NORTH ATLANTIC TREATY ORGANISATION RESEARCH AND TECHNOLOGY ORGANISATION



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**RTO MEETING PROCEEDINGS** 

**MP-HFM-158** 

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## Impacts of Gender Differences on Conducting Operational Activities

(Impact des différences homme/femme sur la conduite des activités opérationnelles)

Papers presented at the RTO Human Factors and Medicine Panel (HFM) Symposium held in Antalya, Turkey on 13-15 October 2008.



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# The Research and Technology Organisation (RTO) of NATO

RTO is the single focus in NATO for Defence Research and Technology activities. Its mission is to conduct and promote co-operative research and information exchange. The objective is to support the development and effective use of national defence research and technology and to meet the military needs of the Alliance, to maintain a technological lead, and to provide advice to NATO and national decision makers. The RTO performs its mission with the support of an extensive network of national experts. It also ensures effective co-ordination with other NATO bodies involved in R&T activities.

RTO reports both to the Military Committee of NATO and to the Conference of National Armament Directors. It comprises a Research and Technology Board (RTB) as the highest level of national representation and the Research and Technology Agency (RTA), a dedicated staff with its headquarters in Neuilly, near Paris, France. In order to facilitate contacts with the military users and other NATO activities, a small part of the RTA staff is located in NATO Headquarters in Brussels. The Brussels staff also co-ordinates RTO's co-operation with nations in Middle and Eastern Europe, to which RTO attaches particular importance especially as working together in the field of research is one of the more promising areas of co-operation.

The total spectrum of R&T activities is covered by the following 7 bodies:

- 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 bodies are made up of national representatives as well as generally recognised 'world class' scientists. They also provide a communication link to military users and other NATO bodies. RTO's scientific and technological work is carried out by Technical Teams, created for specific activities and with a specific duration. Such Technical Teams can organise workshops, symposia, field trials, lecture series and training courses. An important function of these Technical Teams is to ensure the continuity of the expert networks.

RTO builds upon earlier co-operation in defence research and technology as set-up under the Advisory Group for Aerospace Research and Development (AGARD) and the Defence Research Group (DRG). AGARD and the DRG share common roots in that they were both established at the initiative of Dr Theodore von Kármán, a leading aerospace scientist, who early on recognised the importance of scientific support for the Allied Armed Forces. RTO is capitalising on these common roots in order to provide the Alliance and the NATO nations with a strong scientific and technological basis that will guarantee a solid base for the future.

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### Impacts of Gender Differences on Conducting Operational Activities (RTO-MP-HFM-158)

#### **Executive Summary**

The integration of women in the armed forces is proceeding at a variable pace from country to country and involves the management of the actual differences between men and women. This symposium provided the opportunity to assess those differences objectively and scientifically, while avoiding any political controversy or dogmatic approach.

The differences observed between men and women from the anthropological, physical, physiological, psychological and psychophysiological points of view are cross-cultural and can affect performances, including in specifically military tasks. As reported by a number of authors, these differences justify the adaptation of training, diet, equipment or medico-physiological follow-up according to the specific needs of women, as the standards currently implemented in armed forces are generally focused on the needs of male military personnel.

The psychosociological field is, in essence, more closely linked to the culture of each country and calls for an extension of studies which are, at present, rather mono-cultural, to consider a wider diversity of NATO countries. This diversification is all the more justified by the fact that coalition operations are becoming standard practice and bring into contact men and women from countries with great cultural differences. The prevention of psychological trauma linked to combat and sexual harassment should also be dealt with on a multicultural basis.





### Impact des différences homme/femme sur la conduite des activités opérationnelles (RTO-MP-HFM-158)

### Synthèse

L'intégration des femmes dans les armées, se fait à un rythme variable dans les différents pays et implique la gestion des différences qui existent entre hommes et femmes. Ce symposium, a permis d'appréhender objectivement, scientifiquement ces différences, loin de toute controverse politique ou d'approche dogmatique.

Les différences observées entre hommes et femmes dans leurs dimensions anthropologiques, physiques, physiologiques, psychologiques, psychologiques sont transculturelles et peuvent affecter les performances y compris dans des tâches spécifiquement militaires. Ces différences justifient donc comme cela a été rapporté par plusieurs auteurs d'adapter soit l'entraînement, soit la nutrition, soit les équipements, soit le suivi médico-physiologique aux besoins spécifiques des femmes, les normes et standards en vigueur dans les armées étant habituellement ciblés sur les besoins des soldats masculins.

Le domaine psychosociologique est par essence plus lié à la culture du pays et mériterait une extension des études à ce jour un peu mono-culturelle, vers des pays de l'OTAN plus diversifiés. Cette diversification est d'autant plus justifiée que les opérations en coalition deviennent la norme et mettent en contact des militaires hommes et femmes de pays culturellement très différents. Les préventions des traumatismes psychiques liés au combat et aux harcèlements sexuels méritent aussi d'être traitées multi-culturellement.

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This symposium addressed issues related to the growing involvement of women in NATO military forces. This integration of female soldiers affects all military operations since most, if not all, military jobs are open to women.					
All dimensions of women's integration were considered in this symposium: physiology, anthropometry, pathology, training, psychology, sociology.					
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