How to Inspire Female Students to Study Energy Security

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Outline

1. General Trends
2. Possible Reasons
3. Recommendations
What we observe across all disciplines

- there is a constantly increasing number of female students in male dominated fields
- in some fields we have achieved gender equality in student representation
- across all disciplines we observe the so-called ”leaky career pipeline”, where we still find women underrepresented in top-ranking positions
- it less known that female under-representation in certain fields of social sciences is similar to the so-called STEM fields (Hancock et al., 2013)
- in the following I will discuss the developments related to international relations, which can be considered as a sub-field of political science and a discipline within social sciences
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Specific to social sciences and security related fields

### Representation in academia

An extensive US survey (2006) of the political science discipline suggests that (Maliniak et al., 2008):

- only 26% of Political Science Professors are female
- only 17% of Political Science **Full** Professors are female
- only 14% of full professors that research in the field of International Relations are female

This is one of the reasons, why we find that in top journals on energy issues only 15% of articles are authored by women (Sovacool, 2014)
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Representation in international organizations

Figure 1  Percentage of Women in the Professional (P1–5) and Higher Categories in the UN Secretariat and UN System, 31 December 2010

Source: Haack (2014)
Possible reasons

**Institutional Environment**

environment that is inhospitable to women (Hancock et al., 2013)

**Students’ stereotypes**

'boys like guns and girls care about people and this is why they pursue different careers' (Buhr and Sideras, 2015)

**The 'Invisible' Women**

Women in high ranking positions are less visible to public than men (Buhr and Sideras, 2015)

**Lack of female faculty in the male dominated fields**

lack of female faculty often results in lack of female role models and thus enforces the existing stereotypes (Cassese et al., 2012)
Possible reasons - My emphasis today

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Students’ stereotypes

A recent survey, asking international relations students about what they perceive to be major interests by gender:

<table>
<thead>
<tr>
<th>Greater Interest to Male Students (frequency of response)</th>
<th>Greater Interest to Female Students (frequency of response)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Military policy (117)</td>
<td>Women’s studies (95)</td>
</tr>
<tr>
<td>Weapons (93)</td>
<td>Human rights (71)</td>
</tr>
<tr>
<td>International security (35)</td>
<td>Child soldiers (28)</td>
</tr>
<tr>
<td>Diplomatic history (13)</td>
<td>Public health (25)</td>
</tr>
<tr>
<td>Foreign policy (13)</td>
<td>Ethnic conflict (22)</td>
</tr>
</tbody>
</table>

Source: Buhr and Sideras (2015)
### Students’ actual interests and career aspirations

#### Career Aspirations

<table>
<thead>
<tr>
<th>Males (times mentioned)</th>
<th>Females (times mentioned)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign policy (18)</td>
<td>Foreign policy (18)</td>
</tr>
<tr>
<td>International law and organizations (14)</td>
<td>Human rights (16)</td>
</tr>
<tr>
<td>International security (11)</td>
<td>International law and organizations (8)</td>
</tr>
<tr>
<td>International political economy (10)</td>
<td>Public health (6)</td>
</tr>
<tr>
<td>Military policy (9)</td>
<td>Environmental studies (5)</td>
</tr>
<tr>
<td>Intelligence (8)</td>
<td>Justice and peace studies (5)</td>
</tr>
<tr>
<td>Human rights (4)</td>
<td>Development studies (4)</td>
</tr>
<tr>
<td>Geographical area studies (3)</td>
<td>Geographical area studies (4)</td>
</tr>
<tr>
<td>Development studies (3)</td>
<td>Military policy (4)</td>
</tr>
<tr>
<td>Environmental studies (3)</td>
<td>Intelligence (3)</td>
</tr>
<tr>
<td>Dispute resolution (2)</td>
<td>International political economy (3)</td>
</tr>
<tr>
<td>Justice and peace studies (2)</td>
<td>International security (3)</td>
</tr>
<tr>
<td>Ethnic conflict (1)</td>
<td>Dispute resolution (2)</td>
</tr>
<tr>
<td>Food security (1)</td>
<td>Ethnic conflict (2)</td>
</tr>
<tr>
<td>Public health (1)</td>
<td>Weapons (1)</td>
</tr>
<tr>
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<td></td>
</tr>
</tbody>
</table>

Source: Buhr and Sideras (2015)
Students’ stereotypes enhanced

- With a few notable exceptions, we still see high-ranking meetings dominated by men
- Public is not aware of the growing changing demographics
- The career choices of young females might be affected by these stereotypes

Source: G7 meeting in Germany
Students’ stereotypes enhanced II

Female scholars are not considered influential in the dominant fields of international relations (Realism and Liberalism)

<table>
<thead>
<tr>
<th>Faculty Characteristics</th>
<th>Identified Woman as One of Four Most Influential IR Scholars&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Identified a Woman as Doing Interesting IR Scholarship&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Identified Woman as Having Influence on Own Research&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.005</td>
<td>-.027**</td>
<td>-.032**</td>
</tr>
<tr>
<td>Woman</td>
<td>.417***</td>
<td>.389***</td>
<td>.463***</td>
</tr>
<tr>
<td>Year obtained Ph.D.</td>
<td>-.002</td>
<td>-.016</td>
<td>-.012</td>
</tr>
<tr>
<td>Ideology (conservative)</td>
<td>-.056</td>
<td>-.113***</td>
<td>-.081*</td>
</tr>
<tr>
<td>Epistemology (positivist)</td>
<td>.024</td>
<td>.103</td>
<td>-.094</td>
</tr>
<tr>
<td>Paradigm:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Realism</td>
<td>-.019</td>
<td>.114</td>
<td>-.124</td>
</tr>
<tr>
<td>Liberalism</td>
<td>.138</td>
<td>.341*</td>
<td>.089</td>
</tr>
<tr>
<td>Marxism</td>
<td>.591</td>
<td>-.186</td>
<td>-.063</td>
</tr>
<tr>
<td>Constructivism</td>
<td>.264</td>
<td>.429**</td>
<td>.310</td>
</tr>
<tr>
<td>Feminism</td>
<td>1.22**</td>
<td>1.35**</td>
<td>1.70***</td>
</tr>
<tr>
<td>Other paradigm</td>
<td>-.036</td>
<td>.018</td>
<td>.169</td>
</tr>
<tr>
<td>Constant</td>
<td>3.60</td>
<td>32.2</td>
<td>25.2</td>
</tr>
<tr>
<td>Log-likelihood</td>
<td>-257.6</td>
<td>-396.4</td>
<td>-298.1</td>
</tr>
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* ≤ .10; ** ≤ .05; *** ≤ .01; N = 867
Source: 2006 Teaching, Research, and International Politics (TRIP) Survey.

Source: (Maliniak et al., 2008)
**Recommendation 1**: Make successful women more visible and create more role models to break the stereotypes

A 4 year old boy asks his mother: 'Can I become the chancellor of Germany, or is it just for girls?'

Source: The New Yorker
Recommendation II: Target high school students and undergraduates

- while there is a number of initiatives to motivate young females to enter STEM fields, the initiatives to motivate young females for security studies or energy-related studies from a social science perspective are less common.
- The existing surveys suggest that students begin to study with certain stereotypes and that it might affect their specializations.
- It is important for every university to have a set of strategies to break the existing stereotypes, especially within social sciences.
- Such strategies might include: letting female colleagues teach security-related classes (subjects perceived to be dominated by male scholars), introducing key readings by female scholars, offering workshops with leading female scholars.
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Recommendation III: Link faculty in social sciences with women practitioners in male dominated fields

- young students can rarely understand the full range of career opportunities in the security studies
- it is thus important to create trialogues between students, faculty and practitioners
- co-operation between female faculty and practitioners in male dominated sectors could offer a new way of mentoring young female students
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