



Women In Wargaming

DRIVING IMPACT IN THE DEFENCE & SECURITY SECTOR

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AGENDA

1. Background to Project
2. Experiment Design and Data
3. Games
4. Key Findings
5. Potential Impact on Defence
6. Recommendations
7. Future Research



Background

Background

A pilot study was conducted by SONAC, Cabinet Office UK to see if gender had an impact in the delivery, play and outcomes of wargaming and strategic decision making.

Commissioned Research

A full research programme was commissioned with the following questions, boundaries, and deliverables;

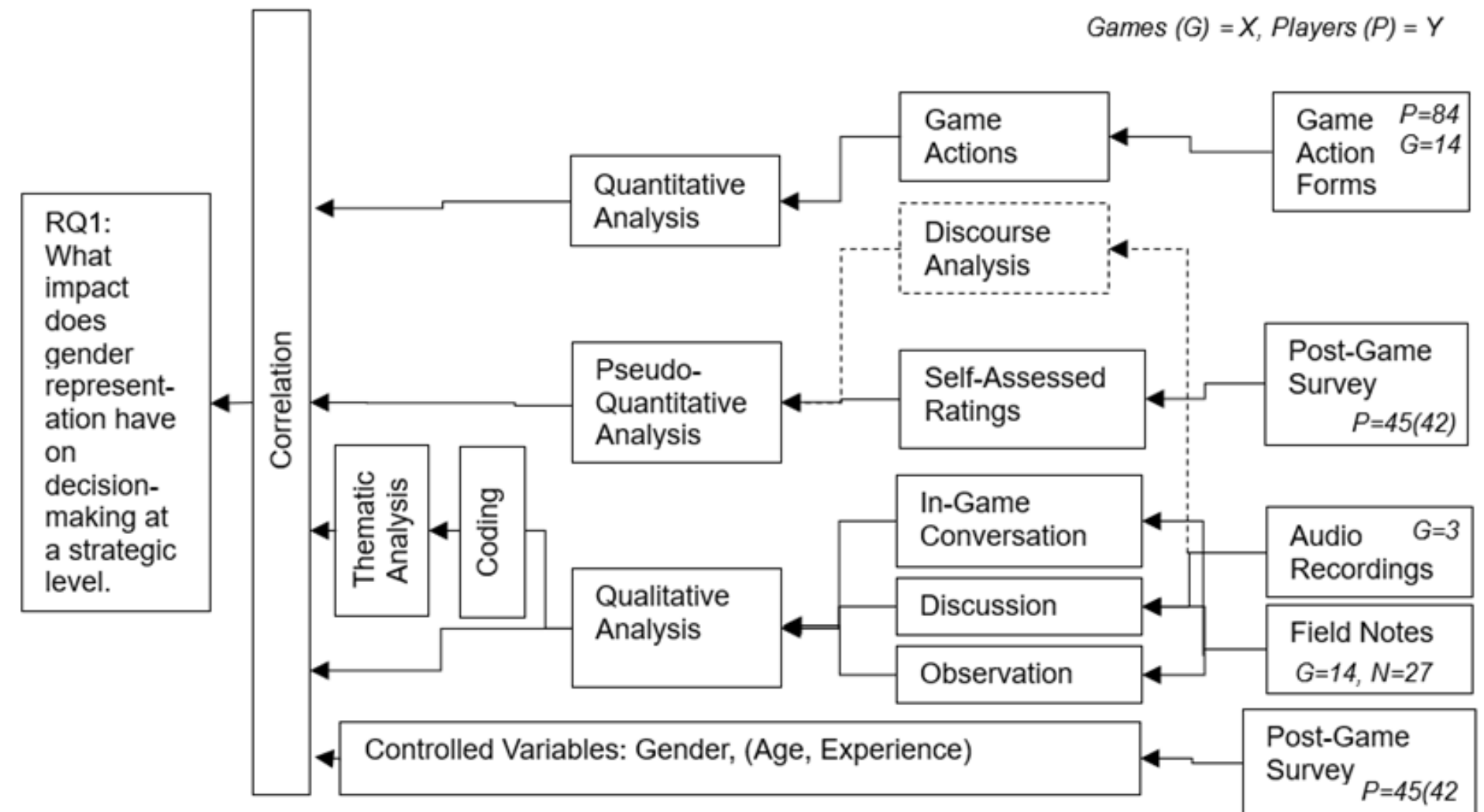
- 1) Are there differences in strategic decision making between single gender or mixed gender teams?
- 2) Record when 'the crisis' or scenario was resolved
- 3) Observations on behaviours in strategic decision making
- 4) Conclusions
- 5) Recommendations

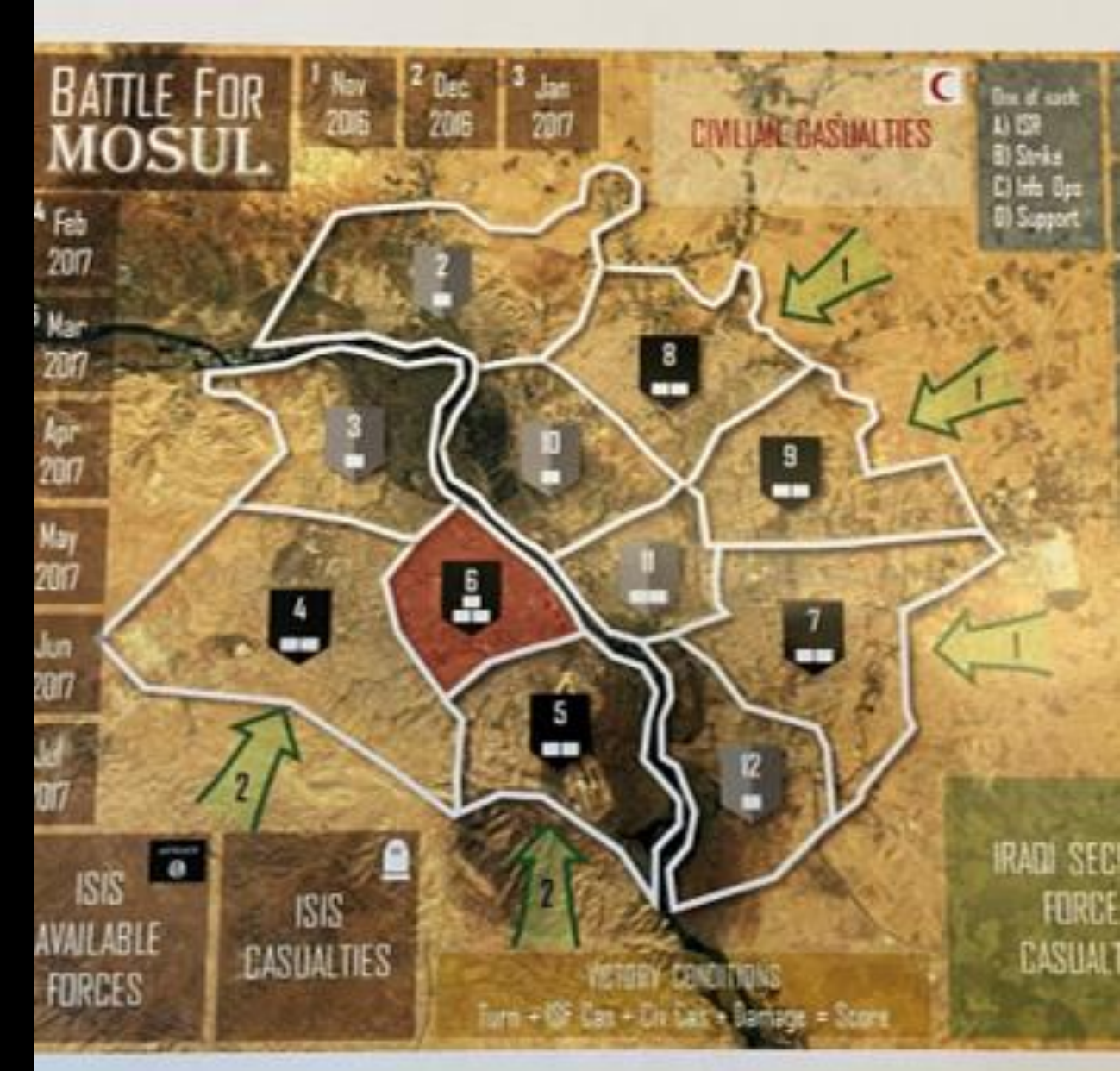


Experiment Design & Data Capture

Experiment Design

- An ethics plan was submitted prior to commencing any work for sign off by both the university and sponsor
- Pre-qualification questionnaire designed to recruit non-wargamers (not enough professional female wargamers exist)
- Data capture was organized by;
 - Observation forms
 - Game Action Forms
 - Audio
 - Pre-game questionnaire
 - Post-game questionnaire





Games Used

3 types of game were employed

- An historically-based solitaire game (Battle of Mosul) – this was also to look at the Protection of Civilians as part of a wider workshop
- A traditional table-top strategic game – 8 players, 6 turns
- A matrix game (Based on Article 5)

Key Findings - 1

Headline differences

- 1) Female players considered and chose from a wider range of strategic decision types than males – in both mixed-gender and all female games across all game types
- 2) All female groups discussed more options for longer than the all male and mixed gender groups – this was because they discussed different things with different group make ups and researched in detail each of the options within those groups.
- 3) All female teams resolved the crisis, on average, in half the number of turns of all-male groups. The mixed gender teams (providing that there was at least 40% female) resolved the crisis, on average, in 2/3 the number of turns of the all-male groups.
- 4) Groups with a balance of gender appeared to show a different balance of discussion and action choices. There was a more distinct balance between aggressive and non-aggressive actions.
- 5) The balance between the rationale and intuitive decision making changed dependent on players' age. Generally older players balanced intuition with rationale making.
- 6) The delivery of the strategic and subsequent tactical actions were that male players saw troop movements as aggressive, but female players saw them as preventative and moved many more of their capabilities into the crisis zone. At the strategic level male players, slightly, chose more aggressive actions than the female players. This doesn't match the literature completely where women are seen as more cautious tactically.

Key Findings - 2

- 7) There was evidence in Game 1 – Contested, that women role-played throughout the wargame.
- 8) Based on this research there was no evidence that women rely more on empathy, men more on logic. All female teams resolved the crisis, on average, in half the number of turns of all-male groups. The mixed gender teams (providing that there was at least 40% female) resolved the crisis, on average, in 2/3 the number of turns of the all-male groups.
- 9) There are some suggestions that presence of female members in a group help members to share opinions and information with each other.

	Diplom	Influence	Military	Readiness	Economic	Covert	Political	Cyber
FEMALE		1		1	2	1		
		1	1				1	1
MIXED				2		1	1	1
	1		1	3				
	1	1		1		2		
MALE	1	1		1		1		
	1		3	1				
	1		1	1				
SME	1	2	1	1				

All Female and Mixed Teams chose from a wider range of strategic options.

Potential Impact on Defence & Security

1. It is clear from this research that all female groups and mixed gender groups consider and use the widest range of possible strategic actions. By ensuring that teams in command of decision making have a balanced gender make up, this capability should be available to senior decision makers when considering resolution of a conflict. This could mean that Senior Leadership have more COA options to chose from, even if they choose the initial route guided by an all-male team.
2. As all-female and mixed-gender teams used fewer actions to resolve the simulated crises studied, it could be potentially cheaper and more cost-effective in employing mixed gender.
3. As we explore how to deliver professional wargaming to defence, security and other sectors – how do these findings impact on game design, pre-scenario data collection (what is the bias inherent in the system?) and how do we exploit the potential of increased gender balance in wargaming participants and delivery?



Recommendations - 1

- 1) Strategic wargames should include more appropriately skilled females in the design, delivery and participation. There are very few qualified female professional wargamers in the UK (six were identified at varying levels of experience) – either in government or civilian business. This study had to interview international female wargamers, as well as those in the UK, in order to build a dataset that would produce credible analysis. Currently those employed to deliver professional wargaming capabilities in the public sector are mostly civilians and almost 100% male.
- 2) We recommend education and training to relevant senior leaders in order to inspire a cultural change led from above, to enable the female talent that wants to deliver into defence strategic thinking and wargaming. Note the survey and interview results that include barriers to entry.
- 3) In order to create a larger pool of female (and male) professional wargamers, we recommend access, funding, and support to women wishing develop skills in designing, delivering and participating in wargamer. These to be serving military, government employees and civilians.

Recommendations - 2



- 4) The research reflected existing work around the perceptions of all genders about the tool of professional wargaming . There are preconceptions around wargaming that it is all 'war', historical reenactments, only for men, only done in defence environments or occasionally in academic settings or only done by 'nerds'. The perception is that it is also potentially 'boring'. Many of the participants of the study came with these perceptions, but as they self-selected to participate in this study, they also showed curiosity and open minds. The vast majority (125 of 130) have all signed up for future wargaming experience and education through The Studio.
- 5) We recommend a wider campaign on what professional wargaming actually is, and wargaming workshops or introductory sessions run in unclassified environments to ensure the greatest participation and education. Leaders at all levels in defence should understand what wargames are, when they are useful (and when they are not) and how to obtain the maximum education, training and analysis from their application.

Future Research

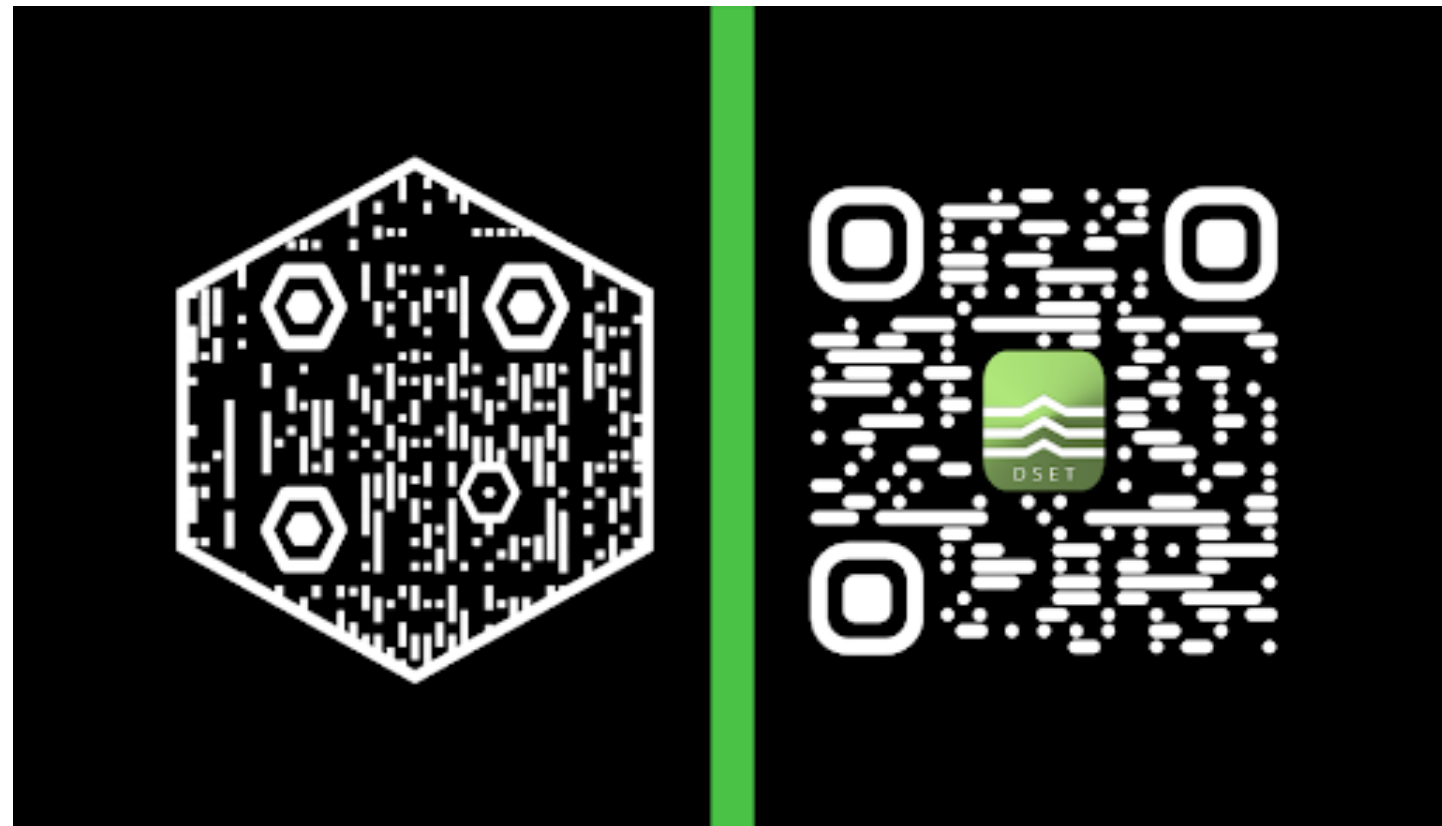


The report looks to non-gendered future research and those are listed there. To further to understanding of the impact of diversity of thought we will be looking at;

- 1) Diversity of educational and social background – it became clear by using non-wargamers in the research that many different trains of thought were apparent, and many from backgrounds that were non-traditional for wargaming. The 130 participants included those from the armed forces, MoD and civil service, but also retail workers, theatre groups, security guards, unemployed, finance specialists, linguists, pensioners and more. There appears to be a huge untapped pool of potential talent. 96% of participants wanted to learn more and be trained.
- 2) As part of her PhD, Tess will be looking to understand;
 - a) the impact of diversity of gender at a more granular level and the impact on game/scenario design.
 - b) The potential differences of neurodiversity in wargaming – from game design to players to facilitation
 - c) The potential differences of different generations – namely Gen Z and then Gen Alpha
 - d) The potential for AI in data analysis in Wargaming

Collaboration!

We ABSOLUTELY want as many people on board with this as possible, including use of The Studio and DSET – please DO get in contact and let's see how we can support one another.



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