics
TCTR	Total Click Through Rate
TRAC	The Research and Analysis Centre
TRADOC	Training and Doctrine Command
TTCP	The Technical Cooperation Program
TW	Training Wing
UCTR	Unique Click Through Rate
UK	United Kingdom
UN	United Nations
US	United States
UNSCR	United Nations Security Council Resolution
USASMA	United States Army Sergeants Major Academy
USMA	United States Military Academy
USMC	United States Marine Corps
WBS	Work Breakdown Structure
WIIS	Women in International Security
WO	Warrant Officer
WPS	Women, Peace and Security

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Integration of Women into Ground Combat Units

(STO-TR-SAS-120)

Executive Summary

There is a developing body of research related to the integration of women into military organizations; however, the inclusion of women in ground combat roles presents unique challenges for individuals and military organizations. In support of such initiatives, it is important to identify best practices, collect empirical evidence and collate lessons learned to support the participation of women in combat roles and to better understand the impacts of gender integration. This means taking into account critical influences on the integration and participation of women in combat units including cultural, behavioural and attitude change, leadership, group dynamics, cohesion, critical mass, harassment, accommodations to support gender integration, early cohort management, strategies which support viable and equitable career paths for women and men, and processes to assist in long term monitoring of the integration efforts, beyond initial integration.

The following objectives, initially established at an Exploratory Team meeting in April 2015 have guided the activity of SAS-120 and are addressed in this report:

- Identify the influence of social, cultural, and psychological factors of gender integration in ground close combat units and their impact on combat effectiveness;
- Identify effective processes and strategies for the integration of women in ground close combat units;
- Identify appropriate methodologies for monitoring, measurement and assessment of integration; and
- Share best practices through collaboration.

This activity leverages existing research to contribute new knowledge with particular application to integration into ground combat roles, thus making significant contribution to the operational effectiveness of mixed gender combat teams/units as well as military policy decisions and public awareness. Empirical questions resulting from this effort will inform defence research programs within participating nations and provide opportunities for collaborative research and related activity with academic institutions as well as security partners such as police organizations. In doing so, this report presents discussion and analysis of past and persistent challenges and concerns regarding the participation of women in ground combat roles. The analysis presented throughout this report places significant emphasis on gender integration with the context of culture change. This report also includes an annotated bibliography, a categorized research bibliography, and a summary of the NATO STO Research Symposium on the Integration of Women Into Ground Combat Units that was coordinated by SAS-120.

Intégration des femmes dans les unités de combat terrestre

(STO-TR-SAS-120)

Synthèse

Le corpus de la recherche liée à l'intégration des femmes dans les organisations militaires se développe. Néanmoins, l'inclusion des femmes dans le combat terrestre présente des défis uniques pour les personnes et les organisations militaires. À l'appui de ces initiatives, il est important d'identifier les meilleures pratiques, recueillir des éléments empiriques et collationner les enseignements retenus, afin de soutenir la participation des femmes au combat et mieux comprendre les impacts de l'intégration des femmes. Cela implique de tenir compte des influences ayant un effet critique sur l'intégration et la participation des femmes à des unités de combat : le changement de culture, de comportement et d'attitude, le commandement, la dynamique de groupe, la cohésion, la masse critique, le harcèlement, le logement facilitant l'intégration des femmes, la gestion précoce des cohortes, les stratégies favorisant une évolution de carrière viable et équitable pour les hommes et les femmes, ainsi que des processus contribuant au suivi à long terme des efforts d'intégration, au-delà de l'intégration initiale.

Les objectifs ci-dessous, initialement établis par une équipe exploratoire qui s'est réunie en avril 2015, ont orienté l'activité du SAS-120 et sont traités dans le présent rapport :

- Identifier l'influence des facteurs sociaux, culturels et psychologiques de l'intégration des femmes dans les unités de combat terrestre rapproché et leur impact sur l'efficacité au combat ;
- Identifier les processus et stratégies efficaces d'intégration des femmes dans les unités de combat terrestre rapproché ;
- Identifier les méthodologies appropriées pour surveiller, mesurer et évaluer l'intégration ; et
- Partager les meilleures pratiques à travers la collaboration.

La présente activité exploite les recherches existantes pour apporter de nouvelles connaissances s'appliquant particulièrement à l'intégration dans les postes de combat terrestre. Elle contribue ainsi de manière significative à l'efficacité opérationnelle des équipes/unités de combat mixtes, ainsi qu'aux décisions politiques militaires et à la sensibilisation du grand public. Les questions empiriques qui découlent de ces travaux éclaireront les programmes de recherche pour la défense au sein des pays participants et offriront des opportunités de recherche collaborative et d'activité liée avec des établissements universitaires et des partenaires des forces de sécurité, telles que la police. Ce faisant, le présent rapport discute et analyse les défis et les préoccupations passés et persistants au sujet de la participation des femmes au combat terrestre. L'analyse présentée tout au long de ce rapport insiste particulièrement sur l'intégration des femmes dans le contexte du changement de culture. Ce rapport comprend également une bibliographie annotée, une bibliographie de recherche par catégorie et une synthèse du colloque de recherche de la STO de l'OTAN sur l'intégration des femmes dans les unités de combat terrestre qui a été coordonnée par le SAS-120.

Chapter 1 – INTRODUCTION

There is a developing body of research related to the integration of women into military organisations; however, the inclusion of women in ground combat roles presents unique challenges for individuals and military organisations. In support of such initiatives, it is important to identify best practices, collect empirical evidence and collate lessons learned to support the participation of women in combat roles and to better understand the impacts of gender integration. This means taking into account critical influences on the integration and participation of women in combat units including cultural, behavioural and attitude change, leadership, group dynamics, cohesion, critical mass, harassment, accommodations to support gender integration, early cohort management, strategies which support viable and equitable career paths for women and men, and processes to assist in long term monitoring of the integration efforts, beyond initial integration.

1.1 SAS-120 GOALS AND OBJECTIVES

The following objectives, initially established at an Exploratory Team meeting in April 2015 have guided the activity of SAS-120 and are addressed in this report:

- Identify the influence of social, cultural, and psychological factors of gender integration in ground close combat units and their impact on combat effectiveness;
- Identify effective processes and strategies for the integration of women in ground close combat units;
- Identify appropriate methodologies for monitoring, measurement and assessment of integration; and
- Share best practices through collaboration.

This activity leverages existing research to contribute new knowledge with particular application to integration into ground combat roles, thus making significant contribution to the operational effectiveness of mixed gender combat teams/units as well as military policy decisions and public awareness. Empirical questions resulting from this effort will inform defence research programs within participating nations and provide opportunities for collaborative research and related activity with academic institutions as well as security partners such as police organisations. In doing so, this report presents discussion and analysis of past and persistent challenges and concerns regarding the participation of women in ground combat roles. The analysis presented throughout this report places significant emphasis on gender integration with the context of culture change. As discussed in the following sections, this report also includes an annotated bibliography, a categorised research bibliography, and a summary of the symposium on the integration of women into ground combat units that was coordinated by SAS-120.

1.2 ANNOTATED BIBLIOGRAPHY

In meeting the SAS-120 objectives, the Research Task Group (RTG) conducted comprehensive reviews of the related published literature, as well as internal defence studies related to the integration and participation of women in the military and combat units and roles. Much of the latter was either not published or not published in the commercial domain. This type of literature, commonly referred to as “grey literature”, makes an important contribution to the analysis presented in this report and represents an important part of the record as women have been integrated into ground combat roles and units. As such, the grey literature cited in this report is captured in an annotated bibliography in Annex A.

1.3 CATEGORISED RESEARCH BIBLIOGRAPHY

In addition, the discussions presented in this report drew heavily from, and build upon, a categorised research bibliography of women in the military published by the Norwegian Defence University College in 2010 [1]. The Norwegian bibliography employed 25 gender key words (e.g., equality) and five military key words (e.g., army) to conduct analysis which yielded 39 unique themes related to gender and the military (e.g., gender and military education). “Women in combat” emerged as a key theme, based on the identification of 61 related references that were published between 1977 and 2010.

The SAS-120 RTG conducted further comprehensive review of the literature, thus expanding the Norwegian reference tool to include published literature that spans 2011 – 2019. As a result of our efforts to conduct rigorous, focused, and disciplined review, the SAS-120 review is limited to search terms that the SAS-120 RTG determined to be the most relevant to the social, cultural, and psychological factors which influence the integration of women into combat units and roles; this included terms and key words employed for the Norwegian review as well as additional terms identified by SAS-120 members (e.g., cohesion) that were not employed in the Norwegian review. The SAS-120 review engaged a total of eight thematic key words (e.g. discrimination), six military key words/terms (e.g., special operating forces), and two gender key words (e.g., woman, female) and resulted in identification of 22 thematic categories (e.g., gender stereotypes) across 602 references to journal articles, books / book chapters, and graduate theses; 48 of these references have specific focus on women in combat, thus signalling continued interest in understanding this phenomena among the other related themes. Literature addressing gender, mental and physical health is the largest gender and military theme; a total of 101 references including 54 journal articles, 8 books or book chapters, and 39 graduate student theses, was identified. The full bibliography, including detailed description of the methodology and the 602 references, as categorized in Table 1-1, is included in Annex B.

Table 1-1: Summary of Bibliographic References by Theme.

Thematic Categories	Journal Articles	Books/ Chapters	Theses (Masters and PhD)	Total # By Theme
Attitudes towards Women in the Military	3	0	1	4
Gender and Family Issues	9	7	29	45
Gender and History	9	0	4	13
Gender and Leadership	45	2	21	68
Gender and Military Education	7	0	3	10
Gender and Peace Building	10	0	1	11
Gender and Sexual Violence as a Weapon of War	5	1	0	6
Gender and Veterans	11	2	8	21
Gender Equality	4	0	0	4
Gender Identity and Gender Roles	16	2	3	21
Gender Integration	37	6	15	58
Gender Stereotypes	1	0	0	1
Gender, Alcohol and Substance Use	13	0	2	15

Thematic Categories	Journal Articles	Books/ Chapters	Theses (Masters and PhD)	Total # By Theme
Gender, Career and Deployment	3	0	1	4
Gender, Mental and Physical Health	54	8	39	101
Gender, Operational and Organisational Effectiveness	7	1	3	11
Gender, Physical and Psychological Ability	14	0	3	17
Gender, Race and Ethnicity	2	1	13	16
Gender, Sexual Harassment and Abuse in a Military Context	59	3	9	71
Lesbian, Gay, Bisexual and Transgender (LGBT) Issues	45	2	5	52
Masculinities and Femininities	4	1	0	5
Women in Combat	23	13	12	48
TOTAL # (by Type of Publication)	381	49	172	602

1.4 SAS-137 RESEARCH SYMPOSIUM

In addition, SAS-120 coordinated an international symposium. SAS-137 was held in Quantico at the US Marine Corps University in February 2019. The symposium resulted in 22 presentation supported by 18 papers related to the integration of women into ground combat units, gender and diversity in military context, and physical standards and training. The papers presented at the symposium have made valuable contributions to the review and analyses presented in this report and can be accessed on the NATO Research and Technology Organization website [2]. The symposium technical report [3], which provides a summary and analysis of the presentations is included in Annex C. The technical report also includes critique of research which uncritically accepts existing masculine norms as gender neutral standards without examining the gendered nature of the norms themselves. The report further presents recommendations for further research to address outstanding questions, including:

- What is the impact of women on ground combat units?
- What is the impact on the women who have integrated into ground combat units?
- How have women impacted operational effectiveness?
- What methods or steps yield the best outcomes for entry level training and subsequent integration?
- What sets women up for success in newly integrated units? What conditions allow some women to thrive and others to fail? [3]

1.5 RELATED NATO RESEARCH ACTIVITY

As discussed in greater detail in Chapter 2, while significant research effort has been committed to determining the (negative) impacts that women might have on operational effectiveness, as a strategy to maintain combat exclusions, relatively little research effort has been committed to ensure the full inclusion of women in all military roles, including strategies that not only meet minimum

accommodations for women as required by law, but strategies that seek to optimize the dignity, well-being and contributions of women and men as they contribute to the operational missions of the military. By way of example, research presented at the SAS-137 Symposium addressed physical standards and women's injury rates, with relatively little attention to women-specific equipment or training strategies that might enhance women's performance and reduce injury rates [3]. Notwithstanding the limitations, numerous research efforts have been initiated in recent years to support the participation of women in the military. Concurrent to the establishment of SAS-120, a NATO Human Factors and Medicine (HFM) 269 RTG [4] was established with a focus on best practices for physical employment standards for gender integrated combat roles. NATO SAS RTG 120 and HFM 269 are the first RTGs to place particular focus on gender and combat roles. While the challenges and processes addressed by these two RTGs are not mutually exclusive, the scope and nature of scientific work, along with the associated impacts on the inclusion of women and men in combat roles, demand separate effort. Consequently, these RTGs offer particular insights in addition to previous and ongoing research efforts related to the inclusion of women and men in military organisations. In 2008, for example, the HFM 158 Symposium on Impact of Gender on Operations yielded research spanning social, cultural, psychological and physical implications for the participation of women in military forces [5]. In 2018, HFM 295 was established with a particular focus on measuring the scope and impact of sexual violence in military organisations, and HFM 307 has been established to consider the integration of gender and cultural perspectives in professional military education programmes.

1.6 CHAPTER SUMMARY

Chapter 1: Introduction

This chapter provides an overview of the objectives and activities of SAS-120, as well as a summary of the chapters which follow in this report.

Chapter 2: Expanding the Participation of Women in the Military to Combat Roles

In establishing the context for the following chapters, Chapter 2 places particular focus on how changing values and priorities globally are impacting the role of women in military organisations, and the social, cultural and psychological considerations for the integration of women into ground combat units.

Chapter 3: Challenges and Opportunities for Culture Change: Diversity and Gender Inclusion

Through the lens of increasing calls for diversity and inclusion in military organisations, including gender diversity, this chapter considers the key dimensions and attributes of military culture, and the associated implications for socio-cultural change.

Chapter 4: The Inclusion of Women into Ground Combat Roles: An Organisational Change Perspective

This chapter discusses the application of culture change models to the development of strategy and planning to integrate women into ground combat units. Particular focus is placed on the recent examples of the UK and US Army as they engaged serving members prior to the entry of women into previously closed combat occupation and units.

Chapter 5: Strategies for Integration and Lessons Learned

This chapter considers specific experiences with integration, including lessons learned from the early adopters of women in ground combat roles, such as Canada and Norway. Particular focus is placed on the recent experiences of the Australian Army, the UK Army, and the US Marine Corps in implementing integration plans.

Chapter 6: Bullying, Harassment and Sexual Misconduct

Recognizing the particular risk of inappropriate sex- and gender-based misconduct to the integration of women into ground combat units, this chapter provides an overview of the correlates and risk factors for bullying, harassment, and sexual misconduct in military context, with particular emphasis on the influence of workplace climate and culture, and the critical role of leaders.

Chapter 7: Motivation to Increase the Share of Women and the Propensity of Women to Serve

The analysis presented in this chapter considers the recruitment context and challenges that military organisations face, and why it is important to attract and recruit women and as well as men to meet military challenges. Strategies and opportunities for engaging women in military careers, including opportunities to serve in combat roles, are explored.

Chapter 8: Measurement and Monitoring: Culture Change and Integration

Within the context of culture change, this chapter provides a summary discussion of the challenges, best practices, and key barriers to the integration of women into ground combat roles. This includes recommendations for monitoring the impacts and outcomes on individuals and units, to exploit opportunities to retain qualified women and optimize unit effectiveness.

Annex A: The “Grey” Literature, 2011 – 2019: Annotated Bibliography

This Annex A provides annotations of defence documents and documents produced for defence that are cited throughout this report; this includes research reports, directives, and implementation plans.

Annex B: Categorized Research Bibliography, 2011 – 2019

In addition to the categorized research bibliography, organized across 22 thematic categories, Annex B provides a description of the methodology which was applied to develop the bibliography; this includes the extent to which it replicates the approach used to produce the bibliography developed by Norway in 2010, and how the approach is customized to meet the focus of the SAS 120 effort.

Annex C: SAS-137 Symposium Technical Evaluation Report

The SAS-137 Symposium Technical Report provides an overview of the symposium, including a summary and analysis of the presentations and papers, and a discussion of research gaps related to the integration of women into ground combat roles.

1.7 REFERENCES

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Chapter 2 – EXPANDING THE PARTICIPATION OF WOMEN IN THE MILITARY TO COMBAT ROLES

There is increasing interest among NATO and Partnership nations in expanding the representation of women in the military, including those roles and occupations in which women are least likely to be represented, including in ground combat roles. Today women are permitted to serve in combat roles in the military forces of many nations, and although the numbers remain low, this includes women in ground combat roles such as infantry. As this Research Task Group (RTG) was being established the United States (US) and the United Kingdom (UK) were responding to government direction to open all combat roles to women. In 2016, the UK and the US opened the last prohibited positions for women: close ground combat roles in the UK, and positions in ground combat units below the Brigade level in the US. In January 2013, the US Secretary of Defense rescinded the 1994 Direct Ground Combat Definition and Assignment Rule (DGCDAR) which limited the participation of women in combat specialties and units and directed the Services to open all occupations and units to women as expeditiously as possible, but no later than 1 January 2016 [1]. In 2016, following a series of reviews and research which considered the impact of the inclusion of women on operational effectiveness [2] [3] [4] and physiological risks to women [5] [6], the Government of the UK concluded that there was sufficient evidence to lift exclusions of women in Ground Close Combat (GCC) roles [7].

The participation of women in all military environments and roles, including ground combat, is important for several reasons. First, gender equality in the military is an important reflection of our nations' values; access to combat roles represents equitable opportunity for women in military roles of their choice, and importantly, also provides the potential for access to the most senior leadership positions in the military, most of which rely on career development and experience within combat operational domains. A recent report released by the NATO Science for Peace and Security Programme (SPSP) further emphasizes the importance of increasing the number of women in combat roles, along with the need to enhance the capacity of mixed-gender teams:

Military leaders should develop, implement and evaluate a range of targeted recruiting strategies designed to increase the number of women across the Services. Strategies that create opportunities for women to enter combat roles and, in particular, those roles that feed into leadership positions, should also be developed, implemented and evaluated. Women entering combat and other areas that are predominantly male dominated should be actively supported. The environments into which women enter must be appropriately briefed and trained, and both leadership and the team must be fully engaged and educated about how they can contribute to effective performance in mixed gender environments [8].

In addition to calls for the participation of women in combat roles and increasing representation in senior leadership roles, operational demands for the contribution of women in defence and security are increasing. This renewed interest is influenced by the increasing emphasis on the participation of military women in peace support operations [9] in response to the United Nations (UN) Women, Peace and Security (WPS) objectives. Initially supported by the ratification of UN Security Council Resolution (UNSCR) 1325 in 2000, nine additional SCRs ratified between 2009 and 2019 [10] have reinforced the priority of the meaningful participation of women in all phases of conflict [11]. In recent years, due to the increasing emphasis placed on National Actions Plans (NAPs) to address WPS priorities, public interest has also been expressed through the media, academic inquiry, and interest groups. As a result, many military organisations now recognize that the participation of women is essential to the integration of gender perspectives into operational planning and implementation across a range of conflict scenarios, including those in which women and children are particularly vulnerable to the atrocities of conflict, including sexual exploitation and abuse. Gender integration and its influence on combat effectiveness cannot be understood without carefully considering these influences, along with the psychological, social and cultural impacts on the performance of women and mixed gender combat teams.

2.1 PARTICIPATION OF WOMEN IN THE MILITARY

Regardless of role, it is clear that in past decades the participation of women has increased in military organisations around the world. The representation of active duty women in military organisations across NATO and partner nations ranges from 0.8 to 19.3 percent [12]. The average representation of women across NATO nations has increased from 7.1% in 1999 to 11.1% in 2017 [12]. The proportion of women in the following 15 NATO nations is above the NATO average: Hungary (19.3%), Slovenia (16.5%), the United States (16.2%), Bulgaria (15.9%), Canada (15.9%), Greece (15.5%), Latvia (15.3%), France (15.2%), Albania (13.1%), the Czech Republic (12.7%), Spain (12.7%), Germany (11.8%), Lithuania (11.7%), Norway (11.6%) and Croatia (11.5%) [12].

As noted, UNSCR 1325 has had some impact on recent efforts to increase the participation of women, including the NATO SPSP report, “UNSCR 1325 Reload” which recognized the 15th anniversary of UNSCR 1325 [8]. The report presented analysis of the participation of women in the military across NATO nations, leading to six key conclusions:

- 1) Strong leadership drives reform;
- 2) Diversity of leadership increases capability;
- 3) Increasing numbers requires increasing opportunities;
- 4) Preventing early separations will strengthen militaries;
- 5) Gender based harassment and violence ruins lives, divides teams and damages operational effectiveness; and
- 6) A transparent and accountable military is a strong and confident military [8] p. 38.

Experience in combat missions has also resulted in recognition of the important contributions of women. As a result of both experience and emerging security challenges, it is increasingly recognized that not only is gender equality and operational effectiveness concurrently possible, but operational effectiveness can be enhanced by the participation of women on combat teams [13]. The experience of “Team Lioness” provides once such example. When combat teams were faced with gender-related challenges, a team of women serving in Iraq in support roles were brought together in an ad hoc manner to join US Army and Marine Corps infantry teams conducting aggressive combat operations against covert insurgents. Although women in the US military were not permitted to serve in direct combat roles at the time, these women did make important contributions to offensive combat operations, but without the benefit of training and knowledge of the standard operating strategies that the teams employed to conduct combat operations [14]. During operations in Iraq, combat units in the US Army, Special Operating Forces, and the Marine Corps also relied upon Female Engagement Teams (FET) to search compounds and women, and access critical intelligence. In 2010 – 2011, Jordan, Norway, Sweden and the UK also established FETs to support operations in Afghanistan [15]. Although FETs have been used for well over a decade to augment combat units throughout operations in Iraq and Afghanistan, members of FETs have struggled to access combat training important to their role and are less likely than combat soldiers to receive recognition for their contributions to challenging and dangerous situations [15], [16].

2.2 WOMEN IN COMBAT ROLES

Within NATO and Partnership for Peace (PfP) forces, the Netherlands, Norway and Denmark were the first countries to permit women to participate in combat roles [17]; in 1985 Norway integrated women into the military including into operational and combat positions [18], by 1988 the Netherlands had abandoned all combat exclusions for women, and Denmark had introduced women to army and air force combat units to test the impact of such assignments [17]. Canada recruited the first women into ground combat roles

in 1987 as part of a Combat Related Employment of Women (CREW) trial, and in 1989 removed all restrictions to the employment of women in combat roles as non-commissioned soldiers and officers in response to the direction of a Canadian Human Rights Tribunal [19], [20]. Women became eligible to serve in ground combat roles in Spain in 1999 [21], [22], France in 2000 [23], and Germany and New Zealand in 2001. By 2009 well over five percent of combat soldiers deployed from Romania to Iraq and Afghanistan were women, and in 2013 women were introduced to ground combat roles in Australia [21], [22]. By 2016 all NATO nations and most partner nations had granted full rights to women for all positions in the armed forces [24]. Although in 2017 most military women in NATO were serving in logistics (18.1%), medical (17.2%), or administrative (14.3%) roles, 10.4% of women were serving in infantry roles – the fourth largest category for women; 21.8% of men were serving in infantry roles, the largest category for men in NATO in 2017 [12].

Across NATO and its partner nations, there are very few formal restrictions to the inclusion of women in military roles. However, women are excluded from participation in submarines and Special Operating Forces in Turkey and Ukraine, as well as from infantry and armour in Turkey, and mine clearance in Ukraine [24]. In Israel, soon after an equality amendment to Defense Service Law in 2000, women were eligible to serve in nearly all combat roles and continue to be eligible to volunteer for “non-close” ground combat roles such as light infantry and artillery [25]. In 2017, Japan introduced women into some close ground combat roles [26]. Several other countries around the world also permit women to service in ground combat roles, including the Philippines since 2010 [27]. Women have partial access to ground combat roles in China, India, North Korea, Singapore, South Korea, and Sri Lanka [27].

While each nation has its own experience, there are also shared experiences and challenges. Regardless of the role, as women are introduced military organisations have and continue to undergo socio-cultural change. The discussion below places particular focus on the resistance and debates that have shaped military experience, in particular across NATO and its partner nations, with the introduction of women into near combat, combat, and ground combat units. These debates are important as, in spite of formal regulations, the values and beliefs that underlie the debates, they continue to impact the extent to which military organisations are prepared to accept the inclusion of women in ground combat roles, as well as the experiences and well-being of those women who are entering new roles.

2.3 SOCIAL CHANGE AND OPERATIONAL EFFECTIVENESS

Women have participated as combatants, including in ground combat roles for centuries [28] and continue to do so today. Although participation in state armies [29], and in particular in operational roles is relatively recent, women have served in the armed forces of NATO and partner nations with distinction for many years, and women served on the battleground throughout the decade-long wars in Iraq and Afghanistan. However, membership in units and specialties intended for direct combat operations is often considered to be unique from participation in combat. As a consequence, women have been restricted from participation in combat and Ground Close Combat specialties, units, and special operating forces. Although many exclusions have been removed in recent years, the challenge of integrating women into ground combat units is one that impacts many NATO nations and controversy persists as military organisations continue to negotiate concerns regarding human rights and gender equality with the imperative of operational effectiveness. The discussion below provides a summary of the debates, followed by introduction of key concepts that are most directly linked to combat unit and team performance.

2.3.1 Supporting Arguments

The removal of exclusions to the participation of women in the military, and ultimately in combat roles, has been framed by post World War II social and political developments as human rights and equality have taken on increasing priority across many nations. The debates reflect values and beliefs within societies and

military organisations that have been characterized as the “rights versus readiness” perspectives – that is, the right of women to serve in the military versus the impact of female participation on the operational effectiveness or “readiness” of the military [30]. Arguments for the inclusion of women in combat roles are tied to the rights of all citizens, including women, to have equitable access to careers of choice; in terms of military service, this also includes the responsibilities of all citizens [15], [31], [32]. As the early debates regarding women and combat unfolded, many NATO nations also faced recruiting shortfalls, which in many cases have been attributed to transition from conscription to all-volunteer forces [30], [33].¹ This created a compelling case to recruit an increasing number of women, and to expand their participation beyond traditional support and medical roles, to support the operational readiness of the military.

Proponents of the removal of combat restrictions on women in the military have also argued that the debate regarding formal access to combat roles creates a false distinction between combat and other military roles as it fails to consider the significant extent to which military women and men participate in combat, regardless of their military role. During the Gulf War in 1991, in spite of combat exclusions, at least 41,000 US military women performed their roles in a combat environment [34], and more than one half of the 375 US military personnel that were killed were support personnel, not combat troops [35], including 15 women [15]. Warfare in Iraq and Afghanistan further eroded conventional battle lines [36] and resulted in unprecedented combat exposure for women. For example, among over 150 US military women who died in Iraq, 78 percent of those deaths were categorized as “hostile” [37], thus underscoring the extent to which the lives of all military personnel can be at risk. It has also been argued that the combat/non-combat distinction is not about the risk of being killed, but the degree to which military roles involve defensive or offensive combat engagement; women have been more likely to serve in defensive roles while offensive roles have remained the exclusive domain of men [31]. Offensive roles, including combat, direct ground combat, and special operating forces are claimed as highly distinctive core specialties of military organisations [38]. Although definitions vary across nations and contexts within, the UK Ministry of Defence defines Ground Close Combat (GCC) as “Roles that are primarily intended and designed with the purpose of requiring individuals on the ground to close and kill the enemy,” and as, “Combat with the enemy over short range on the ground.” [21].

Notwithstanding the distinctions assigned to combat roles, the changing nature of warfare and the blurring of distinctions between battlefields and opponents further blurs the distinctions between combat and support roles [39]. Resistance to the inclusion of women in combat roles further assumes that existing military structure and culture are well suited to the challenges of war, rather than considering the participation of women in new military roles as an opportunity to revise structures and cultures to achieve increased effectiveness in military operations [40].

2.3.2 Opposing Arguments

The social and cultural resistance to the inclusion of women as warriors was identified by Karen Dunivin in 1994 as the combat masculine war-fighting model [41], and has also been captured using concepts such as warrior ethos, warrior culture, and warrior spirit. In their entirety, these warrior paradigms or frameworks have provided explanatory power to the analysis of the influence of a range of beliefs and values on combat exclusions for women [42]. The inclusion versus exclusion debates are closely, if not completely, associated with dichotomous conceptions of masculinity and femininity, male and female, and related expectations and beliefs regarding appropriate roles for women and men, and the relative psychological and physical strengths and weaknesses of women and men [43], [15]. Enduring concerns include those related to: maternity and maternal roles of women; the mental and physical suitability of women for warrior roles [15], [35], [44]; social norms that assume that men have a duty to protect the weak (women and children) from violence and women’s need to be protected [45], [46]; destruction of a male rite of passage into manhood [47], [17]; enemy perceptions of force weakness due to the presence of women [17]; public and personal attitudes

¹ In the case of countries such as Canada who had never relied on conscription, recruiting shortfalls were attributed to post-war values and reluctance to engage in military-related activities.

toward women in the military including resistance to female combat casualties [17], [15], [48] and being held as a prisoner of war; and public resistance to women in roles that require them to kill [12], [48].

Opponents of women in combat have persistently claimed that women are not aggressive enough, do not possess the required physical strength, represent the risk of forced or consensual heterosexual sexual relationships [15], compromise privacy between men and women, and represent unfair risk to men resulting from disruption to the cohesion and operational effectiveness of all-male teams [49]. As the participation of women in military organisations climbed to unprecedented proportions in the 1970s, “combat exclusion policies were broadly drawn and rigidly enforced” [50]. In response to mounting concerns regarding the expansion of women’s role, the stage was set for the evaluations and trials of women in previously all-male combat related military roles that took place in several nations, including Sweden and Canada in the late 1980s [51], [17], and more recently within the US Marine Corps from 2014 – 2015 [52].

Although not always reflective of military policy, and increasingly less representative of public concerns regarding the participation of women in combat roles [53], [54], the debates represent important values-based rationale for the formal exclusion of women from combat roles [15], as well as resistance to gender integration after formal exclusions are removed. For example, in spite of available evidence related to the attributes and capabilities that women and men contribute to combat teams, relatively recent press coverage reveals lingering resistance represented by anecdotal evidence to claim that women are not physically strong enough for sustained combat operations and therefore, undermine combat effectiveness [15], [55], [56].

2.4 KEY CONCEPTS AND INFLUENCES

In addition to the broader societal and cultural concerns related to the successful integration of women into ground combat units, a range of challenges and impacts at the team and unit levels have persistently held up as barriers to combat effectiveness. Put simply, combat effectiveness has been defined as “the ability of a military force to defeat an opponent” [38]. Given the range of quantitative and qualitative variables that contribute to the concept of combat effectiveness, it is important to take many relevant factors into account. The key challenges discussed below are among those that have been most frequently cited as challenges to the integration of women into previously all-male units, and each of these challenges interact with multiple other individual and group level dimensions. They are also influenced by the broader debates described above, and concurrently have unique relevance for military performance. These concepts – physical performance, social cohesion, sexual harassment and critical mass – are introduced briefly below and are addressed in different contexts throughout this report.

2.4.1 Physical Performance

Physical performance and social cohesion are perhaps the most frequently cited imperatives to the effective performance of combat units. Concerns regarding physical performance of women have been persistent, in terms of the physical capabilities of women [15], as well as consideration of the liability of military organisations for the health and safety of its members [6]. The integration of women has contributed to and progressed parallel to research developments related to the relationships between physical performance standards, the actual requirements of the job, training and employment environments, and military culture – all of which impact women and men but have had particular impact as women have been introduced into combat roles. Analysis of the experience of some of the first women to be introduced to combat arms training in Canada identified social and cultural barriers which have an impact on the motivation and ability to meet physical performance standards. For example, the physical performance of women has been assessed against the most physically capable men rather than against minimum standards established based on what is required to do the job; women who fight to meet such ideal standards can become vulnerable to injury in a training regimen that is already designed for men [57].

While there have been important advances since these relatively early experiences, including the establishment of gender neutral standards to meet the minimum requirements to do the job, a near “myopic” focus on gender neutral standards remains a risk factor which excludes consideration of different strategies and tools to support all soldiers, *because of their differences*, to achieve the minimum standards to do the job [58]. In other words, persistent efforts to integrate women into existing structures and cultural processes designed for men, risks loss of opportunities to take advantage of gender diversity to enhance military capability to respond to emerging and unexpected threats [40], [59]. By way of example, Karl Friedl draws from biological and physiological evidence to identify several challenges if the objective were to integrate male soldiers into all-female combat units. In this hypothetical reversal, he suggests six themes that should be prioritized for research to determine impact of men on operational readiness: larger body size and logistics; physiological capabilities; body fat standards and cardiovascular health risks; frontal lobe development and self-control; hormones and mood; and reproductive health [59].

Research specific to the establishment of physical standards, physical training strategies, the impacts of physical performance standards and training on women and men, and the physical performance of women and men have not been addressed by this RTG; however, NATO HFM 269 considers a range of impacts of physical employment standards on the integration of women into combat roles including: an overview of Physical Employment Standards (PES) across NATO nations; a guide for the development of PES; best practices for incentivizing fitness behaviours; biological and physiological differences and training options; the role of PES in preventing musculoskeletal injury; and considerations for return to duty post-illness, post-injury and post-partum [58]. As noted earlier, gender, mental and physical health is the most predominant theme captured in the categorized research bibliography from 2011 – 2019. In addition, the bibliography (Annex B) identifies 17 research documents related to gender, physical and psychological ability, including 14 journal articles and three graduate student theses.

Clearly, physical standards are essential and will garner substantial attention in the foreseeable future; the real and perceived impacts of physical standards are also likely to have significant impact on the social, psychological and cultural implications of integration. Indeed, until quite recently, one of the most prevalent concerns expressed by soldiers in military organisations preparing to open combat occupations to women is that existing physical standards will be lowered to accommodate women [60], [61]. Notwithstanding evident advances in research and application in military context, physical performance has an irrefutable impact, not only on the physical performance and well-being of women and men, but also on the social, psychological, and cultural processes related to integrating women into ground combat units – physicality shapes the cultural lens through which virtually everything that takes place within combat cultures is interpreted.

2.4.2 Cohesion

Based on the imperative of cohesion in military combat units, military practitioners and defence researchers have argued that military effectiveness is far more reliant on bonding within homogenous all-male soldier combat groups than on technical skills [62]. While research considering the inclusion of women in military units and teams suggest that cohesion is more dependent upon leadership, training, and team work than on homogenous, all-male teams [2], [7], [63], [64], [65], [66], [67], research further confirms that cohesion can be impacted by a complex interplay of environmental influences, such as the extent to which a group is “compartmentalized”, or culturally independent from other groups and influences [68]. For example, in research conducted by Rosen et al., high social cohesion was correlated with hyper-masculinity – “expressions of extreme, exaggerated or stereotypic masculine attributes and behaviours” [69] – among all-male groups. While these attributes might contribute to combat effectiveness, they can also place the group at risk for negative, even violent and criminal behaviours, including the denigration of women, that do not represent the values of the society which they are tasked to represent [68]. Research also suggests that cohesion is bi-directional; that is, military performance can have more impact on cohesion than cohesion might have on military performance [70]. Cohesion and masculinity can also have important impacts on mental health outcomes [71], [72], [73].

When considering the opening of military occupational combat specialities to women, a comprehensive study conducted by the US Army identified morale and cohesion as the single most important outcome at risk. As discussed in greater detail in Chapter 4, the study team further concluded that morale and cohesion outcomes would be dependent upon the success of the Army in addressing several barriers: inconsistent enforcement of existing standards and perceptions of double standards; incidents of unprofessional behaviour and indiscipline; fear of sexual harassment and assault; cultural stereotypes; and ignorance of current Army policy [61]. The risk factors identified in Chapter 3 further reinforce the complex interplay between cohesion and those social processes that impact perceptions of fairness and equity. Although cohesion is of significant importance in military context, it does not emerge as a predominant theme across the literature in recent years (Annex B), yielding just six journal articles, one book, and two graduate student theses from 2011 – 2019. Of these nine sources, six were associated with gender and operational effectiveness.

2.4.3 Sexual Harassment

As noted above, the 2015 US Army study that considered implications of opening combat occupational specialties to women, cited cohesion, morale and readiness as critical factors for the successful integration of women. Although there are several related risk factors, soldier concerns about sexual harassment and sexual factors were cited as particularly high risk impacts on cohesion, morale, and readiness [61]. Early experience with women in the combat arms in Canada, also indicate that fraternisation, especially within the chain of command, contributed to break down in social cohesion [74]. While it is clear that there is an important relationship between cohesion and operational effectiveness, the extent to which social cohesion is predominantly critical is less clear. Research conducted in a British military context, for example, suggests that focus on social cohesion as a determinant of operational effectiveness, over task-related explanations of cohesion, can actually exacerbate inappropriate gender-related conduct by producing expectations among social actors regarding accepted behaviours, ultimately resulting in harassment and discrimination of women and gay men in military context [75].

While harassment and discrimination have clear implications for military leaders and members, sexual harassment and assault are of particular concern as women are being integrated into previously all-male domains. Stereotypes of women that are encouraged among leaders and peers, can contribute to a culture of risk for sexual misconduct and reduces the quality of integration experiences for women and men. Within such contexts, male soldiers have persistently held up stereotypes of women as sexually coercive [76], [77] [78], [79]. Furthermore, leaders frequently warn soldiers to be suspicious of the sexual behaviours and associated motives of women [76], and in fact this warning has been formalized in internal lessons learned for leaders [74]. Reinforcement of such stereotypes within military culture, while intended to protect male soldiers, create conditions in which female soldiers can be held disproportionately responsible when their behaviours are either misinterpreted or considered in isolation from the behaviours of male peers and leaders.

Leaders are faced with a particular challenge and responsibility to establish climates of respect to mitigate inappropriate conduct among those they lead, and to ensure that they conduct themselves in an appropriate manner. This is not only a particular challenge as women enter previously all-male domains such as ground combat units, but essential to successful integration. Furthermore, public perception of sexual harassment in the military is considered morally reprehensible, and related incidents thus undermine public confidence in military organisations [80]. Review of the literature confirms the significant challenge that gender and sexual harassment continues to present for military organisations; the categorized research bibliography, 2011 – 2019, identifies 59 journal articles, three books and nine graduate student theses that address gender, sexual harassment and abuse in a military context (see Annex B). Given the potential negative impacts on the integration process, bullying, harassment, and sexual misconduct are discussed in greater detail in Chapter 6.

2.4.4 Critical Mass

The original concept of critical mass considered by military organisations was based on the thesis put forward by Rosabeth Moss Kanter in her ground-breaking study of women and men in organisations [81]. Kanter proposed that organisations with a better balance of existing minority and majority groups (e.g., women and men) “would be more tolerant of the differences among them” (p. 283). In support of this claim, she identified skewed representation as that in which minority group members are under 15%, tilted representation under 35%, and balanced representation as that approaching a 50:50 representation ratio. Subsequent research suggests that there is some evidence-based support for critical mass, suggesting that when women comprise 20 – 40 % of a particular group or organisation, and in particular corporate boards, the organisational performance will be optimized [82].

However, given the shared experience across military organisations, with low numbers of women in combat arms units, there is limited scientific evidence to support critical mass as an isolated strategy for greater inclusion. While it is important to consider the negative impact of underrepresentation on individual experiences of tokenism, performance outcomes, employee voice, and work-related attitudes [83], undue emphasis on training and employing women together at the expense of individual career choices and opportunities for career development can have negative consequences for individual women and gender integration overall [20]. It is also interesting to note that in spite of the attention that it receives within the military in regard to the participation of women, critical mass is not a theme that emerges in the literature related to women in the military. It is, however, possible that research related to critical mass is captured as a secondary theme within literature that is more likely to be associated with terms such as integration, gender balance, diversity, and inclusion. Notwithstanding, as discussed in further detail in Chapter 5, most nations have adopted phased-in strategies which see women assigned to a limited selection of ground combat units to facilitate the co-location of as many women as possible.

In addressing the limited understanding of the nuances associated with team dynamics within specific organisational contexts, organisational researchers have transitioned towards more holistic conceptualizations of inclusion, to investigate the individual, group, organisational, and societal factors that support social integration and inclusion. Thus, while increasing numerical representation is important for supporting diversity initiatives, critical mass theory fails to capture the unique and intersecting influences of individual and contextual factors that support social integration and inclusion in practice. The integration of women into ground combat units provides a unique opportunity to better understand the relationship between gender balance and key dimensions of culture.

2.4.5 Leadership

Many of the challenges discussed above are related to the leadership and management of small numbers of women participating within all-male teams. While it is essential to establish institutional-driven policies and processes to facilitate socio-cultural change, including the integration of women into ground combat units, the role of unit and team level leadership will have an over-riding impact on the extent to which these policies and processes are successful. Gender and leadership emerged as a significant theme in the 2011 – 2019 categorized research bibliography (Annex B), yielding 68 references (45 journal articles, two books, and 21 graduate student theses), up from 44 references (23 journal articles, five military reports, and 16 graduate student theses) from 1973 – 2010 [18]. Consequently, leadership emerges as a recurring theme throughout this report.

2.5 SUMMARY

This chapter has provided a high-level overview of the participation of women in military organisations, along with a particular focus on the removal of restrictions to the participation of women in combat roles in recent decades and indeed, in the case of several nations in recent years. In most cases, there has been

significant political, social, and military resistance to the inclusion of women in formally designated combat roles. The key themes that have fuelled the exclusion versus inclusion debates are summarized in historical context. As a result of experience and available scientific evidence, the relative balance of the debates has shifted to support inclusion; however, the debates are still very much alive. Consequently, the integration of women into combat units is a significant challenge for military organisations. The following chapters provide discussion of the available evidence, including that which claims that successful combat integration requires leadership commitment to culture change; as such leadership and culture are key themes throughout. In setting the stage for further discussion of culture change strategy, Chapter 3 builds upon the culture-related concepts introduced in this chapter.

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Chapter 3 – CHALLENGES AND OPPORTUNITIES FOR CULTURE CHANGE: DIVERSITY AND GENDER INCLUSION

A key question considered by SAS-120 is the role of culture, group dynamics and leadership in order to come to an acceptance of a more diverse workforce in the military. This has implications for gender integration in the military, and in particular, the highly contested inclusion of women into ground combat roles. This chapter reinforces what most military organisations have considered; that is, that the integration of women into ground combat units will require a shift in culture. The discussion further suggests that addressing concerns regarding the potential for negative impact on combat effectiveness can be overcome by effective leadership [1]. A related question that many military organisations strive to understand is whether or not a more diverse or heterogeneous military workforce is more adaptable and thus more effective for current and future military tasks, than a homogenous or uniform workforce. The impact of increased diversity is far from an agreed-upon point of view inside or outside of the military organisation and across national contexts. This chapter contributes to this conversation through introduction and discussion of the importance of military culture and related concepts in military context, through the lens of diversity and gender inclusion.

3.1 WHAT IS DIVERSITY?

In short, diversity is just another word for variety [2]. The variety of equipment, infrastructure, location, workforce, and tasks contribute to the impression or composition of variety in any organisation. We might think about diversity in military context, as presented in Figure 3-1, as a wide range of equipment and weaponry.



Figure 3-1: Military Diversity Presented as a Variety of Military Equipment.

In order to be effective on the battlefield, most military practitioners would agree that it is important to have a variety of firepower and capabilities [3], [4]. The variety of capabilities is proven to be of great value in a specific combat situation, but it is also regarded to be of great importance when evaluating future engagements. If you are facing an enemy at sea, you find it more useful to have sea-based capabilities, especially when combined with air-based capabilities and so forth.

In today's high-tech combat environment, there is significant value placed on high-tech equipment, autonomous systems, long-distance or high-speed capabilities in a joint operational setting. The overall trend is that the military forces around the world are gaining more and more physical capital as they become increasingly high-tech intensive and less personnel intensive. The result is that most military personnel are interacting with more and more capital and high-tech systems than ever before and they are valuing the increased diversity of possibilities that this development is creating for them on the current and future battlefield(s).

However, going back to the definition of diversity, it is not common to reflect on variety of physical capital when defining or presenting variety. The definition of diversity refers to "the inclusion of different types of people such as people of different races or cultures in a group or organization" [2]. In other words; diversity is referring to and usually associated with a variety of human capital or people differences, especially the differences that are most visible such as age, gender, ethnicity, religion, culture, etc. [5].

This finding presents a paradox for the members of SAS-120. Why is it that a large variety of unique equipment can be highly appreciated and asked for, while a high variety of gender, ethnicity, and age is not wanted, or at least not fully accepted in military organisations? In addition to this paradox, we also see that many argue for human capital to be the most important resource for sustainable growth and output in any organisation [6], [7]. One should think that in order to confront an increased variety of current and future tasks on the battlefield, one should also value a wide range within both physical and human capital. But that does not seem to be the case when it comes to human capital, in particular, when it comes to increasing the share of women in the military. In order to understand this difference in attitude towards diversity as a function of improved output, we have to look closer at the importance of organisational culture, traditions, and rituals in the military.

3.2 THE SIGNIFICANCE OF CULTURE, TRADITION AND RITUALS

In short, the literature describes culture as a way of life [8]. The literature underlines that culture is a learned behaviour and although frequently transmitted from one generation to another, it is not something that is naturally inherited without learning and social reinforcement [9]. The interconnection between culture and society is one of the most distinguishable traits of human society [9]. It is common to assume that every person, man or woman, is a representative of their own culture [9]. Culture is transmitted by vertical and horizontal means and is communicative in its nature. And finally, culture is continuous and cumulative as well as consistent and integrated [10].

Based on the extensive and validated literature defining culture one can therefore claim that working in the military is a way of life. In order to function well in the military, new members must adapt and learn the expected behaviour and traits, primarily because it is expected that every military person is a representative of the military culture. Cultural behaviour is continuously transmitted from one military person to another and serves as a way of communication between the members – continuously integrating each member into the different subcultures inside the military culture. The cultural process creates and shapes the foundation for a strong cohesiveness between the members through training, operations, military traditions, and rituals.

Every culture has a set of traditions, symbols, and rituals that expresses its values, especially for those with strong cohesion. A ritual is defined as a specific action with strong symbols, repeated in specific rules and regulations. A tradition is a social practice, a performance, an institution or symbol that is transmitted and continuous to hold significance from one generation to another. The object of a tradition is to tie together the old and the new to create a historical continuity of a group or community members. The content of tradition is often related to cultural items that are particularly valuable because they form an integral part of a society or a group's social heritage.

In a military context, the change in generation aspect could be as rapid as change realized from an annual military class/cohort to the next, but the stories that reflect strong traditions live across all cohorts. Hence, rapidly changing rituals, are those based on relatively weaker traditions. However, significant rituals and traditions not only create strong team cohesion in a military community, but they also create differences and individual exclusions, especially in a military community which functions to create conformity (e.g., boot camp or newly formed units/teams).

If one does not accept this learned behaviour, they are very likely to experience some strong mechanisms of exclusion, such as bullying and sexual harassment. The impact of traditions and rituals on any culture is significant.

3.3 THE IMPORTANCE OF CULTURE AND LEADERSHIP WHEN IMPLEMENTING CHANGE

The importance of culture increases within the context of increasing human diversity, mainly because such differences confront and threaten to disrupt the existing culture. In the military context, independent of nationality, a strong masculine and uniform culture are usually present. Introducing thoughts and processes of increased diversity, especially about increasing the number and share of women, one is basically confronting the existing and stereotypical military culture. If there are positions or areas within the military that women have not been represented in great numbers, or previously not allowed (like combat positions in the US and UK), it should not be a surprise that there will be resistance to their inclusion.

In order to make cultural changes, the role of leadership is of the most importance [11]. Every member of the military culture contributes to the process of changing a culture (or not changing it), but it is the leaders that push it forward (or not). According to a Canadian study, almost every negative issue associated with gender integration has its roots in inappropriate leadership [12]. This suggests that leadership is associated with organisational culture, but not necessarily to its overall performance. One study suggests that leadership primarily affects the processes of presenting and developing a vision, not necessarily providing individual support to its members in need of the outcome of that vision [13].

In summary, it is important that the leaders of the organisation create an atmosphere of acceptance and psychosocial safety for all members to engage in the new behaviours in their own culture, especially for those in non-traditional occupations [13]. For example, women leaving the military reported in a Canadian study that they were not supported by the leadership and that this lack of support further affected the extent to which their peer groups accepted them [14]. Several studies claim that inclusive leadership and integrated organisational culture are more cohesive and productive than an organisational culture characterised by a variety of exclusion mechanisms [15].

3.4 TAILORED COMMUNICATION FOR BETTER COMMITMENT AND GENDER INCLUSION

The diversity literature discusses the role of identification in the creation of in-groups and out-groups [4]. Identification with social categories such as in-groups and out-groups is “based on symbolic attachment to the group as a whole” [16]. As a result of social identification, people become attached to one another through their common connection. One result is that social identities contribute to less individuation as group members incorporate group aspects into their self-concepts [17].

Furthermore, the members of the out-group are feeling a common connection because of the external pressure from the in-group; those driving the pressure upon the out-group are the core members of

the in-group. However, frequently the marginal members of the in-group will also execute the pressure, mainly because they want to underline that they belong in the in-group [5]. These exclusion mechanisms are often expressed through bullying and sexual harassment.

Reducing the grounds for the creation of out-groups in a given community is dependent upon the strong performance and execution of inclusive leadership. In order to reflect the content of inclusive leadership, it is important to communicate commitment towards inclusion to every member of the community. As with any diversity and inclusion initiative, one should design an action plan for inclusion that suits your own organisation. Inclusion work must be consistently implemented, cascaded across all functions and staff in the organisation. It is also recommended that the plan of inclusion reflect a proactive and continuing approach [18]. Once a plan is in place, the active promotion of inclusion is dependent upon the use of inclusive language, across all staffs and functions, for all written, spoken and visual communication. If the leader does not do it, no one else will do it either!

Different means of communication play a critical role in how we interpret the immediate surroundings and the world at large, including how we think and behave. In a military context, the specific communication in which official messages, press releases, social media content and publications from leaders in an organisation provide a crucial role model for everyone in the same organisation as well as a perception of their culture. The choice of words often reflects unconscious assumptions about gender roles, values, and the abilities of women and men. Gendered language is still commonplace in both the workplace and everyday life. For example, when referring to a military officer; the risk of using the male form 'he', not knowing if the person is a woman or a man, is high. In a study of language in defence context, Elizabeth Thompson [19] identifies various ways in which language can thwart inclusion, often in unconscious and implicit ways. Everyday language, including casual conversation, banter, jokes, and nicknaming, for example, are routinely exercised as mechanisms of inclusion; because they are important tools for inclusion, it is important to be conscious of who these language practices include, and therefore, who is at risk of being excluded.

In order to avoid gender-based language which places irrelevant emphasis on differences among people, reduces cohesiveness, and creates different out-groups, one needs to create an atmosphere of acceptance and psychosocial safety for all members in an organisation. To facilitate this, leaders must communicate commitment to equality by demonstrating inclusive leadership as well as gender-sensitive communication, premised on research that advocates for diversity in the workplace [20]. Hence, the overall approach should focus on:

- 1) **Organisational commitment.** It is important to create a sense of organisational commitment to gender inclusion. Demonstrating and pursuing gender inclusion shows women (and men) that you support the idea of increased diversity and individual contribution. In addition, visibly demonstrating gender inclusion will improve recruitment and diversity by contributing to more positive perceptions of the organisation.
- 2) **Policy.** Good policies that protect every member of the organisation are a cornerstone of inclusion leadership. Making your policies gender-inclusive will ensure members are supported in the organisation. Having a good policy is a good start, but bringing the policy to life, in the entire organisation is key to success.
- 3) **Physical spaces, equipment, and facility.** Women may face extra barriers when using all-male-based facilities and equipment. It is of great importance that all physical barriers, including the right size of uniforms, are addressed to ensure a gender-inclusive organisation. Over time negative experiences based on barriers to inclusion, will reduce both recruitment and retention in the military organisation, and importantly loss of confidence in leadership commitment to inclusion.
- 4) **All-members commitment.** Every member should be aware of gender inclusion policy, and associated attitudes and behaviours. At the end of the day, strong leadership not only leads the way, but follows through to ensure that everyone is contributing to a gender-inclusive approach.

- 5) **Be aware of gender-sensitive communication.** While some expressions are communicated with the intent to cause offense, in other cases communication does not accurately convey the original meaning or is open to misinterpretation. In principle, in order to implement a more gender-sensitive communication, one needs to ensure that both men and women are represented equally in organisations media products and messages. Furthermore, one needs to challenge gender stereotypes (e.g., women do not belong in close combat roles) and avoid exclusionary forms of language (he, his, etc.) and while doing this making sure there is a gender balance in the language.

Inclusive leadership recognizes all individuals in the community, evaluates and assesses on an ongoing basis and in unique situations, and conducts comprehensive self-assessment and reflection of leadership actions. This is important in both diverse and homogeneous communities and may be just as important when the latter is assumed; individual differences, needs and potential contributions are not always visible. Leaders demonstrate interest in all members of the team, work to identify the variety of interests and motivations across their team and community as they seek inclusion and engagement of all team members in activities and tasks which build confidence, mastery, and self-esteem.

3.5 THE CHALLENGE OF DEVIATING VISIBILITY IN THE EXISTING CULTURE

Deviating gender visibility is about noticing the difference in gender composition in a given community, and importantly, noticing what does and does not get noticed among different groups of women and men. The greater the imbalance between members of different groups, in this case, low representation of women, the more likely that the visibility of these members will deviate from the norm. This typically means that extremely low representation of women results in what has been commonly referred to as a “fishbowl” effect in which the actions and performance of women are closely scrutinised and interpreted in ways that reinforce their deviance from the norm, and concurrently serve to sustain the existing cultural norms of the dominant group. At the same time, the unique needs of women may be misunderstood, go unnoticed, or are ignored as not relevant. However, analysing gender in the military context, especially in close combat roles where the number of women is at its lowest, brings attention not just to women, but to men and different ideals of masculinity [21].

From the perspective of being one of few women in a male-dominated community, there are some common strategies that are observed. First of all, women face a high risk of not being taken seriously in the male community. This is usually not due to the fact that the women are being discriminated against or treated differently than their male counterparts due to their individual attributes or performance, but because of the stereotypical behaviours associated with their gender [5]. The common strategy to “get out of” this perception is to adapt to the expected behaviour “to fit in” and seek acceptance as “one of the guys” [22]. In the extreme cases, in which some of the women have already been accepted into the male community, these women will impose these expectations on the newcomer women seeking membership in the male-dominated community, to a greater extent than the male members. In this way, the women who have established themselves in a male-dominated community take on “gatekeeping” roles in making sure that stereotypical behaviour, that poses risk to all women, is not being observed; that is discouraging visible behaviours that place all women (including themselves) at risk of being “dragged down” if this occurs.

One of the largest problems with this common strategy is that women are actually reinforcing and underlining the differences and stereotypical perception of women. They are trying hard to fit in through adaptation but it is not a sustainable strategy; they are just turning into “poor copies of men” [5]. The overall strategy, which is harder in a uniformed community like the military, is to stay authentic. When you are one of the only women in the room (or the only one) it is important to avoid trying to act like more of a man, or less of a woman, to fit in. Instead, you should allow everyone in the community to see who you are and

allow others to be themselves [5]. And, while doing this make sure you are visible to the coming generations of military soldiers and officers – it is of great value to other women and men that authentic behaviour is appreciated and valued in a uniform context.

3.6 INCREASED RISK OF FRATERNISATION?

“Nobody will ever win the battle of the sexes. There’s too much fraternizing with the enemy”.

– Henry Kissinger

Fraternisation occurs when members in a community employed by the same organisation interact socially outside of work and employer functions. It includes established family relationships and more “informal” and/or romantic relationships between leaders, subordinates, and peers. It is believed that fraternisation negatively affects work performance and might compromise the integrity of a community. In addition, especially in a military context, allowing fraternisation or family relationships within the same combat unit, or with the local population where they operate, there is increased risk of negative consequences for those involved. Importantly, fraternisation can have particularly negative impacts when it occurs within a chain of command; that is, relationships between a leader and a subordinate. While fraternisation is generally recognized as a consenting relationship, the positional authority that exists between a leader and a subordinate can compromise, both directly and implicitly, the full consent of the subordinate participant.

The rules for fraternisation are well established and highly functional, especially when it comes to impact on families (if more than one member of a family is deployed at the same time) and interaction with the local population in a unit’s Area Of Responsibility (AOR). The appearance of fraternisation through the action of appeared favouritism “hurts” in the immediate surroundings, and, within the military, could actually have devastating effects.

However, when it comes to “regular” interaction between soldiers, across rank and gender, the rules of fraternisation seem to be outdated. The challenge with fraternisation is that it has good intentions, but the outcome is questionable when there is a lack of individual and tactical considerations at the lowest level. Just because there is a woman in the unit, will there automatically be a higher risk for fraternisation? Even if that should be the case, we are still talking about the increased risk of fraternisation, not the occurrence, and then one should discuss the acceptable level of risk. Often this does not seem to be the case and we are ending up denying women to serve because of reasons more likely as a result of risk aversion rather than any certainty that fraternisation will occur, or if it does occur it is the sole responsibility of women [23].

According to Harrel and Miller [24] military regulations have long considered the potential for fraternisation and negative effects of the wrong kind of bonding between leaders and subordinates [24], and have implemented fraternisation policies that forbid close relationships, regardless of gender. A risk assessment of fraternisation-occurrence should be considered based on the intention to avoid misunderstandings, prevent favouritism, protect the military unit from sexual harassment claims and above all prevent loss of morale. In order to achieve this, leaders should consider necessary actions based on principles reflecting inclusiveness, cohesiveness, and trust in order to improve overall unit performance, rather than rely on exclusive and control-based strategies. One alternative, when introducing women into a combat unit, or to improve poor retention of women, is to minimise undue attention on women and instead place emphasis on the shared responsibilities of women and men to act professionally, respect the dignity of all colleagues and avoid relationships that will harm the integrity of the team and unit.

3.7 WILL EXPOSURE TO GENDER DIFFERENCES CHANGE YOUR ATTITUDE TOWARDS GENDER?

As discussed in Chapter 2, there are both similarities and differences related to the participation of women across military nations. In particular, there is a large underrepresentation of women in the military, especially in the combat units [5]. The close proximity of women and men in operational contexts, and the resistance of men to the inclusion of women have been cited as barriers to gender inclusion. Although context matters, research suggests that close and personal exposure to female soldiers and female leaders can change men's stereotypical beliefs and biased perceptions about women in general.

Close exposure to the difference in gender may either decrease or increase bias towards gender. The effects of gender exposure are most likely depending on the type of exposure and the setting in which contact takes place. If the exposure takes place in a more competitive community or context, biases are more likely to increase [25]. The intra-group contact theory argues that negative stereotyping and prejudice declines when those in contact have equal status, are in a cooperative context, and if the contact takes place in a strict hierarchy or authority setting [26]. In other words, introducing a higher level of close contact between a large group of men and a small group of women may reduce men's bias towards women.

There are many examples to suggest that the intra-group contact theory is valid, especially when it comes to differences in ethnicity. One study found that white students, when randomly assigned to live with African-American students in college, were more positive to African-Americans and affirmative action than those white students who had white roommates only [27]. A similar study, conducted with cadets attending the US Air Force Academy, found that white freshmen cadets become more positive to African-American cadets when they were randomly assigned to squadrons [28].

And finally, a comprehensive quantitative and qualitative study conducted among infantry soldiers in Norway, confirmed that exposure to female soldiers improved men's attitude towards female soldiers and reduced discrimination toward females [29], [30], [31]. The key findings, close exposure between men and women through a mixed room policy, has improved gender-neutral responsibility of different assigned tasks and better group cohesiveness within the platoon. The analysis also found evidence of the elimination of discrimination, higher motivation for continued service, and reduced levels of bullying and sexual harassment.

3.8 THE IMPORTANCE OF TASK COHESIVENESS IN THE MILITARY

Cohesion is a sociological term describing the bond or belonging between members in a particular group or community. While definitions vary to the extent that they link cohesion to impacts such as social stability, inclusion, trust, etc., cohesiveness exists among individuals when influenced by "group level structural conditions that produce positive membership attitudes and behaviours," and in turn group members' personal interactions maintain these structural conditions [32]. In general, at the individual level, cohesiveness has three characteristics:

- 1) There is an interpersonal attraction or positive motivation to be a part of the group in the first place;
- 2) There is a sense of pride belonging to a particular group; and
- 3) There is a commitment to the output of the group.

They are willing to work together to complete tasks. So-called *social cohesion* describes the natural and strong bonds that are created between individuals in a group. If a group is characterised as having high social cohesion there are strong interpersonal attractions among group members, they have positive experiences in each other's company and are emotionally tied together. However, not only is social cohesion an output of both group structure and individual interactions, the development of functional cohesion in a military unit is not necessarily limited to social cohesion.

In most military structures the tasks are carried out in teams of different sizes, compositions, and functions. Given the diversity in functionality and hierarchy of units, teams, and individuals, the individual performance will always be part of a team and it is the different teams within a unit that holds the unit together. *Task cohesiveness* is the member’s dedication to assigned tasks that require common or joint input from everyone in the team. The members of the team do not have to be “naturally selected” through motivation or interpersonal attraction, but they are more or less assigned to the team through external mechanisms [33]. Teams, platoons, and units in the military are typical examples of *task cohesiveness* since the members are often assigned or selected by others before they work together. Common values and goals, combined with strong will and motivation to reach these goals through joint cooperation are characteristics of a team with high task cohesiveness [34].

The team experiencing internal cohesiveness (task or social cohesiveness) expresses external cohesiveness either horizontally (to teams or groups at the level above or below its own level) or vertically (to other teams on the same level). The horizontal cohesiveness in a military unit is unique since they are put together to perform tasks, but at the same time share a high level of risk and emotional experiences [35]. A good vertical cohesiveness is expressed through a strong trust between the group members, independent of rank and level, and therefore all rally around strategic goals and ambitions [34].

According to validated research on cohesiveness, it is found that task cohesion has a modest but reliable influence on performance [33]. It is also found that social cohesion does not have an independent effect after controlling for task cohesiveness [35]. Furthermore, research efforts have shown that high social cohesion, or bonding on a social level, can have negative effects on task cohesion because people start to prioritize friendship and social activities over job-related performance. In addition to this, it is found that gender differences alone did not appear to erode cohesion [23]. In units with strong cohesiveness social differences like gender, rank, and ethnicity does not affect cohesiveness. In units with weak cohesiveness, on the other hand, social differences seem to be a factor or at least used as a factor by the respondents to explain weak cohesiveness in their own team/group [23]. Different subjective opinions when asking soldiers, sailors, airmen, and marines about unit cohesion are well reflected in research conducted by Harrel and Miller [24] and summarised in Figure 3-2.




Cohesiveness	Strong	<ul style="list-style-type: none"> • We work together to make things happen regardless of personal feelings • We take pride in our work and we’re not afraid of putting in a little extra effort to help out a shipmate. • We are more of a family than a group of ordinary people 
	Medium	<ul style="list-style-type: none"> • When it’s time to pull together, all [work] to make the tasking complete.  <ul style="list-style-type: none"> • Although we don’t get along we are all ready to fight. • When it’s on the line we get the job done.
	Weak	 <ul style="list-style-type: none"> • Sometimes it seems that different departments are on different teams, not the same mission. • There’s no teamwork or team building, just command generated reasons to hate other departments or divisions. • People tend to want to be around others who are like them: same color, sex, rank, whatever. This creates barriers and draws lines.

Figure 3-2: Different Subjective Expressions from Military Respondents on Experienced Cohesiveness in Teams [24].

Harrel and Miller point out that only when both task and social cohesion in a unit was low, the overall cohesion was also regarded as low [24]. This confirms that there is definitely a strong relationship and correlation between the two different types of cohesion that one cannot disregard. Some lack of cohesiveness was also placed on available external factors such as funding, resources and equipment. When a team is constantly lacking means to carry out their job, one tends to protect the scarce resources, not help others (vertical and horizontal cohesiveness).

Another aspect that is discussed is how cohesiveness in a team is affected when some members are dating. It was claimed by some of the respondents [24] that dating disrupted unit cohesion, especially when their relationship was placed above all else and they did not interact with their other co-workers or focus on their job. This is a very common observation, especially among younger peers when team cohesion is still developing [31].

Another topic that is often discussed in regard to combat performance and unit cohesiveness is based on the myth [5] that men protect women rather than performing their combat duties. Based on the work done by Harrel and Miller [24] no respondents reflected on gender differences when taking action. Men do not show extra concern for women, they do not monitor where women are, men do not tell women to get out of the way, and men do not take over women's roles in order to protect them. It is all about playing your own part in the team when in a situation that requires soldiers to perform [5], [24], [31]. According to Harrel and Miller, the majority of the individuals, [24] both men and women, did not have any preferences about the gender of their colleagues. This is something that is found in many Norwegian studies as well [5], [29], [31], [36]. The discrimination of women is not necessarily a function of unit cohesion (unless it is weak in the first place), but more likely to be more subtle in a masculine culture, expressed through selection and/or evaluation of "who is the best soldier", a typical competitive characteristic in so-called hypermasculine cultures.

3.9 THE CHALLENGES CREATED BY A HYPERMASCULINE CULTURE

Masculinity is not a singular or monolithic concept. Men and women are different individuals, with different personalities, and both men and women express different degrees of masculinity [37]. Hence, within the same organisation, several different expressions of masculinity exist, representing the existence of different masculine ideals [38].

Masculine ideals, according to some researchers are hierarchically ordered and reflect different levels of social power [38]. The masculinity within the military is often regarded to be a "gatekeeper" and initiator of transforming boys into men through military training. One way of regarding this is that military masculinity has a close connection to what it means to be a "real man" and as such differentiates it from other masculine traits and all feminine traits. In this dichotomisation, military masculinity is defined as aggression, violence, and strength [39] which in turn underlines the stereotypical differences between men and women; this excludes masculine values at the lower, less masculine end of the masculine hierarchy and all feminine traits. This contributes to creating a "warrior model" of masculinity based on the primary military task – engaging in combat [40].

One challenge with competitive hyper masculinity cultures is that the members rank each other based on general traits and the so-called "combat body project". According to Sasson-Levy, an Israeli sociologist, the military does not only create differences between boys and men but also ranks men's bodies [41]. She writes:

The "chosen body" (Weiss, 2002) [42] of the combat soldier depends on the existence of the wrong body, the body that fails to become a combat soldier. The literature often specifies female or homosexual bodies as representatives of the "wrong" military body. However, the soldiers I talked to did not compare themselves to women or homosexuals but mostly to other male heterosexual

soldiers who had failed to endure the physical training that is, the fat soldier, the lazy soldier, the “crybaby” or the soldier who is too small. As Robert Connell (1995) [43] notes, masculinity is a relational identity that is often constructed in relation to other masculinities [39], p.306.

This description is aligned with research conducted in the Norwegian Armed Forces in 2010. Based on a buddy evaluation within a small team going through a selection process [5], [44] it was found that the members of the team ranked each other based on physical performance, independent of tasks they were asked to solve. The largest and strongest men were ranked first, then the injured or less physical male members and last, the female member. The female member was ranked last despite the fact that she outperformed some of the men on the physical tests. The men (a majority of the small team) ranked men first, then they ranked women [5], [41]. This sort of mechanisms is particularly visible in hyper masculine cultures and communities. The main challenge with these characteristics is that it really does not matter how well the women perform, they will always be ranked after men.

3.10 SUMMARY

Through the lens of diversity, and the unavoidable impacts of culture and leadership, this chapter has presented several key social and psychological concepts that have particular relevance for the integration of women into ground combat units. When the balance between dominant and non-dominant group members is extreme; that is, when low numbers of women become new members of combat units, there is risk that their unique needs and successes will be overshadowed by those who do not have the ability or are perceived to not have the ability to perform effectively. Clearly leaders play an essential role in planning, implementing, communicating, and monitoring an inclusion strategy. While it is likely that many male combat team members will be uncomfortable or have difficulty accepting women in ground combat roles, experience indicates that with exposure to women in these roles, comfort and confidence levels will increase. Importantly, the over-riding focus that has historically been placed on concerns related to the combat cohesion of all-male teams has been challenged by research that demonstrates that task cohesion has a greater impact on team performance; in fact, extreme social cohesion can undermine team performance. Finally, although military combat culture has historically been associated with the imperative of hypermasculinity to the effective performance of ground combat soldiers and teams, or the inevitability of the negative influences of hypermasculinity on discrimination, bullying, harassment, sexual misconduct and the overall exclusion of different ‘others’ and in particular women, masculinity is introduced as a diverse concept that can manifest itself in different and positive ways. Recognizing the complex interplay of the values, beliefs, conduct, and practices that are related to these concepts, Chapter 4 turns to the task of culture change as women are integrated into ground combat units.

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Chapter 4 – THE INCLUSION OF WOMEN INTO GROUND CLOSE COMBAT ROLES: AN ORGANISATIONAL CHANGE PERSPECTIVE

Social change in military organisations is frequently driven by externally imposed imperatives related to increasing representation and inclusion of marginalised and under-represented groups, including women in the military. Related objectives place particular responsibility on leaders, as well as implicit and explicit change expectations upon members of dominant groups across the organisation, regardless of leadership status. In spite of a generous body of literature that presents frameworks for “how to” change culture, only about 30 percent of change initiatives are successful [1], [2].

Barriers to change include a clash of values between the organisation, change strategy, and change objectives [1]. One size one-size-fits-all approaches that do not reflect the organisation’s unique culture, internal strengths, weaknesses and needs are also likely to fail [3]. Although change initiatives are frequently supported by training, success is limited when training is not followed by provision of resources, opportunities and support from teammates and leaders. Changing behaviour comes with risk, so organisational members need support to engage and practice new behaviours [4]. Finally, change is not likely to be successful without a sense of urgency or motivation that resonates with members of the organisation [5].

Many models are suggested in the literature to guide organisational culture change; however, the two most well-known and widely used frameworks are Kotter’s eight-step model and the model, which is based on Kurt Lewin’s change process, first introduced in 1947 [6]. Regardless of the framework or strategy used, key enablers of change include:

- A stated vision and goals for the change direction;
- Planning and analysis that identifies the gap between where the organisation is now and where it wants to be;
- Identification of the environment conditions required for the change plan to succeed such as a sufficient level of organisational readiness;
- Visible and sustained sponsorship of change by leaders;
- Alignment among stakeholders and parts of the organisation that are required to support the change;
- Defined roles of employees involved in the change;
- Addressing employee needs;
- Training for employees; and
- Measurement and evaluation of performance [3].

The discussion below presents an overview of the application of culture change strategies to the recent integration of women into ground combat units in the UK and the US, as they address associated challenges, including those presented in Chapter 3.

4.1 CHANGE MANAGEMENT: UK CASE STUDY

Kurt Lewin, [6] one of the earliest theorists of change management, based his model on his knowledge of physics. He believed that to change an organisation, like a block of ice, it needed to go through an unfreeze, change and refreeze process. This model has been influential, and still is, due to its simplicity and high face validity.

- **Unfreeze:** this stage refers to the preparation required, a key component of which is the workforce understanding the need and benefits of change, and the organisation to understand and examine its core values and functioning. This stage can be stressful, as it may require questioning of core values and identity and push people away from status quo and equilibrium.
- **Change:** this is the implementation phase, where changes in processes, roles or outputs occur. Leadership which reassures, directs and supports is critical here, as is good communication and acceptance that the changes may take time. As this is the ‘action’ stage, people can begin to be proactive and seek new ways of doing things, but also become aware of pitfalls.
- **Refreeze:** once the change has been accepted and implemented, staff can begin to normalise the new ways of working and embed these so that they can become comfortable and confident of the acquired changes. This stage requires institutionalising the changes and providing a degree of stability for the workforce. This can be difficult in institutions that are continually changing across a variety of axis [6].

The work of Edgar Schein has contributed to the further development of Lewin’s model by extending it to consider the psychological processes that are critical to successful change. Schein has highlighted, for example, that the unfreezing process can be dependent upon three unique processes that are necessary to shift embedded cultural assumptions related to the change objective: enough disconfirming data or information to cause serious discomfort; connection between this disconfirming data and change goals/objectives to cause anxiety and/or guilt; and enough psychological safety that members of the organisation can accept the new data without loss of identity or integrity [7]. In the absence of these processes, there is much greater likelihood that members will be defensive of previous assumptions and information that they believe to be true.

In 1997 [8], John Kotter also proposed a change management theory which has since been widely cited. Based on his experience as a Harvard Business academic, Kotter’s 8-step process is more detailed than Lewin’s three step process which places relatively more emphasis on attention to the social dynamics of change and less emphasis on specific change actions. Since the introduction of his original 8-step-by-step process for leading change, Kotter expanded and shifted the scope to focus on impact. The renewed 8-step process, presented below, is quite similar to his original steps, however, it includes a new emphasis on removing barriers at Step 5:

- 1) Create a sense of urgency;
- 2) Build a guiding coalition of effective people from within the organisation;
- 3) Form a strategic vision and initiatives;
- 4) Enlist a volunteer army;
- 5) Enable action by removing barriers such as inefficient processes and hierarchies;
- 6) Generate short term wins;
- 7) Sustain acceleration; and
- 8) Institute change by showing connections between the new behaviours and organisational success [9].

One final model which will be considered is the ADKAR model of change management. It is a goal-oriented model that guides individual and organisational change, created by Jeff Hiatt [10]. ADKAR is promoted as an acronym that represents the five tangible and concrete outcomes that people need to achieve for lasting change: awareness, desire, knowledge, ability and reinforcement. It is argued that these elements are sequential and cumulative, meaning that outcomes need to be obtained in order so that the change can be implemented and sustained. It is a useful way to systematically identify the reasons why change may not be working, and therefore how to rectify the organisational management of the process.

- **Awareness:** of the need for change.
- **Desire:** to support the change.
- **Knowledge:** of how to change.
- **Ability:** to demonstrate skills and behaviour.
- **Reinforcement:** to make the change stick.

Of the three change management theories introduced, a combination of Lewin's and Hiatt's approaches (rather than a systematic application of them) is used, to consider the introduction of women into ground close combat roles. The reasons are that Lewin provides a strategic and conceptual approach, while Hiatt focusses on the motivations and behaviours underpinning large scale change. Indeed, the encouragement and enactment of change in large scale bureaucracies needs to be at both the strategic and local levels. Large scale changes are arguably often considered at the strategic level, where policies are adapted, corporate and command level communications are set, but the working practices defined at the lower working unit levels can be left open. These crucial, tactical components of change are dependent upon attitudes and low level inclusion or exclusions, often not overt enough to be tangible or warrant official action or responses [11], [12]. In order to understand the attitudes, experiences and perceptions of women joining the UK infantry, a series of twelve discussion groups were conducted in April and May 2018 across four infantry regiments. The purpose of these was to identify the key concerns and perceptions of both males and females with experience of working with and in the infantry, in order to identify mitigations and effective mechanisms to support and enable the transition, prior to women being able to join from December 2018.

4.1.1 Attitudes Towards Women in Ground Close Combat Roles

Sample. Four infantry regiments were selected to take part: one Parachute Regiment, one Guards Battalion, and two line infantry regiments from both the Queens and King Divisions. These represented a breadth of infantry units. Discussion groups divided into attached females (medical, physical training instructors, legal, administrative roles) and two male groups comprising of officers and Senior Non-Commissioned Officers (SNCOs). For one regiment, the SNCOs combined with the officers and a focus group was conducted with Junior Non-Commissioned Officers (JNCOs). Each discussion group lasted one hour and was ran by a civil servant occupational psychologist from army HQ and notes were taken by one or two supporting psychologists.

Format of focus groups. The purpose of the discussion group was to provide an opportunity to understand the key issues, beliefs and experiences that personnel had regarding the imminent inclusion of women into ground close combat roles. As such, an environment of openness and non-judgement was critical, and this was emphasised by the psychologist, where it was re-iterated that judgements would not be made, that everyone was entitled to their own opinion and that the discussions should be treated as anonymous. The format undertaken was to ask all personnel to write down their three key issues, positive or negative, regarding women joining the infantry, on three separate post-it notes. These post-it notes were collected up by the facilitator and placed into themes on a whiteboard or wall. The themes were then discussed in turn, with individuals encouraged, or facilitated (taking in turns), to discuss their views and experiences. Each group was then asked to provide three positives for women joining, which were written and discussed in the same manner. The discussions throughout also included mitigations and ways which the implementation could be effectively managed.

4.1.2 Findings

Overall, 100 males (0.4% of the infantry) and 23 females took part. Table 4-1 provides an overview of the issues brought up in the discussion groups by male infantry personnel. Although it was possible to count

each of the post-it notes in order to provide a quantitative summary of issues, this would not reflect the overall discussions and involvement of personnel across the range of subjects brought up. Therefore, the groupings are broadly in line with the more dominant themes, from top to bottom, and represent the concerns that personnel voiced. The views tended to be highly consistent across ranks and regiments, with the differences being nuanced:

- The overwhelming belief was for women NOT joining the infantry.
- The views of the battalions were not uniform, with some being much more strongly opposed than others.
- JNCOs were more varied in their responses, with more personnel being neutral or positive towards women joining.
- The majority of officers were negative, although not all.

Table 4-1: Summary of Issues Highlighted by Male Infantry Groups.

Theme	Summary Description of Beliefs
Politically driven	Perception that the decision was for political correctness rather than combat effectiveness.
Lowering of physical standards	The introduction of the new Physical Employment Standards (PES) means that there is likely to be lower physical entry standards overall.
Less physical strength and stamina	Women less able to load bear, less physically robust over time and entrance tests are different to actually doing the job.
Greater injury risk	Women will be more prone to injury with subsequent implications on numbers and resources.
Pregnancy and subsequent gapping	Impact on platoon due to maternity leave, gapping of posts, retraining post-partum.
Positive discrimination and dual standards	Needs to be fairness throughout, concerns over quotas, positive discrimination and males taking on physical burdens in the field.
Field administration and infrastructure	Concerns over need for separate infrastructure and the ability to provide it.
Social cohesion and relationships	Concerns over cohesion, impact of romantic relationships, sexual harassment and female isolation.
Discipline and policy	Adding to the existing policy burden, impact on discipline and concerns over female sensitivity and harassment claims.
Combat effectiveness, and the will to fight and emotions	Doubts about women having a 'combat mindset', greater compassion and having to fight females in training.
Army ethos and reputation	The army is not a civilian organisation, it needs to retain its credibility and ethos.
Career longevity	Sustainment of a full career in a very physical occupation with certain infantry career streams more likely to be taken by females.

Table 4-2 provides a summary of the discussions with attached female personnel to the infantry units. Attached females are either supporting Arms or Professionally Qualified Officers, therefore may not be motivated to join a ‘fighting’ Arm; however, there were a number of females who would have considered joining the Infantry at initial entry. Their experiences and views are from their experiences interacting and being part of the wider unit, but not being considered as or conducting the roles and duties of an infantry soldier. The vast majority of females were overwhelmingly negative regarding females joining the infantry.

Table 4-2: Summary of Issues Highlighted by Attached Females.

Theme	Summary Description of Beliefs
Physical attrition, injury	Concerns over the impact on injury, health and fertility and sustainability of a career.
Physical standards and fitness levels required	Concerns about body strength over sustained periods of time and general fitness levels harder to attain and retain.
Team dynamics and cohesion	Altered dynamics – some males do not know how to behave around females (caring, chivalrous, distracted, inappropriate).
Social issues and relationships	Potential lack of friends, isolation or impact of relationships in unit. Potential undermining by rumours and gossip and perception of consistently having to be ‘one of the lads’.
Bias, being discriminated against or treated differently	Dealing with expectations/preconceptions of male counterparts (expected to fail physical tests), being singled out as the female.
Pregnancy, maternity leave, motherhood	Concern about the impact on team, potential resentment and resourcing implications. Concerns over high levels of deployments and exercises and regaining fitness levels.
Need to constantly prove themselves	Having to go above and beyond to be perceived as equal.
Emotional differences	Perceived higher levels of compassion and moral concerns of females; impact on combat.
Harassment	Concern over degree of harassment, either low level and undermining, or overt.
Career longevity	Maternity/motherhood and physical demands impact on career progression and longevity. Concerns over changing aging female body and fitness level required.
Clothing, equipment and infrastructure	Availability and stocking of female clothing and equipment; improvement of some facilities, which can be intimidating for some.

As summarised in Table 4-3, the final section asked personnel to name some positives about women joining the infantry. All groups were able to provide examples, which illustrates that they were all able to see benefits for the future change.

Table 4-3: Summary of Positives Identified by all Discussion Groups.

Theme	Summary of Beliefs
Diversity	Females can provide a different way of thinking Females bring different views, and qualities Increase the variety of skillsets available It will broaden the mindset of soldiers
Improvement in army fitness standards	Males will work harder on their fitness, due to female competition There could be an overall improvement in physical standards
Opportunity and challenge for females	Females can now prove themselves Good for females to have greater opportunities It will allow ALL talent to be maximised
Increase army ‘manning’	More numbers for the infantry Help with ‘manning’ gaps Good for recruitment
Equality	It is good to have equality It keeps the army in line with legal requirements It will increase male respect for females It will become a more modern army
Support	Females often provide emotional and social support to males Females can be a ‘mother figure’ and younger males sometimes go to them for advice Females tend to be more compassionate, have more empathy
Certain roles	Females are likely to be better in certain roles Females can be more diplomatic, less aggressive etc Females are more approachable

4.1.3 Discussion

This study occurred prior to the formal communication and dissemination throughout the wider army, deliberately so. This was in order to identify the key issues or concerns which needed to be addressed in the ensuing planned communication events or notices (e.g., leadership briefings by the Commander Field Army in July 2018 and a roadshow on the new Physical Employment Standards in Sept 2018). This timing is reflected in many of the issues raised, whereby greater communication and information provision would have diminished myths, rumour and assumptions. Arguably it is better to provide early information to personnel, without the detail, with an acknowledgement that the implementation and policies are being researched (e.g., the physical impact on women) and designed. This balance is a hard one to manage for organisations embarking on significant changes, but a proactive approach to communication is certainly a more inclusive one, even if it is perceived to create a degree of uncertainty due to its inability to provide details.

Unfreezing: Whilst it may seem that the views were overwhelmingly negative, it must be recognised that these discussion groups provided an opportunity, and probably one of the only opportunities, to voice their views to ‘the organisation’ in an anonymous and discursive way. The topic is a politically sensitive one, and it can be difficult for open discussions in the organisation and wider society, but it is crucial that this is done. The identity of an infantry soldier is centred around being resilient, physically robust, combat focussed and masculine. This identity is clearly under threat from the inclusion of women, but it does not have to be so. The interesting aspect to these discussion groups, is that through open discussion, the consensus generally shifted to a less negative one. This was in part, due to other members of the group providing a counter

viewpoint ('we already have females in the field and they cope fine', etc.) and the facilitator providing a balance of responses involving challenge, information and non-judgemental acceptance. All ranks discussion of issues in the military is generally counter cultural and personnel are expected to be disciplined and follow command direction. However, where challenges to identity, values and emotional connections (like cohesion) are concerned, it is crucial to ask and listen to people's views and concerns, prior to an organisational change. This is part of the 'unfreezing' stage in Lewin's model.

Two further key aspects of the unfreeze stage are concerned with setting the vision about why change needs to occur and to communicate this. One of the key concerns from males was that the decision was politically derived, rather than being needs or outcome based. In the case of women in ground close combat roles, the *why* is on both legal and moral grounds: that there is no reason to justify a continued exclusion based on gender and that equality of opportunity is a premise upon which democracies are based. The many positives associated with this decision, which all discussion groups were able to recognise, all provide the groundwork and foundation for a compelling vision. One interesting aspect to forming a compelling vision, is that should it be consistent? Currently, the narrative around women in combat is incongruous: it encompasses both that women should compete on equal grounds as men and conduct the same tasks, but also that women are 'good at engagement, negotiations and diffusing tensions'. This incongruity is arguably not always helpful, as the latter is more stereotypical and therefore assumes that there is a better behavioural fit for both men and women, therefore does not appear to reflect equality. However, a study in the Norwegian Armed Forces considered the implications of a difference in role, when females were selected for an all-female troop compared to those selected as equals to men in a mixed unit; the latter resulting in more inter-gender competition and perceptions of role threat by the males [13].

In terms of the principals of the ADKAR model, the unfreeze stage incorporates the Awareness, Desire and Knowledge phases. The need to consider the Knowledge component was reflected in many of the remaining issues brought up by infantry personnel: understanding the new physical entry standards and the awareness of a large scale physiological research programme led by the MOD, to understand and mitigate the physical demands and potential impact upon women in infantry roles, are important in the acceptance of the change. Knowing that there was a scientific programme to investigate these and produce the new role appropriate standards, was reassuring for many. Other key issues requiring knowledge included dealing with potential discipline issues, relationships, practical management of females in terms of infrastructure, physical training (mixed, or single sex) and in-field administration. Many of the issues brought up by males were concerns over 'doing the right thing' and not causing offence to females or misapplying rules. Having knowledge allows personnel to plan, and actively manage the 'change' phase and implementation; it can also provide managers with the confidence that they have the tools and mechanisms (e.g., existing policies) to deal with perceived potential problems.

Change: Lewin's 'change' phase is where action occurs, leadership can set the direction and individuals can work out how to implement the changes effectively. This corresponds to the Ability phase of ADKAR, where individuals can demonstrate the knowledge and behaviours required, and acquired. If we consider the introduction of women into the Royal Armoured Corps, active management of mentoring, support networks and monitoring has been occurring, both at local and strategic levels, thus allowing people to be actively part of the implementation and facilitation. Lessons learned from the Royal Armoured Corps are disseminated via various mechanisms (policy working groups, at unit level, etc.).

Perceptions of fairness and trust are important underlying needs for employees in an organisation and were highlighted in some of the male concerns: perceptions of quotas, potential unequal treatment, or division of infrastructure or the disproportionate impact of injury or gapping of posts. For females, fairness and trust centred around being treated differently in terms of lower expectations, needing to constantly prove themselves, social cohesion, inclusion and potential harassment, and the provision of equipment and infrastructure. What is clearly evident is that perceptions, actions, processes and policies concerning both genders are perhaps better to be neutral, with exceptions being on a specific and evidence basis. Knowledge

that there are no quotas for females and the fair application of rules and processes, particularly in training and promotion situations, are key to the ‘change’ phase, in order to demonstrate the equality that the organisation and politicians aspire to. Indeed, where the infantry identity is closely entwined with physical capability, equivalence of physical standards and the consistent application of these, will be vital ground to maintain, in order to obtain the trust of male soldiers in the decision.

The importance of dialogue throughout the change process is important. During any transition phase, people are often unsure or unclear of the new ‘ways of working’, behaviours or outcomes expected and may require more knowledge or discussion regarding the ‘best way to do things’. Some of the mitigations suggested, were regarding the provision of ‘expert’ advice points or nodes, where the chain of command could find out policies, advice on approaches, implementation and practical aspects of integration. Whilst this is available and used at the policy and strategic level, the need came from the SNCO levels, who were not aware of or felt they had the access to such expertise yet would be practically managing the integration of women. In addition to formalised advice points, local units need to encourage an ‘open door’ to discuss any concerns, or good examples of where and why integration is working well (for lessons learned); these could be key ‘champions’ throughout the unit, formalised roles such as the Equality and Diversity Officer and particular leadership roles in the chain of command.

Refreeze: The ‘refreeze’ stage requires that the changes be embedded into the working practices, structures and culture of the organisation. Although it is a large public bureaucracy and can be considered by some to be a monolith, the Ministry of Defence and its constituent Services has repeatedly adapted and changed over time, either structurally, financially, with its workforce, equipment and technology, in order to meet the external demands and threats. Indeed, the perception that there is constant change is frequently cited and can influence the appetite to embed new changes. However, changing and opening up the workforce in totality, to any gender, is clearly a change which will be enduring and therefore the military organisation is more likely to commit to the new ways of working.

The effectiveness of the refreeze stage is of course, another matter. There is significant evidence of the many obstacles that women in the military may face, across many international militaries [11], [14], which includes sexual harassment, inequity of opportunities, lack of social inclusion, lack of parity or proportionality throughout the rank structure and certain functions. This is reflective of wider societal gender imbalances and so is a more endemic and resistant aspect of gender integration. A bureaucracy is arguably easier to monitor and ensure parity due to its transparent pay scales, rules and regulations – it is the softer and less tangible aspects of disadvantage and inclusion, often termed as ‘micro-aggressions’, which are harder to identify and monitor. The reinforcement stage of ADKAR refers to making the change ‘stick’: this largely refers to the monitoring of integration and identifying, and dealing with, areas where it is not working and celebrating (positively reinforcing) areas where it is. This needs to be conducted at all levels throughout the army, from the unit level through to the more strategic collection of attitudes and management information. There are a range of mechanisms to do this on a sustained basis in the British Army, ranging from the Armed Forces Continuous Attitude Survey (AFCAS) [15], the regular Sexual Harassment Survey [16] and associated Action Group and the Unit Climate Surveys¹. At a more tactical level, an upcoming psychological study will interview UK infantry females, male counterparts and directing staff, from their initial training through to their first few years in a unit [17]. This will provide both immediate feedback and lessons learned regarding good and less effective practice in integration, and a longer-term understanding of ways to improve gender integration and talent management in the army.

¹ Unit Climate Surveys are workplace climate surveys undertaken by individual units every 2 to 3 years to identify perceptions of topics such as leadership, unacceptable behaviours and workload. They are for the Commanding Officer to gauge the culture of the unit.

4.2 MITIGATING RISK: US ARMY GENDER INTEGRATION STUDY

The US Army *Gender Integration Study* represents one of four lines of effort that were implemented to facilitate the expansion of opportunities for women in the army, including the integration of women into previously closed combat occupations and areas of employment. Parallel efforts were focussed on opening positions previously closed to women, developing and validating gender-neutral accession standards, and the coordination of efforts across US Special Operations Command, US Army Special Operations Command and other US military Services to develop plans for the integration of women. The Gender Integration Study also supported the US Soldier2020 initiative, the army's effort to address policies on women in combat and to evaluate all positions in the army to determine their requirements – physical, mental, and emotional – regardless of gender [18]. A summary of the comprehensive army *Gender Integration Study*, published in 2015 by the US Army Training and Doctrine Command (TRADOC), The Research and Analysis Center (TRAC) [18], is presented below.

The Gender Integration Study was tasked to identify the institutional and cultural factors associated with gender integration, and where possible, identify risk mitigation controls to enable the successful integration of women into previously closed combat arms military occupational specialties. In doing so, TRAC engaged three key phases of activity:

- **Phase 1:** Identification of Cultural and Institutional Factors Associated with the Integration of Women.
- **Phase 2:** Risk Assessment and Mitigation Strategy Development.
- **Phase 3:** Leadership Evaluation.

The discussions below present an overview of each of these activities and the high-level findings which were used to shape strategy for the integration of women into previously all-male combat domains.

4.2.1 Identification of Cultural and Institutional Factors

The first phase of the study included comprehensive analysis of past and current cultural and institutional factors that impact the integration of women in the military, including into previously all-male roles and domains. Information from four key sources was collected and analysed including review of the literature, surveys, focus groups, and consultation with subject matter experts and senior leaders.

The literature review included over 200 documents related to: the history of gender integration in the US Army; Service Academy integration; Navy and Marine Corps integration experience; cultural, social, and gender diversity; gender-related medical issues; the status and inquiry of gender integration in the militaries of Australia, Brazil, Canada, Denmark, France, Germany, Israel, Spain, New Zealand, and the United Kingdom, service member perspectives and stories; and position papers.

Surveys were administered to assess issues, concerns and opinions across eight groups in the army: combat soldiers, including armour, field artillery, and infantry; army women; female general officers; female ROTC and USMA cadets. Over 60,000 participants completed surveys, including over 28,000 women.

Focus groups were conducted at institutional, training, and operational organisations across the army to capture thoughts, ideas, and concerns of soldiers; junior enlisted soldiers, Non-Commissioned Officers (NCOs), and company-grade/field-grade officers participated in 130 focus groups. The focus groups complemented the themes presented in the survey, while also providing opportunities for participants to explore the potential impacts and suggest mitigation strategies related to the pending integration of women into new roles in the army.

The fourth data collection activity included the conduct of workshops and engagements with academic experts, and civilian and military senior leaders in the US Army. This included 1 – 2 day workshops with the nine member Army Education Advisory Committee whose membership includes senior academics as well as active duty and retired army enlisted and officers. The workshops were designed to solicit feedback on future research activity, generated products, and overall commentary on the work of the research team. In addition, the team provided briefs and received feedback through 1 – 4 engagements with 22 army civilian and military senior leaders.

The Phase 1 activities resulted in the identification of 17 themes which were further considered and assessed in Phase 2, to be major, intermediate or minor considerations within the context of integrating women into combat roles and units. In Phase 3, leaders were asked to evaluate the feasibility and acceptability of the mitigation controls identified and evaluated at Phase 2. Table 4-4 provides a high-level summary the outcomes of Phase 1, 2, and 3 considerations and assessments for those factors assessed as representing major or intermediate risk to the gender integration process. Phase 2 and Phase 3 are also discussed in greater detail below.

Table 4-4: Assessment of Risk Factors and Mitigation Controls.

Phase 1: Themes	Phase 2: Risk Assessment and Impact of Mitigation Controls	Phase 3: Leadership Evaluation of Mitigation Controls
<i>Major</i>		
Physical Standards	High risk to moderate risk Probability remained likely Severity critical to marginal	Feasible Acceptable
Pregnancy	High risk to moderate risk Probability occasional to likely Severity critical to marginal	Feasible (with exception of backfill for pregnant soldiers) Acceptable
Sexual Harassment	High risk Probability occasional Severity critical	Feasible Acceptable
Sexual Assault	High risk Probability occasional Severity critical	Feasible Acceptable
<i>Intermediate</i>		
Combat Arms Unit Culture	Moderate risk Probability likely Severity marginal	Feasible Acceptable
Field Environment	Moderate risk ² Probability likely Severity marginal	Feasible Acceptable

² NCOs in occupations closed to women at the time of data collection rated mitigated risk as high due to concerns related to impracticality of providing female soldiers with privacy in austere conditions, and associated risk for allegations of harassment against male soldiers.

Phase 1: Themes	Phase 2: Risk Assessment and Impact of Mitigation Controls	Phase 3: Leadership Evaluation of Mitigation Controls
Fraternisation	Moderate risk Probability likely Severity marginal	Feasible Acceptable
Consensual Sex	Moderate to high risk Probability likely to occasional Severity marginal to critical Mitigation controls not sufficient	Not asked to assess; mitigation controls assessed as insufficient at Phase 2
Stereotypes About Women	Moderate risk Probability likely Severity marginal	Feasible Acceptable
Differences in Leadership Style	Moderate risk factor Probability unlikely to occasional Severity marginal to catastrophic	Feasible Acceptable
Men are protectors	Moderate risk Probability likely Severity marginal	Feasible Acceptable
Reclassification	Moderate risk Probability occasional to likely Severity marginal	Feasible Acceptable

Five additional risk factors, although identified in Phase 1 were further assessed as minor risks at Phase 2: spousal concerns; tokenism; role models; physical proximity; and professional standards and conduct. At Phase 3, however, senior leaders expressed concern with the potential longer-term impacts of tokenism on cohesion, morale, and readiness. They were concerned with the impact of tokenism on the fair treatment of female soldiers, including casting a shadow on soldier accomplishments, deterring women from serving in the combat arms, and the potential to negatively impact the morale of women and the overall cohesion within the unit.

4.2.2 Phase 2: Risk Assessment and Mitigation Strategy

Phase 2 included three key steps: an initial risk assessment; mitigation strategy development; and residual risk development. These steps, described in greater detail below, were applied to address each of the 17 factors before proceeding to Phase 3.

The first step engaged 373 senior NCOs at the US Army Sergeants Major Academy (USASMA) to conduct a risk assessment of the 17 factors identified at Phase 1. A composite risk assessment analysis was used to assess the probability and severity that each factor posed to unit morale, cohesion, and readiness. Collectively, these senior NCOs assessed the probability that each factor would cause a challenge for leaders within the first year of the integration of women into combat units, the severity that relevant factors would have on combat power, mission capability or readiness, and the overall risk for each factor. The individual responses of each NCO were mapped by severity and probability to arrive at major, intermediate, and minor

challenges, with major rated as extreme or high risk, intermediate rated on the high end of moderate risk, and minor rated as low or on the low end of moderate risk.

The second step was the development of mitigation strategies. For example, risk mitigation strategies for sexual harassment included:

- Require sustained leader involvement with command emphasis on a unit level program:
 - Educate Soldiers at platoon-level and below with interactive training sessions;
 - Emphasise appropriate tactics, techniques, and procedures and training for conducting official army investigations; and
 - Integrate civilians, contractors, and host nation populations into training.
- Use Sexual Harassment/Assault Response and Prevention (SHARP)/Victim Advocates to sensitise Soldiers on the seriousness of sexual harassment reports;
- Conduct leader inspections of unit physical environments to ensure that posted material is appropriate; and
- Assign women together at the company-level in previously closed units to avoid isolation.

Following the development of mitigation strategies, the NCOs conducted an assessment of the feasibility of the mitigations to determine whether the mitigation strategies would reduce the degree of assessed risk. For example, in the case of sexual harassment, the assessment of associated risk to morale, cohesion, and readiness remained high in spite of identified mitigation strategies, and assessments of probability and severity remained occasional and severe, respectively.

4.2.3 Leadership Evaluation

To conduct the leadership evaluation, the study team engaged 35 command teams, ranging from company- to brigade-level to assess the feasibility and acceptability of the refined set of mitigation controls identified at the end of Phase 2. In addition, the study team collected command team assessments of the impact integration would have on the morale, cohesion, and readiness of their respective units, assuming that the army successfully executed mitigation controls.

As they progressed through three steps in Phase 3, command team participants were asked to:

- Assess the feasibility of implementing the mitigation controls identified for each factor at Phase 2, and if not feasible, explain why not;
- Assess their soldier's willingness to accept and adhere to the mitigation controls; and
- Assess the impact that the inclusion of women will have on the cohesion, morale and readiness of their respective units, assuming the mitigation controls are put in place.

If participants assessed that controls were unacceptable, then the study team asked whether the control conflicted with individual soldier values, unit culture, and/or the army values. The study team used these responses to follow-up with questions to the participants to weigh the resource and cultural costs of the mitigation controls against their perception of the benefits that mitigation controls would offer their units as the integration process is initiated.

4.2.4 Final Analysis and Recommendations

The final analysis conducted by the TRAC study team identified five key barriers to the successful integration of women into previously closed occupations, units, and roles. These barriers along with the contributing factors that were identified and assessed throughout Phases 1, 2, and 3 are presented in Table 4-5.

Table 4-5: Five Key Barriers and Contributing Factors.

Barriers	Contributing Factors
Inconsistent Enforcement of Existing Standards and Perceptions of Double-Standards	Physical Standards Combat Arms Unit Culture Field Environment Stereotypes About Women Fraternisation Professional Standards of Conduct
Incidents of Unprofessional Behaviour and Indiscipline	Sexual Harassment Combat Arms Unit Culture Consensual Sex Sexual Assault Fraternisation Role Models Professional Standards of Conduct
Fear of Sexual Harassment and Sexual Assault	Sexual Harassment Combat Arms Unit Culture Consensual Sex Sexual Assault Fraternisation Spousal Concerns Professional Standards of Conduct
Cultural Stereotypes	Pregnancy Physical Standards Combat Arms Unit Culture Field Environment Stereotypes About Women Fraternisation Differences in Leadership Style Men as Protectors
Ignorance of Army Policy	Pregnancy Physical Standards Field Environment Fraternisation Reclassification Physical Proximity

The final analysis determined that the mitigated risk of the identified study factors to unit morale, cohesion, and readiness was moderate if the army could appropriately address, two high risk factors – soldier concerns about sexual harassment and sexual assault. It is further worth noting that all but one of the five high-level barriers identified combat arms culture as a contributing factor, thus underscoring the focus on culture change introduced in Chapter 2 and discussed in this chapter. While this analysis highlights the impacts on the morale, cohesion, and readiness of a combat unit, it also underscores the challenge of understanding and mitigating the impact of unit culture on risk for sexual misconduct.

The Gender Integration Study concluded with several recommendations, including the following near-term recommendations to prepare for the integration of women:

- Focus on professional ethic;
- Standards-based messaging;
- Develop and maintain occupation-specific standards for accession;
- Address SHARP program issues;
- Develop an enduring assessment effort;
- Plan to integrate female leaders first (e.g., female lieutenants to set conditions for female enlisted);
- Plan to integrate all training; and
- Create a primer for policy education (to include female-specific policy and regulations).

4.2.5 Discussion

Although the approach used by the US Army Gender Integration Study is not explicitly tied to any particular change model in the literature, the process does meet several of the important strategies for change that have been identified in the literature. The imperative for change was set by external direction over which members of the army had no control. Similar to the UK experience described above, and which was inspired by the US Army Gender Integration Study, an ‘unfreezing’ process was established as members of the army confronted what seemed to be a lack of control over change that would impact them, to a large extent in ways that conflicted with their level of comfort with the current status of all-male domains. The review began with a thorough review of cultural indicators that represented potential gaps between the current culture of the army and the objectives of the army in terms of gender integration, along with strategies to mitigate those factors that represented instability and risk to change. In particular, face-to-face engagements with virtually every community and demographic representation across the army not only solicited valuable input from numerous perspectives but represents a strategy with potential to build knowledge across the impacted communities, contribute to a greater sense of confidence in the journey that lay ahead, and thereby represent the potential for stability and increase commitment to the change process.

Importantly, this process was leveraged to shape the implementation plan that followed, to effect the change. Phase 1 of the implementation plan, “Set conditions for the army,” included leveraging the findings of the Gender Integration Study to educate leaders, as well training and educating all leaders on the findings of the Gender Integration Study, including ongoing focus on strategies to mitigate risk to morale, cohesion and readiness [18].

4.3 SUMMARY

This chapter has considered the results of discussion groups with army personnel, including infantry personnel and women serving with infantry units, to understand the experiences and attitudes prior to women joining the infantry. In the case of the UK two popular change management frameworks, Lewin’s freeze

model and Hiatt's ADKAR model, have been considered in relation to the policy decision and the espoused attitudes among army personnel. The US Army approach placed particular focus on identifying risk and mitigation strategies through engagement and consultation of serving members who have significant influence within Army culture; these members not only possess critical knowledge regarding barriers to change but are important influencers in change processes and therefore key enablers of the integration of women into previously all-male Army combat units. In both cases, the concept of, and opportunity for, open discussion and active engagement with serving personnel at an early stage in the change process was an important enabler, to not only understand current culture and change priorities, but to actively engage members in the implementation of change. This is a particularly valuable strategy when core values and beliefs are challenged, and arguably represents an important shift from change initiatives typically directed top-down by senior leaders in military organisations. Knowledge and early communication of the change were also highlighted as critical factors in including and supporting the workforce through the change process. Chapter 4 provides discussion of the implementation of these change strategies.

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Chapter 5 – STRATEGIES FOR INTEGRATION: LESSONS LEARNED

The concept of ‘integration’ is one that assumes there is a dominant social grouping within an organisation, society or group to which a non-dominant group is to be either introduced or previous barriers dismantled. This can be visible (women or visible ethnic minorities) or invisible (sexual orientation). Firstly, the underlying social psychological theories behind integration will be discussed to provide an understanding of the phenomena and then these will be applied practically to the military context. The majority of this chapter will then focus on the practical implications and lessons learned from militaries who have integrated women, or are in the process of integrating women, into combat roles. The frameworks which some militaries have adopted to enable effective integration and the subsequent practical solutions, and commonalities between them will then be considered. The need to monitor and adjust the organisational management and experiences of minority integration is a fundamental component to ensure effective integration and will be considered in greater detail in Chapter 8.

5.1 SOCIAL GROUPING AND CRITICAL MASS THEORY

The term ‘integration’ can be described as the absence of barriers and full participation of individuals in the workplace, regardless of identity characteristics [1], and is arguably reflective of the principles associated with social inclusivity [2]. The term ‘assimilation’ refers to minority group members attempts to integrate with a dominant group and where there is a subsequent distortion of the attributes of token individuals to fit pre-existing generalisations about their group [2]. Although conceptually, integration and assimilation may be different, many of the aspects are fundamental drivers for both: for example, in order to effectively integrate, individuals and the organisation need to be able to transcend perceived and assumed group stereotypes. As the representation of minority groups increases (critical mass), and/or their performance and behaviour do not conform to negative stereotypes, then integration becomes more successful.

Much of the defining work on social groups and integration and assimilation was conducted by Kanter [3], and this work remains key to our understanding of the underlying issues to this day. Kanter proposed that minority groups experience certain phenomena, due to pre-existing generalisations, judgements or biases held by the dominant group (schemas), and that minority group members often adopt the characteristics of the dominant social group to reduce the social distinctions. Arguably, those individuals who do not fit in are more likely to select themselves out of the environment. The central dynamics of ‘tokenism’ were considered by Kanter to be:

- **Visibility** – resulting in increased performance pressure;
- **Contrast** – resulting in polarisation and social exclusion;
- **Assimilation** – resulting in minorities conforming to behaviours and attitudes of the dominant group in order to feel included; and
- **Role entrapment** – resulting in accepting stereotyped roles or needing to correct assumptions (status levelling).

The concept of critical mass was introduced by Kanter [3], whereby, increasing proportions of social groupings will shape the intergroup dynamics (uniform, skewed, tilted and balanced). Within these proportions, individuals can belong to one of five social categories: dominants, tokens, majority, minority or subgroups. Kanter believed that skewed groups are particularly problematic with respect to intra-team dynamics, as token members are either a focal point of attention or they are overlooked. Due to a lack of representation, these individuals are susceptible to three perceptual phenomena: assimilation, visibility, and polarisation, each of which can negatively impact individual outcomes [2]. The implications of increased visibility are significant,

and tokens may experience performance pressures as a result of the increased public and organisational awareness of their performance. This increased burden, Kanter [3] believed leads to additional pressure to demonstrate their ability or competence, work harder for their achievements, but remain careful not to outperform the members of the dominant social group for fear of retaliation. Individuals may also attempt to hide their visibility by ‘blending in’ [4], either in terms of behaviours or attitudes [5]. Polarisation is when intergroup differences are reinforced and exaggerated, leading to more salient group boundaries and informal acts of isolation, exclusion or tests of loyalty [3].

In a review of the literature on critical mass, Ewles et al. [2] found that despite mixed results from individual studies, the literature generally supported the idea that women and members of visible minorities, including those with intersecting identities, experience greater perceived visibility, assimilation, and polarisation as a result of their token status. Tokenism or critical mass ‘numbers’ alone, however, cannot address the issue of integration without consideration of attitudes, stereotypes or cultural beliefs such as sexism [6]. Although formal structures to address sexism in the workplace can be introduced and will likely have positive effect, males may be able to develop informal strategies for applying discrimination and limiting women’s chances for success. Gerson and Peiss [7] suggested that as women cross formal boundaries into male occupations, micro-level boundaries may emerge in the form of male informal group behaviour, serving to maintain women’s marginal and subordinate position. This finding has been replicated in more recent experiences by Australian infantry women, where Cromptvoets [8] found that the Army needed to be particularly vigilant and have creative strategies that encouraged inclusion and acceptance over alienation. In her interviews with women joining the infantry, she concluded that there was a likely existence of microaggression and that there was a risk that it is ‘unseen’ by the chain of command, a risk of marginalisation and exclusion of female infanteers from the normal bonding and team building conventions of their male counter-parts, as well as by other non-infantry women posted to infantry units; also, that there was deliberate discrimination.

The biases which these wider socio-cultural influences promulgate within an organisation can be shifted through a number of mechanisms such as examples of contradictions to stereotyped behaviours, role modelling, leadership support, equal opportunities to demonstrate performance and organisational cultural change programmes (discussed in Chapter 4). However, bias can be nuanced and is often not transparent, therefore, methods of monitoring and understanding the experiences of minorities through psycho-sociological research are key.

5.2 LINKING THEORY TO MILITARY CONTEXT

So, the theoretical basis of social group dynamics would suggest a number of implications for the military, which is a predominantly male occupation with a masculine culture. The proportions of females across militaries worldwide are generally skewed, with the most recent NATO statistics (2017) on the share of women in the military ranging from Turkey (1.3%), Italy and Montenegro (4.3%) up to Hungary (20%), Slovenia (16.1%) and the US (15.9%). It could be argued that those few countries with the highest representations are ‘tilted’, although the proportion will vary across combat arms (for example combat support or direct combat roles); the proportion of females in direct combat roles, even for the more gender progressive militaries, like Canada and Norway is still skewed. So, when considering combat roles, there are no examples of militaries which are not skewed and there remain NATO militaries with uniform male combat roles. Interestingly, there are examples of uniform all female units (e.g., Norway, Israel), where the group dynamics in terms of behaviours, social attitudes and support, are different and largely positive (Norway, [9]), due to the absence of intragroup visibility, contrast and role entrapment.

The issue of ‘critical mass’ and the potential difficulties with presence of ‘tokens’ would suggest that the answer would be to load females into the training pipeline and units in bulk, so as to avoid a skewed distribution. However, the reality is such that most militaries will be an environment where females are a minority and will be ‘tokens’. Indeed, across the workplace there are numerous occupations where females

are a minority, such as firefighters (3.5% of paid US firefighters, 2017 data) and police (13.6% US police and sheriff patrol officers, 2017 data) and so although a more gender balanced workforce may be aspirational, the issue of practical integration has to be managed in a skewed workplace. Canada provides a useful example of an attempt to base the introduction of women into combat units on critical mass theory, with an initial attempt in 1988 to direct that Combat Related Employment of Women (CREW) trials would be based on 50% representation of women. When this was realised to be unachievable [10], the strategy moved to a phased integration into designated combat units. This was also impractical, in that it disadvantaged women who were capable and qualified, from starting their career, as women had to wait for other women to join the units. Furthermore, in accordance with Zimmer [6], analysis by Davis and Thomas [10] on women in combat training found that the presence of large numbers of other women did not contribute to a successful outcome, without the benefit of a positive and accepting environment.

As summarised in Table 5-1, the literature therefore suggests that there will be a number of aspects which military organisations will have to consider in effective integration of women.

Table 5-1: Likely Issues with Female Integration.

Issue	Impact
Increased visibility	Tokens will have to work harder for achievements Increased public awareness Increased organisation and team awareness – attention focal point Failures highlighted and remembered
Contrast	Different performance levels highlighted, polarisation Social exclusion (living arrangements) Equipment and clothing requirements
Assimilation	Competitiveness or prejudice against other females Individualistic as opposed to cohort support focus Not voicing concerns which are contrary to group norms Adopting a ‘traditional masculine’ leadership style Unable to display ‘traditional female’ characteristics Cohort needs can be overlooked
Role entrapment	Lack of opportunity (certain tasks, roles, training) Accepting stereotyped roles Needing to consistently challenge stereotyped thinking and assumptions Sexualised interactions (social media contact, etc.).

Central to the management of integration of any minority in the workplace is the question ‘*are they the same or are they different?*’. The pervading view appears to be that ‘they are the same’, in terms of physical employment standards, roles, tasks, career requirements, etc., yet there are distinct differences in terms of cohort physical make-up, fitness training requirements and social needs. Furthermore, many militaries highlight the specific skillsets that women can bring to tasks like engagement, search and the enablement of diverse thinking. There is thus a mixed narrative, and it is therefore not surprising that both women and men can be unsure of how to navigate the integration journey [11], [12].

“Basically, I struggle with the “being a woman” vs “being a soldier” parts of my brain. Whilst most of the time they can live in harmony because it is an irrelevant part of my character, I feel that as someone who believes in equality and believes in women and their abilities, sometimes I should be doing more to be a “female soldier” and show how good that can be. Show that women are great at what they do without just saying they are great because they are a woman.” (Capt., Royal Armoured Corps, UK 2019).

5.3 FRAMEWORKS USED BY DIFFERENT COUNTRIES

The US, UK and Australia are part of the most recent cohort of countries conducting full integration of women into combat roles, and their approach has been based upon previous experiences of other countries and therefore they have been able to adopt a systematic method to practical integration. To consider the approaches used to recruit and retain women in male dominated organisations similar to the military, a review was requested by the US Defence Advisory Committee on Women in The Services (DACOWITS) in 2017 [13]; this provides a useful overview of non-military services such as firefighters, police and construction. Some of the common issues identified was the need to address physical performance and training, accommodation and ablutions, and cultural hostilities and stereotyping.

A typical systematic approach in a military context would include:

Frameworks allow a ‘top down’ approach for the Command to understand, implement and manage the key aspects to be considered both prior to and during the initial stages of transition.

Communication to the chain of command needs to be considered and instil the core aspects of positive and effective integration.

Monitoring these aspects of integration in quantitative (attrition rates, numbers, injury rates, etc.), qualitative (e.g., interviews) and lessons learned, which all need to feed back into the continuous improvement cycle and adjustments made accordingly.

Most frameworks will incorporate an aspect of monitoring to be conducted within the organisation, but it is useful to also conduct some independent monitoring of female personnel, particularly in terms of their lived experience. This can be conducted by Defence researchers (social scientists) or external contractors. Recent examples of these systematic approaches are illustrated below.

5.3.1 Frameworks

In 2015 the US Marine Corps (USMC) wrote a Force Implementation Integration Plan [14], which systematically identified key factors which would enable better female integration. This is an example of an overarching framework for the employment of women in the USMC throughout the organisation. It shaped the agenda and identified the further work that would be needed to support the transition (Table 5-2).

Table 5-2: US Army Overarching Framework.

Factor	Enabler
Transparent standards	Operationally relevant and objective standards which are gender neutral.
Population size	Small numbers have implications for equipment supply, sizing and facilities.
Physiological demands and physical differences	Understanding that women may be more prone to load bearing injuries and mitigate and manage this.

Factor	Enabler
Conduct and culture	Attitudes towards high team performance through education and training; not accepting sexual harassment, etc.
Talent management	Viable career paths in higher physically demanding roles where fitness is a differentiating factor, merit based and equal opportunity.
Operating abroad	Cross cultural differences with partner nations unused to working with women.
Monitoring	Assessment and adjustment.

A more focussed example of a systematic framework would be the UK School of Infantry, which conducts all of the infantry initial training for the UK Army. The fact that it is one sub-organisation allows it to direct, deliver and manage the transition in greater detail and control than the larger scale roll out across multiple Army units.

In May 2019, the UK School of Infantry issued a supplementary order ('FRAGO') to their Command Plan [15] prior to the first females starting infantry training. This was a narrative document which broke down the elements into a three phase 'scheme of manoeuvre', shown in Table 5-3.

“The School of Infantry will take a deliberate and methodical approach to integrating female trainees and permanent staff onto Inf courses. People will be treated as individuals. Throughout integration all personnel, regardless of gender, will be held to the same standard. Successful integration relies on proactive, enthusiastic leadership at all levels.”

Table 5-3: UK Specific Framework.

Manoeuvre	Related Activity
Shape	<ul style="list-style-type: none"> a) <i>Soft Preparations</i> – cultural development needed to prepare for the arrival of women. b) <i>Hard Preparations</i> – physical preparations needed (e.g., infrastructure, accommodation, kit, equipment, etc.). c) <i>Training Delivery Preparations</i> – measures required to integrate women into Inf training (e.g., generation of pre-courses for female Officers and NCOs attending GCC trade training courses for infantry roles or transfer).
Decisive	Arrival of female Pte soldiers in ITC to undertake initial trade training. By this point most shaping activity will be complete apart from the soft preparations which will endure.
Sustain	Female instructors will be essential in providing role models to female trainees, and in providing insight and advice to training staff. The sustain phase will be complete when the Infantry can maintain qualified female instructors at infantry training establishments.

This was further broken down into the overarching themes, and then specific guidance (as summarised in Table 5-4), examples and reference documents were included; the document remained succinct and totalled 15 pages.

Table 5-4: UK Detailed Framework.

Theme	Guidance
Personnel	<ul style="list-style-type: none"> • Instructor exchanges and visits with previously integrated establishments. • Female trainees – equal treatment; isolation management. • Female recruits – physical standards; loading to train in minimum group sizes of 3. • Female transferees – processes outlined for clarity. • Female instructors – all training teams to have at least one (role model, advice and insight to trainers). • Female permanent staff – to provide role models and cultural development. • Bullying, harassment and discrimination – reporting process.
Organisation	<ul style="list-style-type: none"> • Integrated platoons – timing (every second) and numbers (minimum 3). • Back squadding and pauses in training – females to return to an integrated platoon earliest.
Training	<ul style="list-style-type: none"> • Staff training – to complete all cultural training. • Pre-courses – for female pre-conditioning. • Start standards – processes. • Resilience training – to be conducted earliest. • PT – initial PT streamed by ability; advanced PT will be integrated. • Drill – conducted by ‘size of pace’, with smallest in front.
Doctrine and concepts	<ul style="list-style-type: none"> • Gender specific terms – changed to gender neutral. • Update of Standing Orders – e.g., dress regulations, relationships.
Information	<ul style="list-style-type: none"> • Policy of no publicity – to prevent females from being treated differently. • Army social media policy – reiterated.
Service support	<ul style="list-style-type: none"> • Health surveillance – reinforced health check requirements for women.
Infrastructure	<ul style="list-style-type: none"> • Accommodation – single sex rooms; no subdivision of rooms; integrated with platoon; locks on doors for all; minimum dress standards; ablutions with occupancy signs.
Logistics and equipment	<ul style="list-style-type: none"> • Dress – Tailoring, specific uniforms. • Equipment – ensure stores have sufficient smaller/appropriate kit. • Safety Cases – consideration of any equipment safety implications due to gender/cohort aspects.
Monitoring	<ul style="list-style-type: none"> • A matrix scorecard to be completed periodically (red, amber, green). • Requirements for medical and training monitoring.

In line with monitoring the experiences as the first women came through the training pipeline, this ‘Order’ was updated in November 2019 to incorporate the lessons learned. In line with ongoing research conducted in both the training and trained Army [11], accommodation is a significant issue. Practically it is often difficult to ensure that females are in separate rooms but near their platoons, and also the implications of filling female rooms with females from multiple different platoons at different stages of training. Both of these issues do have an impact on integrated platoon bonding but are practically often difficult to manage due to infrastructure and comparative numbers of the different genders.

5.3.2 Communications

Communication refers to both formal and informal guidance and/or direction to the chain of command or soldier ‘body’. As such, it may represent an ‘Order’, a policy, presentations, guidance manuals or documentation. The key requirement for communication is that *it is conducted* throughout the organisation and that there is both *transparency* and *clarity* regarding expectations and processes, which enables the transition to occur effectively.

Guidance manuals can be written from outside the organisation and therefore represent a more informal source of information, particularly when understanding behaviours or responses and when navigating interactions. The ‘Combat Integration Handbook – a Leader’s Guide to Success’ is an example of a guidance manual written by an independent organisation, Women in International Security (WIIS), a US based organisation dedicated to ‘advancing the leadership and professional development of women in the field of international peace and security’. In 2013 they established the Combat Integration Initiative (CII) to support the successful integration of women into combat arms positions in the US military. WIIS’s Combat Integration Initiative program monitors the gender integration implementation process focusing on five activities deemed necessary for effective implementation. These five areas include:

- Transparency of the implementation process;
- Effective communication of policy changes;
- Establishing job-based, gender neutral standards;
- Providing training to leaders; and
- Mentoring / Gender Advisors.

In 2016 they published the handbook [16], which provided guidance on cultural and practical considerations. Table 5-5 details the chapters included which they believed military personnel needed guidance on.

Table 5-5: US Combat Integration Handbook Sections [16].

CULTURAL CONSIDERATIONS
The Importance of Leadership
Bonding and Cohesion
Stereotypes and Myths
Swearing, Debauchery and Political Correctness
Sexual Assault
Fraternisation
Relationships and Dating
Identity Threat
PRACTICAL CONSIDERATIONS

Arrival Uniform and Grooming PT and Training Standards Counselling and Mentoring Smart Adaptations Health and Hygiene PRACTICAL CONSIDERATIONS (Continued) Media Attention Managing Change in Your Unit
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5.3.3 Monitoring

Monitoring is discussed in Chapter 8, but it is useful to include an example within this chapter as it related to the practical aspects of integration, highlighting a systematic approach to collecting information to improve the system and processes. Building on recommendations from qualitative research that was conducted in 1997 and 1998 to address challenges related to the integration of women into the combat arms [10], [17], in 1998 the Canadian Army conducted a ‘Lessons Learned: Leadership in a Mixed Gender Environment’ study [18], which concluded that:

“In some cases, this culture has resulted in a leadership environment which if it did not actively resist integration, certainly might have been more successful in facilitating it.”

This Dispatches document written by the Army Lessons Learned Centre, distilled the experiences of the initial stage of gender integration into combat units and was targeted to an audience of leaders throughout the chain of command. These lessons were broken down into those elements listed in Table 5-6.

Table 5-6: Canadian Lessons Learned [17].

Your attitude as a leader Unit cohesion and team building Discipline Equitable treatment: favouritism and harassment Sexual misconducts and personal relationships Physical fitness Isolation Critical mass and role models Health considerations

The document is written in a clear, easy to read, concise style, with each element broken down into subheadings. Each topic is dealt with by including quotes, facts, information and advice, with an Annex describing practical advice for gender specific concerns in the field (ablutions, etc.). The focus is on the importance of leadership and culture as a means to set the standard of enabling and not hindering integration, as well as the Dispatches document being a means to feedback key issues and learning points

throughout the Army, in order improve. As such, it provides a useful example of their first iteration of the continuous improvement cycle of a key cultural organisational change.

More recently, Cromptvoets [8] conducted ‘action research’ of the lived experience of females going through Australian infantry training and into combat units. Cromptvoets interviewed females throughout their training and subsequent posting to units and provided a framework which captured the key issues of practical integration on the ground, from the female perspective. This allowed a comprehensive capture of lessons learned, which could then be fed back into the system and changes made accordingly. Table 5-7 captures the headline issues which were found in the study.

Table 5-7: Australian Army Monitoring and Lessons Learned.

Theme	Impact
Physical Dimension	<p>The need to find innovative and creative ways to mitigate the risk of short-term injury and long-term adverse physical side effects that may result from such issues as ill-fitting equipment or inappropriate training methods:</p> <ul style="list-style-type: none"> • The appropriateness of Physical Employment Standards without appropriate conditioning. • Load carrying equipment (i.e., take into consideration appropriate fit, sizing and load carriage distribution and impact points on female bodies). • Personal hygiene requirements and aides (especially the ability to tailor or modify equipment to accommodate these needs). • Physical fitness and strength training. • Iron, calcium and possibly Vitamin D supplements to assist in preventing stress fractures and aide recovery. • Minimum age requirements for entry into initial training. • The possibility of full medical screening prior to entry in to SOI (including bone density, and iron and calcium levels).
Professional Dimension	<ul style="list-style-type: none"> • The appropriateness of the infantry employment category training continuum. • The critical features of a mentoring model, where there is no employment specific and experienced female JNCOs, SNCOs, WOs or Officers to be drawn on. • The limitations of a ‘female support group’ model on base that is not aligned with their profession (i.e., no one from combat corps). • Opportunities for female infantry soldiers who are now in the unit to visit those at different stages. • Sponsorship. • Infantry as a pathway to a broader Army career, rather than a career in itself. • Improved functional and procedural communication.
Social Dimension	<ul style="list-style-type: none"> • The careful management of cohorts (from recruit training to IET and then to posting within a battalion) so that bonds forged during training are preserved. • Integration into battalion and mess life. • The ability to engage in competitive sport. • Back squad management at training establishment.
Environmental Dimension	<p>Recognising that the Infantry School had undertaken significant facilities assessments and risk audits and actioned sensible changes to the physical environments:</p>

Theme	Impact
	<ul style="list-style-type: none"> • Safety and privacy in infantry battalion lines without compromising esprit de corps and team bonding. • Safety and privacy in the field while operating as a member of a mixed gender infantry section. • The appropriate design of social spaces.
Cultural Dimension	<p>Recognising that micro minority groups need to be particularly vigilant and have creative strategies that encourage inclusion and acceptance over alienation.</p> <ul style="list-style-type: none"> • The likely existence of microaggression and the risk that it is ‘unseen’ by the chain of command. • The risk of the marginalisation and exclusion of female infanteers from the normal bonding and team building conventions of their male counter-parts as well as by other non-infantry women posted to infantry units. • Deliberate discrimination.

5.4 CONCLUSIONS

In summary, the literature is consistent in agreeing that there are common experiences and patterns of behaviour which are representative of a visible token minority presence in the workplace. That these need to be addressed to ensure the effective integration of women into combat arms, is clear. A systematic approach, which uses a framework to ensure that key issues are identified and considered, has been adopted by those militaries who have recently moved to gender integration across all military roles; a number of examples have been included to provide illustrations.

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Chapter 6 – BULLYING, HARASSMENT, AND SEXUAL MISCONDUCT

Bullying, harassment, and discrimination represent a persistent challenge for the military. While such behaviours impact women and men in military organisations, the introduction of women into previously all-male roles creates particular risk. This has included claims to increased risk for bullying and harassment as a rationale for continued exclusion of women from previously all-male roles, rationale which has sometimes placed undue responsibility on military women for the inappropriate conduct of others. Issues such as fraternization and harassment, for example, have been blamed on women based on the assumption that if women were not present, the issues would not exist [1]. In 2015, after extensive research and consultation regarding risk factors to unit morale, cohesion and readiness, and therefore the successful integration of women into previously closed combat roles, the US Army concluded that the highest risk factors are soldier concerns about sexual harassment and sexual assault [2]. This clearly underscores the imperative of including strategies and leadership capacity to prevent and respond to bullying, harassment, and sexual misconduct as women are introduced into combat units. Indeed, recent research reveals that qualified enlisted women are facing situations of extreme harassment that is causing them to reclassify out of ground combat occupations or to leave the military altogether [3].

This chapter provides an overview of the antecedents, correlates, and influences on bullying, harassment, and sexual misconduct, along with strategies for mitigating related inappropriate behaviours. Given the significant role of leaders in military context, the presentation also considers the significance of the roles and influences of military leaders.

Although these challenges are not unique to the military, the context within which military members serve presents particular conditions that can exacerbate risk. Given the imperative of operational readiness for the military, strongly supported by emphasis on in-group belonging and cohesion, negative impacts of bullying, harassment and discrimination on its members present a threat to operational effectiveness. The well-being and performance of impacted individuals is at risk as is the cohesion and functioning of a military unit that can become divided by experiences of and claims to such transgressions. Finally, the military is dominated by masculine values that emphasize physical strength and aggression, and as discussed earlier in this report and in further detail in this chapter, research has established a link between leadership, permissive climate, gender balance, masculine values, and risk for unacceptable behaviours such as bullying, harassment and discrimination.

The integration of women into previously all-male domains such as ground combat units present heightened risk for these behaviours, and places women at particular risk. The first women to join the combat arms in Canada, for example, described experiences that were characterised by limited acceptance of women among peers, leaders, and training instructors, and bullying and sexual harassment frequently based upon expectations and assumptions regarding the social and sexual behaviours of women; while some women succeed and have overall positive experiences, many women face a plethora of social and cultural challenges that can significantly undermine their motivation, stamina, well-being and experience of inclusion/exclusion in an already challenging environment [4]. Given the increasingly pervasive role of social media in our lives, these challenges are exacerbated. A recent US Marine Corps Study suggests that social technology itself is not the problem, but social technology provides platforms to amplify the harmful impacts of existing discriminatory attitudes (e.g., women do not belong here) and sexual misconduct (e.g., sharing sexually explicit photos) [5]. Notwithstanding the particular challenges related to the integration of women, it is important to recognize that risk for bullying, harassment, and discrimination, including but not limited to sexual harassment and sexual assault, is not limited to women. Recent analysis of self-reported experience in the Canadian military indicates that while women are more likely to experience inappropriate sex- and gender-based behaviours than men, in 2018, 1.1 percent of men reported experience of sexual assault,

and 13 percent of men reported being the target of sexualized or discriminatory behaviour [6]. This pattern parallels that of women and men in other military organisations, thus underscoring the importance of considering the potential impacts on women and men.

6.1 BULLYING, HARASSMENT, AND SEXUAL MISCONDUCT: A SPECTRUM OF CONDUCT

Analysis and policy development across nations addresses inappropriate conduct among military members through definition of a range of concepts such as bullying, harassment, abuse of power, sexual coercion, and assault [7]. Definitions and distinctions are important in reflecting legislation, determining frequency and scope of negative behaviours, and guiding response to and accountability for conduct within the organisation.

Regardless of the focus placed on unique behaviours, there is widespread agreement in the literature, that these behaviours represent a continuum of harm thereby recognizing the relationship among those behaviours that can be interpreted as the least harmful, even benign by many (e.g., sexist jokes), to behaviours recognized as having significant potential to cause psychological and physical harm (e.g., physical aggression) in the military workplace [8], [9], [10], [11]. This is not to say that the inappropriate conduct can be placed on a linear continuum, but that the tolerance of discriminatory and harassing behaviours increases the risk for higher frequency and seriousness of a range of inappropriate behaviours. Although beyond the scope of this discussion to provide an exhaustive list of definitions and behaviours that represent different forms of bullying, harassment, and discrimination, conceptions of these behaviours that are shared by many military organisations is presented below to provide a general sense of inappropriate behaviours that are represented across a spectrum of conduct, typically ranging from those perceived to be the least harmful to those with relatively greater potential to harm individuals and teams in military contexts. Although the focus is typically on face-to-face manifestations, bullying and sexual misconduct can take various forms using available mediums, including online and mobile social media platforms. These behaviours are typically measured through the administration of self-report surveys of experience that ask respondents to indicate which behaviours they have experienced, rather than asking them to subjectively determine for example, whether they have experienced harassment [12].¹

Bullying is an aggressive form of harassment, defined by the Australian Defence Force as “a persistent, unreasonable pattern of behaviour directed towards a person or group of persons, which may create a risk to health and safety, including a risk to the emotional, mental or physical health of the person(s) in the workplace” (p. 17) [7]. The following behaviours, when experienced more than once over a period of time, are associated with bullying:

- Deliberately withholding information required for your duties;
- Overloading with work to be done within unreasonable deadlines;
- Inappropriate work tasks;
- Excessive criticism relating to your work;
- Spreading of malicious rumours about you;
- Offensive or insulting remarks;
- Persistent teasing; and
- Intimidating behaviours such as finger pointing, invasion of personal space, barring the way.

¹ For an integrated and extensive list of the types of behaviours that have been measured across TTCP nations (Australia, Canada, New Zealand, UK, and US, see TTCP (2015). Measuring Unacceptable Self-Reported Behaviours: A Methods Paper.

The continuous attitude survey administered in the UK, for example, considers discrimination, harassment, and bullying to be a spectrum of behaviours that increase in severity. These behaviours can be tied to prejudice based on numerous attributes, including: gender or gender identity; race, colour, nationality, ethnic, or national origin; social background or class; religion or beliefs; sexual orientation; age; disability; and pregnancy or maternity [7].

Sexual harassment is associated with recipients' gender or harassment of a sexual nature that is unwanted. Sexual harassment is broadly understood to include two types:

- *Quid pro quo*, which is “threats to make employment-related decisions (e.g., hiring, promotion, termination) on the basis of target compliance with requests for sexual favours” (O’Leary-Kelly et al., 2009, p. 504) [13]; and
- The creation of a *hostile work environment*, which occurs when the sexual behaviour has the purpose or effect of unreasonably interfering with an individual’s work performance or creates an intimidating, hostile, or offensive working environment [7], [14].

Abuse of power, although unique from bullying, harassment, and discrimination, can also be an expression of one of these forms of misconduct. Situations in which individuals are ordered to conduct personal tasks for superiors, such as being ordered to participate in unacceptable behaviour, or bribing in return for desirable career outcomes (e.g., improved performance reports, desired postings) [7], can include, for example, requests for sexual favours as captured by *quid pro quo* sexual harassment.

Sexual misconduct is defined in Canadian military context, to include sexual assault, inappropriate sexualized behaviours, and discriminatory behaviours on the basis of sex, sexual orientation, or gender identity [6]. Behaviour variously described across different nations as crude behaviour, unwanted sexual attention, sexual coercion, acts of indecency, stalking, sexual exploitation, sexual assault, and rape [15], [7] fall within this broader concept of sexual misconduct. Over 80 percent of militaries in NATO nations have training and programs in place to prevent sexual misconduct, and 78 percent have reporting procedures in place. Many such initiatives are formally linked to gender equality initiatives, and some nations have initiatives which place particular focus on operational and deployment contexts [15].

The continuum of harm reinforces the role of leaders in establishing work environments that prioritize respect for and the social inclusion of all members of the team. The introduction of women into ground combat units further places particular importance on leader attention to the risk for behaviours that target those who are not perceived to meet traditional sex- and gender-based standards for inclusion. Analyses in military context reinforce the relationship between leadership and risk [16], indicating, for example, a relationship between positive ratings of leaders and lower self-reported frequency of sexual harassment [17], [18], and association between negative leadership behaviours of military leaders and risk of assault among military women [16] and men. Figure 6-1 below, provides a snapshot illustration of the relationship between a healthy and inclusive workplace and a range of behaviours that contribute to a toxic environment. Although the terminology, military regulations, and national legislative parameters will vary from nation to nation, the risk for the most harmful and criminal behaviours highlighted in red is heightened by those behaviours presented in yellow and orange. Although some of those behaviours that fall within the unacceptable conduct range are frequently tolerated in work environments (e.g., sexualized language and jokes), such behaviours, even if perceived to be less harmful or not harmful at all, do contribute to risk for increasingly harmful transgressions.

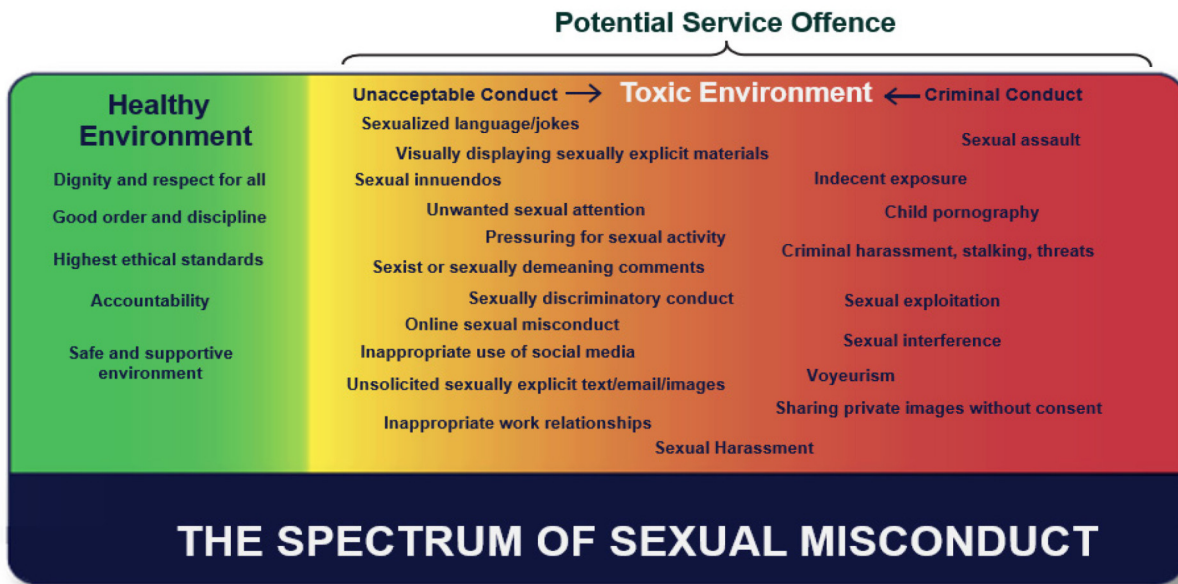


Figure 6-1: Spectrum of Sexual Misconduct Behaviours [19].

In addressing bullying and harassment, there are at least three factors to consider – the characteristics of the work environment, the respondent, and the complainant [20]. Although preventing and addressing bullying and harassment can be far from straightforward, leadership strategies and actions must be fair and transparent. Regardless of the challenges uniquely associated with bullying, harassment, and associated conduct, there is lower risk for such outcomes within organisations in which there is respect and high valuing of others, expressed by fairness, transparency, and trust, irrespective of differences among organisational members [21], [22], [23].

Research suggests that transformational leadership, coupled with leader zero tolerance for behaviours such as sexual harassment, will reduce risk of sexual assault. It is further suggested that leadership development should include:

- 1) Curriculum that addresses the relationship between leadership, the military’s organisational climate and risk for sexual violence;
- 2) Trauma-informed leadership that recognizes and supports early interventions to address associated risky behaviours (e.g., substance abuse) and perpetrator conduct (e.g., bullying); and
- 3) Curriculum that addresses contextual leadership behaviours and skills to enhance understanding of social interactions in different situations and environments [16].

The latter includes understanding how the social climate in units is impacting all women and men, serving as role models, providing guidance or direction as required to ensure that the leadership of subordinate leaders is appropriate [24], and applying leadership capabilities such as empathy and compassion [5]. However, even though soft leadership skills such as empathy and compassion might be praised and valued in military context, recent analysis conducted by the US Marine Corps suggests that empathy is a core leadership attribute that warrants more attention in training, and importantly more emphasis and re-framing within the core values of the military (e.g., empathy as courage) [5].

6.2 CULTURE AND WORKPLACE CLIMATE

Workplace climate can be described as “temporal, subjective, and often subject to direct manipulation by people with power and influence” (p. 644) [25]. Culture, on the other hand, refers to an evolved context that is “rooted in history, collectively held, and sufficiently complex to resist many attempts at direct manipulation” (p. 644) [25]. While some insist on a clear distinction between climate and culture, others posit that climate and culture represent differences in interpretation rather than phenomenon [25]. Regardless of perspective, and although the lines are blurred, it is clear that leadership has an important role in influencing both institutional regulation and direction, as well as experience and outcome within day-to-day workplace climate.

Review and analysis of harassment prevention and resolution policies and practices in organisations, indicates that there are three levels of activity and interventions that characterise efforts across organisations in general. As illustrated in Figure 6-2, primary prevention includes organisational policies; secondary interventions include formal procedures such as reporting systems, conflict resolution processes, discipline procedures, and performance management; and, tertiary interventions encompass a range of activities that develop in response to policy and doctrine, including training and education to prevent mistreatment behaviours and interventions and responses to victims and perpetrators [26]. Institutional policy, procedures, and interventions that are put in place by senior leadership make essential contributions to mitigating inappropriate conduct and social behaviours, including inappropriate sexual behaviours [27]. In the case of the military, ethos and doctrine are also critical as they convey the values and principles that guide military membership, as they contribute to what sociologists refer to as formal military culture [28]. From the perspective of institutional leaders, these activities are rational and sufficient to drive appropriate behaviours, through top down direction and leadership. However, soldiers sometimes experience mixed and inconsistent messaging from senior leaders, and subordinate leaders can be complicit in undermining or contradicting senior leadership messaging [5]. Not surprisingly, incidents and behaviours such as sexual harassment and misconduct persist. The challenge, then, is to identify strategies to mitigate inappropriate behaviours and negative impacts that persist in spite of institutional effort and direction. The informal culture, which manifests across sub-cultures and different social climates, are revealing, in terms of understanding the hearts and minds of military members and extent to which they have embraced social change [29].

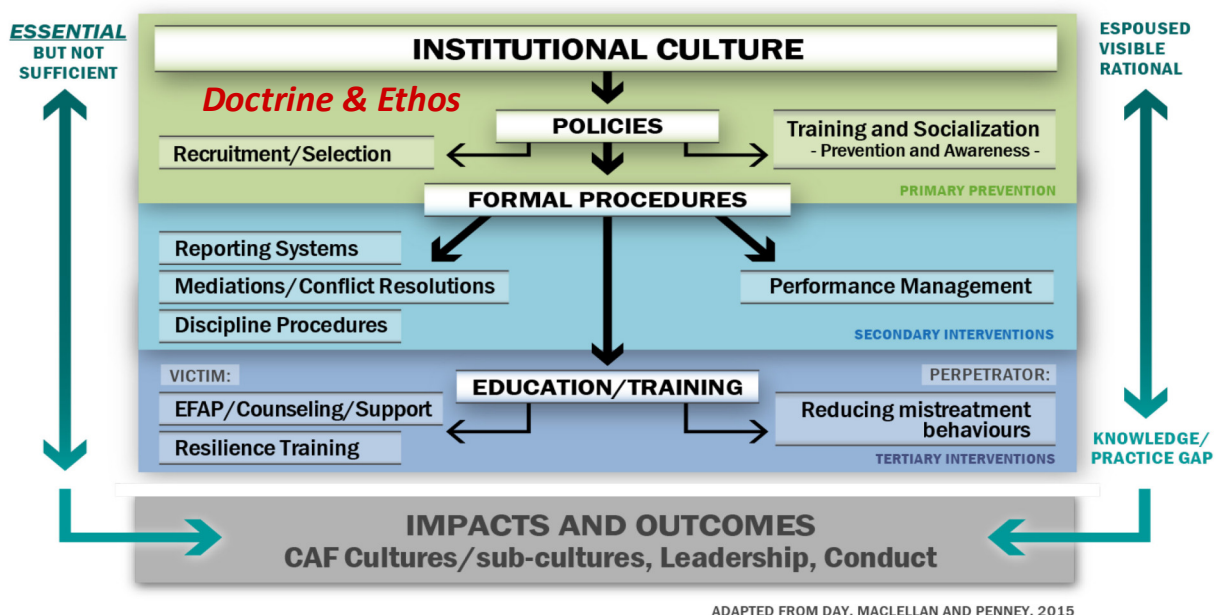


Figure 6-2: Formal and Informal Culture [27].

In their review of common risk factors for six problematic behaviours in military context – sexual harassment, sexual assault, unlawful discrimination, substance abuse, suicide, and hazing – Marquis et al. [14] identify unit or organisational social climate as a potential risk factor for or inhibitor of problematic individual behaviour. By way of example, the authors suggest that an individual who is discouraged from engaging in sexual harassment in a work setting with a strong culture of respect might engage in sexual harassment in another setting in which there is tolerance for sexist language and behaviours. This is supported by a significant body of literature that identifies climate-based risk factors for bullying and harassment to include: tolerance of sexual harassment; limited presence, accessibility, and effectiveness of organisational response; and the insufficient commitment of organisational leaders to address harassment [30], [31], [32], [33], [34], [35], [36], [37]. Importantly, this is relevant to the risk of harassment for women, as well as men; in fact, prior to 1980 and the increasing representation of women in military organisations, most victims of illegitimate violence, sexual harassment and abuse of authority were men [38]. The US Equal Opportunity Employment Commission has also confirmed that men are more likely to experience sexual harassment in workplaces where there is tolerance of sexual harassment in general, and further claimed that it most impacted men who did not conform to hegemonic masculine ideals, such as homosexual or bisexual men, or men who engaged in feminist activism [39].

6.2.1 Unit Climate Surveys

A unit climate survey is a unit assessment tool that is designed to collect information regarding the experiences and attitudes of unit members on a range of objectives that can be incorporated into the survey. The resulting analyses provide commanders with a picture of how the organisation and its members are doing and thus provides feedback on current and emerging issues, and areas for improvement [40]. In the US, for example, the Defense Equal Opportunity Climate Survey (DEOCS) is routinely administered to support leaders with their role in establishing equality and inclusion under their command. The US Sexual Assault Prevention and Response Office (SAPRO) has also partnered with the Defense Equal Opportunity Management Institute (DEOMI) to create Sexual Assault Prevention and Response (SAPR) climate questions for inclusion on the DEOMI DEOCS. The questions provide commanders with additional information regarding the climate for preventing and responding to sexual misconduct. The following six factors are considered important to prevention and response and are therefore measured by SAPR items in the DEOCS:

- *Perceptions of Safety* refers to members' feelings of safety from being sexually assaulted where they currently live and perform their work/duties;
- *Chain of Command Support* refers to members' perceptions of the extent to which command behaviours are targeted towards preventing sexual assault and creating an environment where members feel comfortable reporting a sexual assault;
- *Publicity of SAPR Information* refers to the extent to which members perceive that SAPR-related information and resources are publicly displayed and openly communicated;
- *Unit Reporting Climate* refers to the extent to which members perceive that the chain of command would take appropriate actions to address an Unrestricted Report of sexual assault and the extent to which social and professional retaliation would occur if a sexual assault were reported;
- *Perceived Barriers to Reporting Sexual Assault* refers to the type and frequency of barriers to reporting sexual assault that individuals perceive within their unit/organisation; and
- *Unit Prevention Climate* refers to individuals' intentions to act if they were to observe a situation that may lead to a sexual assault [41].

While considerations of gender and diversity are important regardless of the objectives targeted for assessments, a gender responsive assessment can be particularly useful in assessing attitudes toward women in combat units, as well as themes and issues such as leadership and accountability, diversity and inclusion,

and workplace behaviours. Organisational climate surveys can also provide an opportunity for members of a unit to share their satisfaction levels and experiences in a confidential manner [40].

6.2.2 Psychological Safety

As noted in the case of the SAPR DEOCS, perceptions of safety, often referred to as psychological safety in the research literature, is a factor that has particular impact on harassment, bullying, and discrimination. Psychological safety captures the perceptions of organisational members of the consequences of taking interpersonal risks in a work environment [42]; that is, perception of whether there is a way to solve a problem without a loss of identity or integrity [43]; according to Schein, without psychological safety members of an unit/organisation are likely to be defensive and to deny any evidence that supports the need for change. Perceptions of risk also reduce the likelihood that affected persons will report inappropriate conduct [44], [35]. Research has also established association between a climate of permissiveness that includes behaviours such as sexual jokes, pranks, and pejorative and exclusive gender-based language [45] [46], [47] with negative impacts on job satisfaction, organisational commitment, psychological distress, and the mental health of military members [30]. Importantly, the commitment and response of leaders when they are made aware of incidents of sexual harassment and gender discrimination have been found to have important positive impacts on reducing risk for inappropriate conduct and improving well-being and retention [48].

The example established by leaders as well as underlying cultural influences can also impact the likelihood that bystanders, including peers, will intervene to mitigate or come forward to report harmful behaviours [49], [50]. Bystander response or lack of response can further exacerbate misconduct through explicit and implicit reinforcement of socio-cultural norms, including those reinforced by permissive climate and dominant cultural values [36], [49]. The power and influence that leaders and peer groups exert over newcomers through informal in-group processes normalize attitudes and beliefs [51] which can influence or mitigate inappropriate sex- and gender-based values and behaviours [52], [53], [54]. Even when leaders were not directly responsible for bullying, harassment or discrimination, many of the first women who entered the combat arms in Canada, for example, described leaders as passive in the face of the inappropriate conduct of subordinates. The failure of these leaders to intervene when inappropriate attitudes were evident, reinforced non-acceptance of women in the combat arms environment [4]. The relative emphasis, when compared to civilian organisations, that the military places on group cohesion and de-individualisation allows for socialization and maintenance of negative normative sexual and gender beliefs [55]. For better or worse, leaders make important contributions to such beliefs.

6.2.3 Individual, Organisational and Social Factors

Many individual, organisational, and social factors can influence behaviours, including how third-party observers of inappropriate conduct will act to either mitigate or reinforce acceptance of the observed behaviours. While mitigation requires an action (e.g., telling perpetrator to stop, offering support to the targeted individual), reinforcing acceptance of the observed behaviours can include explicit acceptance (e.g., laughing) or implicit reinforcement / passive acceptance of the observed behaviour through lack of action. Individual factors capture the characteristics of those involved in events such as perpetrators, targeted individuals, bystanders, and the personal beliefs or experiences of bystanders. These factors might include for example, alcohol consumption, perceived efficacy of the bystander or perceived harm to the victim or targeted individual. Pioneers in social psychology [56], [57], as well as seminal research on the bystander effect [58], [59], have further demonstrated the power of situational factors such as ambiguity or diffusion of responsibility to influence behaviour.

Similarly, research on the bystander effect has demonstrated the influence of the social context on bystander behaviour. In military context, for example, the relative permeability between work and leisure, and blurred boundaries between perpetrator and victim can result in “much more continuity between different forms

of sexism, sexual harassment, and sexual assault than is typical in most civilian environments” (p. 244) [60]. A summary of the individual, organisational, and social factors that can influence bystander response [61], is presented in Figure 6-3. A downward facing arrow indicates that the more this factor is present (e.g., alcohol consumption), the less likely it is that a bystander would intervene when witnessing a behaviour such as bullying or sexual harassment. Conversely, an upward facing arrow indicates that the more the factor is present (e.g., external reporting channels), the greater the likelihood that a bystander will respond to inappropriate conduct. A straight line indicates that factors such as gender, culture, and personality, require further analysis to determine the extent to which and how they influence bystander response.

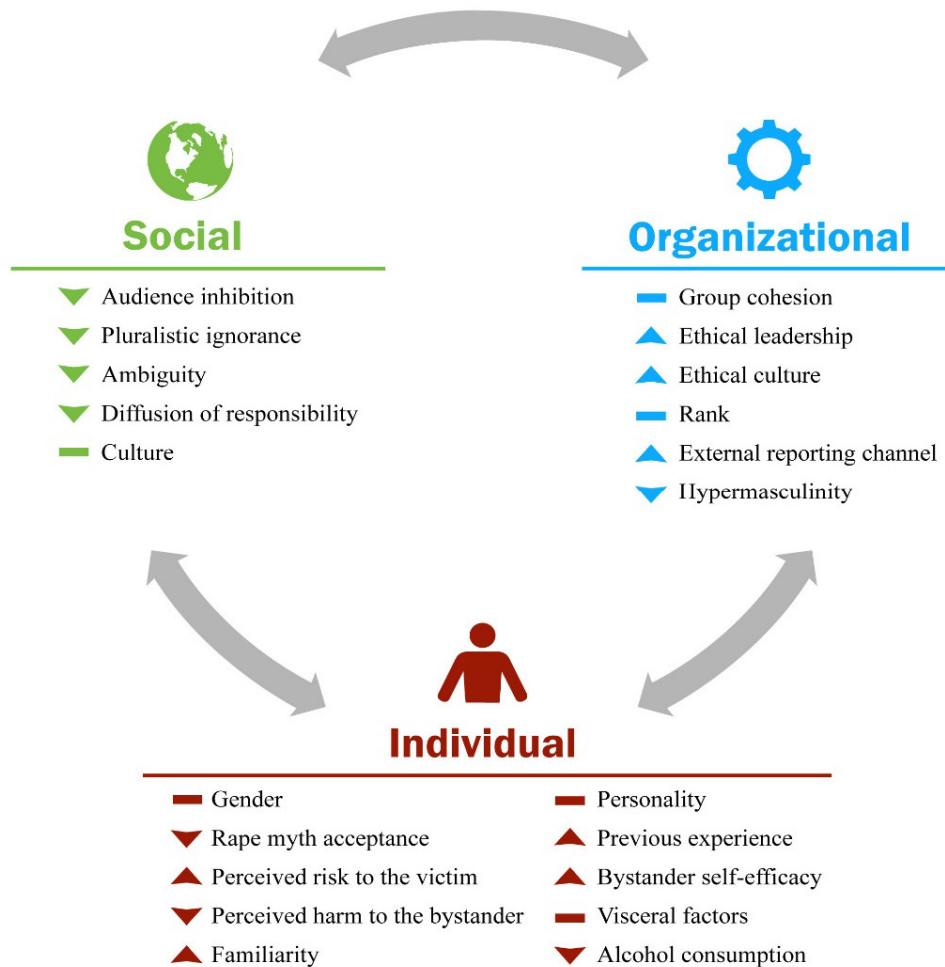


Figure 6-3: Individual, Organisational, and Social Factors Influencing Bystander Behaviour [61].

Although individual-level factors are among the most researched areas related to helping or bystander behaviour [49], it has also been claimed that organisational factors are “by far the greatest predictors of the occurrence of sexual harassment” (p. 46) [62]. Research designed to better understand risk for sexual misconduct in the Canadian military, for example, recognizes the critical role of senior leadership in establishing formal institutional processes to prevent and address sexual misconduct such as doctrine, policy, and response procedures, while at the same time placing particular emphasis on the impact of informal cultural dynamics on risk and prevalence of sexual misconduct [53]. In other words, as discussed above, even when formal structural components are developed to control bullying and sexual harassment, it is still likely to occur [63].

The Norwegian model presented below in Figure 6-4 suggests 12 interconnected influences on risk for bullying and sexual harassment that leaders should be aware of so that they can work to mitigate related behaviours [63]. The model suggests that negative attitudes towards women and resistance to policies such as affirmative action are causal factors influencing a range of impacts on risk for the bullying and harassment of women in military context. While some factors increase risk for the bullying and harassment of women (+), others reduce risk through direct and indirect impacts (÷).

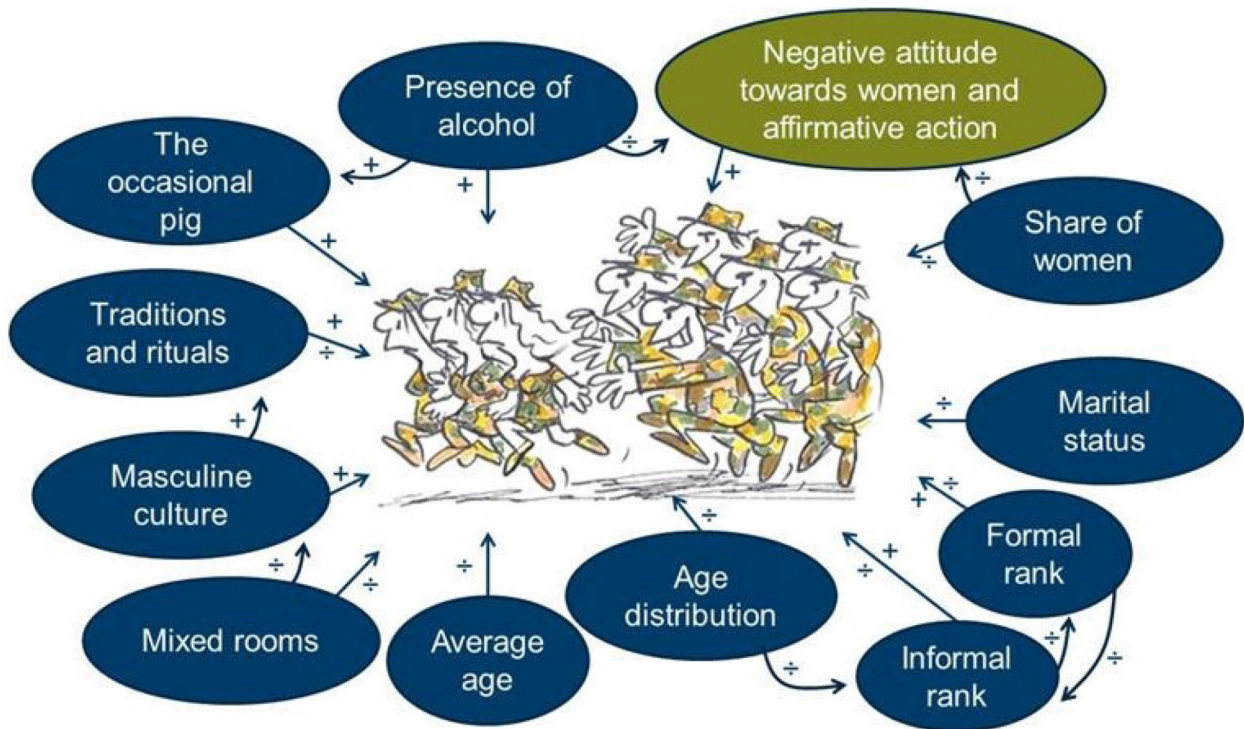


Figure 6-4: Model for Increased Risk-Awareness for Occurrence of Bullying and Sexual Harassment in a Military Community [63].

Of particular interest to the integration of women into ground combat units, this model suggests that:

- Mixed-gender accommodation can reduce negative attitudes toward women [64], [65], [66], [67], and resistance toward women in leadership and combat roles [68], [69];
- The presence of alcohol directly increases risk for perpetration and has a negative impact on already negative attitudes toward women and gender equality initiatives [70], [71], [72];
- The negative behaviours of individuals with strongly negative dispositions toward the presence of women (e.g., those identified as pigs by Steder [63], will be particularly encouraged by alcohol;
- Traditions and rituals are important tools for building cohesion, but can also reinforce differences and exclude some individuals [73];
- Disproportionately younger age cohorts present more risk than a balanced distribution of age;
- Formal rank and authority, as well as the informal power of emerging leaders (regardless of formal rank) can represent opportunity or risk, with particular risk when formal authority is weak and informal authority asserts negative influences; and
- The greater the presence of single members, the greater the risk [74].

Finally, this model reinforces the impacts of gender balance and masculinity as widely identified in the literature. Although the impacts of masculinity in military culture are manifested through the conduct and behaviours of women and men, higher proportions of women in a working environment can mitigate the impacts of problematic aspects of masculinity. As discussed below, when culture is characterised by heightened or extreme forms of masculinity, typically labelled “hypermasculinity” there is particular risk for inappropriate sex- and gender-based social dynamics.

6.3 GENDER BALANCE AND MASCULINITY

Job/gender context has been consistently identified as a risk factor related to behaviours such as sexual harassment [75]. Job gender context refers to the gendered nature of the work group [31], and is frequently associated with: the low representation of women in male dominated work groups, occupations or roles [76] [34]; preference for men in power; value placed on being assertive, even aggressive, competitive, tough, authoritative, and goal oriented; lack of tolerance for deviant persons and ideas [21], [77]; and acceptance of rape myths [78]. Rape myths serve to perpetrate victim-blaming through assumptions such as rape is done by strangers, has visible injuries, typically involves a weapon, involves the problematic drinking of the victim (rather than focusing on the violence of the perpetrator), and occurs because women put themselves at risk [79]. These characteristics are frequently captured within conceptions of masculinity.

Given the emphasis on physical performance, frequently dangerous operating environments, and historical exclusion of women, the combat environment is clearly characterised by high levels of masculinity. Masculinity makes important contributions to operational effectiveness and represents characteristics that can be inherent to, and further developed by women and men in military context. As introduced in Chapter 3, analyses of cultural dynamics in a military context frequently claim the influence of masculinity that reflects traditional conceptions of male warriors, and are reinforced through enduring cultural processes [80], [81], [82], [83], [84]. Masculinity has also been linked to problematic behaviours in the military, including: bullying and workplace aggression [85], [86]; devaluation and harassment of certain groups of individuals [87], [88]; sex-based discriminatory language and soldier sense of entitlement to the body of a woman soldier [2], [89]; and resistance to gender equity [90], [91], [92], [93], [94], [95], [96], [97], [98], [99], [100]. Masculinity has also been associated with the need for identity supported by order and control, domination of others, and competitive success [101]. Analyses of masculinity in military and para-military context, for example, correlates four key factors of masculinity – showing no weakness, strength and stamina, putting work first, and dog-eat-dog/competitiveness – with cultural dynamics and outcomes such as bullying, harassment, discrimination [102], [103], gender bias [94], poor personal well-being [102], toxic leadership [102], [104], [103], and police officer misconduct and use of excessive force [103].

Masculinity, however, is not a homogenous concept; in fact, gender researcher Jeff Hearn asserts that, “any rigid, monocultural definition” should be dismissed [105]. Notwithstanding, it is important to clarify that correlations with negative outcomes as discussed above, are typically in reference to assumptions regarding hypermasculinity. Hypermasculinity is an extreme form of masculinity associated with high power orientation and adherence to traditional military norms such as rigid/stereotypical sex roles, competition, tolerance of pain, mandatory heterosexuality [85], [106], and low representation of women [107]. These characteristics are reinforced through tight association with courage and endurance, physical and psychological strength, rationality, toughness, obedience, discipline, and patriotism [83]. Such masculinity, when disproportionately dominant can reinforce underlying assumptions which resist socio-cultural change [79], [83], [84], not least of which is the introduction of women into previously all-male environments.

Interpretations of masculinity and its impacts are further concerned not only with the characteristics of masculinity, but with the relational dynamics of gender and the processes which sustain the dominance and influence of particular masculine values and norms, through complicit support among groups of individuals. The dominance of particular masculine values and practices; that is, hegemonic masculinity

is sustained as a result of consent, not force, whether explicit or implied, to maintain status quo membership and power [108], [109], [110]. Such paradigms can persist even with the presence of “others” who do not readily fit the prescribed image, such as women and homosexuals. However, the presence of outside “others” challenges the dominant paradigm and as a result, hostile interactions such as harassment frequently emerge. Although extreme forms of masculinity are not always evident [111], the concepts associated with implicit ideals can guide how people are treated in organisations (e.g., what gets rewarded vs. punished), even when the behaviours are not consistently visible [104]. Although they represent unique dimensions of masculinity, hegemonic and hypermasculine impacts of masculinity frequently operate in tandem. This, however, does not have to be the case [109].

Conceptions of masculinity frequently fail to take into account the complexities and differences among men, and among women and men, and in doing so have contributed to the legitimation and reproduction of existing systems of gender inequality [101]. It is increasingly recognized that the representation of masculinity and femininity among, and socially reinforced by, women and men in organisations is complex and diverse [112], [113], [114], [115], [116], [117], [118]. In military context, for example, women derive their empowerment and autonomy, and attempt to reduce social exclusion, by mimicking male soldiers and distancing themselves from traditional femininity, and trivializing sex-related songs, jokes, and sexual harassment [119]. As a result, female soldiers in masculine roles might look down on other women who hold more feminine military roles in an effort to distance themselves from what they have learned to understand as weak and submissive femininity [119]. As women were being introduced into the combat arms in Canada, for example, women sought to distinguish themselves from other women in an effort to be accepted within the male group [2]. This suggests that highly masculine environments not only precipitate harassment of women from men but can also lead to discrimination and harassment of women from other women [52].

Attitudes and beliefs are supported by large amounts of stored knowledge and experience that can be difficult to change; individuals tend to associate with those who share similar attitudes and beliefs, thus continuously reinforcing socio-cultural norms [120]. Also relatively difficult to access and assess [51], values and attitudes convey motivations which can translate into actual behaviours including those related to fairness, equality, diversity, and social behaviours [121], [122] including harassment, discrimination, and sexual misconduct. Finally, within the context of change objectives (e.g., introduction of women into ground combat units), it is important to recognize the extent to which a need for stability, or desire to protect one’s current social status can manifest as resistance to social change [123], and those who represent change. Uncertainty avoidance, that is the tendency to seek stability and predictability through formalized rules, procedures and traditions, as well as high tolerance for respect for authority, is also associated with high risk for discrimination and sexual misconduct [21].

6.4 LEADERSHIP BEST PRACTICES

The discussions above provide an overview of research which considers the sex- and gender-related conditions that create resistance to women in previously all-male domains and further influence the degree of risk that will exist in a military unit for bullying, harassment and a range of sex- and gender-related transgressions targeting women and men.

Much of the solution can be found in good leadership practices that respect and value the inclusion and contributions of all women and men on the team. Knowledge is an important strategy for preparing to provide effective leadership of mixed-gender teams, including awareness of a range of assumptions that shape gender dynamics on teams. relationships in the workplace. As women are integrated into ground combat units, they will be particularly vulnerable to misperceptions regarding their character and motivation to serve which will spill over to gender-based interpretations of their day-to-day performance and conduct. This demands particular focus and strategy to prevent and effectively respond to ‘male perpetrator female victim’ scenarios. Lessons learned in the Canadian experience, for example, placed particular emphasis on

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challenging the myths that surround the integration of women and the role of leaders in establishing fairness, transparency, and trust among soldiers. Three of the key myths that were directly addressed, along with the lessons learned response, include:

- **Myth:** Mixing women and men in the combat arms will result in complete breakdown of unit cohesion.
- **Response:** Unit cohesion has nothing to do with sexual or racial diversity. The sinew of cohesion is discipline. Once discipline goes, cohesion is not far behind. Diversity is not the cause of breakdown in unit cohesion. However, it may be a catalyst if discipline is weak and leadership is inequitable [124].
- **Myth:** When you try to discipline a woman, you end up with a harassment complaint against you.
- **Response:** Policies ensure that all members are treated with respect and dignity. No supervisor needs to fear being prosecuted for sexual harassment if they have carried out their duties, and this includes disciplining subordinates with integrity and honour [124].
- **Myth:** Women look for and get special treatment from the military.
- **Response:** Most women, like most men, do not look for, nor should they receive special treatment in the military. If a woman is excused from specific duties, solely because of her gender, it is the leader's failure, not the woman's. All leaders have a responsibility to ensure each member is treated equitably, regardless of gender [124].

However, it is also important that strategies and practices are not exclusive to 'male perpetrator female victim' issues. Single perspective strategies can be divisive, unfair, and negate consideration of various phenomena that have been revealed in previous research. As such, the following should be considered:

- Women also exercise cognitive bias against women subordinates;
- Male's experience of male-on-male violence;
- Males face different but still difficult cultural barriers to reporting abuse;
- Females can bully and humiliate men in gendered ways;
- Other forms of abuses of power that impact women and men; and
- Framing the entire discussion around the 'male perpetrator female victim' model can:
 - Unfairly shame men.
 - Have negative impacts on team cohesion and trust [38].

The above examples are taken from a recent document published by the Australian Army, "Teaming: An Introduction to Gender Studies, Unshackling Human Talent and Optimising Military Capability for the Coming Era of Equality, 2020 – 2050." This document presents discussions on several key concepts related to the employment of women and men, mixed-gender / high performing diverse teams, and operational effectiveness in military context [125].

Given the potential for impacts on women and men, and the potential for women and men to perpetrate bullying, harassment, and sexual misconduct, it is often considered to be a gender-neutral phenomenon or to have nothing to do with gender. However, in understanding these behaviours and responses it is important to be aware that although behaviours manifest themselves through the actions of individuals, the socio-cultural context within which behaviours occur, and the extent to which it reinforces particular gender-based assumptions and values, can have significant influence on whether the behaviour occurs as well as the response to the behaviour; that is, socio-cultural contexts are gendered in various ways that impact all women and men in various ways.

Regarding specific behaviours, leaders need to understand what constitutes inappropriate conduct such as bullying, harassment, sexual harassment, and discrimination. While related behaviours can be uniquely defined it is particularly important to understand the impact of various forms of conduct on those soldiers that are being targeted by behaviours that may appear to be benign by an onlooker. Regardless of whether an individual complains or appears offended by language and behaviours in the workplace, it is the responsibility of the leader to seek understanding of the impacts by monitoring the social dynamics in their unit. Policies and reporting mechanisms frequently place the onus on targeted individuals to come forward; however, effective leadership interventions, including role modelling commitment to equality and fairness, can be effective in mitigating conflict in the workplace. The positive role modelling and commitment of leaders in ensuring a fair environment for all soldiers, is one source of empowerment for women and men who may be at particular risk for bullying and harassment. Importantly this means being aware of the sex- and gender-related dynamics that put vulnerable soldiers at greater risk and some of the strategies that leaders can use to reduce risk.

The concept of an ethics audit, which highlights the importance of establishing context to enhance the moral functioning in an organisation [54] provides a potential tool for leaders. Based on Kaptein's (2008) [126] model for a qualitative ethics audit across seven key factors, the following adaptation can be used to guide monitoring and implement strategies to reduce the risk for bullying, harassment and related inappropriate sex- and gender-based behaviours in their units:

- **Clarity:** communicate expected standards that are well-defined, comprehensive, and concrete, regardless of differences such as gender, rank/status;
- **Role Modelling:** ensure that the modelling of all leaders is consistent with expectations, including exemplary behaviour toward women;
- **Achievability:** create the conditions (e.g., sufficient time, authority) that enable soldiers to act appropriately, including ensuring that there are no mixed messages regarding appropriate behaviour toward women;
- **Supportability:** monitor the extent to which soldiers treat one another with respect, and take the rules and expectations regarding misconduct, including bullying and harassment of women, seriously;
- **Transparency (or visibility):** monitor extent to which soldier conduct can be observed by those who are in a position to act upon what they observe and encourage victims and bystanders to come forward;
- **Discussability:** create an environment in which soldiers can raise their concerns and have an opportunity to discuss them in a respectful manner, including opportunity to discuss inappropriate sex- and gender-based conduct, conditions of consent, etc.; and
- **Sanctionability:** monitor the extent to which leader and organisational response conveys confidence that inappropriate conduct, including harassment and bullying, is taken seriously, that appropriate action is taken, including punishment where relevant [127].

In summary, there is a much greater likelihood that all women and men, regardless of the differences among them, will achieve performance potential within a fair and positive environment characterised by effective leadership and clearly identified standards and objectives to inspire their performance.

6.5 SUMMARY

Socio-cultural change, such as that represented by the integration of women into ground combat units, is a particularly complex challenge that confronts long held values and assumptions regarding the roles and identities of men in combat. The tensions that exist among women and men in our societies can be

exacerbated in this context. Recognizing the complexity of related social dynamics, this chapter highlights a range of correlates, antecedents, and conditions that can contribute to bullying, harassment, and sexual misconduct in organisations. The discussion describes the important role of policies and interventions supported by formal military culture, the unique conditions that can manifest within a particular workplace climate, and the influence of peers, bystanders, and importantly leaders in both reinforcing and mitigating conduct that is harmful to individuals as well as the cohesion and effectiveness of a military unit. The analysis places particular focus on the informal cultural conditions that have particular influence at the unit level, and the critical role of leaders in establishing fair and equitable environments in which all women and men have opportunity to fully contribute as members of effective teams.

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Chapter 7 – MOTIVATION TO INCREASE THE SHARE OF WOMEN AND THE PROPENSITY OF WOMEN TO SERVE

The change in military organisations since the end of cold war is evident. Most western countries have experienced large cuts in defence expenses, reduced the number of military personnel, and focused on the adaptations believed necessary for military organisations to respond to various changes in operating environments in the same manner as other public and private organizations [1], [2]. One debated factor of military transformation is the nature of women’s military participation, including shifts in female deployments and updated policy frameworks. In regard to this, one of the most recent and visible changes among NATO nations is the lifting of restrictions in the US and the UK allowing women’s participation in direct combat roles.

One of the main arguments used when lifting the ban was that as long as women were denied participation in close combat roles, they are also given very little chance to reach the highest levels of command. It has also been argued that war on terror has erased the frontlines, and everyone in the area of military operations must be prepared to fight. The more traditional debates however, regarding women in combat roles, were not about career development or whether women are capable to perform in close combat roles, but if participation of women in combat was appropriate, and if such a development actually represented progress for women and for gender equality [3], [4].

It is also claimed that women’s participation in close combat is important as it facilitates the full participation of women as equal citizens with an equal duty to undertake military service. It is a matter of democratic participation [5] given the symbolic link between citizenship and military service [6]. In other words, the only way to be worthy of equal rights is to do equal duty. It is also claimed that women’s participation changes the military, makes it more democratic, less hierarchical, more compassionate and more suited to the modern world and future conflicts [7]. Hence, women’s military participation provides opportunities for disruption, subversion, and even transformation of the military.

Unfortunately, evidence suggests that as recent combat restrictions were lifted, women continued to face discrimination, harassment and abuse [8] across military organisations, including women from countries that have allowed participation in direct combat roles for many years [9], [10], [11], [12], [13], [14], [15]. This suggests that regardless of equitable policy and efforts to recruit more women, challenges will persist. Women are more likely than men to leave male dominated occupations such as the military, and research has consistently and recently identified barriers to the retention of women which are related to experience in the work environment including discrimination, harassment and abuse, career options and opportunities, and family-related factors [16]. The opening of combat roles to women as well as priority placed on UNSCR 1325 and the participation of women in various stages of peace support operations, places increasing emphasis across many NATO nations to increase the representation of women in their militaries through both recruitment and retention efforts.

7.1 THE RECRUITMENT AND DIFFERENTIATED EFFORT FOR INCREASING THE SHARE OF WOMEN

As noted in Chapter 3, military’s structures have undergone some major changes in recent years. These changes have had considerable impact on the organisation overall and has influenced how western armed forces recruit and select personnel for military service. In addition to changes in tasks and concepts, moving from a mobilization to an expeditionary structure and entering an era of asymmetric warfare has resulted in a reduction in the number of personnel in recent decades.

The demographic trends in most western countries indicate that the number of young people entering the labour market (age group 15 – 24) has diminished and the ratio of older people in the population has

increased. Western post-industrial societies, which were once quantitatively dominated by younger cohorts, are on their way to becoming societies in which older cohorts constitute the majority. At the same time, most European Union (EU) Member States are also becoming more diverse because of immigration and given the differences in fertility rates the trend will keep accelerating in the near future. The result of these trends is that in most western countries the native labour force will shrink while the immigrant working force will grow. It is becoming more apparent to western armed forces that the demographic changes, especially the aging of the population, immigration, urbanization, difference in fertility rates over time and between ethnic groups, are impacting their recruitment strategies. To the extent that, with the demographic change taking place, armed forces will have to expand their recruitment pool to demographic groups currently under-represented, in particular women and ethnic-cultural minorities.

Within Europe, demographic trends indicate that the number of young people entering the labour market (age group 15 – 24) will diminish by 25 percent between now and 2050 [17]. At constant labour force participation rates, the number of economically active, or unemployed people, will decrease from 239 million to 229 million in 2025 and to 210 million in 2050 [18]. There will be, however, quite large differences between countries. This global demographic change is the consequence of two trends: declining fertility and increasing life expectancy. To cite Münz [17]:

“Most countries in the world experience declining fertility or have stagnating fertility. In most developed countries fertility is below replacement level. And the majority of countries report increasing life expectancies. As a consequence, most parts of the world will witness demographic aging – defined as a rise in median age of populations and a growing share of people above age 65 – during this 21st century. Large discrepancies, however, will remain. Europe and Japan have entered the stage of very slow demographic growth and will most likely be confronted with some population decline during the first half of the 21st century. In Europe, the age group 0 – 15 is already shrinking. This world region now faces declining working age populations and the prospect of shrinking domestic (i.e., non-migrant or native) labor forces.”

In other words, western countries, which once were quantitatively dominated by younger cohorts, are on their way to becoming societies in which older cohorts constitute the majority. As their native population is aging, most nations are also becoming more diverse because of immigration [18].

European countries have not only become more ethnically diverse, but the trend will also keep accelerating in the near future, given the differences in fertility rates. The result of these trends is that European countries will face an ever-shrinking native labour force and an associated increasing dependence on working age immigrants.

The challenge, however, is not only quantitative one, but also qualitative: the young population itself is changing. For example, during the last decades, the educational level of young people has been rising. The consequence is that there are fewer people with a high school degree or less, more with college degrees, and higher qualified youngsters are generally not interested in a military career. The physical requirements of a job in the military present another challenge. In this regard, the pool of qualified persons is shrinking due to the increasing number of overweight (or obese) people and the chronic lack of physical activity among adolescents. Finally, the values of the young population are also changing, from materialist to post materialist priorities [19], [20]. Young people tend to put more emphasis on self-fulfilment, individual freedom and quality of life. These values lead towards a refusal of obedience or subordination to institutional authorities.

All of these developments have important implications for security and defence policies. Western armed forces will indeed face severe recruitment – and retention – problems, especially but not only in technical specialties, and will find themselves in ever more direct competition with other public institutions, such as the Police, Fire Departments, and the private sector to attract the best candidates. This will, in addition to the negative endogenous variables within the armed forces, limit the armed forces as a recruitment entity able to meet their own recruitment and retention goals [21].

One way to offset the shrinking base of recruitment is, as in the civilian labour force, to increase the number of Ethnic-Cultural Minorities (ECMs) and women. Although western armed forces are no longer composed of mainly young, white, catholic/protestant men (as was the case with the mass armed forces of the 19th century) and have, as their host societies, become more diverse by opening their doors to new segments of the population, like women and ethnic-cultural minorities, this openness however, is still quite relative. In most countries, women and ECMs are still greatly underrepresented in military organisations.

In other words, if the armed forces in western societies want to be able to successfully meet the challenges of the demographic transition, they will need to become even more diverse than they are now. One must add that increased diversity is not only necessary from a recruitment perspective; it is also good for carrying out missions all around the world. Indeed, members of these diverse organisations, when operating in diverse theatres of operations, need to have intercultural skills, and to be sensitive to cultural differences. To function effectively, they (especially the officers) must possess new skills and capabilities. In addition, as Schneider and Barsoux [22], [23], have shown, the internal and external levels are closely interrelated: culturally diverse organisations, because they are more tolerant of ambiguity and respectful of differences, are better equipped to cope effectively in a foreign and confusing environment. Nevertheless, despite this benefit, this greater openness is not always well accepted by the members of these organisations. For traditional uniformed organisations, this movement of growing differentiation remains a challenge and a real acceptance of this greater diversity requires the continuous adaptation of the organisational culture.

A final challenge is that most women are not interested in a military career. In Norway, where gender neutral conscription is practiced, all members of any given cohort entering the age of military service shows us that only 25 percent women have some motivation and interest in the military in the first place [24]. A very common reason for this is self-selection “The armed forces is not for me”. This is a very common observation in many western countries. Although a thorough analysis of the experience with conscription in Norway is not available, recent research conducted in Canada also indicates that young women (18 – 34 yrs.) overall express low interest in a military career. However, most of these women also reported having limited familiarity with the military, and those who reported being “somewhat familiar” with the military were three times more likely than those with limited familiarity to express interest in a career in the military. Overall, similar to Norway, the analysis concluded that approximately 23 percent of the women surveyed were considered to be “potential recruits” [25].

In short, in order to increase the share of women one need not only higher motivation in the military organisation, but also more women need to be motivated of service. As long as the majority of women find the armed forces less motivating or interesting as a future career, the share of women will never be high.

7.2 THE IMPACTS OF RETENTION FACTORS ON RECRUITMENT

The following discussion presents selected results from an online survey carried out between Spring 2015 and Spring 2016 in five countries (Belgium, The Netherlands, Norway, Sweden, and Switzerland) among samples from more than 10 000 young people [26]. The paper analyses how young people from these countries in general, and women in particular, view their armed forces, what their job expectations are, whether they think the armed forces offer what they seek, etc. The multinational survey on which the analyses are based is part of a collaborative project conducted within the framework of the European Defense Agency on the impact of demographic change on the recruitment and retention of personnel in European armed forces.

To measure the intrinsic importance of various factors when looking for a job a Likert scale was used. Respondents could choose between four answer categories: from 1 (not important at all) to 4 (very important). Based on their answers we can identify whether or not there are differences in gender perceptions and culture/country preferences. Figure 7-1 gives a quick overview of the relative importance, for all countries.

MOTIVATION TO INCREASE THE SHARE OF WOMEN AND THE PROPENSITY OF WOMEN TO SERVE



We see from Figure 7-1 that independent of country and gender, the most important factor when looking for a job is a good work atmosphere, a stimulating work environment and training opportunities. However, as presented in Figure 7-2, there are significant gender and country differences. The brown markers indicate statistically significant gender differences (t-test, $p = 0,05$), the blue marker indicates country differences, and the green ones indicate gender and country differences.

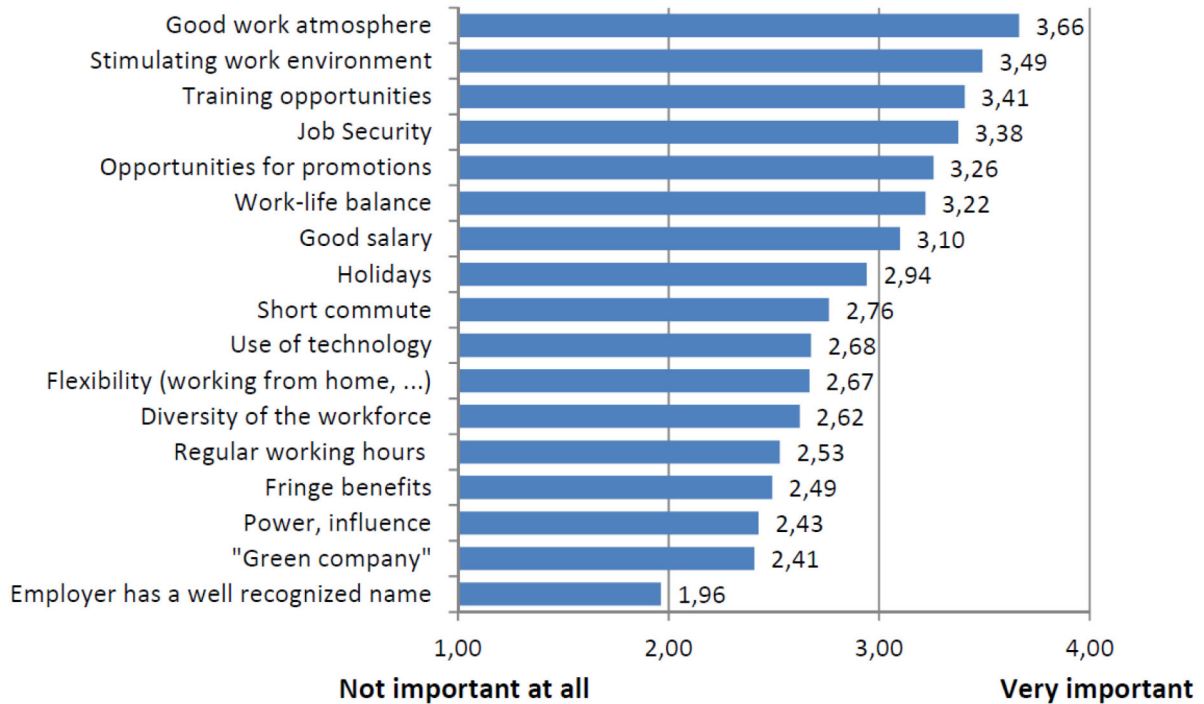


Figure 7-1: Job Expectations (Overall Means) [26].

Country	Gender	Job Security	Good salary	Good work atmosphere	Opportunities for promotions	Training opportunities	Holidays	Regular working hours	Short commute	Work-life balance	Stimulating work environment	Fringe benefits	Diversity of the workforce	"Green company"	Use of technology	Power, influence	Flexibility (working from home, ...)	Employer has a well recognized name
Belgium	Male	3,49	3,23	3,56	3,23	3,24	2,74	2,26	2,68	3,27	3,49	2,75	2,55	2,47	2,78	2,21	2,58	1,89
	Female	3,52	3,29	3,62	3,13	3,21	2,87	2,65	3,00	3,48	3,54	2,81	2,64	2,55	2,54	2,11	2,71	1,82
Netherlands	Male	3,35	3,11	3,65	3,26	3,15	2,83	2,37	2,42	3,13	3,43	2,63	2,74	2,42	2,83	2,44	2,71	2,34
	Female	3,40	3,06	3,72	3,25	3,33	2,89	2,65	2,60	3,30	3,46	2,60	2,88	2,66	2,50	2,24	2,94	2,34
Sweden	Male	3,25	3,11	3,54	3,34	3,55	3,04	2,33	2,71	2,93	3,58	2,57	2,22	2,05	2,54	2,51	2,49	1,80
	Female	3,46	3,33	3,88	3,38	3,88	3,25	2,46	2,88	3,42	3,83	2,79	2,92	2,63	2,42	3,13	2,63	1,63
Norway	Male	3,30	2,91	3,68	3,30	3,57	2,59	2,39	2,82	3,02	3,59	2,23	2,39	2,23	3,18	2,44	2,70	1,91
	Female	3,21	3,07	3,50	3,21	3,57	3,07	2,62	3,07	3,07	3,43	1,57	2,64	2,43	2,64	2,36	2,79	2,43
Swiss	Male	3,39	3,05	3,66	3,27	3,30	3,17	2,83	2,75	3,28	3,32	2,51		2,18			2,55	1,94
	Female	3,38	2,83	3,83	3,21	3,25	2,96	2,74	2,70	3,29	3,25	2,46		2,46			2,58	1,54
Total	Min	3,21	2,83	3,50	3,13	3,15	2,59	2,26	2,42	2,93	3,25	1,57	2,22	2,05	2,42	2,11	2,49	1,54
	Max	3,52	3,33	3,88	3,38	3,88	3,25	2,83	3,07	3,48	3,83	2,81	2,92	2,66	3,18	3,13	2,94	2,43
	Average	3,38	3,10	3,66	3,26	3,41	2,94	2,53	2,76	3,22	3,49	2,49	2,62	2,41	2,68	2,43	2,67	1,96

Figure 7-2: Job Expectations by Country and Gender (Means).

Some of the country differences could naturally be due to socio-demographic differences among the national samples resulting from differences in data collection. However, independent of this and independent of differences in gender and country (no colour marks in the column), a stimulating work environment and job security are regarded as very important in all five countries when looking for a job! We can also see from the table that Belgian respondents are significantly more attracted by fringe benefits than people from the other four countries. In the Netherlands, it is more important, compared to other countries, that the employer has a well-recognised name (but the score is still low). Sweden is the only country with both gender and country differences: training opportunities and power/influence are rated more highly than in other countries, especially among female respondents.

Respondents were also asked to rank the three most important factors among the same items. When one is forced to prioritize the factors, the most important factors are job security, good salary and good work atmosphere. These top-three factors are picked by 86 percent of the respondents (ranking the factor 1, 2, or 3). In short, independent of country and gender, these three items are really important characteristics when looking for a job.

Big, small and medium corporations are seen as most popular employers after the armed forces. Among male respondents, the police occupy third place; among female respondents, police are ranked in fourth place, along with the educational system. Not only is the similarity in ranking across countries surprising but also the popularity of the armed forces as an employer. From these data it would appear that contrary to what many people (among them military recruiters) believe, armed forces are potentially serious competitors on the labour market.

More stunning perhaps is the finding that women are also very much attracted by a job in the military. With the exception of the Netherlands, they also rate the armed forces as their preferred employer. The differences compared to male respondents are minor and not statistically significant. This is an important finding because it would suggest that is that the recruitment potential for females is no lesser than that of males. But again, one should be very prudent before jumping to a definitive conclusion here given that here also there is probably the same pro-military bias as in the whole sample.

Next to these similarities there are also some country peculiarities. Belgium is the only country where people still uphold the boy's dream of becoming a fire fighter. More correctly, it is not only a boy's dream, since women also place fire fighters quite high on their preference list, albeit not in third place like the men do. On the whole, the first three top rankings are reserved for uniformed professions, etc., the armed forces, the police and the firefighters. Among Belgian women who responded, the health system comes in second place. The Netherlands follows the general pattern but are peculiar regarding the ranking of Non-Government Organisations (NGOs) and the health system. Although respondents in the Netherlands are also highly interested in pursuing a job in the military, the average score is lower than that in the other countries. In Sweden, men are significantly more attracted by the armed forces than women (3.5 vs. 2.8), but among both groups, the armed forces come in first position. Norway is interesting because the first two most attractive employers are uniformed professions. The fact that Norwegians are interested in armed forces and police is important since it shows support for the recent decision for universal conscription in this country. Women also serve, and considering the outcomes of the analysis, it looks like this decision is in line with the attractiveness of the uniformed professions. The few female Swiss respondents clearly prefer the armed forces above all other possible employers, with the police coming in second place. In the Swiss militia system service is compulsory for men, whilst women serve voluntarily. The gender preferences seem a reflection of this system. Women serve voluntarily and willingly.

Another finding is that the perception of the armed forces is more related to the image of the armed forces than to a personal interest in joining. Items more connected to the individual's possibilities of joining the armed forces, such as values and the armed forces attractiveness, were less highly rated, which is somewhat worrying. Many items concern issues regarding the general perception of the military,

not necessarily something that will increase recruitment in the armed forces. The different methods of data collection and in some cases small sample sizes have probably influenced the results, but one clear trend is that there are many differences, however small, between countries.

On the one hand the EDA-study shows that armed forces are attractive to men and women alike, but on the other hand women do not believe that the military is active enough regarding equal opportunities policies. The upside of these findings is that armed forces could, by doing some efforts to do better regarding equal opportunity, easily increase their attractiveness among women and since women make up more than 50 per cent of the population, the recruiting prospects look favourable. Armed forces do have an enormous recruiting potential, but presently they squander the full potential, and allow human talent to be wasted. This conclusion may be harshly formulated as it is, but the situation can fortunately easily be remedied and only needs better equal opportunity policies that will impact women's perception of the Armed Forces as an employer where women are accepted.

Most respondents think that "armed forces are an essential organisation" (highest overall mean among the various items) but few agree that the things they value in life are the same as the ones armed forces value (lowest overall mean). On the whole armed forces in the five countries are evaluated positively, in terms of being a good employer, a modern organisation, pride in the Armed Forces and prestige. When differences are considered, the bottom line is that women do not seem less attracted than men by a job in the military but they think that armed forces should do more to recruit women, to give them equal opportunities. To sum up, they want the military to do more to promote equality and gender integration. Norway is an exception to this general finding. In Norway, the means between men and women are approximately equal except regarding the equal opportunities item.

7.3 RECRUITMENT OF WOMEN

7.3.1 Norway: The Jegertroppen

The targeted campaign implemented by the Norwegian Special Operations Commando (FSK) to recruit women for the all-female Special Operations Forces (SOF) platoon "Jegertroppen" provides a unique example of a proactive and tailored recruitment effort to bring women into combat domains in the military. The all-female platoon in many ways is the female twin to the traditional SOF platoon, Fallskjermjegertroppen (FJT). It may thus appear that the purpose of the two troops is the same. Before we go into the direct and offensive recruitment approach its useful to understand the context when establishing the platoon.

Since the 1960s the Norwegian Special Operations Commando (FSK)¹ have conducted basic SOF education through the traditional Fallskjermjegertroppen (FJT) The FJT is regarded as a very rigorous platoon, to which only the very best performing candidates are selected for service. It has been open to women since mid-1980s but no women have been successful in accessing the final phase of the selection process. The FJT is considered to offer an extremely rigorous and respected 12-month education period to prepare soldiers for advancement to Special Forces selection. However, this is not a goal for the all-female Jegertroppen. The Jegertroppen provides an opportunity to prepare women for close ground combat roles, inside and outside of the Norwegian SOF community:

The goal of the Jegertroppen is to improve operational capabilities. We believe that recruiting women to the Special Forces through an attractive 12 month conscription period can increase the overall diversity and operational value in the Norwegian Armed Forces. We do not want to change the requirements for admission but let the young women in the Jegertroppen work systematically against the requirements through the entire conscription period. (Eirik Kristoffersen, Commander FSK, 2014).

¹ It has gone under several different names since established in the 1960s, FSK is its current name.

Leaders and instructors from FSK told the researchers that the Jegertroppen should be “*a good day to increase the share of women in the Norwegian Armed Forces*” (NorAF) [27]. At the same time, these informants did not believe that FSK were given an assignment or directives that contributed to increased female participation in the NorAF to satisfy political objectives related to criticism of the Norwegian Army. On the contrary, they understand that the Jegertroppen is a self-initiated and voluntary project based on their operational evaluation and need for support from operationally competent women from the conventional structure. At the same time, they believe that the project has a high political value, reflecting positive gender-based values within and outside of Norway.

The political motivation, as already mentioned, is referring to an indirect criticism of the Norwegian Army (“*a little kick to the Army*”) for not looking at new ways to recruit, select and educate women when they realize that a competition-based integration on terms established for and dominated by men did not produce results. The political motivation also refers to a desire to investigate a unique approach to the recruitment of women:

The main idea of the all-female platoon was to create an arena for women, where they were allowed to develop and compete on their terms and not compete with men. That’s what the Norwegian Armed Forces has done in the last 25 – 30 years. Given a desire to increase the share of women, you put the women together with men, and voila, the integration is complete. Then you realize that this is not the case. The initial idea was to think a little bit controversial, think a little differently, turn 180 degrees over what has been tried over the last few decades. Let’s separate men and women in their basic training (conscription) see how it goes” (Leader/Instructor in Training Wing).

Despite handing out “hints” and “kicks” directed at the Army for failing to recruit and train women, the FSK is self-critical as well, especially with regard to access to military core capabilities. The FSK recognises that the selection criteria for traditional FSK have prevented women from accessing the basic SOF training. Every year there have been about 1,400 qualified male applicants for the FSK. Of these, approximately 300 meet selection criteria to further compete for very limited opportunities, which means that as little as one percent of applicants, or about four percent of those 300 who compete for available positions are admitted as aspirants in the FSK. The men competing for the few spots are in the upper part of men’s normal distribution on physical tests. As the FSK informers claim, “then, it goes without saying” that there are very few women who have the capability to outperform the highest performing men in the physical trials and gruelling selection processes.

A woman must be at the extreme end of the performance scale of the women’s normal distribution in order just to get to the final phase of selection for the FSK. In addition, if she were to be so extraordinary that she was able to win one of the few spots in the platoon, she would probably be the only woman in a male-dominated environment. In addition, as Kristiansen [28] points out she will then only be able to operate individually, or as part of a team of men, but FSK will still not be able to insert a team of women, which in some cases has been needed. Several of the FSK informants say that this is why they asked the question: “*How can we get the best women, just as we get the best men?*”.

Since FSK did not want to establish quotas for the selection of women, and then have them undergo training and education alongside men who competed for entry, the proposed solution was to establish a separate selection process where women compete with other women, and a subsequent training and education experience which would allow women to seek optimum physical performance on their own terms. Concurrently, the FSK remained open to women who wish to compete with men, however, the Jegertroppen is closed to men. This prevents women being placed within a process in which they are outstripped by physically stronger men who do not enter the competition for the FSK. Jegertroppen is reserved for women based on the objective of including more female soldiers in close combat roles, not more male soldiers.

When recruiting for Jegertroppen it was made known to potential applicants through several aggressive and focused recruitment measures. For instance, in 2014 and 2016, the NorAF recruitment office (FPVS) sent

out personal invitations to individual women with particularly good results from the military selection process (sesjon del 2). In addition, posts were placed on social media, information stands were set up and staffed with informed personnel at educational fairs and school visits. This multi-method outreach resulted in more than 300 applicants for the first all-female platoon starting in 2014, and around 200 applicants in each of the following years.

Also, in April every year, all the applicants for Jegertroppen were invited to Rena for further information about the service. They received a tour of the site/camp/barracks and were presented with information regarding the service they would be able to access throughout the conscription period. The primary function of this training weekend has been to prepare the candidates for what awaits them and give them some tips on how to train ahead for the selection starts in June. During this welcome and training weekend, a questionnaire consisting of eight questions was administered to all participants. Among other things, participants were asked: “Where/How did you know about the Jegertroppen and the FSK first time?”. From the answers to this question, we see that the NorAF’s active recruitment measures through initial selection, educational fairs and information letters in the mail, as well as friends/family/colleagues and individual searches on internet has provided important information channels. Notably, about 31 percent (N = 110) of respondents became acquainted with the Jegertroppen for the first time through the NorAF active recruitment efforts; about 30 percent became aware through friends, family, or colleagues, and 29 percent through information available on the internet. These results are presented in Figure 7-3.

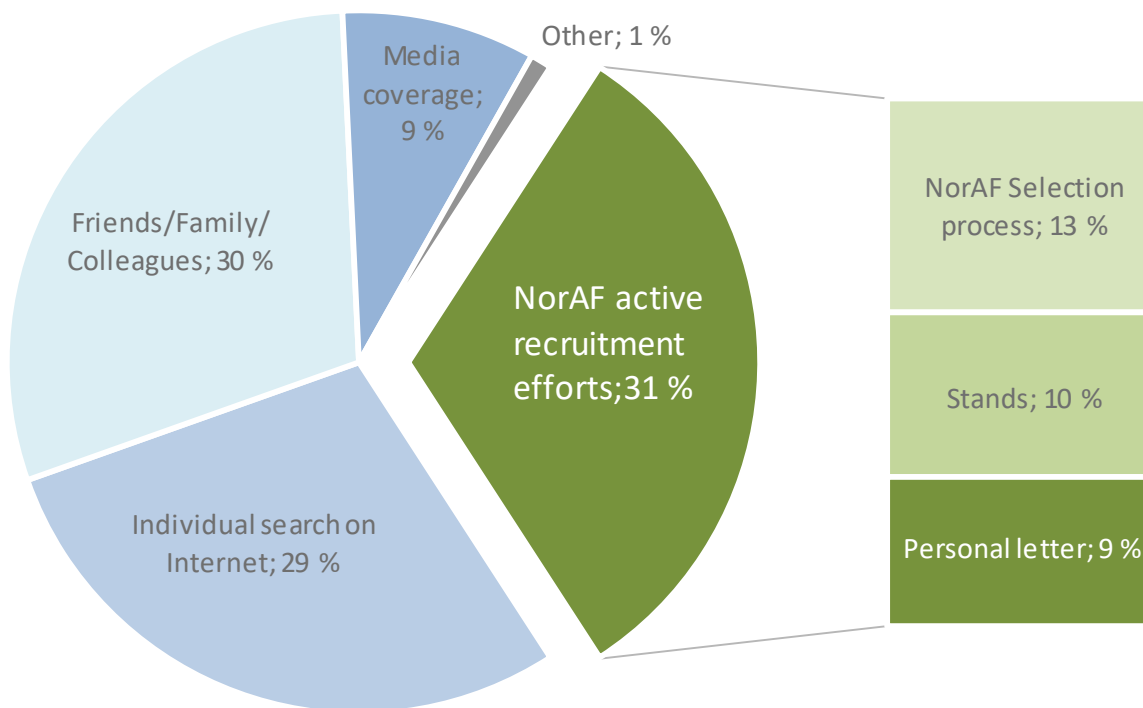


Figure 7-3: Sources of Information About Jegertroppen [27].

Since the launch of the Jegertroppen, the mention of the all-female platoon in the media increased sharply, with the peak attention through the TV documentary “Girls for Norway” being shown in the fall of 2016. It is therefore also highly possible that more women will have received information about the Jegertroppen through the media after release of this documentary. Material related to the Jegertroppen, such as those presented in Figure 7-4, are illustrative of some of the media coverage identified by nine percent of training weekend survey respondents.



Figure 7-4: Passive Recruitment: Randomly Selected Images from National and International News Articles on Jegertruppen.

Participants on the all-female training weekend were also asked an open-ended question: “What is the reason for applying to Jegertruppen?”. The vast majority of respondents took advantage of this opportunity and on average a text of 125 characters or 22 words was written. The shortest was less than 30 characters (3 to 5 words) such as “Sounds exciting” or “Likes challenges and exercising”. The longest ones were over 300 characters (60 – 75 words) and described several reasons in more detail, for example:

I’ve always wanted to work in the Norwegian Armed Forces and now I had the opportunity. I seek a challenging conscription service that can give me the best basis for further work in the Norwegian Armed Forces, such as Army NCO or in the Telemark battalion. I feel like the Jegertruppen is something that suits me well and I love a great challenge and like to gutz. I look at myself as a slightly tough and straight forward (boy) girl (Jegertruppen applicant at the training weekend).

From the free-text responses we see that women are seeking Jegertruppen first and foremost because they want a challenging and exciting challenge, where they tested personal boundaries, and how much they are capable of physically and mentally [27]. Several also mentioned seeking for “something extra” from their military conscription service. Of all the 108 responses to this question, 14 mention the possibility of a further career in the Norwegian Armed Forces as one of the main reasons for seeking Jegertruppen.

Later in the same survey, it is asked through an open question: “In your own words; what expectations do you have for the service in Jegertruppen?”. The shortest answers (3 to 6 words) stated expectations as “a great physical and mental challenge” and a “demanding and educational year”. The most comprehensive expectations were written with 60 – 80 words and emphasized both challenging challenges, learning, cohesion and collaboration:

A very tough and time-consuming military service, where I get to know my own and others’ constraints and qualities in demanding situations I have never encountered before. Getting to know a unique cohesive unity in the platoon, experiencing positive friendship despite sacrifices and energy consuming situations. I also expect a huge learning curve where I get a deep insight into the Norwegian Armed Forces’ work and how important it is to have a military defense in Norway.

The combination of positive passive and active recruitment efforts resulted in a very effective output for FSK and the Norwegian Armed Forces. The fact that the Special Forces is a unique and partly known unit to serve in attracted a new kind of women into military service. These women were not interested in getting special recognition for their experience, but they were genuinely interested in the service itself and were seriously considering a career in the Norwegian Armed Forces, something they did not consider before Jegertroppen was established.

7.3.2 UK Army: Increasing the Engagement and Retention of Women

The British Army is committed to increasing female inflow to broaden the intellectual diversity of the organisation and be more reflective of society. Engagement and recruitment efforts are routinely proactive and consciously inclusive in efforts to attract women to an Army career. However, it is recognised that more needs to be done to boost female inflow from historical norms of circa 10 – 11% towards the Army's desire to have women represent at least 15% of inflow by 2025 and increasing beyond. In November 2019, HQ Home Command led a planning 'sprint' with the aim of boosting female inflow into the Army. The initiatives which were generated from this and other existing initiatives were formalised into a FragO for subordinate commands (November 2019). Since then, a subsequent study into boosting female inflow even further was led by HQ Home Command in February 2020 and work is ongoing to develop the additional initiatives which were proposed, again underlining the Army's commitment to improve the recruitment of women.

Significant investment is made into regularly researching and providing insights into the attitudes of young women and their gatekeepers across society to understand the barriers and motivators to recruitment into the Army. An innovative and positive marketing campaign, 'Your Army 2020 – Army Confidence lasts a lifetime' projects an appropriate balance of women that promotes the institution as a career of choice and counters misconceptions of life in the Army. Messaging to inform gatekeepers of the attraction of the Army and what the Army offers women forms a key part of the engagement and recruitment strategy. Indeed, the number of women applicants to the Army is relatively healthy in comparison to male applications but extensive effort is being taken to reduce the much higher likelihood that women will drop off along the recruiting pipeline. This is achieved with candidate nurturing (face-to-face, by phone and virtually) to improve confidence, performance and maintain interest. In addition to routine employment training for recruiters, staff at all levels of the recruiting effort have undertaken an inclusive leadership programme. Each stage of the recruiting process, communications and marketing is scrutinised to reduce unconscious bias and boost attractiveness to both women and men.

In the engagement arena, planning is underway to establish Regional Engagement Teams to reinforce the delivery of wider engagement and increase the number of direct female engagements; an SO2 (OF3) woman will additionally be employed at each Regional Point of Command to coordinate and reinforce Diversity and Inclusion Engagement activity. The Army is routinely represented at high profile youth engagement events nationwide to raise the profile of the Army amongst women and men. There is an effort to maximise female opportunities within the Army Cadet Force and Combined Cadet Force to increase uniformed female role models within youth organisations. Meanwhile, the Army has established contracts to provide leadership initiatives to youth groups with high numbers of young women including Girlguiding, the Scout Association and England Netball. There are further initiatives planned to engage with women's sport organisations including rugby.

A positive lived experience for female soldiers is central to them advocating a career in the Army to other young women. There are numerous retention initiatives specifically designed to retain female talent and provide an attractive recruiting narrative. It is worth noting that many of the initiatives designed to improve female inflow are beneficial to male recruitment too.

7.3.3 Canadian Armed Forces: Seeking 25 Percent Representation by 2026

In recent years, the Canadian military has engaged in several key activities to address the employment of women including: a propensity survey [25]; initiatives to tackle sexual misconduct on the heels of a damning external review on sexual harassment and sexual misconduct in the Canadian Armed Forces [29]; multiple initiatives to strengthen diversity and inclusion, including gender inclusion; and the implementation of United Nations Security Council Resolution (UNSCR) 1325 (and subsequent women, peace and security SCRs) and gender-based analysis into planning and operations [30]. Canada's 2017 Defence Policy, *Strong, Secure, Engaged*, further reinforces the priority of these initiatives, along with a call to increase the representation of women to 25 percent by 2026 [31].

Efforts to increase the representation of women, although not directly focused on increasing the participation of women in ground combat roles, do recognise the importance of encouraging more engagement of women in those roles in which they are currently least likely to be serving in the military. While traditional recruiting methods continue to increase the recruitment of women (e.g., face-to-face information outreach, influencer events) unique and targeted approaches also include applications of behavioural science using social media and pre-recruit "boot camps" to provide realistic job previews.

Applications of behavioural science on social media engage experimental designs to better understand what type of messaging might have the most impact on the likelihood that women will reach out to join the military. In the first example, researchers used Randomized Controlled Trials (RCTs) to re-connect with applicants who had made initial contact with the recruiting system but did not follow through to submit an application. This approach was based on the concept of "nudging"; that is, interventions that influence people's decision-making, without constraining their freedom [32], and related initiatives similar to those that were implemented by the UK Behavioural Insights Team to enhance the UK Army Reserve application process [33]. Personalized email messages were sent to 3,336 CAF prospects (2,109 men and 1,227 women) encouraging them to consider one of 10 military occupations that had immediate openings. The messages were identical with the exception that some were sent by a male military member, some by a serving female member of the same rank, and some were generic with no sender identified. Analysis of the study concluded that although the messaging was more effective in encouraging men to continue with the application process (men were 1.67 X more likely to re-open their file than women), it did influence some women to continue with the process. Although previous research has placed emphasis on the importance of women having an opportunity to engage with other women in the recruitment process, this study did not provide evidence for preferences for women to engage with women. Women responded most favourably to the generic message, to a lesser degree to the male message, and very little to the female message; men responded equally to all three sources of messaging [34].

In another study, also based on behavioural insight, the Canadian government's Impact and Innovation Hub partnered with the Department of National Defence to run a social media marketing trial to determine best practices to increase engagement among Canadian women with a career in the military [35]. Seven ads were designed and tested on both Facebook and Instagram to reflect previous findings [36] related to opportunities and barriers to the engagement of women. For example, the first example described below (Ad 1) responds to research findings which indicate that women are apprehensive about their ability to successfully complete the physical demands of entry level basic training. The following summarizes the seven concepts explored by this Randomized Control Trial (RCT) [35]:

- **Basic Training (Ad 1)** – This ad uses social norms that are specific to women to help break down the widespread assumptions that underlie the perception that basic training, in particular the physical demands of training, is difficult for women;
- **Tuition (Ad 2)** – Financial support for education is considered as a key incentive for young women considering a career in the Armed Forces;

- **Badge Neutral (Ad 3)** – The Canadian Armed Forces badge is intended to convey the most neutral message possible, and to evoke a sense of patriotism;
- **Challenge (Ad 4)** – Communicates that a career in the armed forces is an exciting and challenging lifestyle;
- **Humanitarian (Ad 5)** – This ad frames a career in terms of helping others to highlight the humanitarian aspect of a CAF career that might be appealing to women;
- **Challenge – Neutral Image (Ad 6)** – This ad repeats the language from ad 4, with a more neutral picture, thus isolating the effects of the design in these ads; and
- **Humanitarian – Neutral Image (Ad 7)** – Similar to ad 6, this ad allowed for the isolation of the effects design for the humanitarian message.

Although true randomization was not possible due to the Facebook and Instagram ad auction systems, several steps were taken to maintain the validity of the trial (e.g., total budget allocated to each ad was kept equal). Engagement with each ad was measured over a three-week period by the Unique Click Through Rates (UCTR)². In some cases, UCTRs exceeded the engagement rate for Government of Canada social media advertising. Overall, when measured across both Instagram and Facebook and in English and French, the best performing ads, in order of performance, were the neutral badge (Ad 3), basic training (Ad 1), and tuition (Ad 2) ads. The tuition ad performed particularly well on Instagram, much better than the basic training ad, while the basic training ad performed better than the tuition ad on Facebook. The humanitarian ad (Ad 5) demonstrated the weakest performance overall, followed by the challenge neutral ad (Ad 6). The humanitarian neutral ad (Ad 7) closely followed as the third worst performer. Given some of the assumptions at work regarding the differences between the motivations and propensities of women and men, it is somewhat surprising that the humanitarian ads did not seem to evoke greater engagement among Canadian women. The analysis concluded that women were most likely to engage with ads that offer a values-based proposition, or challenged assumptions about a career in the Canadian military.

Each of the ads is presented in Figure 7-5. Ad 1 as it appeared on both Facebook and Instagram is presented to illustrate the slight differences on each social media platform. While Ads 2 to 7 were also placed on both social media platforms, the visuals in Figure 7-5 provide examples of only the Facebook or the Instagram version, but not both.

The CAF has also initiated a “Women in Force” program to offer Canadian women a “try-before-you-buy” experience to potential woman recruits with realistic information regarding the military and opportunities for women. Previous research identified five key areas that can affect the willingness of women to pursue careers in the CAF: deployments and postings; leave without pay; childcare support; long-term commitment or the ability to resign; and concerns regarding military culture and diversity. Further, the research suggests that women often make decisions not to pursue a military career based on lack of awareness or erroneous information regarding CAF policies and military lifestyle in these five areas [38]. The application of “try-before-you-buy” was recommended to address these gaps and thereby increase the likelihood that some women would be willing to try a military career or even a short-term engagement [35]. Although the concept of a realistic job preview is not a new concept, this CAF initiative offers information through an interactive experience, with some similarity to pre-recruit training programs that have been offered to Indigenous Canadians for well over 20 years.

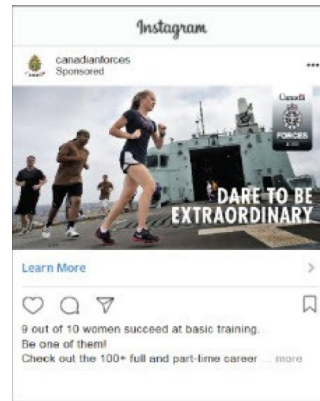
² UCTR is calculated using the total number of unique subscribers that clicked at least once on a link within the campaign and dividing that by the number of subscribers; this is considered more representative than a Total Click Through Rate (TCTR) which considers total clicks which may reflect multiple clicks of one subscriber [37].

Basic Training (Ad 1), Facebook.



Facebook

Basic Training (Ad 1), Instagram.



Instagram

Tuition (Ad 2).



Facebook

Badge Neutral (Ad 3).



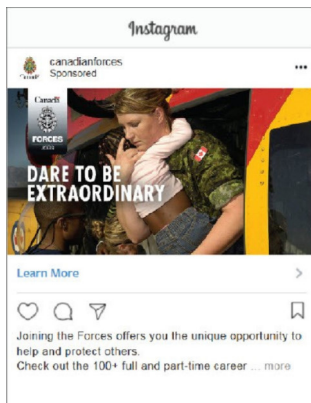
Instagram

Challenge (Ad 4).



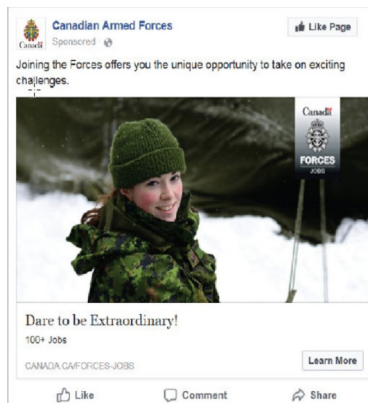
Facebook

Humanitarian (Ad 5):



Instagram

Challenge – Neutral Image (Ad 6):



Facebook

Humanitarian – Neutral Image (Ad 7):



Instagram

Figure 7-5: Social Media Posts for Randomized Controlled Trials [35].

In 2017, the CAF pilot tested a condensed three-day, and an optimum ten-day serial to introduce Canadian women to the CAF and life in the military. Although the scope and depth varied between the two courses, each course included introduction to six key components [38]:

- The CAF – role, mission, participation of women, rank, structure, ethos, service discipline;
- Military Skills – interactive sessions on dress, deportment, drill, weapons, and Chemical, Biological, Radiological and Nuclear (CBRN) defence;
- Recruiting and Selection – enrolment interview, aptitude testing, security clearance, fitness evaluation, and medical exam;
- Job Opportunities – 10-day serial included sessions with military women in different occupations, and a career fair for the three-day serial;
- CAF Community and Culture – the work environment in the Army, Navy, and Air Force, benefits of CAF membership, candid information regarding the challenges the CAF is facing (e.g., sexual misconduct) and how the CAF is addressing these challenges; and
- Developing Potential – career development and transferrable skills.

In assessing the initial administrations of the “Women in Force” serials, participants were asked to complete a survey at the beginning of the course, and another with many of the same questions at the end of the course. Women who took part in the 10-day serials in particular evidenced a significant increase in self-rated familiarity with different aspects of CAF membership, confidence about joining the CAF and transitioning into the military and were very positive about the CAF as a potential employer. Initial indications are that the serials will impact the recruitment of women as the majority of the participants on the first 10-day serial indicated that they were likely to apply to the CAF within the next 6 – 12 months [38].

Increasing the representation of women in the CAF to 25 percent is a challenging objective that will require the accumulated impacts of several initiatives and innovations. Importantly, innovations such as these are important in addressing long held assumptions regarding the motivations of women and the suitability of a career in the military for women – assumptions that are held by women about the military, and too often negative assumptions that are held and shared by those who resist the inclusion of women in the military.

7.4 SUMMARY

The discussion in this chapter highlights both the motivation for military organisations to recruit women as well as related efforts to recruit women to increase their representation in the Army or the military overall. As discussed, the considerable competition for talent as well as increasing recognition of the value of diversity in the military underscores the importance of reaching out to the full diversity of women and men across NATO and partner nations. This chapter discussed unique initiatives to better understand what motivates or acts as a barrier to women pursuing a military career, along with initiatives to address some of the misconceptions that women might hold regarding their suitability and capability for a military career. However, based on available information, efforts to target the recruitment of women into ground combat roles specifically has been quite limited. The example of Norway in establishing the Jegertroppen initiative with the specific purpose of increasing the availability of combat trained women for military service in ground combat roles is a notable exception. Notwithstanding, the relatively low propensity for women to seek military service in ground combat roles, efforts to provide women with realistic information and opportunity to join the military in any role is an important step in ensuring that interested and capable women will have an opportunity to engage in military ground combat roles as their military career choice.

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Chapter 8 – MEASUREMENT AND MONITORING: CULTURE CHANGE AND INTEGRATION

As discussed throughout this report, the integration of women into ground combat units presents a significant cultural challenge to long-held assumptions and practices regarding who is best suited to be a combat soldier, the qualities and attributes required of a combat soldier and perhaps most importantly, strategies for building cohesive and effective combat units. As discussed throughout this report, recent initiatives to integrate women into ground combat units have considered these challenges, along with numerous supporting strategies to establish, for example, gender neutral physical standards, adequate equipment and facilities, and equitable career opportunities.

The extent to which the integration of women into ground combat units is closely related to broader culture change efforts to establish cultures of inclusion; that is, a context within which all women and men are accepted and can contribute to military effectiveness. The process of integrating women into ground combat units can leverage decades of lessons learned regarding diversity and gender inclusion, and in many ways is simply the next step in removing barriers to the inclusion of women. However, the debates within contemporary military context, regarding the inclusion of women in combat roles have persisted for at least 40 years. Although the scope of resistance across our societies may have lessened, the intensity of the debates is still robust within some communities. Research to date tells us that the introduction of women into ground combat units presents particular disruption to all-male domains and related assumptions and values. As such, the integration of women into ground combat roles is clearly a culture change challenge that is both unique from and integrated with the broader objectives of increasing the participation of women in the military.

This chapter provides an overview of proposed monitoring frameworks that have been developed to respond specifically to the integration of women into ground combat units and closes with a summary discussion of the implications for sustained culture change as women are integrated into ground combat units.

8.1 MEASUREMENT AND MONITORING STRATEGIES

As introduced in Chapter 5, commitments to measurement and monitoring of a comprehensive range of facilitating initiatives including the allocation of resources, qualification standards, training curriculums and approaches, and related outcomes are important indicators of leadership commitment to change; these measures are also critical to sustained provision of the equipment, structures, and policies that will both influence and be optimized by culture change. Within the context of shared international priorities to increase the participation of women in military organizations (discussed in Chapter 2), the success of the integration of women into ground combat arms units is important. Yet experience among various nations over the last several decades tells us that as long as physical prowess continues to be the most important marker of a capable combat arms soldier, it is unlikely that the numbers and proportions of women serving in ground combat roles will be high enough to make a significant impact on the overall representation of women in military organizations. However, it is also true, that in spite of the challenges, the participation of women in these roles has increased and many women have been successful; today, women in ground combat occupations are serving in senior enlisted and officer roles.

The monitoring strategies discussed below span the early entry of women into the combat arms to the most recent initiatives to integrate women into ground combat units. Monitoring can be achieved in multiple ways, ranging from unit-level leadership-driven monitoring and reporting to the chain of command to research-driven approaches using qualitative and quantitative data. Data sources will also vary to include administrative databases, surveys, interviews, focus groups [1], non-participant observation and employee-driven feedback. Drawing from Pless and Maak's model for organizational change, a review

of best practices, regarding gender integration, culture, and leadership, suggests that during implementation of change it is important to facilitate open and participative dialogue to allow multiple perspectives to be taken into consideration [2]. Important considerations for monitoring further include internal and external oversight; the use of gender advisers; consistent monitoring; and monitoring that engages specialized knowledge of culture change and the implications of gender issues [1]. All of these considerations have been integrated in various ways into strategies to monitor the integration of women into ground combat roles and units. By way of example, examples that span over 30 years of integration experience are presented below.

8.1.1 Canadian Armed Forces: Internal and External Monitoring

The first women were recruited to train in the land combat arms as part of the Combat Related Employment of Women (CREW) trials that were launched in 1987. The key focus of the CREW trials was to determine if operational effectiveness was reduced as a result of the introduction of women into land combat arms units [3] and naval destroyers [4]. The trial terms of reference identified ten factors as specific contributors to operational effectiveness: performance of tasks (group and individual), leadership; morale, discipline, physical ability, training standards, teamwork, skill level, motivation, and satisfaction [5].

The research evaluation was intended to focus on the extent to which cohesion was established in the mixed-gender groups, including the role of leadership in facilitating the process [6]. The first women were recruited for training in the land combat arms in 1988. However, the research portion of the trials was never completed and the trials were superseded by the direction of a 1989 Canadian Human Rights Tribunal to fully integrate women into all environments and roles in the following 10 years. The Tribunal direction further stipulated that the process of integration was to be supported by internal and external monitoring of integration, and immediate implementation of appropriate modifications [7]. In 1990, an external advisory board was established to provide advice and recommendations regarding gender integration [8]; after making some 90 recommendations to the military regarding gender integration, the board was stood down in 1995 at the end of its five year mandate [6].

Concurrently, senior leadership directed Army unit level Commanders to monitor the following:

- Number of male and female personnel by occupation;
- Number of single parents by male/female;
- Number of releases by type of release (e.g., voluntary, medical) by male/female;
- Battle efficiency test failures, attempts by male/female;
- Preparation/deficiencies for mixed-gender-employment, including comments on the mixed-gender leadership guide;
- Difficulties / levels of performance during training courses and exercises;
- Difference in physical fitness levels of males and females\describe any changes to accommodate women;
- Trends or incidents of injuries or ailments of female personnel, including sick parade, light duty differences for male and female personnel, and impact on unit;
- Differences in male/female availability for duty, field or otherwise and why, include male/female comparative statistics;
- Impact of integration on unit – inter-personal relationship, cohesion and morale, incidents of fraternization and harassment;
- How women were employed;
- Acceptance of mixed-gender employment by male and female personnel; and
- Consequences to operational preparedness, effectiveness, and unit mission [9].

By 1997, 63 women were serving in the Regular Force in the land combat arms (53 enlisted, 10 officers), including three infantry soldiers and one infantry officer. However, the attrition rates of women from the combat arms were high, ranging from 2.3 times that of their male peers among enlisted field engineers, to 6.4 times among enlisted infantry soldiers [10]. Research was conducted in 1997 and 1998 to identify barriers to the integration of women into the combat arms [10], [11], and contributed to the implementation of a *Leadership in a Diverse Army* program across the Canadian Army in 1998. In 1998, an internal audit that was conducted on gender integration determined that there was a need to define the longer-term vision of full gender integration and to coordinate comprehensive plans in order to achieve these objectives [12]; *Leadership in a Diverse Army* provided this vision.

Since the gender integration study conducted in 1997 and 1998, the monitoring of women in the combat arms has been integrated into the broader monitoring of women in the Canadian military across all occupations, in complying with the Canadian *Employment Equity Act*. Compliance with the Act includes the obligation of employers to consult with employees who are members of under-represented groups in the organization, regarding employment barriers, policies and processes that impact employees [13]. As a result, advisory groups, comprised of volunteer members have been established to advise leadership on issues impacting members of their group. Also, an annual report is published that includes, among other things, data that tracks the representation of women by occupational group in the Regular and Reserve components of the military.

Although the proportions remain small, the numbers of women serving in the land combat arms in Canada has steadily increased since 1989, from 0.3 percent of enlisted and 0.4 percent of officers in the Regular Force, to 4.8 percent of enlisted and 5.5 percent of officers in the Regular and Reserve components combined, effective January 2020 [14]. This further breaks down to include 468 women (291 enlisted, 177 officers) comprising 3 percent of the Regular Force combat arms, and 1070 women (953 enlisted, 117 officers) comprising 6.8 percent of the Reserve Force combat arms. Although the highest in terms of absolute numbers, the proportion of women in the infantry occupations is the lowest with 99 women (51 enlisted, 48 officers) representing 1.8 percent in the Regular Force, and 583 women (491 enlisted, 92 officers) representing 6.2 percent of the infantry in the Reserve Force [15].

8.1.2 Australian Army: Rapid Feedback Loops

In 2012, the Government of Australia approved a five-year implementation plan for the removal of restrictions and the integration of women into combat role employment categories, including the Infantry Corps, the Armoured Corps, existing restrictions across Artillery roles, the Explosive Ordnance Disposal Squadron, and Combat Engineer Squadrons. The plan specified that success would depend upon performance management and evaluation that would take place across eight key domains:

- Work Breakdown Structure (WBS) (to ensure newly identified activities are listed);
- Activities and timeframes within the WBS, including those in upcoming phases;
- Stakeholders;
- Consultation;
- Equipment;
- Facilities;
- Occupational health and safety; and
- Risks [16].

The plan further specified that evaluation would be conducted at the end of each of four phases of the WBS: planning, preparation, transition, and integration phases [17]. In addition, the plan indicated that annual reporting on key milestones would be included in the Defence Annual Reports, from the 2011/12 to 2016/17 report [16].

In January 2013, application to combat arms training was opened to currently serving women, and in 2016 the first direct entry women began training in the land combat arms. As described in chapter 5, Australia conducted qualitative research with the first women who were preparing for and had entered infantry occupations. The purpose of the research was to monitor and better understand the experiences of these women, and importantly to provide a rapid feedback loop to Army stakeholders, thereby allowing senior leadership and the chain of command to adjust conditions, processes, and policies where required and possible. Effective 1 October 2018, 21 women (19 enlisted, 2 officers) had been posted to infantry units [18].

8.1.3 Developing Monitoring Frameworks: The US Marine Corps

As noted in Chapter 2, the 1994 Direct Ground Combat Definition and Assignment Rule (DGCDAR) which limited the participation of women in combat specialties and units, was rescinded in January 2013, along with direction to the US military Services to open all occupations and units to women as expeditiously as possible, but no later than 1 January 2016 [19]. In response, the US Marine Corps launched a comprehensive experimental research study to support the decision of the Commandant of the USMC regarding combat gender integration. For the purpose of this evaluation, female Marine volunteers were trained in combat occupational specialties that were closed at the time and integrated into an infantry battalion [20]. Analysis of evidence derived from the study considered the risks and mitigations of integration across four themes: combat effectiveness, unit readiness, individual Marine success, and institutional costs. In the final analysis it was determined that there would be some positive and some negative impacts resulting from combat integration. For example, while the research found that gender integrated teams performed as well or better than all-male teams on cognitively difficult tasks, the physiological differences between women and men resulted in a higher rate of injury among women [21].

Concurrently, a RAND study was conducted to consider the implications of integrating women into the US Marine Corps (USMC) Infantry. This study included comprehensive review of integration strategies, challenges, and monitoring initiatives employed by nations who had previously removed all restrictions on the employment of women in ground combat roles, including Australia, Canada, New Zealand, Norway and Sweden [1]. Based on review of a monitoring framework provided to the research team by the USMC, as well as review of monitoring activities related to the integration of women into combat roles in several other nations, the research team proposed a monitoring framework that emphasizes the importance of internal and external oversight, the significance of gender advisors, culture change and understanding gender issues, and the importance of consistent monitoring. The proposal further recommends a pre-integration planning phase, a second phase extending to five years after integration, and longer-term monitoring of individual, collective and institutional across nine categories and 20 sub-categories as presented below:

- Organization – individual and unit readiness;
- Training – initial entry training (recruit training, officer and soldier infantry training), and unit training;
- Materiel – individual clothing and equipment, and individual weapons and optics (e.g., optics, image enhancing equipment);

- Leadership and education – Professional Military Education (PME), mentorship and support, career development;
- Personnel – recruitment, assignment, promotion, attrition, retention;
- Facilities – infrastructure (accommodation, office buildings, training facilities);
- Policy – oversight, integration execution (temporary policies, execution, transition support), and integration cost (one time cost of planning programming, budgeting, and execution); and
- Attitude – misconduct (incidents, punishments, including sexual misconduct), cohesion and morale, and welfare (satisfaction, usefulness and morale among women) [1].

The implementation plan for the integration of women into the US Marine Corps included five phases.

Phase 1: Setting conditions – completed, ongoing and future actions pertaining to validated gender-neutral physical standards, female leader assignments, administration, Military Occupational Specialty (MOS) lateral moves, and education – ends when ground combat units become socialized and acculturated to serving with female Marines.

Phase 2: Recruiting – allow all interested and qualified women opportunity to access into ground combat arms MOS – enduring and continuous through all phases.

Phase 3: Entry Level Training – application of validated occupational standards to physically classify and qualify Marines for their chosen MOS – enduring and continuous through all phases.

Phase 4: Assignment – assignment of female Marines to ground combat arms units, female leaders to arrive prior to female enlisted Marines – enduring, continuous with some tasks ending when conditions are met.

Phase 5: Sustainment – implement MOS continuation standards, affording opportunities for viable career paths, monitoring and analysing integration progress and success, and make in-stride adjustments as required – enduring [22].

Phase 5 is of particular importance to ongoing efforts to monitor the integration of women. A second study commissioned by the USMC provided a long term plan to monitor the USMC Implementation Plan, across multiple layers, from individual to the institutional level, and across three key themes: combat effectiveness, health and welfare of Marines, and talent management. Across these themes, 15 research topics and sub-topics were identified, along with measures of effectiveness, measures of performance and related metrics [23]. The research topics and sub-themes that were identified for measurement and monitoring are presented in Table 8-1.

Reports which provide updates on the status of measuring and monitoring the integration of women into the Marine Corps Infantry are not publicly available; however, the *Marine Corps Times* reports that effective August 2019, 613 female Marines were serving in previously all-male units, and 231 women were serving in jobs previously closed to women [24]. The first three enlisted women joined an infantry battalion as infantry Marines in January 2017, and after graduating from the Marine School of Infantry as part of the USMC gender integration experimental research [25], the first woman successfully completed the Infantry Officer's Course in September 2017, the second in June 2018 [26]. In October 2018, the *Marine Corps Times* reported that two female officers and 26 enlisted soldiers had successfully completed infantry qualification training; at that time, one of those officers and all 26 soldiers were serving in infantry positions [27].

Table 8-1: Key Themes and Areas of Focus for USMC Measurement and Monitoring.

Combat Effectiveness	Health and Welfare	Talent Management
<i>Unit Readiness</i> (To be monitored by representation of women.)	<i>Injury rates, type and severity</i> <ul style="list-style-type: none"> Injury rates for recruits and Marines, comparing ground combat arms to non-ground combat arms. 	<i>Propensity</i> <ul style="list-style-type: none"> Enlistment. Officer accession. Applicant quality.
<i>Personnel Deployability Rates</i> <ul style="list-style-type: none"> Misconduct; Medical. 	<i>Relationship of accession height/weight to physical performance and injury rates and types</i> (Impact of opening ground combat roles.)	<i>Correlation of standards performance by Military occupation standards (MOS)</i> <ul style="list-style-type: none"> Ground combat arms initial strength test to MOS classification standards (MCS). MOS classification standards MOS specific physical standards (MSPS). Individual MOS classification standards to MSPS. MSPS to operating forces. Accession height/weight to long-term career viability.
<i>Use of Continuation Standards in Operating Forces</i> (Standards sustained, recorded, measured by MOS.)	<i>Materiel adaptations to equipment and infantry combat equipment</i> <ul style="list-style-type: none"> Safety. Opportunity. 	<i>ELT graduation, reclassification, and recycle rates and reasons by PEF/QSN, and MOSs</i> (Five year baseline.)
<i>Unit Cohesion</i> (Team to battalion level.)	<i>Misconduct rates and types</i> (Current and historical trends by gender.)	<i>Gender representation across all MOSs and unit types</i> (Changes since integration.)
	<i>Unit Cohesion</i> (Team to battalion level.)	<i>Effect of unit assignment criteria standards</i> <ul style="list-style-type: none"> Assignment processes and policy. Available qualified inventory. Turnover rates. Repeat assignments .
		<i>Career sustainability and viability</i> <ul style="list-style-type: none"> Relation of accession height/weight. Career milestones achieved. Enlisted FTAP, STAP, assignments, board selections, etc. Officer career designation, assignments, board selections, etc. Promotions/retention/board selection by MOS (five year baseline). Rates of qualified and considered by gender. Rates of selection by MOS. Rates of removal by request.

8.1.4 US Army

As discussed in some detail in Chapter 4, the US Army engaged in considerable research and consultations to identify risk factors and mitigation strategies to create the conditions that would be important to the success of the integration of women into previously closed combat occupations [28]. In 2016, the US Army released its gender integration implementation plan to include four key phases.

Phase 1: Set Conditions for the Army – train and educate leaders, update policies, set recruiters and cadre, finalize unit fill plans, develop longitudinal study plans, access, establish Occupational Physical Assessment Test (OPAT) scoring, implement validated occupational standards;

Phase 2: Initiate Gender Neutral Training – train women in accordance with implementation plan, initiate longitudinal studies, implement OPAT;

Phase 3: Initial Operational Capability (IOC) Assignment to Operational Units – assign women in accordance with unit fill plans, continue longitudinal studies, intensively manage and assign by cohort; and

Phase 4: Full Operational Capability (FOC) Sustain and Optimize – continue to access and train, achieve steady state operations [19].

The plan calls for continuous assessment and coordination with sister services throughout phases 2, 3, and 4. All phases are further supported by four lines of effort: transform accessions, talent management, unit fill plan, educate/communicate, and assessment. Assessment is further specified to include:

- 1) The development and implementation of surveillance studies to inform accessions and talent management decisions; and
- 2) Collaboration and coordination of studies with other Services to reduce resource requirements and identify best practices [19].

Approximately 15 studies are underway as part of first five-year phase of gender integration, and documented analysis is scheduled to start becoming available in 2020 [29]. Notwithstanding, the limited availability of measurement and monitoring information at this time, by August 2019, the *Army Times* reported that more than 1200 women had been accessed into infantry, armour and field artillery since 2019, and more than 30 women had graduated from Ranger school [30], considered to be an “all-but-required” test for a successful career in ground combat leadership [31]. The first two female officers to complete Ranger School in 2015 have transitioned to command positions in infantry units, and the first two enlisted women graduated from Ranger School in August 2018 and April 2019 [32].

8.2 BARRIERS TO INTEGRATION

Culture change practitioners and theorists are quick to note that many organizational change initiatives fail. Review of the literature reveals that there are numerous factors that act as barriers to successful change initiatives. Several of these key barriers are discussed below, with particular focus on implications for the integration of women into ground combat roles and units. The discussion below and various observations included in this report, suggest that these potential barriers should be considered within measurement and monitoring strategies and frameworks. The discussion further suggests that the successful integration of women into ground combat roles is dependent upon longer-term leadership commitment to measurement, monitoring, and continuous response to emerging and persistent challenges.

8.2.1 Clash of Values

The discussions of culture included throughout this report identify several key indicators of the conflict between the cultural values which tend to dominate combat cultures and the inclusion of women within those cultures. As presented in Chapter 2, the ongoing debate between the inclusion of women and different others throughout incremental stages of social change have been consistently characterized by concerns about operational effectiveness, or combat effectiveness within the current challenge. This concern is fundamentally based on values-based assumptions regarding appropriate roles for women and men in our societies. Shifting these assumptions requires the commitment of leaders who believe that integration can work; that is, leaders who have strategic vision and believe that socio-cultural change represents not only a commitment to fairness and opportunity for equitable contribution by women and men, but that change introduces opportunity to enhance effectiveness.

The US Marine Corps (USMC) culture research study that was launched in 2017, in response to the March 2017 Marines United Facebook misconduct, responds to the challenges of gender integration in the Marine Corps. Importantly, the research reveals the ways in which the posting on social media of sexually explicit photos, disparaging photos and pejorative comments regarding female Marines is symptomatic of embedded cultural values and beliefs that undermine the full inclusion of women in the Marine Corps. Of particular note, the report observes that calls for more professional and respectful behaviour in the workplace is frequently dismissed as “political correctness” or an indicator of the weaknesses of those who subscribe to such challenges to cultural norms. The analysis further confirms the ongoing confusion regarding the differences between equality, parity and equity; that is, misperceptions persist that equality is “the same for all”, rather than understanding that fairness takes the differing needs and experiences of individuals into accounts [33]. This USMC analysis is valuable in highlighting the relationships between the visible symptoms of culture, and the narratives and beliefs that are used to reinforce and protect cultural norms, while challenging diversity and inclusion initiatives. As discussed in chapter 3, these and related challenges are not unique to the USMC, but they do underscore the relevance of the cultural context within which the integration of women into ground combat units is taking place.

8.2.2 Externally Driven Change

Diversity or gender change initiatives that are based on pressure from outside of an organization rather than motivation from within the organization are clearly at risk of failure. The decision to integrate women into ground combat roles has never been made by those who participate as soldiers and leaders in ground combat roles and units. Insiders often claim expert knowledge to refute the wisdom of such a move [6], and frequently invoke reinforcement of the relevance of existing beliefs, policies, practices, and performance levels to emphasize the conditions for the exclusion and the insurmountable challenges of gender inclusion. Described by Rosabeth Moss Kanter as “boundary heightening” [34], such reinforcement of existing conditions renders newcomers on probation, through both formal and informal processes. The successful integration of women requires genuine leadership commitment and vision for successful outcomes. Even as some leaders resist the intrusion of outside direction within their domain, the authentic commitment and vision of influential leaders is important in overcoming resistance to externally imposed change.

8.2.3 Following Through to Sustain the Conditions for Success

As exemplified by several approaches discussed throughout the report, it is important to set the conditions for success across all domains of integration. However, change initiatives can fail if there is no follow through on the conditions for success beyond the initial stages of change. To sustain short term indications of change to longer term success, leaders and soldiers need to have the tools, resources, opportunities, and supports necessary to put the conditions into long term practice. For example, change initiatives often include preliminary awareness training, but do not provide further opportunities for the development of the skills and competencies necessary to successfully apply new knowledge, often in challenging and

complex situations. Without the required competencies and support of leaders and peers, individuals will be less likely to take the risk of engaging in new behaviours; if new behaviours are not practiced frequently and consistently, sustained culture change will be difficult [35]. This further supports the importance of establishing a climate of psychological safety, as discussed in chapter 6 within the context of bullying, harassment and sexual misconduct.

8.2.4 Using Performance Metrics and Incentives that Still Reflect the Old Culture

The integration of women into combat roles has relied upon gender neutral approaches, with a particular emphasis on ensuring that women and men are held to the same standards. Indeed, one of the earliest lessons learned was the imperative of women meeting the same physical standards as men if they wanted to be included in the combat arms [11]. As noted above, the US Marine Corps culture study confirms that insistence on sameness persists as military members continue to associate initiatives that promote fairness and equality with political correctness, weakness and double standards [33]. The value of a female soldier is persistently tied directly to her physical performance [10], [11], [33]. This is not to suggest that minimum standards for all soldiers are not important; however, as noted in chapter 2, such myopic focus on gender neutral standards fails to take into account strategies, tools and attributes that facilitate the full contributions of all soldiers, while valuing their differences [36], [37]. Analysts further suggest that the introduction of women into ground combat units creates opportunity to enhance military capability [37], [38]. Ongoing monitoring efforts should consider not only measurement against existing standards, but provide opportunities to identify practices that facilitate fairness, transparency and inclusion, as well as emerging changes with the potential to enhance contributions.

8.2.5 Sustained Measurement and Monitoring

Analysis suggests that the development and follow through of a comprehensive and clear monitoring framework is a challenging, yet crucial aspect of gender integration [1]. As countries strive to create inclusive conditions for the contribution of women and men to combat units, monitoring integration is imperative. Culture change strategies frequently include plans to measure and monitor indicators of change, and many researchers agree that the best measurement systems include subjective and objective, and quantitative and qualitative data [1].

Successful change is further supported by strong human resources support to measure and evaluate change processes and performance [39]. Many of the outputs (e.g., number of female recruits), efficiencies (e.g., resource usage such as person years), and outcomes (e.g., measure of desired effect) can be embedded within routine performance measurement frameworks. In the medium to longer term, it is important to measure and monitor climate and cultural influences such as opinions, perceptions, experiences, and behaviours. These measures might include surveys, focus groups and interviews to assess and measure, for example, discrimination, harassment attitudes toward women in combat arms roles, impact of training and development initiatives, unconscious bias, trust and confidence in leadership, and psychological safety. In the longer term, sustainment of short term change will depend upon leadership knowledge and response to embedded and changing expressions of values and beliefs expressed through social dynamics, cultural narratives, conduct and behaviour [40]. Early lessons learned indicate that the success or failure of gender integration, although top-down directed, will be closely related to the quality of leadership and social dynamics within unit and sub-cultural contexts [10], [11], [41]. Consequently, multiple measures and methods should be employed to ensure that the monitoring of integration takes the experiences and challenges of leaders and soldiers in operational units into account, to ensure that all have access to knowledge, tools, and appropriate role modelling to provide them with an opportunity to contribute to positive culture change.

8.3 SUMMARY

Each country will have different priorities and imperatives that are related to gender integration and culture change in their own military context, and it is important that the relevant strengths of various cultures are leveraged to support and enhance gender integration. Notwithstanding, there are similarities in the experiences across nations spanning three decades in regard to the integration of women into ground combat units and roles. This report suggests that there are several shared priorities and challenges for culture change. Notwithstanding the differences that will be adopted across nations, it is important to commit to a clear strategy for measurement and monitoring at the initial stages of integration, as well as accountability for mid to longer term monitoring of impacts, outcomes and opportunities related to shifting awareness, practices and behaviours at unit levels, and culture-based beliefs, values and assumptions across sub-cultures. While consistency over time is an important consideration, the strategy should also embrace an approach which is flexible enough to take lessons learned and emerging dynamics into account to guide improvement throughout the journey.

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- [31] Myers, M., (2018). Almost 800 Women Are Serving in Previously Closed Army Combat Jobs: This is How They are Faring. *The Army Times*, (October 9, 2018). Accessed from: <https://www.armytimes.com/news/your-army/2018/10/09/almost-800-women-are-serving-in-previously-closed-army-combat-jobs-this-is-how-theyre-faring/>.
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- [40] Davis, K. D. and Blais, A-R., (2019). *Socio-Cultural Change in Gender and Military Contexts: Measuring Values*, paper submitted to NATO SAS-137 Symposium, Integration of Women into Ground Combat Units. Quantico, Virginia, 5 – 7 February 2019. Accessed from: <https://www.sto.nato.int/publications/STO%20Meeting%20Proceedings/Forms/Meeting%20Proceedings%20Document%20Set/docsethomepage.aspx?ID=43970&FolderCTID=0x0120D5200078F9E87043356C409A0D30823AFA16F602008CF184CAB7588E468F5E9FA364E05BA5&List=7e2cc123-6186-4c30-8082-1ba072228ca7&RootFolder=https://www.sto.nato.int/publications/STO%20Meeting%20Proceedings/STO-MP-SAS-137>.
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Annex A – THE “GREY” LITERATURE, 2011 – 2019: ANNOTATED BIBLIOGRAPHY

This Annex provides annotations of 35 defence and produced for defence documents that are cited throughout this report; this includes research reports, directives, and implementation plans directly related to the removal of exclusions to the participation of women in ground combat roles, as well as supporting documents related to gender integration more broadly. The latter captures, for example, documents related to diversity and inclusion, and bullying, harassment and sexual misconduct. Unlike the systematic strategy used for the development of the categorized research bibliography presented at Annex B, the defence and government documents accessed for this report, reflect a “snowball” approach which was heavily influenced by the membership of the SAS 120 research task group; as a result, it is certain that relevant and valuable documents have been produced by countries that are not represented in this report or in this annotated bibliography. In particular, the selection of documents that support, but are not directly related to the removal of relatively recent combat exclusions for women, such as strategies, plans, reports and measures related to diversity and sexual harassment is quite limited. As such, readers interested in defence initiatives related to those themes will find this bibliography as a starting point for a focused search for more related material.

Notwithstanding the limitations, the information compiled in this Annex provides a foundation for those interested in further consideration of the analysis, planning and implementation strategies that supported the recent removal of combat exclusions, in the UK and the US in particular. In addition, the references cited below provide a useful complement to the categorized research bibliography (Annex B), which is the result of a search strategy that does not include a comprehensive accounting of defence documents.

- [1] Arnhart, L., Crosswhite, B., Jebo, B., Jessee, M., Johnson, D., Kerekanich, P., Lechtenberg-Kasten, S., McGrath, A., and Williams, B. (2015). Gender Integration Study. Fort Leavenworth, KS: TRADOC Analysis Centre. <https://dod.defense.gov/Portals/1/Documents/wisr-studies/Army%20-%20Gender%20Integration%20Study3.pdf>.

On 19 April 2013, Headquarters, Department of the Army (HQDA), issued strategic guidance for gender integration implementation planning. Designated Soldier2020, this initiative reflects the Army’s effort to address policies on women in combat and to evaluate all positions in the Army to determine their requirements – physical, mental, and emotional – regardless of gender. The goal of Soldier2020 is to enhance force readiness and capability by applying a scientific approach for evaluating and validating Military Occupation Specialty (MOS)-specific standards. This will aid leadership in selecting the best-qualified Soldiers regardless of gender for each position. As part of Soldier2020, HQDA tasked TRAC to conduct the Gender Integration Study to identify the institutional and cultural factors associated with integrating women into previously closed MOSs and units and to recommend implementation strategies. Based on extensive research and data collection, this report identifies the factors expected to affect integration, presents the results of a risk assessment and mitigation effort, and provides near-, mid-, and long-term recommendations.

- [2] Australian Government (2013). Removal of Gender Restrictions on Australian Defence Force Combat Role Employment Categories: Implementation Plan, Attachment 3.1, Army Work Breakdown Structure. Department of Defence. <https://www.defence.gov.au/uAT/women/docs/3-1%20Army%20WBS.pdf>.

This document details the Army work breakdown structure for the phases of the implementation plan (planning, preparation, transition, integration) for the removal of restrictions to the employment of women in combat role categories. This breakdown of tasks supports the implementation document; see Australian Government (2012).

- [3] Australian Government (2012). Removal of Gender Restrictions on Australian Defence Force Combat Role Employment Categories: Implementation Plan. Department of Defence. <https://www.defence.gov.au/uAT/women/docs/Implementation%20Plan2.pdf>.

On 11 April 2011, the Minister for Defence announced that the Department of Defence (Defence) would bring forward a plan to remove the gender restrictions on the remaining ADF combat role employment categories for which women were previously excluded. This announcement was formally endorsed by Government in late September 2011 with a caveat to implement it within five years. The Implementation Plan details the actions and the timeline to achieve the removal of barriers to women’s participation in all ADF combat role employment categories.

- [4] Boulton, E. (2017). Teaming: An Introduction to Gender Studies, Unshackling Human Talent and Optimising Military Capability for the Coming Era of Equality: 2020 to 2050. Australian Army. https://researchcentre.army.gov.au/sites/default/files/teaming_lo_res.pdf.

The purpose of Teaming is to provide Army with a deeper understanding or ‘rich picture’ of gender and how this may influence the world of 2020 to 2050. The report includes eight chapters across three sections:

- Part I: The strategic context – global trends; and the military operating environment.
- Part II: The Cultural Context – insights from gender studies; women; and men.
- Part III: Implications – teamwork; leadership; strategy and capability.

The report includes recommendations, suggested solutions and samples resources and scenarios for Army leadership teams, cultural development and education, and strategy and policy resource activities.

- [5] Brown, A., Adams, B.D., Filardo E-A., and Richards, K. (2015). Impacts of Culture and Leadership on Gender Integration and Operational Effectiveness in Male Dominated Environments. Guelph, Canada: HumanSystems® Incorporated. (Defence Research and Development Canada Director General Military Personnel Research and Analysis, Contract Report, DRDC-RDDC-2015-C087).

The contracted report examines the role of leadership in supporting and promoting gender inclusion in the military and in combat arms. More than 50 articles were identified for detailed review. Theories, concepts, and measures used in various male-dominated environments are reviewed. A mind map process yielded a set of primary keywords to focus the literature search. The review reiterates the importance of leadership role in supporting and promoting gender integration in the organization and underlines a number of cultural barriers that hinder women’s full inclusion including sexual harassment, and isolation in both military systems and other non-traditional occupations (e.g., law enforcement, mining). The review outlines areas for changing organizational culture that include creating the motivation to change, learning new concepts, meanings and standards, and promoting internalization of these among both the leaders and members of the organization. Emphasis is placed on measurable and observable targets to track progress toward gender diversity goals.

- [6] Cotter, Adam (2019). Sexual Misconduct in the Canadian Armed Forces Regular Force, 2018. Ottawa, Canada: Statistics Canada. <https://www150.statcan.gc.ca/n1/en/catalogue/85-603-X2019002>.

This report presents the findings of the second administration of the Survey of Sexual Misconduct in the Canadian Armed Forces; the survey was administered to the entire population of active Regular Force members in 2016, and all active members of the Regular and Primary Reserve in 2018. The survey measures members’ experience of sexual assault, sexual harassment, sexualized and discriminatory behaviours, from victims/survivors, direct and indirect 3rd party perspectives. The survey also measures knowledge and perceptions of policies and response to sexual misconduct. The results are analysed by gender (including LGBT), environmental command, age, rank, and other

diversity factors, wherever possible. The findings presented in this report represent only the perceptions and experiences of active Regular Force members; for Primary Reserve Force report, see Burczycka, M. (2019). *Sexual Misconduct in the Canadian Armed Forces Primary Reserve*, 2018. Ottawa, Canada: Statistics Canada. <https://www150.statcan.gc.ca/n1/en/catalogue/85-603-X2019001>.

- [7] Curry Hall, K., Keller, K. M., Schulker, D., Weiland, S., Kidder, K. L. & Lim, N. (2019). *Improving Gender Diversity in the U.S. Coast Guard: Identifying Barriers to Female Retention*. Homeland Security Operational Analysis Center operated by the RAND Corporation, 2019. Retrieved from https://www.rand.org/pubs/research_reports/RR2770.html.

This report documents the results of a mixed-methods study designed to help identify the root causes of female attrition in the active-duty Coast Guard and develop recommendations to help mitigate identified barriers to the retention of active-duty women. The study analysed trends in retention data and conducted focus groups with over 1,100 active-duty Coast Guard members (women and men) across ten locations. This report describes the key retention factors identified through these analyses and provides recommendations for improving U.S. Coast Guard policies and programs to address potential barriers and improve female retention. Key barriers are identified, along with recommendations, across three key themes:

- 1) Work environment factors, including leadership, gender bias, discrimination, sexual harassment and assault, and burnout;
- 2) Career factors, including reduced career opportunities limiting advancement, unpredictable assignments and undesired locations, and potential civilian opportunities (all important, but less impact than the work environment for women; and
- 3) Family as an essential factor, regardless of marital or parental status.

- [8] DEOMI (2014). *Sexual Assault Prevention and Response Climate Report: Department of Defense and Reserve Component Results*. Defense Equal Opportunity Management Institute, Directorate of Research Development and Strategic Initiatives.

The Sexual Assault Prevention and Response Office (SAPRO) partnered with the Defense Equal Opportunity Management Institute (DEOMI) to create Sexual Assault Prevention and Response (SAPR) climate questions for inclusion on the DEOMI Organizational Climate Survey (DEOCS). The purpose of the current document is to report results of the SAPR climate tool collected on DEOCS 4.0 between 1 April 2014 and 30 June 2014 at the (a) individual-level across the Department of Defense (DoD) and the Reserve Component and (b) unit-level across DoD. These questions aid commanders in identifying the climate associated with SAPR within their unit. The DEOCS includes seven measures:

- 1) Perceptions of safety;
- 2) Chain of command support;
- 3) Publicity/communication of SAPR information;
- 4) Unit reporting climate;
- 5) Perceived barriers to reporting sexual assault;
- 6) Unit prevention climate; and
- 7) Restricted reporting knowledge.

- [9] Department of National Defence. (2017). *Strong, Secure, Engaged – Canada’s Defence Policy*. http://publications.gc.ca/collections/collection_2017/mdn-dnd/D2-386-2017-eng.pdf.

Canada’s 2017 Defence Policy presents the vision and approach to defence of the Government of Canada. This policy focuses on the women and men who serve in the Canadian Armed Forces,

articulating priorities for well-supported, diverse and resilient members and their families, a culture of respect and honour, an increase in the representation of women to 25 percent, the application of gender based analyses to all policies, programs, services and other initiatives, enhanced investigation and prosecution of sexual offences, institutionalized culture change to enhance response to sexual misconduct, and enhanced understanding and response to challenges related to child soldiers and women, peace and security. The latter includes the integration of gender perspectives into the analysis, planning, execution and evaluation of all operations; gender-based analysis was applied to the development of this defence policy.

- [10] Deschamps, M. (2015). External Review into Sexual Misconduct and Sexual Harassment in the Canadian Armed Forces. Ottawa: Department of National Defence Contract No 8404-15008/001/7G. <https://www.canada.ca/en/department-national-defence/corporate/reports-publications/sexual-misbehaviour/external-review-2015.html>.

This report presents the findings and recommendations resulting from the external review of Canadian military policies, procedures and programs in relation to sexual harassment and sexual assault. The External Review Authority (ERA) conducted focus groups, face-to-face interviews and telephone interviews in 2014 with military members across Canada, including reserve and regular members, and all ranks and environments (Naval, Land, and Air Force, and training). The ERA also met with two civilian organizations, one operating in the law enforcement sector and one commercial corporation, and reviewed information concerning the practices of a number of other armed forces, to examine “best practices” in addressing inappropriate sexual conduct in the workplace. The report includes 10 recommendations made to the Canadian Armed Forces, including the development of a strategy, guided by gender-based analysis, to effect culture change to eliminate the sexualized environment and enhance the integration of women.

- [11] Ewles, G, Emrah, E. and Budgell, G. (2017). Literature Review – Integration of Gender Perspectives into Operational Roles: Critical Mass. Ottawa, Canada: Human Resources Systems Group, Inc. (Defence Research and Development Canada Director General Military Personnel Research and Analysis Contract Report, DRDC-RDDC-2017-C263).

The purpose of this literature review is to provide a comprehensive interdisciplinary review of the associated theories, interpretations, and applications of critical mass theory, with emphasis on gender diversity, and in particular the representation of women. Gender-Based Analysis Plus (GBA+) was used as the guiding framework to conduct this literature review. This review focused on concepts related to the inclusion, participation, and integrated contributions of minority group members in organizations – specifically:

- 1) The development of critical mass theory, including key constructs or concept;
- 2) The application of critical mass theory in social science research;
- 3) The identification of strengths, gaps, and limitations associated with critical mass theory and related research; and
- 4) Recommendations for opportunities to apply critical mass theory in future research.

Despite interest in critical mass theory, there is limited empirical research investigating the associated principles or propositions within organizational contexts. Of the research available, findings have been mixed, with some support for the negative implications associated with low levels of representation (e.g., increased performance pressures, heightened visibility). However, criticisms of critical mass theory highlight the nuanced nature of team dynamics, emphasizing the role of context in the emergence of individual behaviours and group-level outcomes. Based on these criticisms, many researchers have moved towards more holistic approaches to the study of diversity, social integration, and inclusion in the workplace. Limitations of available literature and recommendations for future research are discussed.

- [12] Fosher, Kerry, Edwards, Jennifer, Lane, Rebecca, Tarzi, Erika, Post, Kristin & Gauldin, Eric (2018). Marines’ Perspectives on Various Aspects of Marine Corps Organizational Culture, Centre for Advanced Operational Culture and Learning, US Marine Corps. https://www.usmcu.edu/Portals/218/CAOCL/files/MCOOCR%20Report%20to%20PSO%2030Mar18_wDem_FINAL.pdf?ver=2019-09-05-135301-060.

This report presents research and analysis conducted by the Marine Corps Organizational Culture Research (MCOCR) Project, Marine Corps University Center for Advanced Operational Culture Learning (CAOCL), of seven core themes of interest to the Personnel Studies and Oversight Office of the US Marine Corps: online sexual misconduct; leadership; the procedural and social uses of the combat and physical fitness tests; the experience of women Marines; hostile environments; Marine decisions regarding retention/attrition; and cohesion, leadership, and difference through the lens of humour. The research reflects the perspectives of Marines as they relate to three broad topics – social cohesion, gender bias, and leadership, while addressing online sexual misconduct. Interviews and focus groups were conducted in 2017 with 267 Marines. Although the research, which was triggered by the March 2017 Marines United Facebook misconduct and focused on seven themes identified by leadership, the research design allowed Marines to introduce the topics that they felt were significant to the overall intent of the research. The report presents the analysis and four key takeaways related to leadership skills, value conflicts, limitations of messaging related to equality and professionalism, and the high level of motivation among Marine Corps personnel, women and men, to be part of the solutions to the challenges that the Marine Corps faces.

- [13] Government of the United Kingdom (2016). Women in Ground Close Combat Findings Paper – 17 May 2016. Retrieved from: <https://www.gov.uk/government/publications/women-in-ground-close-combat-roles-review-2016>.

The 2015/2016 review supports lifting exclusions on women from ground combat roles with updated understanding on potential health risks to women in GCC roles. The review captured key findings from the Interim Health Report including, for example, women at higher risk of Musculoskeletal Injuries (MSkl) as compared to men due to different physiology, a higher rate of medical discharge among servicewomen than servicemen, and potential mental health. A component of international analysis on for example US and Australia Armed Forces’ experiences is included in the paper. Recommended courses of action include a starting timeline and a phased approach for implementation in order to balance the speed of delivering the lifting and risk management. Contents for a roll-out plan are detailed, including: women will not be in high risk roles until all mitigations are in place; mitigation against health risks will focus on a small number of units first; seeking for ways to maintain coherence with existing policies of exclusion to protect combat effectiveness, and a gender free physical standard but no quotas or targets for women in GCC roles.

- [14] Government of the United Kingdom (2014). Women in Ground Close Combat (GCC) Review Paper – 01 December 2014. Retrieved from: <https://www.gov.uk/government/publications/women-in-ground-close-combat-gcc-review-paper>.

The 2014 review assesses the exclusion of women from ground close combat roles, by identifying the benefits and risks of policy change on the recruitment of women in ground close combat roles. The review covered all Army services of the Navy, the Air Force and the Chief of Defence Personnel, and built upon reviews conducted in 2002 and 2010. The 2014 review places particular focus on assessing the impact of a change. The review was conducted on a premise that all roles should be open to women without a compromise of the central issue – combat effectiveness. The review identified nine lines of work, from various impact assessment to legal cases review, and implementation planning. It is notably that initiatives to create new capabilities or organisations that seek to integrate female talent were out of scope. This review also noted to ensure the outcome

does not have a disproportionate impact on those in the Protected Characteristics groups. The review gains a fair understanding of the physical, physiological and health differences between the sexes and genders, and studied 21 factors that affect combat effectiveness, among which cohesion and combat effectiveness are most relevant. The paper pointed out uncertainties exit concerning physical differences and its effects of combat effectiveness. It recommended programme of physiological research to further understand physical challenges and health risks for women in GCC roles for courses of action to remove the current exclusion.

- [15] Hanson, T., Steder, F.B. and Kvalvik, S.N. (2016). Hva motiverer til tjeneste i Forsvaret? En innledende kvantitativ analyse av holdninger og adferd i Brigade Nord [What Motivates Military Service in the Norwegian Armed Forces? – A quantitative analysis of attitude and values in the Army Brigade, FFI-rapport 16/01012. <https://publications.ffi.no/nb/item/asset/dspace:2608/16-01012.pdf>.

In order to better understand what influences the soldiers' desire to continue serving in the Armed Forces after the initial compulsory period, FFI has in the time period 2014 – 2016 conducted a survey of attitudes and behaviour in Northern Brigade. The report includes analysis of the data from the first full year of this survey. The analysis considers six main topics, all connected with the main theme of soldiers' motivation for further service in the Armed Forces: attitudes and prejudices; gender role identity; bullying and sexual harassment; well-being; and intrinsic and extrinsic motivational factors.

- [16] Hellum, N. (2014). «Sminkedritt over hele vasken» – En kvalitativ feltstudie av kjønnsblandede rom og maskulinitetskultur i Forsvaret [Make-Up-Crap All Over the Sink – A Qualitative Field Study of Mixed-Rooms and Masculine Culture in NorAF] (FFI-rapport 14/02156), <https://publications.ffi.no/nb/item/asset/dspace:2462/14-02156.pdf>.

The report is based on the Norwegian Defence Research Establishment (FFI) study commissioned to assess the mechanisms and impacts of mixed rooms practise. The study employed participant observation, interviews, and informal conversations with conscripted soldiers and officers to gain access to the experience of women and men, with particular focus on perceptions of mixed rooms, sexual challenges, and masculinity culture. The study reveals frequent and intimate exposure tend to lead to family-like relationships, which reduces sexual tension between roommates of the opposite sex.

- [17] Marquis, Jefferson P., Farris, C., Hall, K.C., Kamarck, K.N., Lim, N., Shontz, D., Steinberg, P.S., Stewart, R., Trail, T.E., Wenger, J.W., Wong, A., and Wong, E.C. (2017). Improving Oversight and Coordination of Department of Defense Programs that Address Problematic Behaviors among Military Personnel. Santa Monica, California: The RAND Corporation. https://www.rand.org/pubs/research_reports/RR1352.html.

This report provides the results of a RAND study examining the integration of programs for addressing a particular set of problematic behaviours: sexual harassment, sexual assault, discrimination, substance abuse, suicide, and hazing. The report combines the results of the two major lines of research: the first related to the development of a typology of common risk and protective factors and prevention methods for problematic behaviour, and the second related to the organization, coordination, oversight, and managerial practices of programs at the DoD-wide and service levels to address problematic behaviour.

- [18] Lin, I., van der Werf, D., and Butler, A. (2019). Measuring and Monitoring Culture Change: Claiming Success. Ottawa, Canada: Human Resources Systems Group, Inc. (Defence Research and Development Canada, Director General Military Personnel Research and Analysis Contract Report, DRDC-RDDC-2019-C039).

The overall purpose of this research is to provide a comprehensive review and annotated bibliography of culture change frameworks, strategies, and methods to assess cultural change at various stages of the change process. Specifically, this review:

- 1) Provides a summary analysis and annotated bibliography of culture change frameworks that are supported by evidence-based research strategies;
- 2) Identifies what possible methods are used to assess cultural change at various stages of the change process, including those measures or metrics that are used to support claims of the achievement and/or sustainment of change objectives; and
- 3) Describes the measure or methodology, population assessed, key findings, strengths, and limitations of each research paper identified.

- [19] ManTech International Corporation (2017). Marine Corps Integration, Implementation, Research and Assessment Study: Longitudinal Assessment Plan. Submitted to US Marine Corps, Combat Development and Integration, Operations Analysis Directorate. Lexington Park, MD, USA: ManTech Engineering Systems Corporation.

The Longitudinal Assessment Plan of the Marine Corps Integration Implementation Plan (MCIPP) attempts to provide a framework for longitudinal observational monitoring of plan implementation and the progress of gender integration across the Marine Corps. The research plan bears assessment analyses in the design, exemplified by datasets including the Marine Corps data, for example the Marine Corps Total Force System records, the Marine Survey and Analysis branch longitudinal survey responses, and independent research survey data and analysis and personal interviews. The Assessment Plan uses the operational lenses of Combat Effectiveness, Health and Welfare, and Talent Management to evaluate across five phases of a Marine’s career – Recruit, Train, Develop, Deploy, and Retain. The Plan exemplifies a transparent, bottom-up method of assessing the progress of change by capturing and analysing multiple-sourced information at both individual and institutional levels.

- [20] Markson, H. (2018). Sexual Harassment: Report 2018. Directorate of Personnel Strategy, Army HQ, UK. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/736177/20180821_Sexual_harassment_report_2018_OS.PDF.

The document includes results from the 2018 Sexual Harassment Survey administered to all Regular and Reserve service members in British Army. The 2018 survey is a follow on the 2015 survey, both of which investigate the nature, prevalence, and management of sexual harassment within the British Army. The 2018 Survey gathered experiences of sexual harassment among military women and men with a view toward comparative analysis with the results of the 2015 survey. The report reveals that unwanted sexualized behaviours remain prevalent, though with a downward shift in UK army. Since 2015, both the percentage of reported experience of generalized unwanted sexualized behaviours and targeted sexual behaviours have reduced except for a notable increase of sending sexually explicit materials skewed to junior ranking segment. Analysis indicates a positive perception of Army efforts to tackle unacceptable behaviours including visible and active leadership since 2015. Troublemaker is still considered a label when it comes to making a complaint and reporting.

- [21] NATO (2017). Summary of National Reports of NATO Member and Partner Nations to the NATO Committee on Gender Perspectives. https://www.nato.int/cps/en/natohq/topics_132342.htm.

The 2017 Summary report on the implementation of the UNSCR 1325 is the fourth edition of NATO’s overview on the integration of gender perspectives in the armed forces of NATO member and partner nations. The Summary is produced based on collated data gathered from all NATO

members and 11 partner nations’ national statistics, policies, and programmes on women in the armed forces, focussing on recruitment, retention, work-life balance and women in military operations. Built on previous years’ data and analysis, the summary provides snapshots of trends and developments from 1999 to 2017 and includes profiles for each NATO member and partner nation, including lessons learned and best practices.

- [22] NATO (2016). Summary of the National Reports of NATO and Partner Nations to the NATO Committee on Gender Perspectives, 2016. https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2018_01/1801-2016-Summary-NR-to-NCGP.pdf.

The 2016 Summary report on the implementation of the UNSCR 1325 is the third edition of NATO’s overview on the integration of gender perspectives in the armed forces of NATO member and partner nations.

- [23] New Zealand Ministry of Defence (2014). Maximizing Opportunities for Military Women in the New Zealand Defence Force. Wellington, New Zealand (February 2014). <https://www.defence.govt.nz/publications/publication/maximising-opportunities-for-military-women-in-the-new-zealand-defence-force>.

At the request of the Minister of Defence, this Review is a broad and independent examination into the treatment of women in the New Zealand Defence Force. It explores the degree to which Regular Force women are: treated equitably; able to achieve their full potential; and are safe from harassment, bullying and assault. The review has drawn on information from reviews of international literature and NZDF policies, data sourced from NZDF administration data and organisational surveys, and interviews with NZDF personnel. The Report makes four recommendations:

- 1) Recruit the best personnel, by focusing on a broader potential candidate pool;
- 2) Expand systems to increase women’s retention;
- 3) Improve pathways for women to attain senior leadership roles; and
- 4) Further reduce discrimination, harassment and bullying, particularly in recruit training.

Subsequent reviews of military women were anticipated in 2015 and 2018, and the NZDF was working through an action plan and recommendations for the way forward.

- [24] Randazzo-Matsel, A., Schult, J., and Yopp, J. (2012). Assessing the Implications of Possible Changes to Women in Service Restrictions: Practices of Foreign Militaries and Other Organizations. Center for Naval Analyses (CNA) Analysis and Solutions. https://www.cna.org/CNA_files/PDF/DIM-2012-U-000689-Final.pdf.

The Marine Corps reviews policies and practices of four militaries, namely Australia, the United Kingdom, Canada and Israel, and two professions including fire-fighting and Special Weapons And Tactics (SWAT) policing in order to learn about women’s physical abilities and the effects of gender integration on unit and organizational dynamics. Overall, the review found that a small percentage of women were able to meet the physical demands of ground combat service or physically taxing occupations.

- [25] Rey Juan Carlos University, Australian Human Rights Commission, and Australian Defence Force (2015). UNSCR 1325 Reload, An Analysis of Annual National Reports to the NATO Committee on Gender Perspectives from 1999-2013: Policies, Recruitment, Retention & Operations. Brussels, Belgium: The NATO Science for Peace and Security Programme. https://www.nato.int/issues/nogp/meeting-records/2015/UNSCR1325-Reload_Report.pdf.

Marking the 15th anniversary of UNSCR 1325, the Reload report attempted to assess the impact of the implementation of UNSCR 1325 and related Resolutions on women as well as gender integration in the Armed Forces among NATO’s twenty-eight member countries. The researchers reviewed various actions taken by NATO members for integrating women in the armed forces with respect to:

- 1) National legislation and policies;
- 2) Human resources;
- 3) Military operations; and
- 4) Sexual assault prevention mechanisms.

The report also includes Australian Defence Force as a case study for best practices and lessons learned for achieving the goals of increasing women’s participation in the military. Recommendations presented to increase the participation of women in militaries across NATO include a holistic framework covering various areas of legislation, recruitment, retention, career development, work-life balance, sexual assault and harassment prevention; development and implementation of National Action Plans; strong leadership, and more research and analysis including for the purpose of monitoring, , and recruitment policies that utilises social media mechanism to appeal to young people.

- [26] Schaefer, A.G., Wenger, J.W., Kavanaugh, J., Wong, J.P., Oak, G.S., Trail, T.E., and Nichols, T. (2015). Implications of Integrating Women into the Marine Corps Infantry. Santa Monica, California: The RAND Corporation. https://www.rand.org/pubs/research_reports/RR1103.html.

The RAND report presents a historical overview of the integration of women into the U.S. military that delves into the importance of cohesion. The researchers use a comparative lens to conduct analysis of the military experiences of several nations with regards to the issues of recruiting and retaining, human resource management policies, targeted recruitment and retention policies, and leadership commitment and accountability. The report sheds light on potential one-time and recurring costs associated with integration, and presents a comprehensive framework for implementing gender integration which includes the development of an implementation plan and assignment of accountabilities, establishing internal and external oversight mechanisms, monitoring standards and training, monitoring progress, recruiting, hiring, promotion, and retention, and continuous research and experimentation linked to data collection, analysis, and evaluation.

- [27] Szyna, T.S., Larson, E.V., O’Mahony, A., Robson, S., Schaefer, A.G., Matthews, M., Polich, J.M., Ayer, L., Eaton, D., Marcellino, W., Miyashiro, L., Posard, M., Syme, J., Winkelman, Z., Wright, C., Zander-Cotugno, M. and Wesler, W. IV. (2016). Considerations for Integrating Women into Closed Occupations in U.S. Special Operations Forces. Santa Monica, Calif.: RAND Corporation. https://www.rand.org/pubs/research_reports/RR1058.html.

This report has two main objectives. It assesses potential challenges to the integration of women into SOF for unit cohesion, and it provides analytical support in validating SOF occupational standards for USSOCOM-controlled positions. The report briefly summarizes the history of integration of women into the U.S. armed forces. It reviews the current state of knowledge about cohesion in small units and discusses the application of gender-neutral standards to SOF. It identifies widely agreed on professional standards for validation of physically demanding occupations and assists SOF service components with the application of these standards to SOF occupations. The report discusses the primary data—a survey of SOF personnel and a series of focus group discussions—collected by the research team regarding the potential challenges to the integration of women in SOF. The final chapter discusses the findings of the task and presents some recommendations regarding potential implementation.

- [28] Thomson, E.A. (2014). *Battling with Words: A Study of Language, Diversity and Social Inclusion in the Australian Department of Defence*. Australia: Australian Department of Defence. <https://www.semanticscholar.org/paper/Battling-with-Words%3A-A-study-of-language%2C-diversity-Thomson/f7a5f2a6dc524b375b3dae539b75ce3510bee495>.

Battling with Words takes a distinctive sociolinguistic approach to leadership efforts to bring about cultural change in the Australian Department of Defence and establish a more heterogeneous workforce. The report describes the role language plays in maintaining and perpetuating cultural norms, and provides linguistic evidence for the current, homogeneous demographic of Defence. It offers recommendations for language change in support of the other social inclusion policy interventions being rolled out across the organisation. Using social and linguistic theoretical frameworks to understand culture and cultural change, the analysis provides a strategy for the use of inclusive language that promotes and supports heterogeneity. The report arises out of the 2013 Australian Secretary of Defence Fellowship, titled *Representing the Community We Serve – Diversity in the Defence Workforce: How do we make an impact now?*

- [29] TTCP (2015). *Measuring Self-Reported Unacceptable Behaviours: A Methods Paper*. The Technical Cooperation Panel, TTCP Technical Report DOC-HUM-02-2015 (May).

This report was prepared to maximise understanding of the commonalities, differences, and changes over time to prevalence and attitudes about unacceptable behaviours. The report compares data collection methodologies from self-reported unacceptable behaviour instruments across The Technical Cooperation Program (TTCP) nations, including Australia, USA, Canada and the United Kingdom. It further aims to identify best practice for collecting self-reported prevalence data and attitudinal information on unacceptable behaviour for inclusion in the unacceptable behaviour research programs in TTCP partner nations.

- [30] UK Ministry of Defence (2018). *Army Sexual Harassment Survey (SHS) 2018 – Action Plan*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/759304/20180810-SH_Action_Plan_Public_Release-AHEmpl.pdf.

This action plan identifies four key interventions and prioritized activity across the operating environment. The interventions are: prepare, prevent, report and support, and operating environment includes individuals, units, Army and society.

- [31] UK Ministry of Defence (2016). *Interim Report on the Health Risks to Women in Ground Close Combat Roles*. Andover, Hampshire: Department of Manning (Army). Retrieved from: <https://www.gov.uk/government/publications/women-in-ground-close-combat-roles-review-2016>.

To advise Secretary of States for Defence’s final decision on lifting exclusions of women from ground close combat roles, an interim health report was produced in April 2016 to further understand the physical challenges and potential health risks to women in Ground Close Combat (GCC) roles. The IHR report focuses on investigating health risks to women in GCC roles, and accordingly, recommends mitigation strategies and measures to reduce these risks with various impact on and through servicewomen’s career and life. Three broad categories of health risks were identified including Musculoskeletal Injuries (MSkl), mental health and reproductive health. Musculoskeletal injuries are considered as the top level of health risks once the lifting is implemented. Four mitigation strategies are proposed to address these health risks. A series of recommendations were made including training strategies, education on injuries, continuous research of understanding injuries and close monitor of health risks among women in GCC roles. The report finally points out that health risks will only be fully understood until women actually serve in GCC roles.

- [32] United States, Department of the Army (2016). HQDA Execution Order 097-16 to the U.S. Army Implementation Plan (Army Gender Integration), 9 March 2016. <https://www.hsdl.org/?abstract&did=791185>.

The HQDA EXORD (Headquarters, Department of the Army Executive Order), is a sequel to EXORD 112-13) directing U.S. Army’s efforts to improve readiness and combat performance while opening all occupational fields to women. The document presents the execution plan on gender integration, including the integration of women into previously closed combat occupations, including principles, phases, operational tasks for commanders and units, and integration strategies of recruitment, talent management, communication plan and assessment for the implementation. The concept of “leaders first” is also specified, to direct that female Armor or Infantry leaders will be placed in a unit prior to assignment of female junior enlisted soldiers.

- [33] United States Marine Corps (2015). Analysis of the Integration of Female Marines into Ground Combat Arms and Units. Quantico, VA: Operations Analysis Division, Marine Corps Combat Development Command. <http://cmrlink.org/data/sites/85/CMRDocuments/285174854-Marine-Corps-analysis-of-female-integration.pdf>.

This report presents research and analysis regarding the potential impacts of integration in four areas: Combat Effectiveness, Unit Readiness, Individual Marine Success, and Institutional Costs. The objective of this research was to identify positive implications, as well as risks/downsides, of integration. For those areas of risk, where possible and supported by research, the report also provides potential mitigating factors to help reduce those areas of risk. Supported by empirical evidence, the objective of the report was to assess the relative levels of risk and mitigation related to the integration of women into closed combat occupations and units, to support the decision-making of the Commandant of the USMC. The research was supported by a large number of analytical organizations, both within and external to the Marine Corps, to ensure the broadest possible analytical coverage. The report concluded that the integration of females into the combat arms Military Occupational Specialties (MOSs) and units would add a level of risk in performance/effectiveness and cost. While this risk can be mitigated by various methods to address failure rates, injuries, and ability to perform the mission, the bottom line is that the physiological differences between males and females will likely always be evident to some extent.

- [34] United States Marine Corps (2015). Ground Combat Integrated Task Force: Experimental Assessment Report. Quantico, VA: Marine Corps Operational Test and Evaluation Activity. <https://dod.defense.gov/Portals/1/Documents/wisr-studies/USMC%20-%20Line%20Of%20Effort%203%20GCEITF%20Experimental%20Assessment%20Report2.pdf>.

This report records experimental results among trained female Marine volunteers in closed Military Occupational Specialty (MOS) skills on their integration into a combat arms unit in an operational environment, formed as the Ground Combat Element Integrated Task Force (GCEITF). Data obtained from both GCEITF experimental events and non-experimental event periods. The task force formed in July 2014 and remained in place until July 2015 in order to investigate unit’s performance with a design implemented in a ground combat environment. The report concludes that the female Marines demonstrated their capability of performing the physically demanding tasks, though not up to the same level as their male counterparts in terms of performance, fatigue, workload, or cohesion, compared with all-male units. The size of the differences observed between units and tasks varied widely. The study underscores the cumulative impacts of accomplishing tasks in the context of actual combat operations cumulative differences can lead to substantial effects on the unit, and the unit’s ability to accomplish the mission. The results show that gender and MOS type are better predictors of occupational injuries. Other findings are for example females tend to have more occupational injuries that results in reduced readiness compared to their male counterparts as compared to their male counterparts; Marines in vehicle MOSs tends to have lower injury rates than those is on MOSs that march (i.e., foot mobile) or Artillery.

- [35] United States Marine Corps (2015). Marine Corps Force Integration Implementation Plan. Department of the Navy, 16 December 2015. <https://www.fitness.marines.mil/Portals/211/Docs/MARINE%20CORPS%20FORCE%20INTEGRATION%20CAMPAIGN%20PLAN.pdf>.

Marine Corps Force Integration Campaign Plan, including activities throughout the following five phases: setting conditions; recruiting; entry level training; assignment; and sustainment. The plan also specifies the concept of operations, occupational specialty specific physical standards, production timelines, orders and directives, assessment synchronization matrix and public affairs guidance.

Annex B – CATEGORIZED RESEARCH BIBLIOGRAPHY, 2011 – 2019

This categorized research bibliography is one of several activities that contribute to knowledge on the integration of women into ground combat roles. The bibliography builds upon the categorized research bibliography published by the Norwegian Defence University College in 2010, titled *Gender and Military Issues – A Categorized Research Bibliography*.¹ Also referred to as the “Norway compendium” throughout this Annex, the bibliography was developed to provide foundational knowledge for the development of a research program on gender in the Norwegian military. The Norway compendium categorized a total of 2,571 documents that addressed gender and military themes and were published in the commercial and military grey literature from 1970 to 2010. As described in further detail below, SAS-120 built upon this effort, guided by an objective to identify available knowledge and research trends related to the integration of women into ground combat units. The approach and results of this review are presented in this annex.

B.1 METHODOLOGY

The SAS-120 bibliography replicates, to the extent possible, the methodological approach employed to develop the Norway compendium. In doing so, the development of the updated bibliography followed three basic steps:

- 1) Review of the Norway compendium methodology;
- 2) A broadly focused test run of an updated search to determine the scope and volume of potential literature, 2011-2019; and
- 3) Development of a feasible SAS-120 search strategy within the context of available resources and focus on integration of women into combat roles.

After making decisions regarding the scope and approach for the literature search, including keywords and databases, a systematic search was conducted from July 11, 2019 to August 31, 2019. This systematic search was further supplemented through a “snowball” approach” based on sources identified by the research team in the course of sharing knowledge and lessons learned across nations; although not exhaustive, the snowball approach also contributed a number of documents that were published after the completion of the systematic search at the end of August 2019.

B.1.1 The Norway Compendium

As presented in Table B-1, the Norwegian compendium employed two clusters of key words: five military key words and 25 gender key words. In combination, this resulted in a total of 125 search terms. In addition, each of two key words, “peacebuilding” and “peacekeeping operations”, were combined with “female”, “gender” and “women” resulting in six additional searches. A complete list of key words used in Norway compendium is summarized in Table B-1. These keywords were used to search a total of 12 databases: EBSCO Academic Search Premier, EBSCO Military & Government, ERIC, HighWire, ISI Web of Science, OvidSP, ProQuest, PubMed, ScienceDirect, SpringerLink, Swetswise, and WorldCat.

¹ Fasting, K. & Sand, T.S. (2010). *Gender and Military Issues – A Categorized Research Bibliography*. Oslo: The Norwegian Defence University College, Norwegian School of Sport Sciences.

Table B-1: Key Words: Norway Compendium.

Gender Key Words (N = 25)	Military Keywords (N = 5)				
	Military	Armed Forces	Army	Air Force	Navy
Abuse	X	X	X	X	X
Body	X	X	X	X	X
Bullying	X	X	X	X	X
Discrimination	X	X	X	X	X
Diversity	X	X	X	X	X
Equality	X	X	X	X	X
Equity	X	X	X	X	X
Female	X	X	X	X	X
Femininity	X	X	X	X	X
Gay	X	X	X	X	X
Gender	X	X	X	X	X
Harassment	X	X	X	X	X
Hazing	X	X	X	X	X
Homophobia	X	X	X	X	X
Homophobic	X	X	X	X	X
Homosexual	X	X	X	X	X
Integration	X	X	X	X	X
Maltreatment	X	X	X	X	X
Masculinity	X	X	X	X	X
Neglect	X	X	X	X	X
Prostitution	X	X	X	X	X
Rape	X	X	X	X	X
Sexuality	X	X	X	X	X
Trafficking	X	X	X	X	X
Women	X	X	X	X	X
Additional Search Terms (N = 6)					
Peacebuilding	Women	Female	Gender	-	-
Peacekeeping	X	X	X	-	-

B.1.2 Keywords

At step 2, an initial search of documents published from within one data base (EBSCO Academic Search Complete) and using “military” and “combat” as guiding key words, yielded 10, 000 documents. “Combat” was not a keyword used in the Norway compendium; however, given the key focus of SAS-120, it was introduced as a keyword in the preliminary scoping of the literature. The introduction of “gender” as a keyword along with “military” and “combat” reduced the volume, but still generated over 7, 500 raw search results in another selected data base (i.e., Springer Link). Exploring the ProQuest Dissertations and Theses Global data base, a total of over 31,000 results showed up if using a combination of “ground combat AND military AND gender. These test runs confirmed our initial postulation regarding the potential for an unmanageable high volume of publications related to military gender integration since 2010. As a result, it was necessary to develop a search strategy and methodology to scale down the updated search through selective inclusion of the most relevant key words as well as careful selection of databases.

As illustrated in Figure B-1, three clusters of key words were used to filter search results to refine the scope of the literature. Four thematic key words that were used in the Norway search (bullying, discrimination, harassment, integration), and six thematic key words that were not employed in the Norway compendium were identified to focus on concepts related to the SAS-120 objectives: cohesion, combat, ground combat, leadership, Special Forces, and Special Operations Forces. A cluster of key words was also used to further filter the literature for relevant inclusion of gender and related terms; wildcard key word and Boolean search terms of “gender*”, and “women OR females OR female or woman” were applied. The five military keywords employed for the Norway compendium were retained for the SAS-120 bibliographic search.

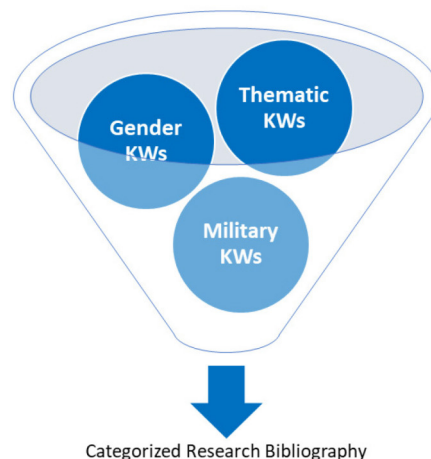


Figure B-1: Key Words Filter.

With key words and filters identified, literature searches were organized and completed using Boolean search terms (i.e., AND, OR) and wildcard search strategy (e.g., gender* captured gendering, gender roles, gender differences, gender equality etc.). Using a combination of the three clusters, 100 search terms were generated (Table B-2).

B.1.3 Data Bases

Based on available resources and data base access, several databases were removed from the search and several data bases were added. Table B-3 identifies those data bases that were used in both the Norway and SAS-120 reviews. While most decisions were based on ready access, two of the data bases used by Norway to search for reports and books, WorldCat and Amazon, were not included in this search due resource restrictions. Although not exhaustive, the “snowball” contributions to the bibliography identified several key books and reports for inclusion.

Table B-2: SAS-120 Keywords.

Thematic Key Words (N = 10)	Military Key Words (N = 5)					Gender Key Words (N = 2)
	Military	Armed Forces	Army	Air Force	Navy	
Bullying	X	X	X	X	X	
Discrimination	X	X	X	X	X	
Harassment	X	X	X	X	X	Gender* Women OR Females OR Female OR Woman
Integration	X	X	X	X	X	
Cohesion	X	X	X	X	X	
Combat	X	X	X	X	X	
Ground Combat	X	X	X	X	X	
Leadership	X	X	X	X	X	
Special Forces	X	X	X	X	X	
Special Operations Forces (SOF)	X	X	X	X	X	

Table B-3: Data Bases: Norway and SAS-120.

Data Base	Norway Categorized Bibliography, 1970 – 2010	SAS-120 Categorized Bibliography, 2011 – 2019
Amazon.com	X	
EBSCO Academic Search Premier	X	X
EBSCO Military & Government	X	X
Education Resource Information Centre (ERIC)	X	X
HighWire	X	-
ISI Web of Science	X	X
OvidSP	X	-
ProQuest	X	-
PubMed	X	X
ScienceDirect	X	X
SpringerLink	X	-
Swetswise	X	-
WorldCat	X	-
APA PsychNet (including PsychINFO and PsychARTICLES)	-	X
EBSCO Open Dissertations	-	X
Google Scholar	-	X

B.1.4 Document Categories

SAS-120 search results are organized across three key document categories: journal articles and conference papers; books, and book chapters/sections; and graduate student theses at the Master's and PhD level. As very few conference papers were identified in the search, they were included with the journal articles as an alternative to a separate category. Due to the resource limitations noted earlier, in contrast to the Norway compendium, the SAS-120 bibliography does not include a Reports category or reflect focused searches through academic institutions for graduate student theses. As a result, this limited opportunity to identify Master's level theses in particular; most graduate student theses included in the bibliography are at the PhD level and were identified through EBSCO Open Dissertations.

B.1.5 Inclusion and Exclusion Criteria

The following exclusion criteria were used to ensure the review included relevant and up-to-date literature on integration of gender in military organizations:

- Literature published prior to 2011 was excluded.
- Research studies on para-military organizations and military police were excluded (military Reserve is included).
- Studies without female military samples were excluded unless male samples were studied with specific focus on gender-related phenomena, for example, masculinities.
- Organizational and workplace studies without military samples or populations were excluded.

Integrating gender in military organization and combat roles in foreign countries' military and armed forces are included. We include studies on men and masculinity in the results by employing a relational lens towards women and gender issues in military settings.

B.2 ANALYTICAL FRAMEWORK

B.2.1 Coding Themes

In the case of each bibliography, all references were screened and assigned a key bibliographic reference category, identified here as a Unique Identification (UID). In doing so, the researchers reviewed two bibliographic categories – title and abstract for each entry. The methodological approach for each reference was also scanned to confirm the sample or population under study when it was not readily apparent in the abstract or title. Each reference was tagged with pre-categorised code(s), using the 39 categorized themes identified in Norway's compendium as a guide. Frequently, this called for the subjective decision of the analyst to determine key themes in cases where two or more themes might be reflected in one reference. All thematic categories, along with their UID, are summarized in Table B-4. a reference assigned the UID "AWM" – attitudes toward women, might also include significant content related to gender and leadership which would be coded "GL". To avoid duplication of references in the categorized bibliography, this reference would appear under attitudes toward women in the bibliography, along with an annotation of GL indicating the secondary theme.

Among all references, 441 (73%) are assigned just one thematic category, 128 (21%) are assigned two, 30 (5%) are assigned three, and 5 (<1%) are assigned four. Those that are assigned two or more categories are identified in the bibliography by UIDs which appear at the end of relevant citations. For example, the following citation with content assessed as being most relevant to "Attitudes Toward Women" and appears in that section of the bibliography, also has content that is related to Gender Integration (GI) and Gender, Physical and Psychological Ability" as indicated by

Table B-4: SAS-120 Bibliography Thematic Categories, Unique Identification Codes, and Relationship to Norway.

SAS-120 Thematic Categories	UID	Relationship to Norway Categories*
Attitudes towards Women in the Military	AWM	√
Gender and Family Issues	GF	√
Gender and History	GH	Includes Biography and Autobiography
Gender and Leadership	GL	√
Gender and Military Education	GME	√
Gender and Peace Building	GPB	Includes UN Resolution 1325
Gender and Sexual Violence as a Weapon of War	GSVW	√
Gender and Veterans	GVT	√
Gender Equality	GE	√
Gender Identity and Gender Roles	GIGR	√
Gender Integration	GI	√
Gender Stereotypes	GS	√
Gender, Alcohol and Substance Use	GASU	√
Gender, Career and Deployment	GCD	√
Gender, Mental and Physical Health	GMPH	Includes Gender and Injury
Gender, Operational and Organizational Effectiveness	GOOE	√
Gender, Physical and Psychological Ability	GPPA	√
Gender, Race and Ethnicity	GRE	√
Gender, Sexual Harassment and Abuse in a Military Context	GSHA	Includes Gender, Hazing, and Bullying
Lesbian, Gay, Bisexual and Transgender (LGBT) Issues	LGBT	√
Masculinities and Femininities	MF	One category to replace two categories: Masculinities, and Women and Femininities
Women in Combat	WIC	√

* Regardless of some interconnections with and adaptations to the SAS-120 categories, the SAS-120 bibliography does not include the following 16 categories that are included in the Norway compendium: Biography and Autobiography; Gender and Injury; Gender and Sexual Risk Behaviour; Gender and Spouse Abuse; Gender and Stress; Gender and the Body; Gender and Violence; Gender, Child Abuse and Maltreatment in Military Communities; Gender, Childhood Victimization and Sexual Trauma among Military Personnel; Military Personnel; Gender, Hazing and Bullying; Gender, Nutrition and Eating Disorders; Gender, Trafficking and Prostitution; Pregnancy and Child Care; Recruitment of Women; UN Resolution 1325; and Women’s Health Issues.

Vaara, J.P., Viskari, J., Kyröläinen, H., and Santtila, M. (2016). Perceptions and attitudes of female soldiers toward physical performance and fitness standards in soldiers. *Military Medicine* 81(10): 1218-1223.

The SAS-120 search was conducted on a set of ten thematic key words, including six that were not included in the Norway compendium search which was based on 25 thematic key words. Given the adapted focus as well as the reduced scope from the Norway baseline, it was not possible to precisely replicate the original coding scheme. As noted, the Norway bibliography resulted in 39 thematic categories and the SAS-120 bibliography yielded 22 thematic categories. To the extent possible, the Norway themes were used as the basis for coding with adaptations as required. Table B-4 includes the 22 categories presented in the SAS-120 bibliography and provides examples of Norway categories that were either adapted or combined with SAS-120 themes. However, in some cases thematic categories that emerged from the Norway bibliographic analysis are more broadly interspersed across several SAS-120 themes. “Gender and Stress,” for example, emerges as a sub-theme across several identified categories, but did not emerge as a significant theme warranting a thematic category in this review. Twenty of the SAS-120 thematic categories were also identified in the Norway bibliography and “Masculinities and Femininities” is added as a new category through adaptation of the Norway categories “Women and Femininities” and “Masculinities”.

B.3 CONTENT SUMMARY

A total of 603 references are included in SAS-120 Bibliography. As presented in Table B-5, the most prevalent categories that emerged from the analysis, with 45 or more documents assigned to each, are “Gender, Mental and Physical Health”, “Gender, Sexual Harassment and Abuse in a Military Context”, “Gender and Leadership”, “Gender Integration”, “Lesbian, Gay, Bisexual and Transgender (LGBT) Issues”, and “Women in Combat”. These categories accounted for almost two thirds (66%) of the bibliography. Although “Gender and Family Issues” also includes 45 references, there is a much lower number of published journal and book contributions than those counted in the top six categories above; 29 of 45 references in this category are graduate student theses.

Given their prevalence as unique categories, it is not surprising that the highest frequency thematic categories are also among those that are most likely to be cited as secondary or tertiary themes within other categories. Women in Combat, for example, cross-referenced to and within nine other thematic categories. Gender Integration, although its own category, was the most likely to cross-reference to other themes, with citations cross-referenced to and within 17 other categories.

Well over half of the documents included in the bibliography are journal articles (63.2%), approximately one quarter were graduate student theses (28.5%), and a small proportion represented books or book chapters; of 172 graduate student theses, all except 12 were completed at the PhD level. Five journals account for approximately one-third (33.9%) of all journal articles identified in the bibliography. As presented in Table B-6, *Military Psychology* is the most prevalent, followed by *Military Medicine* which was the top journal identified in the Norway compendium. *Armed Forces & Society*, *Military Psychology* and the *Journal of Homosexuality* also make the SAS-120 top five list and were identified as three of the top ten of journals in the Norway compendium.

Table B-5: Total Number of References by Thematic Category, by Type of Reference.

Thematic Categories	Journals	Books	Theses	Total # by Thematic Category
Attitudes towards Women in the Military	3	0	1	4
Gender and Family Issues	9	7	29	45
Gender and History	9	0	4	13
Gender and Leadership	45	2	21	68
Gender and Military Education	7	0	3	10
Gender and Peace Building	10	0	1	11
Gender and Sexual Violence as a Weapon of War	5	1	0	6
Gender and Veterans	11	2	8	21
Gender Equality	4	0	0	4
Gender Identity and Gender Roles	16	2	3	21
Gender Integration	37	6	15	58
Gender Stereotypes	1	0	0	1
Gender, Alcohol and Substance Use	13	0	2	15
Gender, Career and Deployment	3	0	1	4
Gender, Mental and Physical Health	54	8	39	101
Gender, Operational and Organizational Effectiveness	7	1	3	12
Gender, Physical and Psychological Ability	14	0	3	17
Gender, Race and Ethnicity	2	1	13	16
Gender, Sexual Harassment and Abuse in a Military Context	59	3	9	71
Lesbian, Gay, Bisexual and Transgender (LGBT) Issues	45	2	5	52
Masculinities and Femininities	4	1	0	5
Women in Combat	23	13	12	48
Total proportion by document type	63.2% (N = 381)	8.3% (N = 49)	28.5% (N = 172)	602

Table B-6: Top Five Journals (Those with 10 or More References).

	Journal Names	N
1.	<i>Military Psychology</i>	37
2.	<i>Military Medicine</i>	27
3.	<i>Armed Forces & Society</i>	16
4.	<i>International Feminist Journal of Politics</i>	12
5.	<i>Journal of Homosexuality</i>	10

B.3.1 Limitations

The SAS-120 Bibliography provides a resource which replicates to the extent possible, the search methodology and analytical approach used to produce the Norway Compendium in 2010. However, there are still data bases that we were unable to access and the scope of key words that SAS-120 employed is much reduced from that applied to the 2010 research bibliography. Also, Reports and/or Government Reports are not included in the SAS-120 bibliography as they are not included in the data bases we covered. However, the “grey” literature presented in Annex A, serves, at least in part to address this gap by including documents of relevance to the objectives of SAS-120.

Although the Norway compendium does include numerous 2010 references, it is possible that the SAS-120 search missed publications that might have been published or completed in 2010 after completion of the Norway compendium search. Notwithstanding, a decision was made to not include 2010 in the current search as there would be considerable overlap with the Norway compendium, and the primary focus of the SAS 120 search was to access an up to date scan of the literature related to the integration of women into ground combat roles and units. Also, as the SAS 120 search was conducted in July and August 2019, publications added to databases in the last four months of 2019 will not be captured. To the extent possible, these gaps have been addressed using a snowball approach. Regardless of the value of this exercise and efforts made to address relevant omissions, the current bibliography is not comprehensive and we invite others to build upon this effort.

Due to the limitation of time and resources, we did not perform any level of systematic content analysis beyond Titles and Abstracts. Furthermore, the analysis applied to this bibliography sought to identify relationships within the literature by identifying cross-themed categories; however, our approach was influenced not only by the pre-determined themes that we had identified early on as those with predominant influence on previous experiences of the integration of women into the combat arms, but also any biases that we bring to the task as researchers with various perspectives and priorities. As such, the replication of our analysis and resulting thematic categories might look quite different if we had the opportunity, for example, to engage in a rigorous process of inter-rater reliability.

B.4 BIBLIOGRAPHY

The SAS-120 Bibliography which follows is organized by thematic categories which are presented by in alphabetical order. Each of the 22 thematic categories/sections which follow is further organized by type of documents: Journal Articles; Books/Book Sections; and Theses. As described above, where applicable, each bibliographic reference is supplemented by the identification of cross-themes, or secondary, tertiary, and in a very few cases, quaternary thematic categories.

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Annex C – SAS-137 SYMPOSIUM TECHNICAL EVALUATION REPORT

TECHNICAL EVALUATION REPORT SAS-137 RESEARCH SYMPOSIUM ON INTEGRATION OF WOMEN INTO GROUND COMBAT UNITS

5 – 7 February 2019
United States Marine Corps University
Quantico, USA

Dr. Ellen Haring
Service Women's Action Network
UNITED STATES

Dr. Karen D. Davis
Defence Research and Development Canada
CANADA

Ms. Laura Chewning
United States Marine Corps
UNITED STATES

ABSTRACT

This technical evaluation report summarizes the main contributions of the papers and their associated presentations given during the 2019 Research Symposium on Integration of Women into Ground Combat Units. It augments the papers collected in the proceedings, addresses the main points of keynotes not accompanied by a paper, and presents a summary of discussion and identified key insights of the two-day symposium, including contributions from six NATO countries, as well as Australia, India, and Japan. It recommends future activities based on the papers, presentations, and discussions summarized here.

EXECUTIVE SUMMARY

This Technical Evaluation Report summarizes the main contributions of the papers and their associated presentations given during the 2019 Research Symposium on Integration of Women into Ground Combat Units. The prime purpose of a Research Symposium is to enhance the capability of the NATO Science and Technology (S&T) community to respond adequately to the military requirements of NATO.

Women participate in ground close combat units in many NATO countries, and there is increasing interest among other NATO and Partner nations to expand the roles open to women. In support of new initiatives, as well as efforts to increase the representation of women in close ground combat units through enhanced selection, training, and retention strategies, the Symposium on Integration of Women into Ground Combat Units provided an opportunity to share lessons learned and best practices. It also provided research analysis and insights to support the expansion of combat roles for women and to better understand the impact of gender integration on ground combat units.

The symposium further provided the opportunity to explore the impact of the participation of women in ground combat units and male-dominated operational roles on international priorities related to Women, Peace and Security, including UNSCR 1325 (2000) and subsequent resolutions which call for increased participation of women in security forces.

The objectives of this symposium were to share research and best practices regarding:

- 1) The influence of social, cultural, and psychological factors of gender integration in ground close combat units and their impact on combat effectiveness.
- 2) Effective processes and strategies for the integration of women in ground close combat units.
- 3) Appropriate methodologies for monitoring, measurement and assessment of integration, including measurement of cohesion and inclusion.
- 4) Career and cohort management of women and men in combat roles.

Two parallel sessions occurred during the conference. The first session was principally comprised of research that focused on the social, cultural and psychological aspects of integration. The second session, on the first day was comprised of research on physical employment standards while the second day included a variety of additional topics related to integration. Analysis of the papers and presentations was organized by themes. The first theme includes research, papers and presentations focused on social, cultural and psychological aspects of integration while the second theme includes topics associated with employment standards and training.

C.1 INTRODUCTION

The prime purpose of a Research Symposium is to enhance the capability of the NATO Science and Technology (S&T) community to respond adequately to the military requirements of NATO. A Research Symposium results in a NATO Science and Technology Organization publication (Meeting Proceedings).

S&T Organization in the NATO context is defined as the selective and rigorous generation and application of state-of-the-art, validated knowledge for defence and security purposes. S&T activities embrace scientific research, technology development, transition, application and field-testing, experimentation and a range of related scientific activities that include systems engineering, operational research and analysis, synthesis, integration and validation of knowledge derived through the scientific method.

The mission of the NATO STO is to help position the Nations' and NATO's S&T investments as a strategic enabler of the knowledge and technology advantage for the defence and security posture of NATO Nations and partner Nations, by:

- Conducting and promoting S&T activities that augment and leverage the capabilities and programmes of the Alliance, of the NATO Nations and the partner Nations, in support of NATO's objectives;
- Contributing to NATO's ability to enable and influence security- and defence-related capability development and threat mitigation in NATO Nations and partner Nations, in accordance with NATO policies; and
- Supporting decision making in the NATO Nations and NATO.

C.1.1 The System Analysis and Studies Panel

The System Analysis and Studies (SAS) Panel conducts studies, analysis and information exchange activities that explore how operational capability can be provided and enhanced through the exploitation of new technologies, new forms of organization or new concepts of operation. Such studies will, where appropriate, give explicit consideration to financial and other resource issues.

The Panel will be responsive to requests for such studies from a variety of sources, including nations, the Science and Technology Board (STB), the Military Committee, the National Armament Directors (CNAD),

the Main Armaments Groups, Allied Command Operations (ACO), Allied Command Transformation (ACT), the NATO Communications and Information Agency (NCIA), the NATO Industrial Advisory Group (NIAG), and industry.

The Panel will undertake activities to develop and promote improved analysis methods and techniques to support defence decision making. This aspect of the Panel's work will focus particularly on the methods required to address the new issues thrown up by the evolving strategic environment and the responses that both individual nations and NATO as a whole are making to it.

Women participate in ground close combat units in many NATO countries, and there is increasing interest among other NATO/PfP countries to expand the roles open to women. In support of new initiatives, as well as efforts to increase the representation of women in close ground combat units through enhanced selection, training, and retention strategies, the Symposium on Integration of Women into Ground Combat Units provided opportunity to share lessons learned, best practices, and research analysis and insights to support the expansion of combat roles for women and to better understand the impact of gender integration on ground combat units. The symposium further provided opportunity to explore the impact of the participation of women in ground combat units and male-dominated operational roles on international priorities related to Women, Peace and Security, including UNSCR 1325 (2000) and subsequent resolutions which call for increased participation of women in security forces.

The objectives of this symposium are to **share research and best practices regarding:**

- 1) The influence of social, cultural, and psychological factors of gender integration in ground close combat units and their impact on combat effectiveness.
- 2) Effective processes and strategies for the integration of women in ground close combat units.
- 3) Appropriate methodologies for monitoring, measurement and assessment of integration, including measurement of cohesion and inclusion.
- 4) Career and cohort management of women and men in combat roles.

This Technical Evaluation Report provides insights from the symposium to inform the ongoing SAS-120 activity as well as provide NATO and partner nations not participating in the SAS-120 activity with lessons learned, best practices, and research analysis and insights to support the expansion of combat roles for women and to better understand the impact of gender integration on ground combat units. It reflects the interpretation of the evaluators and has been conducted with utmost scientific rigor. However, as the presented efforts are on the leading edge of science and research conducted in support of NATO, the reader is encouraged to carefully study the report itself and conduct additional research to ensure the maximal benefit.

Two parallel sessions occurred during the conference. Session 1 was principally comprised of research that focused on the social, cultural and psychological aspects of integration. Session 2, Day 1 was comprised of research on physical employment standards while Day 2 included a variety of additional topics related to integration. Analysis of the papers and presentations is organized by themes. Theme 1 analysis includes research, papers and presentations focused on social, cultural and psychological aspects of integration while theme 2 includes topics associated with employment standards and training.

C.2 KEYNOTES

The keynote speakers and their presentations set the framework for the symposium at the beginning of the first day, as they provided complementary views and experiences related to the role of women in the military and their final integration into ground combat units. The first keynote introduced the topic by highlighting

the limits, changes and challenges of women's increased participation in national military units by providing a historical overview of women's integration and tracing her own experiences as an early US Naval Academy graduate.

The second keynote focused the discussion more directly on women's integration into ground combat units by highlighting her experiences as the first woman to become a Canadian Defence Force (CDF) infantry officer in the 1990s. Canada was one of the first countries to open their infantry units to women and the keynote highlighted the obstacles and barriers that she faced when trying to integrate traditionally all male infantry units.

These two presentations are summarized in this section. Neither presentation was accompanied by a paper although the second speaker has published a memoir that chronicles her experiences.

C.2.1 Lieutenant General Lori E. Reynolds, Deputy Commandant for Information, US Marine Corps

The two-day event was framed by General Lori Reynolds when she provided an overview of the integration of women in the US military from the founding of the United States as a nation to today. The history of women in the US military is marked by slow but steady inclusion in the national military Services. General Reynolds focused in greater detail on the changes that have occurred in the last 30 years since her graduation from the US Naval Academy in 1986. She noted that when she graduated women were not allowed to access many military occupations and that she could not serve on Navy ships, submarines or fly most military aircraft. Today, all of the occupations and positions that were closed to her are now open to women.

She emphasized the important relationship between diversity and increased military effectiveness noting that despite the known benefits of diversity many military members and their units continue to resist full integration.

C.2.2 Sandra Perron (Major, Retired), Building on Leadership and Diversity, Canada

This invited presentation was delivered by Sandra Perron; the first Canadian women to officially serve openly as an infantry officer. Perron discussed her experiences integrating the Canadian infantry in the 1990s as an experience that was met with high levels of resistance and outright hostility. Like General Reynolds she discussed the research on diversity and its impact on team capabilities. She called attention to long lasting gender roles and stereotypes that make integration extremely difficult. However, she noted that with performance and perseverance women are able to make inroads into traditionally all male organizations.

She presented 4 possible strategies that women might employ as they integrate and that the strategies may not be mutually exclusive. They are: 1) Put up and Shut Up; 2) Protest/Fight It; 3) Leave; 4) Become Competent. She emphasized the importance of setting appropriate physical standards and meeting them, of operational effectiveness and of group cohesion. Despite persevering for many years Perron left the military in 1996 "after enduring unrelenting abuse from her fellow military officers who didn't want women in combat arms."

Both keynote discussions focused on the need to highlight the power and increased effectiveness of diverse groups and teams and their resulting impacts on improved combat effectiveness for the military. Both women provided stories of overt and covert resistance to their inclusion in military units.

C.3 THEME 1 – SOCIAL, CULTURAL AND PSYCHOLOGICAL IMPACTS OF INTEGRATION

C.3.1 Combat Integration Handbook, Antonietta Rico, Women in International Security, USA

The first presentation was delivered by Antonietta Rico, a Fellow at Women in International Security. The Combat Integration Handbook is a reference guide for US Army combat arms leaders on how to successfully lead gender integration in their units. The Handbook exclusively addresses common challenges with gender integration in combat arms units and gives leaders and soldiers best practices for successfully navigating the change process.

Research for the Handbook came from over 30 hours of exclusive interviews with Cultural Support Team members, women who were attached to special operations units in Afghanistan; more than a half dozen individual interviews with combat arms officers and NCOs; and a Working Group of over 20 active duty Army officers and NCOs from across the US Army, who provided experience, input and feedback to the Handbook. It also drew on raw data from a Maneuver Center of Excellence survey of 816 officers from the Command and General Staff College Intermediate Level Education, which included the officer's views and concerns about women in combat. Finally, the Handbook draws on other US Army Studies.

The Handbook is comprised of two principal sections; Cultural Considerations and Practical Considerations. Rico highlighted several key sub-sections of the Handbook in her discussion starting with the important and pivotal role that leaders play in successful integration.

<https://www.wiisglobal.org/combat-integration-initiative/combat-integration-handbook/>.

C.3.2 Conformist Culture and Tolerance of Diversity, LCol Maureen Wellwood, Canadian Armed Forces

Wellwood provided a thought-provoking presentation on the difficulty of creating diverse and inclusive organizations within the existing restrictive and conformist cultures of the existing military organizations. She argues that existing personnel policy and training systems are set up to ensure conformity and that they systemically resist diversity-oriented policies and approaches to inclusion. Wellwood recommends changes that begin with the way soldiers are trained from the point of induction onward. Specifically, she recommends diverse training strategies that accommodate various cognitive learning styles and abilities including more advanced use of media, audio visual aids, training spaces that include seclusion, social learning techniques, and simultaneous physical simulation techniques.

C.3.3 Self and Other: Perceptions of Military Performance of Men and Women in the Bundeswehr, Dr. Gerhard Küemmel (Presenter) and Timo Graf, Bundeswehr Centre of Military History and Social Sciences, Germany

Kummel provides a brief overview of women's inclusion into the German armed forces including the relatively recent legal challenge that opened combat jobs and units to women. In January 2000, the European Court of Justice ruled in favour of a woman who was trying to access a combat support position in the German Army. The case resulted in all positions being opened to women although progress has been slow. Kummel's research focused on the perceptions of men and women about their own abilities, those of their peers and those of the opposite sex. Men tend to have more favourable views of their own performance than women have of their own performance. This trend holds in a number of evaluative categories where men assess themselves and other men to be above average while women assess themselves and other women as average or below. When men assess women 27% think that women's performance is worse than men's

performance with younger soldiers and non-commissioned officers from the Army and combat occupations rating them the most negatively. Scepticism and resistance to women's integration is most likely to come from the very units that women are currently attempting to integrate.

Increased confidence and performance for women was correlated to maturity, education and experience. Although the authors do not make any specific recommendations relative to their findings a possible recommendation might be that women who are assessing into newly opened units be older, better educated and have more experience in the military.

C.3.4 Team D+ Innovation in Diversity, Col Stephane Boucher, Canadian Armed Forces

This paper outlines a grass roots initiative of the 2nd Canadian Division Group called Team Diversity+ or Team D+. It was organically created by volunteers to meet the goals of the Canadian Armed Forces Diversity Strategy published in 2017. The group has created an informal communications channel to leadership to elevate group goals and concerns of a diverse community. It is unclear what the impact has been of this initiative. However, like other organically created initiatives it is likely to be beneficial within the context of the organization where it was created but may not be replicable in other organizations.

C.3.5 Women in Combat: Stress, Social Support and Health, Major Angela Yarnell, US Army

Yarnell and a team of researchers fill a research gap by examining the stress impact on men and women in deployed combat environments. They analysed a matched sample of surveys from deployed men and women to determine the health impacts of combat deployment. While women reported significantly less combat exposure, they did not differ from men in other stressful life events during deployment. For health and functioning, women reported significantly more somatic symptoms and sick call visits than men, yet did not differ significantly on several other physical health variables. Health outcomes investigated in relation to combat exposure, found men but not women reported significantly greater functional impairment as the number of combat exposures increased. Both males and females reported more somatic symptoms, more sick call visits, greater difficulty falling asleep and sleeping less than six hours per night as combat exposures increased. Importantly, the association between combat exposure and several health variables were similar for males and females.

Defining, understanding, and fostering social support is necessary for men and women to ensure readiness for military missions by reducing effects of stress on health. While combat stress manifested similarly in men and women, they found that women reported significantly lower unit morale, unit cohesion, and marital quality than men. This may explain women's increased somatic symptoms and sick call visits since social support is a protective factor.

C.3.6 Gender Integration and Citizenship: A Civil-Military Perspective, Dr. Brad Wineman, US Marine Corps University

Wineman summarized many of the ongoing arguments against women's integration into combat arms which he boils down into two main arguments that are based on physiology and readiness. He dismisses both sets of arguments by illustrating their changing nature over time or the inability to actually define the term readiness. He goes on to note that the military has been consistently resistant to any change that it views as socially or politically motivated. He invites us, instead, to consider the question of the duties and responsibilities of citizenship and the civilian-military gap. He argues that including women in all areas of the military increases the available pool of talent and thus capabilities and decreases the civilian-military gap.

C.3.7 NATO Representative for Women, Peace and Security, LT Andrea Goldstein, US Navy

Goldstein provided an overview of NATO's current efforts and structure that support the goals outlined in UN Security Council Resolution 1325 and its subsequent Women, Peace and Security resolutions. NATO created a Gender Task Force and has positions for trained Gender Advisors (GENAD) and Gender Focal Points (GFP) throughout the organization. NATO has also created a number of directive documents that require NATO countries to meet specific goals and objectives. Additionally, countries are required to report annually on the status of women in their military's. The result has been increased opportunities and participation of women across NATO and NATO partner nations. This presentation was not accompanied by a paper.

C.3.8 Integration of Women into Ground Combat Units – Slovenia as an Example of a Successful but a Small Country, Liliana Brožič and Col Mojca Pešec (presenter), Slovenian Armed Forces

Pešec presents Slovenia as an example of a small country that has successfully integrated women into all areas of its armed forces with a high degree of success. For a success indicator she points to Slovenia's rank among NATO nations in terms of percentage of women (6th) who serve, and in retention rates for women (4th) relative to other NATO nations. However, while Slovenia does comparatively well women remain a fractional minority of their military at less than 17% of their force and the majority of women serve in a few key combat support specialties where they outnumber men; in finance, legal and medical specialties. Also, in the last 10 years less than 10% of any mission has been comprised of women and the Slovenian military offers no programs specific to women. Notably however, Slovenia has one of the only woman Defence Ministers in NATO.

C.3.9 The Integration of Women into the Australian Army Infantry Corps: Dimensions for Success, Dr. Samantha Crompvoets and BRIG Leigh Wilton, Australia

This original research provides a comprehensive picture of the early integration efforts of the first enlisted women to enter the Royal Australian Infantry Corps. Her role has been to research, monitor and evaluate, and make corrective recommendations to integration efforts. This integration effort has experienced many missteps including failing to provide women with appropriate equipment and information, training opportunity disparities, and hostile work environments. Most of the first group of women are leaving the infantry. Australia has taken some corrective actions. Crompvoets and her team make several recommendations for improved integration including: provide direct mentorship for women, help establish peer support groups, provide clear job and fitness standards, educate leadership and ensure that women remain co-located with their teams.

C.3.10 Infantry Perceptions and Potential Mitigation of Women Joining the UK Infantry, Dr. Joanna Harvey, Great Britain

This presentation provided an overview of research that examined the perceptions and expectations of various demographic groups in the British military to the integration of women into ground combat units. The purpose of the research was to understand how to affect large scale culture change by identifying mitigating factors and learning points. The data is being used to aid in planning for integration.

Key themes emerged from male cohorts that mirror similar points of resistance and cultural factors already identified in research in the USA (Arnhardt et al., 2015, [1]) and Canada (Davis & Thomas, 1998, [2]) and is summarized in the presentation provided by Dr. Wineman. Cultural points of resistance relate to concerns about any change that is viewed as politically driven, perceived to lower standards due to differentials in physical strength and stamina, reduce readiness because of possible increased injury rates, or reduce unit

cohesion because of fraternization due to intimate relationships, etc. The UK is using this information to develop a set of mitigation strategies including a well planned and executed communications strategy, scientifically based physical employment standards, and no quotas that would give the appearance of preferential treatment. This presentation was not accompanied by a paper.

C.3.11 Understanding Differences in Experiences Between Enlisted Women and Officers, Antonieta Rico, Women in International Security, USA

This original research highlights the differences in treatment and experiences of women officers relative to enlisted women who have newly integrated ground combat units in the US Army. It is based on interviews and surveys from 10 women officers and 10 enlisted women. A key finding is that enlisted women face harassment and assault at levels not experienced by women officers, while simultaneously having fewer resources and support systems necessary to cope with their experiences. This significantly degrades their ability to succeed as they integrate combat arms units. Furthermore, the Leaders First policy, a policy intended to assist with integration has done little to address the problems experienced by enlisted women and may be detrimental to women officers' career advancement. The purpose of the policy was to provide same sex peer mentors for junior women but the officers are themselves junior officers and they have not provided the envisioned mentorship.

Recommendations for improving integration were provided in the briefing but not in the accompanying paper. They include eliminating the Leaders First policy and instead implementing a peer bonding program to create social support networks during initial entry training followed by assigning enlisted women in cohorts to new units. Screening and training male leaders on their duties and responsibilities relative to successful integration and monitoring unit climates.

C.3.12 Promoting Active Participation of Women in Japan Ground Self Defence Force: Female Integration into Close Combat Units, LTC Junko Araki, Japan

Although Japan's official position is that all positions in their Ground Self Defence Force (GSDF) have been open to women since 1993 it was not until 2017 that women were actually assessed into some of the ground close combat occupation and in 2018 women remained a fractional minority of the force at just 7% with a goal of reaching 9% by 2027. To encourage women's increased participation the GSDF has focused on improved childcare and maternity/paternity leave. However, the envisioned improvements lag behind those already in place in most NATO nations. Another policy established to increase women's retention is the provision for up to a three-year leave of absence with guaranteed reemployment. No data was provided to show if these policies are having a positive impact on recruiting and retention.

C.3.13 UK Approach to Women in Ground Close Combat, WO1 Gareth Bowen, Great Britain

This presentation provided the historical background to women's military service in Great Britain with a focus on recent efforts to open all remaining closed occupations in the ground combat forces. In order to overcome resistance to women's inclusion in ground combat units, outlined earlier in the day by Harvey, Great Britain is taking a similar approach to other NATO nations by messaging the benefits of an increased and diverse talent pool that enhance operational capabilities while simultaneously focusing on setting job-based gender neutral physical standards with no quotas for women's inclusion. This presentation was not accompanied by a paper.

C.3.14 Why Make a Special Platoon for Women? An Assessment of The Jegertroppen at the Norwegian Special Operations Commando (NORSOC), Frank Brundtland Steder, Norway

This paper documents and critically evaluates Norway's Special Operations Command's experiment with creating a women-only training program. The experiment was conceived by the special operations community as a way to make military service more attractive to women thereby increasing the percentage of women in the total force. It successfully relied on attracting women to a "special" and elite training program. The program has yielded a cadre of highly motivated, specially trained elite women soldiers. However, it is a highly gendered program in was conceived not to bring qualified women into the special operations community except when it is necessary to interact with local women during military operations. Despite demonstrating extraordinary capabilities, including beating all male teams during team-based missions the women have not been assessed into NORSOC as anticipated. Instead, they have become disillusioned because few of them have actually been integrated into NORSOC and they are not being retained as anticipated.

C.3.15 The Queen Bees and the Women's Team: Why Make a Special Platoon for Women? Frank Brundtland Steder, Norway

This research builds on data captured during the Jegertroppen experiment from the previous presentation. Researchers observed that behaviors often attributed to women who are in competition with each other in close quarters exhibit behavior commonly called "queen bee" behavior that is marked by gossip and undercutting other women. However, the women in the Jegertroppen did not exhibit such behavior; quite the opposite. Not only did they work collaboratively but they established close personal relationships that were mutually supporting and supportive. The researchers determined that "queen bee" behavior is actually only evident in contexts in which a high degree of masculine conformity is required. They conclude that when diversity is valued queen bee behavior is not necessary for success and therefore it is context dependent. This research dispels stereotypical myths about women "natural" tendencies to behave a certain way by showing that it is actually gender based stereotype threat that accounts for some women exhibiting "queen bee" behavior.

C.3.16 Socio-Cultural Change in Gender and Military Contexts: Measuring Values, Dr. Karen D. Davis (Presenter) and Dr. Ann-Renee Blais, Defence Research and Development, Canada

Davis provides an examination of the forces which both stabilize and may cause change within military organizations. While she notes that culture is the single most important element to understanding military units and a critical factor relative to women's inclusion in ground combat units it is rarely researched and remains almost unexamined. Although the Canadian Armed Forces and the Canadian Army have done some surveys and have created broad based initiatives like *Strong, Secure, Engaged* they have not included a research component that would indicate if such initiatives are having the desired effect.

C.3.17 Challenges of Integration of Women in Peacekeeping Operations, Dr. Shilpi Nanglu, India

Nanglu presents research on the experiences of women who have been assigned to peacekeeping operations. Similar to other research findings related to women who are integrating ground combat units women who deploy on peacekeeping missions experience marginalization through limited job opportunities, underutilization and harassment. At the same time, they struggle to cope with family and childcare responsibilities for the families that they leave behind. The result is that few women participate in peacekeeping missions, at a time when their presence is needed to address challenges that are better addressed by a diverse force.

**C.3.18 Architecting a Paradigm Shift to Further Invest in Human Capital,
LTC Kristina L. Richardson, USA**

This paper documents the process by which the US Army's Special Operations Command determined that existing standards were already valid and gender neutral after they were directed to ensure that their standards were science based not gender based. The author uncritically asserts that previously existing standards were already gender free since women had not been allowed to assess into those occupations. She does not challenge, as others (Riley) have done, the fact that standards that are developed for men are likely gendered masculine from the outset. Simply validating standards that were developed by men, for men, are likely highly gendered.

C.4 THEME 2 – PHYSICAL STANDARDS AND TRAINING**C.4.1 USMC Combat Arms Physical Screening, Brian McGuire, US Marine Corps,
USA**

The objective of this presentation was to provide an update and overview of the USMC physical screening methodology. In 2014 and 2015, in anticipation of opening combat specialties to women, occupation specific standards methodology was developed and validated for Infantry, Artillery, Tanks, Amphibious Vehicles, Low Altitude Air Defence, Combat Engineers and Ground Ordnance Maintenance. By way of outcome example, recent data indicates that the MOS Specific Physical Standards (MSPS) pass rate for men and women infantry candidates is 99.5 and 81.5%, respectively. Administered on a regular basis to members of the above MOS, the MSPS has been developed to be gender neutral, operationally relevant, maintain combat readiness, enhance the full potential of every Marine, and sustain the quality of the Force going forward.

**C.4.2 Combat Integration: Implications for Physical Employment Standards, Dr.
Tara Reilly, Canada; Dr. Sam Blacker, Great Britain; Mrs Marilyn Sharp, USA;
Dr. Jace Drain, Australia; and Dr Keith Hauret, USA**

This panel included five presentations related to Physical Employment Standards (PES) and the integration of women into combat roles, thus providing insight into the ongoing work of NATO Human Factors and Medicine (HFM) Research Task Group (RTG) 269, Combat Integration and Physical Employment Standards. The Panel began with a review of current practices across NATO nations, primarily from Canada, UK, USA and Australia, the relationship between established standards and the occupational demands, male and female physical strength and endurance capabilities, and biases in related practices and research (Blacker and Reilly). The second presentation highlighted sex differences in physical fitness tests of military members, including in the performance of physically demanding military occupational tasks. The presentation identified tests with the least bias while maintaining predictive capability, noting that some tests are maintained for historical/cultural reasons but may falsely identify females as incapable of performing at a minimum standard (Sharp). Highlighting the limited availability of longitudinal research specific to Musculoskeletal (MSKI) female injury rates, the third presentation identified several modifiable factors (body mass, lean body mass, training status, experience) with potential to contribute to injury prevention. Further, it was emphasized that as women move through combat arms training, employment, and deployment, there is an opportunity to identify training methods that will optimize performance on occupational tasks, as well as reduce injury among female combat arms soldiers (Drain and Hauret). Available research also suggests that combined resistance and aerobic training programs will improve the performance of females in physically demanding occupations. The fourth presentation reviewed recent research, suggesting that a minimum of six months training using job-specific exercises for load carriage, with an emphasis on upper body strength and power, is necessary to prepare females for combat occupations. Importantly, research demonstrates that females are capable of significantly improving performance and narrowing the performance gap between female and male candidates, with the right type of preparation and

training (Drain, Blacker, and Sharp). Focusing on Canadian Armed Forces PES, which has been established as bias free and best practice at the minimal acceptable performance standard, the final presentation explored incentive strategy to encourage higher levels of performance. A strategy that relies upon sex and age categories was discussed, including the potential for effectiveness and bias (Reilly).

The final goal of RTG HFM-269 is to produce a technical report with practical recommendations for designing PES, supported by a comprehensive compendium of available research which addresses performance impacts and outcomes by sex. Given the significant impact of physical performance standards and practices on the physical effectiveness, well-being, acceptance, and success of female soldiers, this panel highlighted the importance of evidence-based knowledge, policy, and practice to guide the introduction of women into combat occupations and units.

C.4.3 Implementation of A Hybrid Push Up/Pull Up Test on the USMC Physical Fitness Test, Brian McGuire, US Marine Corps, USA

This presentation provided an overview of the Physical Fitness Testing (PFT) requirements of the USMC, from 1909 to 2018, noting that a 5 kilometre rowing option was implemented in 2016 as an optional alternative to running for all USMC members over 45 years of age, regardless of gender. The main focus of the presentation was the development of the hybrid pushup/pullup option which allows all members of the USMC, regardless of gender, to select either a pushup or pullup testing option. Originally developed, to provide better options for women to aspire to, and achieve, optimum upper body strength, 2016 data indicates that most women choose the pullup option and perform an average of 7 pullups at testing. The presentation emphasized the significance of this initiative to gender integration, along with the strong correlation of the hybrid option to performance on physically demanding tasks.

C.4.4 RAF Regiment Training, Flt Lt Jon Griffin, Great Britain

This presentation provided an overview of the recruitment and training processes and standards for the Royal Air Force Regiment and its recent efforts to integrate women. Although there has been some interest by women only three women have qualified, leading one to question either the efforts to recruit qualified women, set gender neutral job-based standards, or to set conditions for them to succeed once selected for training are appropriate. This presentation was not accompanied by a paper.

C.5 SUMMARY AND RECOMMENDATIONS

The objective of this symposium was to provide a forum to identify and gain input on best practices for the further integration of women into ground combat units of NATO and NATO partner nations. Many countries appear to be following similar strategies and practices for integrating women into ground combat units. However, while they take similar approaches little research shows whether these common practices are or should be identified as “Best Practices”. For example, the US “Leaders First” policy was touted as a “best practice” but subsequent research by Rico finds that it may be harming efforts to integrate women and not be a “best practice” that other countries should follow. Similarly, there is an almost myopic focus on setting “gender free” or “gender neutral” occupational standards but there has been no established “best practice” for setting said standards. The result is that there are no two countries with the same standards for what are inherently identical jobs. Any efforts to set common standards results in countries attempting to exceptionalize themselves thereby removing any requirement to conform to a common set of “best practices”.

No country advanced a set of “best practices” although some common approaches to integration were revealed in the research and presentations. The common approaches respond to recurring themes relative to integration. Furthermore, the fact that there are no identified best practices reveals monitoring and evaluation shortfalls and research gaps.

Rather than identifying “best practices” that may or may not, in fact, be best practices the following list is a set of common approaches to gender integration followed by most countries:

- 1) Most countries have engaged in relooking and either updating or validating ground combat occupational standards to ensure that they are gender neutral and are applied to men and women equally.
- 2) Most countries have pledged not to set quotas for women to avoid appearing to lower standards to admit more women.
- 3) Most countries have engaged in messaging that touts the benefits of increased capabilities brought by a larger recruiting pool and diverse talent.

Some emerging approaches that may turn out to be best practices, if they are validated by further research include the following:

- 1) Screening women recruits: increased success, as measured by performance and confidence has been linked to maturity, education and experience leading to the conclusion that women might be more successful if they are older, better educated and knowledgeable about what they are getting themselves into (Cromptvoets).
- 2) Nearly all research has pointed to the importance of leader attitudes in successful integration. Careful leader screening and selection along with gender integration education was highlighted in several research efforts (Rico; Cromptvoets; Boucher; Harvey) and positively or negatively correlate to successful integration.
- 3) Several researchers noted the importance of social support to successful integration for women. Rico recommends eliminating a Leaders First approach which was intended to be a provide institutionally based mentorship but instead implementing a peer bonding program to create social support networks during initial entry training and then assigning enlisted women in cohorts to new units. Dr Yarnell’s research demonstrates the importance of social support networks as a protective mental and physical health factor (Rico; Yarnell; Cromptvoets).
- 4) Most military organizations recognize the need to reduce injuries and optimize performance but do not prioritize it for women (Cromptvoets; Rico). A few countries have now designed and issued women specific equipment to optimize women’s performance and reduce injuries.

C.5.1 Recurring Sub-Themes

Resistance to women’s inclusion in ground combat units has been repeatedly studied as countries have prepared to integrate their ground combat units. There is a great deal of cross-cultural consistency relative to resistance which was succinctly summarized by Wineman in his presentation. Despite existing studies that outline the known areas of resistance countries continue to look at their own points of resistance. Harvey’s research in the UK is yet another study that arrives at the same conclusions as previous studies on resistance in countries that have already integrated. NATO may want to encourage nations to spend their research dollars on moving beyond this research area to fill other research gaps.

Diversity discussions figured heavily in many presentations with most citing studies that show increased capabilities with more diverse teams. Linking women’s participation to increased capabilities is a strategic communications strategy being used to combat resistance but it may not be having the intended effects. There is a growing body of research that shows that training that is based on this line of reasoning not only not help but may actually decrease acceptance (Bregman, 2012, [3]) to diverse teams.

High rates of harassment and assault against service women has been systematically documented across NATO nations in recent years. Therefore, it should come as no surprise that ongoing harassment, marginalization and underutilization of qualified women is driving women out of ground combat units.

Research by Rico (US) and Cromptvoets (Australia) reveal that qualified enlisted women are facing situations of extreme harassment that is causing them to reclassify out of ground combat occupations or to leave the military altogether. Research by Steder reveals that women who qualified for special operations units are not being utilized and are being sent back to the regular operational force. These women have expressed disillusionment due to a “dead end” opportunity that is causing them to leave the military when they are not allowed to actually serve in special operations units. Similarly, Nanglu found that women peacekeepers are subordinated to more traditional support jobs and have limited job assignment opportunities.

C.5.2 Research Gaps

Although women have been integrated into ground combat occupations and units in some countries for many years little is known about their impact on the units or the impact on the women. Monitoring and evaluation seems to end abruptly after the first few years of integration has occurred (Davis). There is still no research that examines how women may or may not have impacted operational effectiveness. Research Questions: What has been the impact of women on ground combat units? What has been the impact on the women who have integrated ground combat units?

Physical standards and women’s injury rates were two topics that figured frequently in research and presentations while little attention is paid to women specific equipment or training that might enhance women’s performance and reduce injury rates. Cromptvoets points to women specific equipment that is available in Australia but was not issued while other countries seem blind to the requirement to develop equipment at all that might enhance women’s performance and reduce injuries. Research Questions: What women specific equipment is available across NATO and how does it impact performance and injury rates? What are the commonly agreed upon physical requirements for the same or similar occupations in NATO military formations?

Much of the research uncritically accepts existing masculine norms as gender neutral standards without examining the gendered nature of the norms themselves. Women are simply expected to conform or assimilate (Davis) into the existing masculine paradigm. Research presented at the conference found several difficulties with this expectation most notably that it creates a sort of double bind for women (Steder). They are expected to be exactly like men but bring something new and unique to the organization that make their presence valuable. Steder’s research highlights how this has impacted service women in Norway and the training conundrum it presents. Research Questions: What methods or steps yield the best outcomes for entry level training and subsequent integration? What sets women up for success in newly integrated units? What conditions allow some women to thrive and others to fail?

C.5.3 Participant and Committee Review of Presentations and Papers*

Further to the review and analysis provided by the technical evaluation and the programme committee, symposium participants were asked to evaluate the presentations against the objectives identified for the symposium. Based on review of 22 presentations, participants determined that a significant proportion addressed cultural (35%) and social (38%) influences, a smaller proportion addressed psychological factors (20%), and a small proportion (7%) were assessed as not reflecting the key objectives of the symposium (Figure C-1). Programme committee review of presentations reflect similar patterns, with slightly more emphasis on cultural influences and less on psychological.

The programme committee review of all papers (N = 16) that were submitted (Figure C-2) reinforced the observations presented throughout this report. When assessed in aggregate, on a three-point scale, with one indicating “no” and three indicating “a lot”, symposium papers provided “some” relevant research and analysis, knowledge, strategies for integration, and insights into the impact of gender integration on combat units. While additional research and analysis would be valuable in all domains, the evaluation highlighted particular research gaps related to cohort management, the measurement and monitoring of integration, and

lessons learned/best practices to support the integration of women into combat roles and units. Although not a specific objective of the symposium, the HFM-269 Panel on PES also highlighted significant research gaps in areas with particular impact on women in combat occupations and units. Notwithstanding the need for further research, the knowledge and information shared through the symposium presentations and papers provide valuable contribution to the final report of SAS 120, Integration of Women into Combat Units.

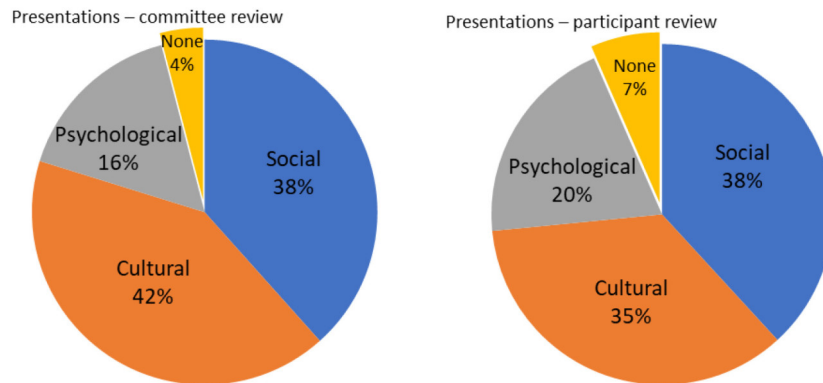


Figure C-1: Participant and Committee Review of Symposium Presentations.

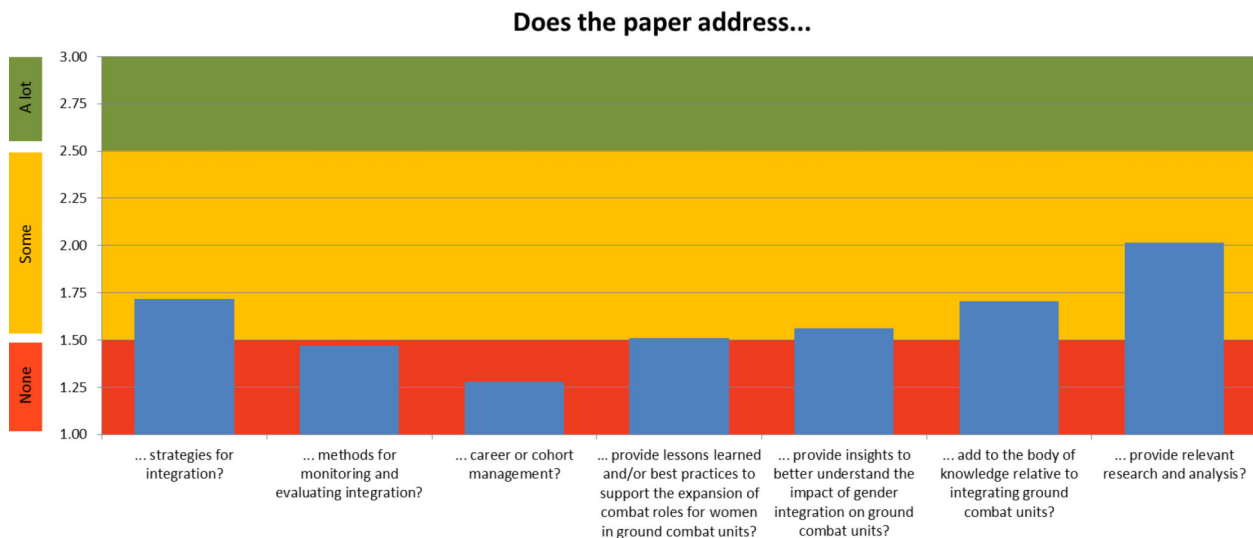


Figure C-2: Programme Committee Review of Papers Submitted to SAS-137.

C.5.4 Recommendations

NATO should host a resource portal where countries can post original research and review the research of other countries as they seek to integrate their ground combat units or increase the percentages of women.

NATO should identify and publish a set of minimum physical occupational standards for common ground combat occupations like “infanteer” or “tanker” to reduce extreme standards designed to keep most otherwise qualified women out of ground combat occupations.

NATO should publish a set of research gaps to help countries identify what research remains and what questions have already been answered and by whom.

C.6 REFERENCES

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