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Gender diversity management in NATO for sustainable security and peace

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Abstract

The article focuses on the need for a paradigm shift in diversity management for sustainable peace and security. We discuss the bidirectional influence of security and defence organisations and society; the intersectionality of issues related to social justice, health, race, and ethnicity; sexual abuse and exploitation; and cultural factors that influence the functioning of LGBTQ+ personnel and the gender/technology nexus in the context of North Atlantic Treaty Organization (NATO). During the application of the Sustainable Security Paradigm to gender diversity management, we found that ecofeminism and the ideas of post-colonial theory should inform the transformational shift of contemporary security and defence organisational cultures. This approach was used by the multinational NATO Science & Technology Organization Exploratory Team ET-197 Gender, Peace and Sustainable Security (2022-23) and its successor, the NATO HFM-368 Research Task Group (2023-26). Our research efforts were triangulated by an analysis of doctrinal textual, audiovisual and art sources that relate to gender diversity and its management. Given the complexity of future warfare, there is a strategic imperative to develop an inclusive defence strategy that reconfigures the traditional white male-focused military paradigm. It is evident that the root cause of gender inequality cannot be solved solely by doctrine and training solutions—rather a transformational organisational culture shift is pivotal and critical to the future global security. This is the first article that addresses the issues of gender diversity management for sustainable security and peace in an interdisciplinary and holistic manner. Our approach is relevant to any organisation with internal gender and intersectional diversity and systemic discrimination.

Keywords

social justice, NATO, organisational effectiveness, sustainable security, gender diversity management



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Introduction

NATO's Gender Problem

The escalation of global conflicts highlights the impact on women who have been disenfranchised, dislocated, victimised, and who face a future of uncertainty. Indeed, women's human rights have been violated across all dimensions from personal inalienable rights and freedoms to the right of independent agency and participation in governance (Blanchfield, 2023; The White House (Gov), 2023). Women, who constitute half of the world's population (United Nations Department of Economic and Social Affairs, 2022) should be given the opportunity to contribute and support peace and security efforts on a global scale. However, they are often under-represented in peace and security endeavours and considered a minority and a "niche" (Perez, 2019). It is apparent that women are most often ignored based on physical, cultural, and social criteria that restrict and limit their opportunities to contribute to peace and global security environment.

Gender inequality remains an issue in affording women the opportunity to contribute and support peace and security across the globe (Blanchfield, 2023). The 2022 UN Global Development Goals Report provides evidence regarding the disenfranchisement and social inequities of women based solely on their gender (UN, 2022). Over 60% of chronically hungry individuals are women and girls. There is a significant gap in women's access to basic subsistence needs that plays a pivotal role in their disenfranchisement, agency, and their ability to participate in leadership and decision-making roles. Female representation is limited in both lower and upper houses of national parliaments to 26.2% (United Nations, 2022). Worldwide, female managerial positions are limited to 28.3%. Prior to the 2019 COVID pandemic, women comprised 39.4% of total employment, but in 2020, they accounted for nearly 45% of global employment losses. More disturbing is the fact that almost one in five young women were married before the age of 18 years (United Nations, 2022), and those from developing countries were married in childhood at a rate of approximately 35%.

Gender inequality, gender disenfranchisement, sexual violations, and the exploitation of women have been used historically to control female population, which continue to disempower women. Historically, women have been viewed as victims and non-entities with regard to governance across developing countries (Yoshida and Céspedes-Báez, 2021). Gender gaps economically marginalise women in developing countries. The forcible displacement of women across nations, such as Ethiopia, Nigeria, and Somalia, has resulted in both decrease in economic opportunities and increase in violence aimed at women (Georgetown Research Institute, 2022). Additionally, at least 200 million girls and women have been subjected to female genital mutilation. Between 2018 and 2021, only 26% of countries had comprehensive systems in place to track public allocations for gender equality, and 59% had some features of such a system, while 15% lacked the minimum elements required for such tracking (United Nations, 2022; UN Women, 2021).

These disparities result from the unjust and unsustainable security paradigm that stems from the national security strategies of nations imposing their rulesets on women (Ellis, 2023). Some scholars have argued that the cosmology and anthropology of division has constructed a structurally dichotomised reality in which women and minorities, like nature, should be controlled, oppressed, exploited, and dominated by men (Shiva and Mies, 2014). The traditional realist view of security focuses on protection of a state or society against external threats through the use of military force or other means of defence. This patriarchal paradigm serves only a privileged, tiny fraction of the global population. Such a paradigm can only be sustained through violence and by shaping modern science and technology against the nature, the colonised, and women. This traditional, state-centered security paradigm functions by dispossessing women of their generative and productive capacity, as it does with productive capacities of the nature.

Inevitably, because of this exclusionary and dominating security paradigm, women have been unable to participate fully in military organisations and security contexts in decision-making roles. This is particularly noticeable in peacekeeping processes which require more than traditional (male) military skills. Without women and gender perspectives, a stable security environment cannot be built. Research indicates that female peacekeeping personnel are critical for the success of peacekeeping missions. Women in conflict zones tend to confide in female peacekeepers and when at least 30% of peacekeepers are female, local women become more involved in the peace process, increasing the likelihood that the peace achieved is sustained (Carey, 2001; Whitworth, 2004). Moreover, experience, knowledge, and communication skills of females and minorities are essential tools in peace-building and peacekeeping (Sandole and Staroste, 2015). The positive impact of gender diversity in peacekeeping indicates the enhanced value of understanding and deploying gender-diverse and gender-aware personnel in any security context.

Gender (defined as a spectrum and focusing on men and women) plays a crucial role in organisational effectiveness within and between organisations, and in interaction with the local populations. Individuals who are adept at communication, empathy, cooperation, gender competence, and cultural competence are more effective in all contexts. Most military organisations perceive these qualities as essentially or naturally feminine. Accordingly, their solution is to add more women as a means to increasing these capabilities within the organisation. Given the plateauing of numbers of women going into military organisations, this solution is not sufficient. Although generally associated with women because of socialisation and years of practice, these behaviours and capabilities should be recognised as skills (Marçal, 2021), and hence not necessarily exclusive to either gender. Conceptualised as skills, they can be developed by any individual with subsequent appropriate training. Females in a traditionally male environment must often acquire skills associated with male soldiers. In these areas, females are as least as effective as the incumbent males. For example, patients treated by female surgeons have a lower riskadjusted likelihood of adverse postoperative outcomes at 90 days and 1 year following surgery (compared to patients treated by male surgeons) (Wallis et al., 2023). In a balanced organisational culture, male soldiers should also acquire the skills associated with females (Holohan, 2019).

NATO organisations have a deep gap between doctrine and practice in terms of gender equality. The non-recognition and devaluing of the skill set currently associated with women discourages women from joining military organisations and has resulted in a plateauing of female participation in NATO militaries. In NATO, the organisational culture reflects the male majority. Those who do not fit the paradigm are seen as "other" and experience the environment as less than inclusive. Proportions in organisations matter, whether it is gender or race and ethnicity (Kanter, 1993); a skewed distribution produces

a skewed organisational culture. An organisational culture that recognises and values a wider set of skills and competencies increases effectiveness, improves recruitment and retention, and creates a comfortable environment for anyone who does not fit the current "default male" (Perez, 2019) model of a soldier or peacekeeper.

Concerning methodology, during the application of the Sustainable Security Paradigm (SSP) to gender diversity management, we found that ecofeminism and the ideas of post-colonial theory should inform the transformational shift of contemporary security and defence organisational cultures. This approach was used by the multinational NATO STO Exploratory Team ET-197 Gender, Peace and Sustainable Security (2022–23) and its successor, the NATO HFM-368 Research Task Group (2023–26). Our multinational research meetings focused on the violation of women's rights, access to power, and the ability to contribute as a full partner in the development of human rights, peace, and security on a global scale, in both uniformed organisations and civilian society. Our research efforts were triangulated by the analysis of doctrinal, textual, audiovisual, and art sources that relate to gender diversity and its management globally.

There is a dire need to integrate the female perspective in human rights and justice policies, as their perspective represents that of other disenfranchised individuals. Failure to integrate the female perspective, experiences, and challenges could lead to misunderstanding the relationship between gender dynamics and global security challenges. The marginalisation of women in their agency and role in governance is reflected by the increased control that nations place on women to keep them isolated from participation in their governance. In contrast, the increased inclusion of women in peace and security efforts fosters collaboration between governments that could serve as the foundation for forging partnerships to ensure gender equanimity and security across nations. In fact, women's participation across all levels of gender equality and diversity lay the foundation "for a more prosperous, secure and democratic nation" (Jennings, 2023).

NATO's Race and Ethnicity Problem

NATO tends to discount or ignore the intersection of ethnicity, race, gender, and sexual orientation. The linkages between these social constructs must be taken into consideration in the design of inclusive solutions, including those for military organisations.

As the Women, Peace and Security Index 2021 indicates, in many US states, racial disparities affected the status of women. Racial gaps were most marked for college degree attainment, representation in the state legislature, and maternal mortality (Georgetown Institute for Women, Peace and Security (GCWPS) and the Peace Research Institute Oslo, 2022). Parallel institutional racism and individual-level discrimination have adverse effects on health and psychological well-being. A review of medical studies conducted in the military context has found that exposure to racial/ethnic discrimination can adversely affect physical and mental health and contribute to hypertension, cardiovascular disease, obesity, anxiety, and depression; is detrimental to the health of racial/ethnic minorities through its association with physiological changes and high-risk behaviour, such as excessive alcohol consumption; and links with pre-clinical indicators of disease, including increased allostatic load, inflammation, shorter telomere length, dysregulation of cortisol, and oxidative stress (Coughlin, 2021).

Psychological factors associated with discrimination, such as low self-esteem, depression, increased hopelessness, etc., are also connected with poor mental health because of discrimination issues. A study conducted in 2017 on the occurrence of post-traumatic stress

disorder (PTSD) in civilian and military populations shows that women veterans reported the highest rates of lifetime and past-year PTSD (13.4%), compared with women civilians (8%), male veterans (7.7%), and male civilians (3.4%) (Lehavot *et al.*, 2018). Although global PTSD symptoms were generally similar in males, African Americans had a higher rate of "re-experiencing" than Caucasians (Coleman *et al.*, 2019). These results highlight the intersection or race and gender with PTSD prevalence and indicate that severe PTSD negatively impacts operational effectiveness.

Discrimination of all types, systemic bias, inequality, exploitation of minority groups, and sexual harassment and assault, are but a few of the issues that must be addressed in NATO. These violations are antithetical to the military's core values and detrimental to the trust required to build and sustain an effective and inclusive military force. As noted in the Workplace and Gender Relations (WGR) Survey of Military Members 2021 report (Breslin *et al.*, 2021), gender discrimination and sexual harassment are a grave concern. Although these phenomena stem from gender discrimination in mainstream society based on "toxic masculinity" (Ford, 2019), NATO is not isolated from their effect.

NATO's LGBTQ+ Problem

In member nations, LGBTQ+ inclusion and equality varies greatly, from upright systemic discrimination, through "don't ask, don't tell," to genuine inclusion. For the most part, however, NATO still adheres to the traditional binary male/female opposition. However, this traditional construct does not reflect the contemporary social landscape. Gender in the 21st century is viewed as a spectrum with numerous nuances and implications as to the gender-ascribed roles, skills, and abilities (Ben, 2020; Joz et al., 2020; Mihr and Gibney, 2014; Twist et al., 2020). Currently, up to 3% of global population identify themselves as non-binary (Statista, 2021).

In member countries where transgender personnel serve in the armed services, the national military often issues permission for each step in a serviceman's gender transition. As a result, soldiers are judged by regulations as to height, weight, and performance of a gender group that no longer represents the current state of psychological and physical characteristics (VICE News, 2022).

NATO's Diversity and Inclusion Programme espouses policies and practices to promote the development of a diverse and inclusive workforce that uses differences to achieve organisational effectiveness (North Atlantic Treaty Organization (NATO) International Staff, 2021). Yet in practice, NATO's equal opportunity and diversity policy remains unenforced.

NATO's Sexual Violence Problem

Of course, UN, NATO, European Union (EU), and most military organisations have policies against sexual exploitation and abuse (SEA) (Al-Hussein, 2005; Charbonne, 2021; Inter-Agency Standing Committee (IASC), 2021; NATO, 2019), yet these policies are rarely enforced.

The current patriarchal security paradigm creates an environment that tolerates SEA. Sexual violence is an endemic problem in peacekeeping, as evidenced by a 2021 study of 35 international peacekeeping missions by the UN, NATO, Economic Community of West African States (ECOWAS), and African Union (Nordås, 2021). Moreover, the

phenomenon is largely underreported. Harm is perpetrated by the very people who are supposed to be the "protectors" and enforcers of international law and human rights. Often, the erosion of trust fatally undermines the mission. Host factors often exacerbate sexual violence, including patriarchal power structures, a culture of impunity for genderbased violence, and weak legal protection for women that permit abuse, poverty, and violence (Nordås, 2021).

Preventing sexual and gender-based violence is not just about preventing rape as a weapon of war, which for centuries has been a horrific but an effective tool for psychological and moral annihilation of an opponent (<u>Hayden, 2011</u>). Peacekeepers themselves must be held accountable for using sexual violence as a weapon of exploitation. Only a shift in the extreme power disparity between the overwhelmingly male composition of peacekeepers and the most vulnerable populations on the ground in missions—women and children—will alleviate the issue.

Violence against women is not merely a "side effect" of modern science and war (which are interconnected), but an inherent feature of modern, civilised society. A bidirectional relationship exists between discrimination and growth of violent, undemocratically imposed, unjust economic and social policies, and violence against women in all forms, from oppression to rape and homicide (Shiva and Mies, 2014).

NATO's Technology Problem

Advanced technologies and innovative adaptations of Artificial Intelligence (AI) and Machine Learning (ML) have reconfigured the battle space and reshaped the 21st century warfare. The integration of drones, robotics, and autonomous systems applied in novel approaches in the recent Russia–Ukraine conflict has altered battle damage assessment, intelligence reconnaissance and surveillance operations as well as highlighted the disparity between senior and junior military personnel regarding the technical capabilities of integrating advanced technologies.

A widespread, systemic, and implicit gender bias exists in most of the fields in which AI–ML is widely used, including search and ranking algorithms; systems of online recommendations; robotics; Natural Language Processing (NLP); and automated decision-support systems that are used in social programmes, national defence, justice, medicine and health-care, and policing. They are programmed with a binary concept of gender which does not reflect the real world, and completely ignores the complexity of identities, most common among the Y- and Z-generation members (Shrestha and Das, 2022). Algorithmic unfairness has been starkly evidenced in the groundbreaking paper "Gender shades: intersectional accuracy disparities in commercial gender classification" (Buolamwini and Gebru, 2018), which demonstrated that facial recognition systems were more than 30% inaccurate at classifying the faces of women of colour but had the greatest accuracy for white men. This discovery led one of the authors, Buolamwini, an MIT Media Lab researcher, to an investigation of widespread bias in algorithms. Her struggle for the first-ever legislation in the United States to govern against bias in the algorithms was inspirationally depicted in the 2020 documentary *Coded Bias* 2020 (7th Empire Media, 2020).

Another issue concerns the lack of diversity in the science, technology, engineering, and mathematics (STEM) workforce at all levels. As of 2021, in the United States, women constituted only 25% of those in computer jobs and 15% in engineering. In the EU, 41% of STEM scientists are females, but only 9% of information and communications technology (ICT) specialists and about one-third of the STEM graduates are females.

The percentage of females entering tertiary education in STEM in Organization for Economic Cooperation and Development (OECD) countries does not exceed 16% in the top country (United Kingdom), with the average being not even 9% (European Commission, Directorate-General for Education, Youth, Sport and Culture, 2015; Organization for Economic Co-operation and Development (OECD), 2021; Perez, 2021). At the Defence Advanced Research Projects Agency (DARPA), only 32% of employees are females, and the most common ethnicity is white (50%) (Defense Advanced Research Projects Agency (DARAP), 2022). There is some good news, however, in that those engaged in military service are associated with higher odds of completing a STEM degree and that this association is particularly strong for female veterans (Steidl *et al.*, 2020).

Early cyber adherents express their naïve hope in manifestos, such as *A Declaration of the Independence of Cyberspace* (1996) that the virtual world would be a world that is both everywhere and nowhere, but it is not where bodies live, a world that all may enter without privilege or prejudice accorded by race, economic power, military force, or station of birth" (Barlow, 2016). However, in reality, cyberspace is forged by the intersectionality of age, economic status, culture, gender, and severely biased algorithms. While many gender-bias detection and mitigation methods have been proposed in the literature, they are not widely applied nor are the ethical and legal aspects discussed (Shrestha and Das, 2022).

NATO's Current Remedial Efforts

More than 20 years after adopting the women, peace, and security agenda (U.S. Southern Command Women, Peace, and Security (WPS), 2023), the UN Secretary-General expressed the need to examine and make prominent "the role played by women in promoting and maintaining peace" (Gutteres, 2022). One of the essential premises of NATO's 2022 strategic concept is to implement the UN's women, peace and security agenda across all activities and advance gender equality as a reflection of its core values (NATO, 2022). Member nations are actively carrying out the action plan for implementation of the NATO/EAPC policy on women, peace and security 21–25 (NATO, 2021), and the NATO International Staff laid out the diversity and inclusion (D & I) action plan for 2019–2023 (NATO International Staff, 2021). The EU military staff launched its missions and operations gender monitoring team as a part of carrying out the EU Gender Action Plan (GAP III) 2021–2025 (European Union External Action Service, 2021). Most of the world's militaries have already adopted or are developing culturally adjusted WPS regulations.

NATO has recently become concerned about the paucity of women in peacekeeping operations, especially conflict analysis and design and implementation of peace-building interventions (Jennings, 2011). NATO has finally recognised that a lack of women has hindered their operational effectiveness. Efforts are underway to explore the problem and identify potential solutions. The 2021 Women in the Armed Forces NATO Science and Technology Organisation's (STO) report identified four key areas of research: (1) employment and integration of women in the armed formations; (2) sexual violence and harassment; (3) kit and equipment; and (4) health (NATO STO, 2021). The report noted that leadership and leader development play a key role in the effective integration of service women into the armed forces, as well as contributing to the culture of organisations and the prevention of sexual harassment and assault. The report highlighted the importance of training to the prospects of service for women in a range of areas, including integration into combat roles and the enhancement of physical performance. Therefore, the action plan for implementation of the NATO/EAPC policy on women, peace and security

21–25 (NATO, 2021) calls for advancements in the institutional framework; integration of gender perspectives in all NATO activities, including education, training and exercises; partnerships that help to achieve the WPS agenda; and implementing measures to ensure the highest standards of integrity and morale among the personnel.

NATO's Exploratory Team 197 on Gender, Peace, and Sustainable Security

NATO's doctrinal policy, and organisational and training solutions are all in place. As noted above, nations are paying attention to the action plan for implementation of the NATO/EAPC policy on women, peace, and security. However, anyone familiar with NATO would realise that their version of an "action plan" is primarily aspirational. To operationalise those recommendations and make them actionable, in 2021, the international NATO STO ET-197 gender, peace and sustainable security exploratory team was created by the authors. It gathered military and civilian gender experts from United States, Canada, Ireland, Estonia, Poland, and the Netherlands. This research team's objective was to identify and report on the *status quo* of gender issues, approaches, and regulations in member states and identify the best and worst practices in respective organisational cultures across the NATO nations.

The results of the ET-197 research team on gender, peace and sustainable security (2022–2023) confirmed the necessity to address these gaps by continued research aimed at developing the training, education, and organisational measures in the following areas:

- An in-depth examination of authentic gender-specific demographics within the NATO forces, alongside consideration of cultural factors, intersections of identity, and a shift from a binary to a spectrum understanding of gender, is crucial for enhancing recruitment and retention efforts. This approach leads to an optimised performance and efficiency in both civilian and military capacities within defence organisations.
- Preconceived notions of masculine and feminine attributes, based on outdated divisions of labour, impose constraints on personal and professional growth of individuals in military settings. These stereotypes contribute to a range of violence against women and LGBTQ+ individuals, hinder the creation of an inclusive organisational culture, and impede the recruitment and retention of the most qualified personnel. Additionally, they have significant ramifications for operational effectiveness.
- The imperative for organisational transformation and inclusivity, coupled with effective diversity management, stands as a prerequisite for the sustained and optimal operation of any institution or system. Inclusivity plays a pivotal role in the formation of high-performing teams and functions as a force multiplier. Similarly, allyship—ensuring collaborative partnerships—is crucial in nurturing an inclusive culture and serves as a potent tool for advocating gender equality and empowerment.
- Intersectionality is a critical factor in the effectiveness of both military organisations and broader alliance. Gender, when combined with factors, such as sexual orientation, race, religion, ethnicity, nationality, and economic status, significantly influences the performance of multicultural and multi-agency teams, which constitute NATO and its units. Individuals with marginalised identities (due to gender, race, or both) often possess a more comprehensive understanding of diverse perspectives, as their survival necessitates it. This holistic viewpoint is distinct from those in the majority identity (typically white and males in many NATO organisations).
- In the wake of the COVID-19 pandemic, the urgency for inclusive and transformative approaches to sustainable peace-building has become even more apparent. Recent shifts in the security landscape, exemplified by the ongoing conflict in Ukraine, present

- both challenges and opportunities for addressing gender dynamics in the pursuit of inclusive peace and enduring security.
- Gender bias constitutes a primary form of bias prevalent across military and police
 organisations, transcending various nations and missions. Norms are inherently rooted
 in a male-centric paradigm, relegating anything outside of this construct as "non-standard" or "deviant" (Kanter, 1993). However, it is widely acknowledged that engaging
 with the local female population is pivotal to achieving sustainable peace.
- The qualities sought in both male and female professionals should integrate attributes
 traditionally ascribed to each gender. These include cooperation, assertiveness, leadership skills, independence of thought and action, effective communication, and rational decision-making.
- A thorough reevaluation of the recruitment processes and motivations for women in service, as well as considerations for personnel retention (including maternity leave policies and marital regulations for all members), is essential. It is equally imperative to address the barriers to career advancement faced by women in top leadership positions. This approach addresses a wide spectrum of root causes of inequality spanning both horizontal and vertical dimensions.
- A transformation in the narrative and terminology surrounding efforts to enhance gender equality and empowerment within security and defence organisations is paramount. The terminology employed by entities such as the UN, NATO, and the EU—"inclusion," "mainstreaming," and "integration"—implies that the participation of women is an exceptional occurrence, perpetuating the notion of a special category within organisations originally designed by and for the dominant male demographic.

NATO Research Task Group (RTG-368) on Gender, Inclusive Leadership, and Sustainable Security

The preliminary research results of the ET-197 research (2022–2023) confirmed the need to address these gaps by continued research aimed at developing the training, education, and organisational measures in the above areas. To this end, the successor NATO Research Task Group (RTG-368) on gender, inclusive leadership and sustainable security will examine the implications of intersectionality across several factors, including health, discrimination, and sexual abuse in the military as well as cultural factors that influence the functioning of LGBTQ+ personnel and the gender/technology nexus. We will conduct a thorough gender gap analysis, as well as investigate the intersections of organisational, social, physical, security, cultural, and recruitment topics with those of race, ethnicity, economic status, nationality, and sexual orientation, that may impact gender equality and operational effectiveness. We will investigate gender discrimination and oppression. We will assess the impact of gender-related issues on military operations and leader development that has disenfranchised a segment of the population who might otherwise contribute to a range of activities aimed at providing sustainable security. We will create a framework of competencies required to achieve organisational effectiveness, and even transformational change. We will make recommendations to ensure social justice and facilitate the development of leaders who are well prepared and empowered to participate and lead across all military operations, including peacekeeping. We will investigate gender in the context of integration of advanced technologies.

Injecting Ecofeminism into NATO

Beyond the standard theoretical construct of a NATO report, we seek a more radical framework that incorporates the historical and institutional developments that have shaped our understandings, role, organizations, and societies, and which is flexible enough to frame our work. We posit ecofeminism as a framework to address gender within NATO and beyond. Ecofeminism takes a holistic approach to our socio-ecological system, namely the recognition that life in nature (which includes human beings) is maintained by means of cooperation, interconnectedness, preservation of diversity of all life forms, and mutual care and responsibility (Shiva and Mies, 2014). Ecofeminism elevates the mainstreaming and empowerment of women and minorities to a universal principle of celebrating the diversity of humanity.

Ecofeminism provides the philosophical underpinning to the SSP that guides our work (Abbott, 2006; Oxford Research Group, 2021; Prizzia and Levy, 2018; Sewak, 2005; Trochowska-Sviderok, 2021). Sustainable security is a concept that recognises the interdependence of security, development, and human rights. It emphasises the need for long-term holistic approaches to security that address the root causes of conflict and insecurity, such as poverty, inequality, and environmental degradation (Oxford Research Group, 2023). Ecofeminism addresses these topics as a complex-adaptive system that integrates a range of international, social, and individual activities over the long term. We believe that "security" must reflect the diversity of people, ways of knowing, and cultural practices to create an inclusive environment of just and sustainable development for all. Adaptive models for addressing gender issues must be developed to ensure inclusivity that are based on a theoretically coherent, empirically verifiable, and practical actionable scheme that will work on both individual and collective levels (Trochowska-Sviderok, 2021).

Conclusion

The disparity in gender equality and the erosion of women's rights across the globe poses a security threat at several levels. In an increasingly challenging and entropic security environment, crises such as the COVID-19 pandemic, unprecedented climate change, and an increase in military conflicts, including the Russia–Ukraine war, necessitate a more holistic approach to security. Technological advances in AI and ML have reconfigured the battle space and AI-enabled drones, robotics, and cyber technologies have increased the complexity of the battle space and reshaped the 21st-century warfare. All of these social forces have permanently altered the 21st-century global security.

In NATO, gender issues are far from resolved. Discrimination by gender, race, ethnicity, or sexual orientation, systemic bias and inequality, the exploitation of minority groups, and sexual harassment and assault, is antithetical to the military's core values and detrimental to the trust required to build and sustain an effective and inclusive military force. As noted in the WGR Survey of Military Members 2021 report, gender discrimination and sexual harassment remain a grave concern (Breslin *et al.*, 2021). Thus, there is a strategic imperative to address gender inequities that disenfranchise those who serve and enhance military operations and peacekeeping.

Given the complexity of security in a highly interconnected world with complex problems, it is essential that gender does not remain a barrier to each nation's defence and international security. Therefore, there is a strategic imperative to develop an inclusive defence strategy that reconfigures the traditional white male-focused military paradigm. The long-term objective is to develop the means of fostering equitable participation across agencies and genders. It is evident that the root cause of gender inequality cannot be solved solely by doctrine and training solutions—rather, a transformational organisational culture shift is pivotal and critical to future global security (Acker, 1994, 1990; Burke, 2017; Schein, 2010).

The framework of ecofeminism should not be seen as the conceptual opposite of military thought but an encompassing epistemology that recognises different ways of knowing, institutional diversity, and contributions from all.

Feminist perspectives and traditional military values are indeed often seen as confronting one another in a zero-sum game. (...) This zero-sum view is both inaccurate and unhelpful for everyone seeking to improve international security and stability. The two viewpoints have much to learn from each other, and there are plenty of synergies to be explored (Egnell, 2016).

Exploring these synergies would help NATO and its allied partners address future challenges and ensure the health, security, and welfare of our populations. To achieve this end, we have laid out the challenges and steps we need to take, starting with ensuring that all genders have equal access and opportunities to become participants and leaders.

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