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Oral Presentation Abstracts Alphabetical by Lead Author's Surname

Understanding cognitive work: improving decision making in defence

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In the current and future operating environments, defined by volatility, uncertainty, complexity and ambiguity (VUCA), successful performance depends largely on the cognitive work of defence personnel. That is, the thinking, judgments, assessments, planning and decision making of personnel at all levels from the “strategic Corporal” to the Chief of Joint Operations. Winning the conflict or effectively supporting relief/aid operations requires cognitive performance at the highest levels. Psychology, in combination with other disciplines, provides some of the theoretical models, analytical tools and techniques for understanding the requirements for effective performance and principled interventions. Interventions could include software requirements for decision support applications, strategies for more effective human-machine teaming, education or training to improve cognitive agility, or processes for improving collaborative decision making. This presentation will provide case studies where the analysis of cognitive work in defence contexts has led to recommendations or designs to improve performance. The first case study will describe the application of principles of visual perception through ecological interface design to support improved understanding of cyber effects on a mission; the second will describe the analysis and improvement of behaviours and ways of working that support collaborative planning and operational decision-making in complex circumstances; and finally, a third case study will describe how our understanding of thinking, reasoning and metacognition have supported the articulation of the notion of cognitive agility for the purposes of improving education and training approaches to developing more effective critical thinking and decision making.



Managing Human Cyber Risk in Organisations: The impact of Punishment on Working Conditions

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Cyber crime is rising at an unprecedented rate. Organisations are spending more than ever on combating the human element through training and other interventions, such as simulated phishing attacks. Metrics gathered through simulated phishing are used to manage human cyber risk in organisations and to provide further targeted interventions. But these metrics are often used to restrict and in some cases punish individuals who pose a cyber risk, ranging from locking computers until awareness programs have been completed to disciplinary action -- with some companies even suing their employees for falling victim to online scams. Yet such an approach has been argued to lead to a variety of unintended consequences. Not only is employee morale likely to drop, but so too might an employee's trust in the firm and respect for management. In this presentation, we will outline two studies that explore the role of punishment. In the first, a survey, we will address how organisations use and understand punishment in a cyber security context. In the second, we will experimentally assess the impact of different types of punishment on awareness and employee working conditions (such as productivity, trust, fairness and stress). The findings from these studies will aid in understanding the unintended impact of behaviour change interventions in the wild.



The impact of changing working practices on insider threat risk and mitigation strategies

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Purpose: To explore the impact of changing working practices on insider threat and identify corresponding mitigations.

Background: An increasingly diverse workforce requires greater variety in working patterns and practices to attract and retain employees. As more organisations start to adopt hot-desking and remote working, it is important to consider if/how these working practices effect insider threat. While remote working agreements can benefit both employer and employee they can also introduce personnel security risks, if not properly managed. For example, when people work remotely, organisations lose control of their working environment and direct supervision is not possible. This can lead to increased security risks, insufficient provision of welfare and support, and an erosion of company culture; all of which can increase insider threat risk. Similarly, while hot-desking can increase interconnectedness of staff and enhance creativity and collaboration, it removes employees' ability to identify behaviour that is out-of-character for those around them. With traditional insider threat prevention efforts relying heavily on the recognition of tell-tale behavioural indicators, it is necessary to consider the consequences of removing the 'human' from the detection chain.

Methods: Reviewing available literature, we explore the pros and cons of hot-desking and remote working in relation to insider threat and consider the underlying causes of different types of insider behaviour using Michie et al's (2011) COM-B model as a framework.

Conclusions: This presentation highlights how organisations can future-proof their working practices to ensure a secure workforce.



Defence MODified Stress Indicator Survey

Sarah Caldwell, Katie Phillips, *The Institute of Naval Medicine*

Stress in the workplace is identified as a significant occupational health hazard in military environments. The Ministry of Defence (MOD) recognises the importance of identifying, reducing and managing stress in the workplace through the MOD Stress in the Workplace Policy detailed in Joint Service Publication 375. The Institute of Naval Medicine (INM) created a modified version of the Health and Safety Executive (HSE) Management Standards Indicator Tool that had greater validity in the defence environment.

The MODified Stress Indicator Tool is administered by MOD psychologists at the INM when requested by customers within the MOD. The survey contains the original 35 items from the HSE tool, grouped into the seven HSE working conditions plus an additional 5 items about work-life balance. A comments box can be included to obtain additional feedback from respondents.

Mean scores are calculated for the eight working conditions. The original seven working conditions are compared against the HSE's benchmarks (136 non-defence UK organisations). Work-life balance scores are compared with defence norm group data. Thematic analysis is conducted on respondents' comments to extract common themes. A report is provided to customers.

Survey findings have been used to make changes to reduce work-related stress. For example, the introduction of peer support schemes and improvements in communication of information throughout the workforce.

To date, 30 surveys have been conducted, ranging from individual units through to tri-service headquarters.



Intelligence Analysts' Strategies for Solving Analytic Tasks

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Objectives: Previous research has shown that successful intelligence analysis requires critical thinking. The present research aimed to measure how often intelligence analysts use “deliberative” and “intuitive” strategies when solving specific tasks at each stage of the analytic workflow, and if this was associated with their skill or experience level.

Design: A self-report survey was used to collect data on the frequency with which analysts said they used strategies classified as deliberative vs intuitive in response to analytic scenarios representing stages of the workflow.

Methods: Participants (N = 113) volunteered to take part. Each read an analytic scenario and then rated on a 5-point scale ranging from 1 (never) to 5 (always) how often they used a specific strategy in response to the scenario. The scenarios represented each stages of the analytic workflow. We also collected data on analysts' level of experience, training, skills, and proportion of time spent working collaboratively vs individually.

Results: Quantitative analyses revealed that analysts reported using deliberative strategies significantly more often than intuitive ones when capturing customer requirements, processing data, and communicating conclusions. Years of experience, skills level, analytical thinking training, and amount of time spent working collaboratively vs individually were largely unrelated to reported strategy use.

Conclusions: This study sheds light on an under-researched area, taking a different approach to previous case-study based research. It demonstrates the applicability of decision science approaches to inform the design of training and support of intelligence analysis.



Improving Policy and Practice in Intelligence Analysis with Decision Science

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Purpose: This paper describes two areas of policy and practice in intelligence analysis that have been empirically examined by decision scientists: (1) the communication of uncertainty in analytic assessments and (2) the use of ‘structured analytic techniques’ (SATs) to support analysis.

Background: The intelligence community (IC) has adopted policies for communicating uncertainty using verbal probabilities (e.g., “very likely”). However, these policies were not informed by psychological research on verbal probabilities. The IC has also adopted SATs such as the ‘analyses of competing hypotheses’ (ACH) to support analysis. However, these techniques have not been empirically evaluated. Recently, theories and methods in Decision Science been used to understand and improve analysis. It is recognized that intelligence analysis is judgment under uncertainty, and this depends on cognitive abilities that are subject to error and (systematic and unsystematic) bias.

Methods: Studies examining the IC’s policies and practices for communicating uncertainty and supporting analysis are reviewed.

Conclusions: The research demonstrates that the IC’s policies for communicating uncertainty are likely to be ineffective, largely due to the variability in people’s interpretations of verbal probabilities. An obvious alternative would be to use numeric probabilities which can overcome the shortcomings of verbal probabilities. Research also shows that ACH does not reduce all forms of confirmation bias and may increase judgment inconsistency and reduce accuracy. Evidence suggests that applying post-analytic adjustments to analytic judgments may be better alternatives to techniques such as ACH. A psychologically evidence-based approach to policy and practice in intelligence analysis is warranted.



Analytic Tradecraft Tried and Untested: Examination of the ‘Analysis of Competing Hypotheses’

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Objectives: Intelligence analysts are often required to judge the probability of alternative hypotheses given available evidence. Intelligence organizations advise analysts to use tradecraft methods such as Analysis of Competing Hypotheses (ACH) to think critically and avoid bias. However, few rigorous tests of these techniques exist. We examined the use and usefulness of ACH.

Design: In a between-subjects experimental design, 50 analysts were randomly assigned to use ACH or not when completing a hypothesis testing task that had probabilistic ground truth.

Methods: Analysts in the ACH condition were trained to apply the method. Analysts in the control group were neither trained in ACH nor asked to use any specific method. Data were collected using (1) ‘during task’ written protocols that were coded for statistical analyses, and (2) a ‘post task’ structured questionnaire.

Results: The ‘during task’ data provided mixed evidence for ACH’s ability to reduce confirmation bias, and showed that ACH may increase judgment inconsistency and error. The ‘post task’ data showed that although the ACH group assessed information usefulness better than the control group, the control group was a little more accurate (and coherent) than the ACH group. Importantly, we found that ‘add on’ recalibration and aggregation methods substantially improved judgment accuracy.

Conclusions: Our findings cast doubt on the efficacy of ACH, and show the promise of statistical methods for boosting judgment quality in intelligence analysis. These alternative methods place the onus for change on the organisation rather than on individual analysts.



Diversity and Retention within the United Kingdom (UK) Defence

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Objectives: The UK Ministry of Defence (MOD) understands that a diverse and inclusive organisation is one that is stronger, healthier, more cohesive and resilient. However, Defence still struggles to recruit and retain people from backgrounds not traditionally associated with Defence, such as females and Black, Asian and Minority Ethnic (BAME) personnel. The MOD wishes to better understand the experiences of females and BAME personnel, in comparison with the white male majority.

Design: A qualitative study (unprecedented in scope and scale) was employed to better understand the extent to which gender and ethnicity influence the experiences of MOD personnel and how these experiences can be exploited/addressed.

Methods: Data were collected from 405 personnel, using a timeline interview approach. Data were analysed using thematic analysis.

Results: Gender and ethnicity were found to impact the experiences of MOD personnel. Whilst some positive aspects of being female and/or BAME within Defence were noted, across the Whole Force, gender and ethnicity were significant contributors to the organisational barriers that personnel faced. The findings further suggested that personnel who did not fit the white male prototype (including some white males) experienced challenges navigating the organisation.

Conclusions: The study uncovered new insights as well as adding further support to extant research. A list of six focus areas (cultural change; organisational communication; recruitment, selection and induction; leadership and management; policy and practice; and education and training) and suggested options for action were recommended to improve issues relating to diversity and inclusion within Defence.



Understanding the needs and treatment for UK veterans with PTSD

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Objectives: Evidence suggests that veterans with posttraumatic stress disorder (PTSD) have a poorer treatment response than non-veterans.

Design: This study explored heterogeneity in treatment response for 960 UK veterans with PTSD who had been offered a residential intervention consisting of a mixture of group sessions and individual TF-CBT.

Methods: The primary outcome was PTSD score (IES-R). Covariates included depression (PHQ-9), anxiety (GAD-7), anger (DAR-5), alcohol misuse (AUDIT), functioning (WSAS) and socio-demographic characteristics. Participants were followed-up for 12 months after treatment at set time points. This paper presents predictors of PTSD severity at post-treatment and follow-up and uses a latent class growth analysis (LCGA) to identify different treatment trajectories. Multinomial logistic regression models were used to identify covariates that predicted class membership.

Results: Five classes were identified. 71.3% of participants belonged to three classes showing positive treatment responses. 1.2% of participants showed initial improvement but then relapsed. 27.5% of participants were identified within a treatment resistant class that showed little change in severity of presentation. Depression (odds ratios: 1.12-1.53), anxiety (OR: 1.16-1.32) and having had a combat role during military service (OR: 2.89) increased the likelihood of being assigned to the treatment resistant class. In addition, participants in the treatment resistant class appeared to have higher pre-treatment PTSD scores.

Conclusions: The findings may suggest the importance of moving away from a 'one size' fits all treatment approach for veterans with PTSD to triaging individuals and offering interventions tailored to severity of presentation.



The role of the Royal British Legion Scotland in supporting veterans; a review of past, present and future strategy

Antonia Paton, David Paton, *Royal British Legion Scotland*

Purpose: To develop processes to inform the future strategy of the Royal British Legion Scotland (RBL) in its aim to continue supporting military veterans, their families, and ex-members of the emergency services.

Background: The RBL, formed in 1921, has 145 branches and more than 24000 members across Scotland. Its infrastructure, assets and geographical spread, together with its membership, can provide an extensive set of resources to support veterans and the surrounding communities. RBL must ensure future recruitment of veterans to guarantee its continued existence in the communities of Scotland. Some RBL branches conduct local campaigns and charitable activities such as providing food banks, group meals, and working with other organisations to counter social isolation. At present, no structure exists for evaluating the effectiveness of local initiatives or sharing good practice with other branches. Such information would provide useful insight into the benefits veterans gain through membership of the RBL, as well as better selection of initiatives and targeting of resources.

Methods: Branch leadership interviewed veterans, recipients of key services, and personnel from the other organisations involved in developing initiatives. Output from these interviews has allowed RBL to initiate development of structures and processes to support best practice / lessons identified for use by other branches.

Conclusions: RBL has identified that branches must demonstrate their value within their local community in order to thrive and survive. Veterans participating in local initiatives report an increased sense of purpose and self-esteem. Further work is required to identify, assess and promulgate successful practices.



Reliability and biases in terrorism risk assessment

Nadine L Salman, Paul Gill, Adam JL Harris, *University College London*

Objectives: This paper assessed how terrorism risk assessment tools affected judgments of individual risk. It also examined whether the individual's ideology affected these judgments.

Design: The experiment included four independent variables: vignette (two known violent extremists), guidance (without/with a tool), risk assessment tool (VERA/TRAP-18), and vignette ideology (jihadist/far-right).

Methods: 239 participants, recruited opportunistically, participated in an online study. Participants evaluated two vignettes describing known violent extremists (excluding terrorist activity so the outcome was unknown). Participants saw one of two versions of each vignette (jihadist/far-right), and rated each vignette's vulnerability, risk of radicalisation and risk of violence; their confidence in these ratings; and whether they would refer the individual for further investigation (first without, then with guidance from a tool).

Results: Mixed MANOVAs found significant differences between vignette ratings, and a significant effect of guidance, where vulnerability ratings decreased and radicalisation ratings increased when using a tool. Confidence ratings also significantly increased with guidance. There was no significant difference in ratings depending on the individual's ideology or the tool used. Mixed ANOVAs found no significant effect of these variables on decisions to refer subjects for further investigation.

Conclusions: This study indicated that using terrorism risk assessment tools influenced assessors' risk judgments and confidence, and that different tools produced similar judgments. It also suggested that assessors were not influenced by the ideology of the subject. A limitation of this study was that it only used true positive cases; further research can include judgments of non-terrorist vignettes.



The dynamic nature of stressful demands, coping, affect and team cohesion in extreme and high-risk settings

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Objectives: Defence and security operations often take place in stressful and extremely demanding settings requiring personnel to use effective coping strategies to maintain their performance and health and safely achieve their goals. To inform on the operational performance and health of defence and security personnel, we examined the situational demands encountered, coping strategies used and impact upon individual affect and team cohesion in environments similar to those faced on operations.

Design: Three diary studies with expedition teams were conducted. All studies included a pre-expedition survey and structured daily expedition diary.

Methods: In Study 1 (N=6; days=305) we examined temporal changes in daily events, coping strategies and affect during a military ski expedition across Antarctica. Study 2 (N=42; days=939) focused on dispositional (personality) and situational (daily events & coping strategies) predictors of expeditioners' daily reports of affect. Finally, in Study 3 (N=7; days=133) we tested daily interrelations between coping, affect and team cohesion during three Arctic ski expeditions. Hierarchical linear modelling was used to examine relationships between variables. Indicator Waves were used to examine coupling of daily events and coping strategies.

Results: Findings highlight daily variability in and a degree of coupling between the events reported and coping strategies used by expeditioners. Events and coping strategies predicted fluctuations in affect, which accounted for onward variations in team cohesion.

Conclusion: We identified a number of factors that may explain variations in individual and interpersonal function in extreme and high-risk operational settings. Suggestions for how findings might inform future training and intervention are provided.



The experience and impact of moral injury in UK military veterans – an exploratory study

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Objectives: Moral injury has been found to adversely affect the mental health of US veterans; yet little is known about the impact of moral injury on the wellbeing of UK Armed Forces (AF) veterans or how moral injury is currently addressed in treatment. This study aimed to examine UK AF veteran experiences of moral injury and the perceptions and challenges faced by clinicians in treating moral injury-related psychological difficulties.

Method: 15 clinicians who had treated veterans with moral injury were recruited for qualitative interviews from psychological treatment services. Veterans with either self-reported military-related moral injury or non-morally injurious trauma exposure were recruited for telephone interviews (n=30) and/or an online open response questionnaire (n=225) about their thoughts, feelings and reactions following the event. Data were analysed using thematic analysis.

Results: Moral injury was found to have a considerable negative impact on psychological functioning and was perceived by clinicians to be increasingly common in UK AF veterans. Various difficulties in providing treatment were identified, including challenging maintaining symptoms and the management of ethical dilemmas when morally injurious events disclosed involved a crime or incident outside the rules of engagement. Several risk and protective factors for experiencing distress following morally injury were described, including veteran unpreparedness for making ethically challenging decisions.

Conclusion: This study provides some of the first insight into the impact of moral injury on UK AF veteran wellbeing and highlights the need to examine effective pathways for prevention and intervention for veterans who have experienced a moral injurious event.



Poster Presentation Abstracts

Alphabetical by Lead Author's Surname

Cognitive hacking: An analytical method for decomposing features of online content

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Purpose: A novel analytical method was developed to enable the interpretation of nuanced verbal and non-verbal online content and the identification of potential threats that machine algorithms cannot yet detect.

Background: Insights into cognitive vulnerabilities (CVs) can be exploited for 'cognitive hacking' of individuals' thinking. Cognitive hacking, through the manipulation of online content and dissemination of misinformation and disinformation, intends to influence individual and group decision-making and subsequent behaviours for social, political or financial gain.

Methods: A theoretical model was developed, which maps 16 Information Validity (IV) and 11 Context Credibility (CC) features of online content to human CVs. The model was then operationalised through the development of an analytical process method, designed to support defence and/or security analysts in decomposing features of content that may be exploiting CVs. The method comprises a set of questions and subjective ratings, with an overall weighted score generated for each feature. CC and IV features were grouped such that their combined weighting can be plotted to an information environment threat quadrant.

Conclusions: Application of the method provides insight into features of online content and the CVs they can excite. Future empirical research is required to refine and validate the method. Outputs can inform the prioritisation of counter-strategies for neutralising threats identified and support trend and pattern analysis, leading to the identification of commonly exploited vulnerabilities. The research was funded by the Defence Science and Technology Laboratory (DSTL) through the Defence and Security Accelerator (DASA) Phase 1 Behavioural Analytics Themed Competition. Contract number DSTLX1000133521.



Psychological immunity: introducing an evolutionary informed application of memory mechanisms to prevent radicalisation

Philippe Chassy, *University of Liverpool*

Purpose. The paper aims to develop the idea that cognitive training could protect people from considering noxious cognitions as true.

Background. Radicalisation is the process whereby individuals change their perception and beliefs about the world, which in turn leads to terrorist actions. Many social factors have been identified as underpinning the shift (Sageman, 2004). Radicalisation though is cognitive in essence and relates to the central role of memory in understanding the world (Chassy & Gobet, 2011) and reasoning about it (Chassy, de Calmes, & Prades, 2001). As this is a battle of ideas, cognitive psychology has a role to play in designing method that prevent the mind of individuals from falling into radicalism. The present paper aims at opening the discussion by offering a potential strategy.

Methods. Cognitive interventions inspired by biological immunity, a mechanism relying on the recognition of a threat (e.g., principle of a vaccine), would familiarise individuals to wrongful theories so as to increase their cognitive resistance to noxious influences. The intervention would include exposing people to fallacious arguments and demonstrate how to prove them wrong. Developing an analytic mind might help prevent the spreading of incoherent ideas. It is thus a matter of creating a system of beliefs implemented in long term memory that reflects a sound vision of the world. Intervention should be prioritised in children and defence personal.

Conclusion. In the ideological battle, increasing the resistance to extremes beliefs might prevent people from shifting towards extremism.



Current Understanding and Attitudes Relating to Work-Life Balance in the Armed Forces

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Objectives: The study aimed to investigate:

- The theories and the current understanding relating to WLB;
- The tools/activities/policies that facilitate WLB; and
- The perceptions of Service personnel with regard to WLB

Design and Method: A literature review; nine face-to-face interviews with stakeholders; and 14 focus groups with 116 Service personnel were conducted. The qualitative data were analysed using thematic analysis (exploring patterns and themes within the data).

Results: There is a vast amount of research on the topic of WLB making it a difficult concept to unpack. Many researchers have argued against the suggestion that the two domains of work and non-work can be brought into a harmonious 'balance' (Guest, 2002) and instead focus upon the conflict between the two domains. Service personnel describe WLB as striking a balance between work and home life and in general, many felt that they did not always have a good WLB. The main reasons for this were the military lifestyle, current manning levels and a lack of resources, meaning that personnel were working harder or for longer hours. Evidence of spillover, where the serving person's work life spilled over into their home life was apparent across all personnel. This constant requirement to be contacted meant that Service personnel were not able to get away from work to re-charge their batteries.

Conclusion: The findings will be used to inform how the implementation of formal flexible working might be received by Service personnel. It will also help shape policy, communications and training/education.



Ethnic Minority Representation in UK Military Cadet Organisations

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Objectives: This study aimed to understand:

- what attracts young people from ethnically diverse backgrounds to join and maintain participation;
- the career aspirations of those who participate in the Cadet Forces (and to what extent the experiences gained through the cadets influence career choices); and
- what attracts Adult Volunteer Instructors and what are the implications for recruiting them

Design and Method: A mixed-methods approach was adopted involving:

- an online survey of 1,713 Adult Volunteer Instructors;
- ten focus groups with 65 cadets from strategically selected geographical locations; and
- nine telephone interviews with Adult Volunteer Instructors, who consider themselves to be from an ethnic minority family background

Results: Regardless of ethnicity, young people are attracted to join the Cadet Forces because participation looks 'fun'. They remain as members because it is an inclusive environment which encourages their personal development. Instructors join to gain skills and continue to serve as a cadet, and maintain participation for very similar reasons. The majority of both cadets and Instructors become aware of the Cadet Forces via word-of-mouth (a process of referral) rather than formal recruitment campaigns. There is evidence to suggest that joining the cadets influences the career aspirations of young people.

Conclusions: This is the first time that the future career intentions of Cadet Force members have been researched on a tri-Service basis. This study also provided an opportunity for the Services to evaluate their diversity model through a lens that reflects the diversity model used within the Cadet Forces.



Geographically Dispersed Military Families: Exploring the psychological and social impact of intermittent separation

Alison Osborne, Gemma Wilson, Matthew Kiernan, Michael Rodrigues, *Northumbria University*

Objectives: To explore the psycho-social impact of intermittent separation on geographically dispersed military families.

Design: Following a mixed methods approach, an Explanatory Sequential Design was utilised, with two phases. The purpose of this design was to identify what is already known about the impact of separation on military families and use this to inform a semi-structured interview schedule for empirical study.

Methods: Phase 1 consisted of a systematic narrative review of existing literature on the impact of separation on military families and geospatial analysis of publicly available data as a proxy to estimate the location of military families in England. Semi-structured interviews formed phase 2 with dispersed civilian partners/spouses and children of UK Armed Forces personnel over the age of 16.

Results: Phase 1 indicated that military families experience changes in their psychological well-being during military-induced separations with specific increases in stress, depression and anxiety symptoms. Communication and relationships are also affected, but social support can mitigate the psychological effects of separations. Higher levels of social support were significantly associated with better psychological health, fewer depressive symptoms, and lower levels of stress. In England, approximately 22.2% of military families are living dispersed from the serving member of their family. Phase 2 is ongoing, but indicates a dialogue around stress, loneliness, identity, stability, growth and a lack of understanding or support.

Conclusions: By gaining a greater understanding of the impact of separation on dispersed military families, recommendations for future policies and practice can be developed to further support these families.



What Went Wrong? An investigation into the lived experiences of UK military veteran offenders

Jacqueline Rappoport, *Edinburgh Napier University*

Purpose: This poster presents insights into my ongoing Doctoral study that examines the lives of UK military veteran offenders through an Interpretative Phenomenological Analysis approach.

Background: Whilst veteran offenders have been the subject of some research, as are other military veterans with readily identifiable problematic civilian outcomes, (e.g. homelessness, substance misuse etc.) research aimed at understanding the experiences of the pathway towards crime is limited. There are lessons for Defence and support organisations when investigating the increase in veterans in prison who report symptoms relating to a variety of trauma disorders such as Complex PTSD as well as a history of prior offending pre-military enlistment.

Methods: The study was conducted in Scotland, UK and included 16 participants. Although a large participant group for IPA, the participants belonged to a complex subgroup of veterans in prison predominately for sexual offending. Therefore, the data collection and analysis period was extended to fully give voice to the participants. Face to face interviews were held in three prisons in mainstream and sexual offending units. IPA was used in order to gain insight into the constructed identities and lived experiences of the participants.

Conclusions: The poster presents insights into the complexities of the military as an institution, self-identification within prison settings, coping with trauma pre and post military service, barriers to accessing support and aims for future re-integration. The contradictions around their identity as a soldier versus that of an offender are also deconstructed with the aim of providing insights into their reasons for recidivism.



Using Scenarios to Forecast Outcomes of a Refugee Crisis

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The Syrian civil war has led to millions of Syrians fleeing the country, and has resulted in a humanitarian crisis. By considering how such socio-political events may unfold, scenarios can lead to informed forecasts that can be used for decision-making. We examined the relationship between scenarios and forecasts in the context of the Syrian refugee crisis. Forty Turkish students trained to use a brainstorming technique generated scenarios that might follow within six months of the Turkish government banning Syrian refugees from entering the country. Participants generated from 3-6 scenarios. Over half were rated as 'high' quality in terms of completeness, relevance/pertinence, plausibility, coherence, and transparency (order effects). Scenario quality was unaffected by scenario quantity. Even though no forecasts were requested, participants' first scenarios contained from 0-17 forecasts. Mean forecast accuracy was 45% and this was unaffected by forecast quantity. Therefore, brainstorming can offer a simple and quick way of generating scenarios and forecasts that can potentially help decision-makers tackle humanitarian crises.

