

HINISTRY OF HOME AFFAIRS + 2011 ISSUE NO. 3 HOME AFFAIRS + 2011 I



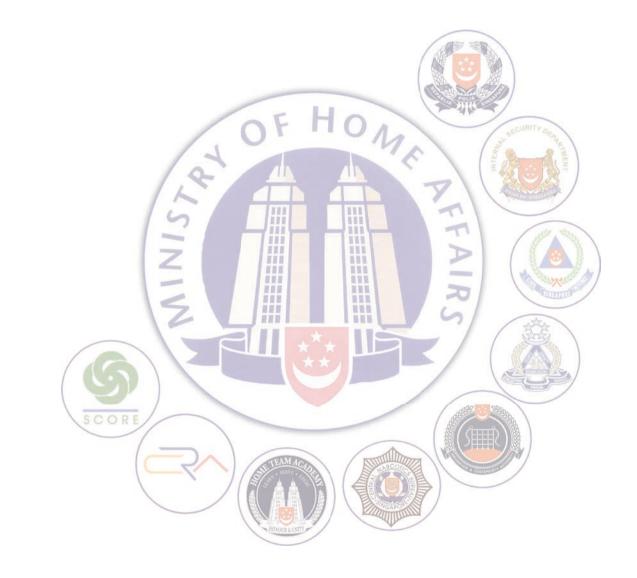
HOME TEAM JOURNAL • 2011 ISSUE NO. 3

About the Home Team Academy

The Home Team Academy (HTA) is a Department under the Ministry of Home Affairs that is committed to the training of Home Team officers in Homefront Security and Safety. The Academy aims to spearhead training in Counter-Terrorism, Law Enforcement, Crisis Management and Emergency Preparedness. It also conducts a wide range of programmes, including Behavioural Sciences and Leadership Development.

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Cover design:

The cover design is reflective of how behavioural sciences research enhances operational strategy by equipping officers with the necessary knowledge to assess the behaviour of their oponent. In essence, behavioural science is the art of deciding when to move the white knight against the enemy. The trident beside the title of this special edition is the symbol of psychology.

HOME TEAM JOURNAL



The Home Team Journal is a professional journal published by the Home Team Academy to highlight the work of the Home Team and its knowledge partners in Homefront Security and Safety. The Journal also functions as a forum for engagement, exchange and discussion over the broad and diverse range of issues and interests that come under the subject of Homefront security and safety.





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JOURNAL ADMINISTRATION

Esther Chang Yvonne Chan Goh Guan Long

.....

Please address all contributions and correspondence to:

Editorial Board, Home Team Journal

Knowledge Management Branch, Strategic Affairs Centre Home Team Academy 501 Old Choa Chu Kang Road, Singapore 698928

> Email to MHA_HT_Journal@mha.gov.sg Or fax to +65 6465-3793.

SPECIAL EDITION

RESEARCH • INSIGHTS • TRAINING

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Foreword by Chairman

FTER TWO WELL-RECEIVED issues of the Home Team Journal, we decided to try something new. You would have noticed that this is a Special issue of the Home Team Journal which focuses on Behavioural Sciences in Home Team Operations. The journey towards this unique issue has been a learning process for us as well.

I would like to thank all our readers and contributors for making the first two issues a success. Receiving compliments not only encouraged us but it was also a good sign that our formula for sieving out the intellectual capital of our Home Team practitioners and their partners is working. However, we have always felt that the approach to capturing knowledge and dissemination needs to stay dynamic to reflect the changes in our Homefront security environment. This is to ensure that we are able to highlight new developments and corresponding new knowledge that have been created to address these changes in a timely and concerted manner. Quite naturally, there will be a need to *'re-invent'* our approach especially when opportunities for sieving out the very latest developments in this field manifest themselves.

Our first source for leveraging on such opportunities comes from the research capabilities of our various Home Team units, such as the Behavioural Science Unit, which is based in the Home Team Academy, the Research Division of the Ministry of Home Affairs and the Prisons Psychological & Counselling Services Branch – of which their articles are featured in this special issue.

Opportunities also come from the varied sources of Subject Matter Expertise that we have cultivated over the years through our emphasis on partnerships as an important component of our Homefront Security Training Strategy. One active source of intellectual capital would be the Advisory Panel Members for the Home Team Academy. We also tapped on subject matter expertise we got to know through conferences such as the Asian Conference of Criminal and Operations Psychology (ACCOP) and the Global Futures Forum (GFF).

This forms the *raison d'être* behind this special issue. The main source of information, as can be seen, is situated within a highly specialised discipline – namely psychology and related social sciences. But we had to choose articles that are able to translate the wealth of knowledge from these fields of study to the realm of practitioners. This is in many ways why we introduced the idea of having a Guest

Editor who is a domain specialist in the particular theme for this issue, while at the same time, a Home Team officer. In this instance, we planned to have a special issue based on the specialised discipline of behavioural sciences and its relation to Homefront Security and Safety. For this purpose, we could think of none other than our Director and Senior Consultant Psychologist of the Behavioural Sciences Unit, Dr. Khader Majeed, as the ideal Guest Editor for this issue.

Dr. Majeed has worked very closely with the editorial team of the Home Team Journal to select the very best articles that espouse the translation of theoretical research from the social sciences to the realm of Homefront security practitioners. It was by no means an easy task and one in which I have to thank Dr. Majeed and the editorial team of the Home Team Journal for their efforts.

I am confident that our readers, who are essentially practitioners in Homefront security and safety, will benefit from the selection of articles we have sourced out for this special issue on Behavioural Sciences in Home Team Operations.

MR. DEREK PEREIRA

Chairman Editorial Board

Behavioural Sciences in Home Team Operations:

'Mindware' to Complement Our Hardware

HE FOCUS OF this special issue of the Home Team Journal is 'Behavioural Sciences'. And this is for good reason. What people think, decide, and do drives some of society's best achievements as well as some of its worst failings. Excellent organisations worldwide recognise this and accept that current gaps in operational knowledge and expertise are related to human behaviour, not just technology or equipment.

The field of behavioural sciences is a powerful fighting tool which equips our Home Team departments with a competitive edge. The use of the behavioural sciences in crimefighting is, however, not new. While formally organised now in many law enforcement establishments (for example, the FBI's Behavior Analysis Unit (BAU) and the UK's Behavioural Investigative Analysts (BIAs), for as long as there have been criminals, have law enforcement agencies appreciated the value and business of human profiling. The Home Team is no different. Behavioural specialists

have supported our front line departments such as the police and prisons for almost 20 years now.

Realising the need to use this tool in a structured manner across the Home Team, the Behavioural Sciences Unit (BSU) was conceived in 2005 by Mr. Benny Lim, Permanent Secretary of MHA. This was with the vision that 'mindware' tools such as behavioural analysis would allow Home Team departments to leverage on 'operations psychology'. Aligned to this, the BSU was set up as a research and training agency staffed pre-dominantly by psychologists and co-located in the Home Team Academy (HTA). The unit is responsible for cutting-edge research and interventions in areas where behavioural sciences can act as force multipliers, as well as to translate knowledge from research into training for both local and international law enforcement. In its endeavour to do so, the BSU aims to act as a nexus connecting our departments, academia and the world's experts to offer a

INTRODUCTION BY GUEST EDITOR **DR. MAJEED KHADER, PHD** *DIRECTOR, BEHAVIOURAL SCIENCES UNIT, HTA*

fusion of ideas and practical solutions – all with the objective of supporting front-line operations. It provides objective, independent, evidencebased knowledge and tools to enhance the administration of Home Team policy-making on operational matters and tactics. Operationally, BSU works closely with its front-line partners, the psychologists in the police, prisons and narcotics departments.

BSU's programmes are mostly developed in-house and they focus on subjects such as forensic and investigative psychology (e.g. detection of deception, investigative interviewing), behavioural profiling, management crisis (e.g. crisis leadership, psychological first aid in disasters, resilience). While these are tailored to deal with operational issues, there are programmes that aim to enhance the understanding of regional and international cultures, programmes to support the leadership development of officers as well as enable Home Team (HT) officers to prepare for future challenges by conducting research examining emerging behavioural trends.

THE '3 O' APPLICATIONS OF BEHAVIOURAL SCIENCES

HE BEHAVIOURAL SCIENCES are important to the three O's in the Home Team – its 'Operations', its 'Organisations' and its 'Officers'. There are several reasons why:

'0' for '0perations'

SCIENCES HE BEHAVIOURAL are useful for enhancing **Operations as long as there** are human operators. This is about understanding the mind and behaviour of the adversary. Human behaviour in relation to crime, terrorism, disaster, emergency, civil defence, and security is directly relevant to our business. This is not only about understanding them, but also about predicting and managing behaviours effectively. Take the example of terrorism. Although we know a lot about the behaviour of traditional criminals, we know far less about terrorists. Research has shown that traditional criminals may be spontaneous, but terrorists seem to go to great lengths preparing for their attacks. Do different terrorist groups vary in their preparation times? Behavioural sciences have much to say that should inform strategies for counterterrorism and counter-intelligence. Profiling after all is merely the analysis and study of behavioural correlates pertaining to a crime.

It is the nature of the Home Affairs Ministry to deal with difficult issues that touch on sensitive societal questions. But these issues require analysis and understanding, so that we do not rush into quick fix solutions. Examples include questions such as

INTRODUCTION BY GUEST EDITOR

'what constitutes anti-social behaviour and how should we respond?' Should the Home Team respond to social media developments such as Facebook protests, flash mobs inciting violence or happy slapping in YouTube? Deep deliberation and analysis on these questions will be important. HT officers need to be constantly ahead of these behavioural trends by understanding through research the psyche of individuals, groups and trends. This research may in turn be fed back to HT officers during foundational and leadership courses at the HTA and within the Home Team. There is a need to appreciate, understand and stay on top of these trends so that HT leaders will be able to anticipate and develop better policies and tactics for the Home Team.

'0' for the 'Organisation'

EHAVIOURAL **SCIENCES** ARE developing useful when excellent Organisations. The behavioural sciences may help in the areas of people management, leadership development, training psychology and organisational development. One crucial example lies in the psychology of Leadership, as leading expert Dr. Robert Hogan has claimed. Leadership is critical to all organisations for various reasons. First, leadership is the single most important issue in the human sciences. Second, leadership is about the performance of teams and organisations since good leadership brings about good performance. Third, 'dark side or bad leadership' makes everyone suffer, especially in the area of command failures. Fourth, personality predicts leadership since 'who we are, is how we lead'. All this knowledge may be used to select future leaders or improve the performance of current leadership. This is but one example of how behavioural understanding can make our organisations more effective.

'0' for the 'Officer'

EHAVIOURAL **S**CIENCES ARE useful for enhancing selfmastery of each Officer. The behavioural sciences can help officers start on the right foot with the right knowledge, attitudes and skills on how to manage oneself, stay resilient and achieve personal mastery. Good pre-supposes situation awareness good self awareness. Because the Home Team Academy is the starting point for all careers, introducing knowledge and skills such as selfawareness, resilience, and life skills will be important for all our officers.

ARTICLES IN THIS ISSUE

AVING SET THE theme for this special edition, I will now discuss the articles I have selected.

There are two groups of contributors represented here. The first set of writers presented at the historic Asian Conference of Criminal

and Operations Psychology (ACCOP) in May 2010 in Singapore, where we saw a brilliant confluence of minds. The second group of distinguished contributors are prominent intellectuals and consultants for the Home Team Academy. While this collection was not written with the explicit goal of highlighting behavioural science themes, they all inevitably discuss the human operator, organisations human-run and organisational processes involving humans. Hence, they colourfully demonstrate the panorama of human behaviour, at its best and worst.

The papers by Shobi Pereira, Christian Leuprecht and David Skillicorn, Susan Sim, BG (Ret) Russell Howard. David Bayley, Bruce Hoffman, and Vincent Egan discuss the first 'O' [Operations]. paper discusses Shobi Pereira's a very current issue: How new media can affect law enforcement operations using the Middle East uprisings as a case study. She raises interesting questions. Is social media a powerful catalyst for 'influencers'? Or is it overrated since revolutions were taking place even before the advent of social media? Christian David's paper discusses and а controversial but thought-provoking finding using an Ottawa sample. Discussing radicalisation, they make a case that there is limited evidence for the 'slippery slope' narrative that assumes that social dissatisfaction may lead to religious zealotry, and thus to an individual committing violent terrorist acts. On a related note, Susan Sim's paper discusses the currently relevant issue of risk for violent extremists. reduction Here she delves into the important issue of 'what works' and badly needed programme evaluation. David Bayley's paper goes on to discuss policing terrorism and the dilemma of resource allocation for counter terrorism policing: Should resources go into building specialist teams or general policing? He argues for the importance of having a right balance and not to neglect the potentially useful role that general duties policing can provide. Bruce Hoffman's article discusses the strategy of terrorist groups, elaborating on six core components of al-Oaeda's strategies. discusses Interestingly, he the importance of equipping officers with critical thinking skills so that they can react quickly to any crisis situation, just as terrorist groups have learnt to adapt to changing environments. Russell Howard posits that there is a need for our agencies to be concerned about the marriage of convenience between terrorist networks multinational criminal cartels, and trafficking organisations, highlighting similarities and differences among the three. Of poignant value is his discussion on the 'Big Three sectors' of organised international crime. The final paper by Aline and Vincent,

INTRODUCTION BY GUEST EDITOR

whilst not about terrorism per se, discusses the operational profiling of white collar criminals.

The second group of papers by Laurence Alison and colleagues, Mark Kebbell, Zoe Staines and Geoff Dean discuss the second 'O' [Organisation] and the interface between organisational structures and operations. Laurence's group from Centre for Critical & Major Incident Psychology (CAMI), for example, highlight the problem of 'decision avoidance' and how realistic simulations can be used to enhance decision-making. Mark Kebbell discusses the difficult problem of

The goal rather is to advocate the appreciation of the human behind the operator; his irrationalities and potential so that we are able to harness the power of "Mindware."

sieving out useful intelligence from a lot of information and complex information in counterterrorism operations and the impact of heuristics on organisational decisionmaking. The paper then provides excellent suggestions on how to process large data sets. Zoe Staines' article discusses creativity in policing, cognitive investigative styles and their role in criminal investigations. Geoff Dean and Zoe Staines' paper on investigative thinking and the development of a methodologically

sound instrument to capture investigative knowledge is inspiring new work since it sows the seeds of creative developments within the field of investigative styles. No longer can it be said that there is just one thinking method for investigations, as there may be different thinking styles between investigators.

Finally, as a representation of the final 'O' in behavioural sciences applications (i.e. Officers' Self-Mastery), this edition concludes with two articles. The first article presents Singaporean perspective. The а paper by Karen Ho and Sara Delia Menon from the Singapore Prison Service makes an interesting case for building up individual resilience to buffer against stress-related burnout. The second is an article by Ellen Kirschman on how to help helpers. Sharing her experience as a volunteer with the West Coast Post Trauma Retreat, Ellen discusses an excellent programme for First Responders and emergency workers.

In conclusion, all of the articles presented in this issue are special, but this special issue is not intended to be exhaustive in its coverage. The goal rather is to advocate the appreciation of the human behind the operator; his irrationalities and potential so that we are able to harness the power of "Mindware." Hopefully, this special issue may serve as a starting point for greater discussions on this topic.

EDITOR'S NOTES =



A pioneering forensic psychologist in Singapore, Dr. A Majeed Khader is the Director of the Behavioural Sciences Unit at the Home Team Academy and Assistant Director of the Police Psychological Services Division. He is Deputy Commander of the Crisis Negotiation Unit. Majeed holds a Masters degree (with Distinction) in Forensic Psychology and a PhD in Psychology, (specialising in crisis and personality). Dr. Majeed has overseen the development of psychological services in

the areas of stress, counselling, resilience, personnel selection, leadership, negotiations, profiling, and crisis psychology in law enforcement settings. For his work in the psychology of terrorism, he was awarded the National Day Public Administration Award (Bronze). Dr. Majeed is presently an Assistant Professor (Adjunct) at NTU where he teaches forensic psychology. He is a Registered Psychologist with the Singapore Psychological Society, and a member of the British, American and Australian Psychological Societies. He is presently also Asian Director for the Society of Police and Criminal Psychology (USA).

Operations Psychology in the Home Team:

Psychology and Mindware in Law Enforcement and Operations

HE SUCCESS OF the best-laid plans depends on the people executing plans. While hardware the and technological software serve to maximise the chances of success, it is the human operator who ultimately determines the effective execution The human operator's effectiveness is contingent on the training, experiences, mental equipment and development received before the operation. The operator is also affected by his or her operational environment, culture and support systems in place to help him or her do the job. Selecting the right officers, effective training, timely leadership and organisational development are thus important in providing a context that enables the operator. Similarly, accurate criminal intelligence and adequate consideration of the human factors are also important in maximising the effectiveness of the operator.

These 'soft' aspects are the *mindware*¹ domain and the 'operations psychology' that psychologists in the Home Team work on to enhance success in Home Team operations.

JANSEN ANG AND MAJEED KHADER

This paper describes (1) the history of *mindware* or psychological services in the Home Team and (2) how psychological or *mindware* expertise in the police, prison, narcotics bureau, Home Team Academy and civil defence are used in the day-to-day operations of the Home Team.

HISTORY OF HOME TEAM PSYCHOLOGICAL SERVICES

HE INAUGURAL ASIAN Conference of Criminal and Operations Psychology (ACCOP), held in Singapore in May 2010, was historic not only because it was the first gathering of law enforcement and correctional psychologists in Asia, but also because it marked the coming of age of Home Team psychology in Singapore. ACCOP brought together experts from 11 countries to discuss how psychology can be used to support operations, intelligence and counter terrorism. It is precisely this effort to enhance *mindware* - officer and operational effectiveness - that has been the focus of psychological services in the Home Team from the beginning.²

Psychology in the Home Team is closely linked to the services in the Home Team. Since the early 1970s,³ psychologists have supported law enforcement services in Singapore, involved mainly in the areas of assessment, employee emplovee assistance and psychological support after crises or critical incidents (e.g. shooting, line-of-duty deaths). Psychological proficiencies started to grow in the 1990s with the appointment of a psychologist panel of advisors to the police. The panel⁴ provided advice to the police on how psychology could be used to support human resources and policing operations. From this development, two police psychologists⁵ were recruited in 1993 to provide direct counselling services to officers. In 1995, two more police psychologists were recruited to deliver psychological services to units. This led to the introduction of psychological assessment for entry-level selection and the formation of the Police Psychological Unit (PPU) in 1996. In the prison service, one psychologist⁶ was recruited in 1997 to attend to statutory cases, corrective training and preventive detention assessments. Until then, such assessments were made by psychologists from the Ministry of Health.

In 1998, the police embarked on a process of organisational change and this led to the development of organisational health initiatives. The PPU was tasked with the running of the force-wide Organisational Health Survey (OHS). The OHS allowed police leadership to have, for the first time, an organised and structured sensing of officers' perceptions of the organisation and leadership. The OHS also led to a slew of organisational change efforts to create a more conducive workplace. Police psychology at this point expanded beyond counselling and selection to organisational change and development.

То support the need for psychological services in the Central Narcotics Bureau (CNB). one psychologist was appointed within the PPU in 1998 to provide counselling and personnel assessment services to CNB. At around the same time, the prison service embarked on an organisational change process that led to a greater emphasis on assessment, rehabilitation and programme evaluation in the prisons. More prisons psychologists were hired.

The 9-11 attack on the United States and the subsequent discovery of a local terrorist network in Singapore prompted the deployment of psychologists in understanding the terror threat in Singapore.⁷ A team of psychologists were deployed to study the process of radicalisation among the terrorists detained under the Internal Security Act. This eventually led to the development of psychological services within the Internal Security

THE HOME TEAM USE OF BEHAVIOURAL SCIENCES.....



Figure 1: Some resource guides on crisis leadership and terrorism produced by BSU.

Department, which saw psychological expertise used in the support and rehabilitative services for detainees.

The maturation of the Home Team eventually led to the birth of the Home Team Academy (HTA) in January 2006. The HTA is a centre for the training and development of Home Team officers. Permanent Secretary Home Affairs (PS MHA), Mr. Benny Lim, had a vision of a behavioural sciences team that would bring the cutting-edge research in the sciences to support frontline law enforcement. This team would provide services beyond the training platform and would consult on operational with and strategic projects the various Home Front agencies, hence enhancing operational capabilities in the Home Team and the Home Front. This led to the formation of the Behavioural Sciences Unit (BSU). The BSU operates as a centre for research and training in law enforcement behavioural sciences and functions as

an independent affiliate of the HTA and reports directly to PS MHA. In May 2006, a small team of two psychologists were appointed to the BSU to start research on terrorism, crisis leadership and resilience. The demands and workload of the BSU eventually expanded to include leadership assessment and development.

MINDWARE IN THE HOME TEAM

ENFORCEMENT HARDWARE ΔW and equipment enable officers to perform their duties safely and effectively. Law enforcement technology information software the command. control. supports coordination and analysis of law enforcement issues. However, it is the human operator, operating singly or in teams, that affects the effective execution of policies and plans, hence the importance of *mindware* in the Home Team. Psychological expertise in the Home Team has come a long way since the early 1990s where it was focused on traditional clinical services. Today, psychological expertise is used in supporting operations, enhancing criminal intelligence collection and analysis, measuring and maintaining morale, psychological readiness, maintaining resilience, developing leaders and commanders, and selecting officers.

SUPPORTING OPERATIONS USING 'OPERATIONS PSYCHOLOGY'

PERATIONS IN THE Home Team stretch from routine to major to crisis operations. In the following spheres, psychological expertise has been used to enhance operational effectiveness.

Routine operations

ENFORCEMENT OFFICERS AW interface with the public on a daily basis. Police psychologists support routine operations through providing information in dealing with vulnerable members of the public, victims of crime as well as providing psychological perspectives in operations planning. For instance, when the Special Operations Command designed the Tactical Assault Vehicle (TAV) in 2005, psychologists gave human factors inputs on the TAV's design. Psychologists are also routinely consulted on plans for contingencies and public communication messages to ensure that the public understand and comply with police messages, to prevent panic.

Crowd and public behaviour management

INGAPORE HAS OVER the last decade positioned itself as a choice venue for MICE (Meetings, Incentives, Conferences and Exhibitions) events. These events are typically marked by high levels of crowd participation and require effective people movement and security management. Psychologists in the Home Team are involved in providing mental preparation training as well as operational consultation on managing crowds. For instance, the National Day Parade is a major public event every year. At the end of the parade, the crowds instinctively head towards the nearest train station. If not managed, this will lead to overcrowding and poses the serious threat of a crowd-related disaster. Police psychologists worked closely with Central Police Division to design crowd management and diversion tactics to channel part of the crowd towards surrounding stations. Data from the train operators indicate that the efforts at crowd management have resulted in a significant displacement of the crowd to the nearby stations, thus relieving the pressure on the nearest station

Overseas mission and attaché mental preparation

s an active member of the international community, Singapore supports various peacekeeping operations under the flag of the United Nations. SPF has deployed peacekeeping officers in many theatres of conflict and crisis. The SPF also deploys officers as attachés Singapore's in overseas missions. To support these operations, police psychologists help select, assess, train and mentally prepare officers for their duties in theatre. Psychologists also monitor troop morale in theatre subsequently debrief officers and when they return from missions. For instance, during the Boxing Day tsunami of 2004, police psychologists were deployed with the Disaster Victim Identification (DVI) teams in Phuket to assess and support team morale.8 Similarly, SCDF also deployed the Disaster Assistance and Rescue Teams (DART) to many areas of disasters under Operation Lionheart. SCDF counsellors support the deployments by taking care of the mental health concerns of officers deployed.

Morale sensing and management

N THE PAST decade, Singapore hosted various major international events such as the International Monetary Fund and World Bank (IMFWB) meetings in 2006, ASEAN Summit in 2007, APEC meeting in 2009 and the Youth Olympic Games in 2010. These deployments typically very are intense and prolonged. Officers are also expected to perform duties that are beyond their usual scope of responsibilities. Psychologists from PPSD, BSU and SCDF are deployed to prepare officers mentally before deployment. Psychologists are also involved in morale sensing operations during such major deployments to ensure that officers are confident and ready to perform their duties. For instance, during the 2006 IMF-WB meetings, officers were issued with a new operational equipment to be used against chemical threats. However, some officers were not completely familiar or confident of the efficacy of the equipment. Such concerns were detected through morale sensing operations and fed back to operational leaders who were then able to organise training sessions to enhance operational morale. This ensured that officers felt protected and ready to perform their duties even in the event of a deliberate attack

Vigilance and fatigue management

HE HOME TEAM works round the clock and officers from the respective Home Team Departments are expected to be

vigilant at all times. This is not always possible, as the scope of law enforcement work has grown exponentially post 9-11. A few recent high profile lapses have highlighted importance maintaining the of vigilance and managing fatigue in the Home Team. Psychologists in the BSU work with the respective Home Team departments to develop strategies and ground practices that can help to manage deployment fatigue as well as enhance vigilance during operations.

Crisis negotiation operations

INGAPORE STANDS READY to respond to criminal hostage-taking, siege and suicidal situations round the clock. Psychologists are an integral component of any crisis negotiation operation. Psychologists are embedded the negotiation teams within to support assessment of person(s) in crisis and hostage-takers as well as to support the negotiation teams during and after operations. Psychologists are also involved in the selection, assessment and training of crisis negotiators to ensure that their skills are current and effective

Offender rehabilitation

Being FAMILIAR WITH the psychology of psychopathology and risk assessments, prison psychologists are engaged in the assessment of prisoners as well as the process of rehabilitating them.⁹ For instance, after assessment of their suitability for treatment and risk potential, prison inmates are selected for offender treatment programmes to reduce the risk of their posing a risk to the community upon release.

Intervention evaluation and enhancement

G IVEN PSYCHOLOGY'S TRADITION of measurement and evaluation, psychologists in the Home Team are also engaged in measuring the effectiveness of intervention programmes in prisons. For instance, prison psychologists and researchers are involved daily in evaluating the efficacy of the respective treatment programmes¹⁰ so as to enhance those that work and change those that fail.

ENHANCING 'CRIMINAL INTELLIGENCE' COLLECTION BY UNDERSTANDING CRIMINAL MINDS

Sun TZU IN the Art of War argued that when one understands oneself and one's opponents, one stands ready to be victorious in engagements. Psychologists in the Home Team are involved in helping operators understand the 'enemy mind' and hence increasing the chances of success in operations.

HUMINT Training

HE FIELD OF human source handling managing and field officers is heavily dependent on the psychology of social influence. Understanding and effectively applying the norms in human interactions (e.g. reciprocity, consistency) help make the source handler more effective in obtaining critical pieces of HUMINT (or Human Intelligence). Police psychologists are involved in the training of field intelligence operators to heighten their awareness of the tactics that are effective in collecting HUMINT.

Offence Profiling

N THE FIELD of profiling, there is a need for operators to understand what drives specific offending behaviour and what is effective in crime prevention and reduction. BSU, police, prisons and CNB psychologists are engaged in offence profiling to uncover the drivers of specific offences. This intelligence is then fed back to Home Team operators to enable them to do their work intelligently effectively. and For instance. police psychologists conducting research on paedophiles found that different interview strategies work for such offenders. Officers investigating paedophilia cases are trained on the best way of handling each case. Similarly, offence profiling has also been conducted on understanding the 'drug mule' phenomenon, attractiveness of unlicensed money lending as a job, serial sexual offending and radicalisation in terrorists.

Offender Profiling

PROFILING FFENCE AIMS to uncover the drivers and psyche behind specific offending behaviour while offender profiling aims at uncovering the psyche of specific high profile offenders. Psychologists have been engaged in developing criminal intelligence profiles of some of these offenders. For instance, when a soldier ran away from his army camp with a loaded assault rifle, police psychologists supporting the operations developed a specific offender profile to assist police officers responding to the case. This helped the police deploy specific tactics to reduce the threat and apprehend the offender whilst working with the army to manage the incident.

Psychological Autopsy

HILE PATHOLOGISTS CONDUCT medical autopsies, police psychologists are trained in the field of psychological autopsies. Such a technique aims to provide a psychological profile of the person of interest to support investigations.

.....THE HOME TEAM USE OF BEHAVIOURAL SCIENCES

For instance, when the Silkair plane MI185 crashed into Palembang, Indonesia, in 1997, there were allegations that the pilot crashed the plane deliberately as a suicidal act. Psychologists were engaged in conducting a psychological autopsy which helped investigators uncover the true causes behind the crash.

Offender risk assessment

RISON PSYCHOLOGISTS ARE involved in the risk assessment of convicted offenders. This allows the offenders to be accurately classified and channelled into appropriate housing and intervention regimes in prisons. This also helps ensure that more attention is focused on the higher risk and more complex offenders.

Victim management, deceit detection and interviewing training

HE WORK OF the Home Team extends to the management of victims as well. Many times, victims who are humanely and compassionately managed become an ally of the police investigators. They cooperate better and provide better intelligence on the offence and offender. Police psychologists help train operators on the skills and strategies of effective victim management, deceit detection and investigative interviewing so that they can enhance their investigative skills.¹¹

BUILDING AND MAINTAINING RESILIENCE

ome TEAM WORK is mentally, physically and psychologically demanding. Home Team operators handle real issues in real time that affect real lives. The decisions made are at times the difference between life and death. Home Team psychologists help maintain the resilience of operators through the following means:¹²

Resilience Research and Training

Singapore has encountered many crises over the years and yet our people remain resilient. Psychologists at the BSU work on research to identify the common factors that build resilient individuals, teams and organisations. The findings are then ploughed back into training as well as community engagement activities to support the building of a resilient Home Team and a resilient community.

SMARTCOP life skills training, mental health promotion

S MARTCOP IS AN acronym for a set of life skills needed to be effective officers. This includes stress management, money

THE HOME TEAM USE OF BEHAVIOURAL SCIENCES.....

management, anger management, relationship management, time management, conflict management, openness to change and being professional. Rather than being reactive when problems arise, psychologists help maintain the resilience of officers through building positive life skills.

Organisational Development, Climate Survey

UILDING RESILIENT TEAMS is as important as building resilient individuals. Psychologists organisational various conduct interventions to identify the pressure and recommend points in teams suitable interventions so as to maintain the resilience of the team. For instance, PPSD conducts force-wide the Organisational Health Survey (OHS). The OHS helps identify weaknesses and strengths within teams and focus attention on actionable interventions needed to maintain team resilience. Today, all Home Team Departments respective OHSs have their to help leaders better appreciate the perspectives of their officers and teams.

Paracounselling Teams

AINTAINING RESILIENCE ALSO extends to building capabilities to respond in times of crisis. For teams to survive when crisis hits, operators within the teams need to be trained on the actions they have to take in a crisis. Psychologists train responders as paracounsellors within teams and help maintain the skill sets so that they are ready to respond in a crisis. Some of these officers are also trained as National CAR¹³ Officers. For instance, groups of paracounsellors are maintained within the various Home Team departments. When a crisis hits a unit (e.g. line-of-duty death), the paracounsellors are activated to support affected officers. This helps ensure that the Home Team remains resilient even in times of crisis.

Supervisor Heartskills Training

O ENSURE TEAM resiliency, leaders and team supervisors also need to build a positive team culture. Psychologists train supervisors and leaders on strategies and tools they can use to build strong team culture. For instance, PPSD trains supervisors on *Heartskills* strategies to build resilient teams.

Counselling services

AVING STRONG TEAMS and individuals does not guarantee that people will not be affected in a crisis. For operators affected by their work or life hassles, psychologists in the Home Team provide counselling services to help restore them. The faster officers are supported and restored to their normalcy, the sooner they can contribute to their teams and support the operational challenges facing the teams.

DEVELOPING LEADERS WITH LEADERSHIP PSYCHOLOGY

O BE EFFECTIVE operationally requires strong leaders and good officers. Psychologists in the Home Team help measure, assess and develop effective leaders at various levels.

Home Team Crisis Leadership Competency Framework

N MANY SENSES, the Home Team is a crisis management agency ready to respond to and prevent crises at various levels. Psychologists in the Home Team help develop a Home Team Crisis Leadership Competency Framework (CLCF) that indicates the competencies needed at various levels to effectively manage a crisis. The CLCF is used today in Command and Staff and senior leadership training to train operators to be better crisis leaders.¹⁴

Home Team Command Leadership Competency

HE HOME TEAM, somewhat similar to the military, is a highly structured rank-andfile organisation that is effective and efficient due to its formalised chains of command. However, the ability to effectively utilise this command in a crisis needs to be trained and measured. Psychologists are involved in defining what makes effective command leaders and how such command leadership can be measured and trained in the Home Team. This ensures that the leaders are trained and effective in maximising the element of command when managing situations.

Leadership Assessment and Development Centres

• O EFFECTIVELY DEVELOP leaders, it is critical that their weaknesses and strengths are accurately identified. Psychologists, being experts measurements, have developed at various leadership assessment centres for such purpose. For instance, the PPSD developed a rigorous two-Leadership dav and Command Development Centre (LCDC) in 2007. The LCDC was then used to assess police leaders at the Acting Inspector grade and identify areas of leadership development. Psychologists are also deployed as assessors and mentors in various leadership courses to assess and develop leaders in the Home Team.

Home Team Scholarship Assessment

BEING A RESILIENT organisation means that the Home Team stands ready today and tomorrow to respond to any crisis.

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Thus it is important for the Home Team to start selecting leaders early and to develop their potential. Psychologists are involved in the selection of Home Team scholars by providing psychological insights into their capabilities, aspirations and compatibility. By selecting the right people and investing in their leadership development, the Home Team will be better prepared to meet the operational and organisational challenges ahead.

Developing leadership case studies databank

HE HOME TEAM has responded well to crises in the past. There have also been lapses that provide excellent leadership learning support materials. То leadership development in the Home Team. psychologists at the BSU are constantly developing training case studies on Home Team leadership. These are then used in command and staff training so the leaders of today can learn from the lessons and wisdom of leaders before them and be better equipped mentally to manage the crises ahead.

SELECTING AND DEVELOPING CAPABLE OFFICERS FOR THE HOME TEAM

Besides Building Strong teams and strong leaders, Home Team psychologists

help ensure operational success by selecting the right candidates for the right units. Psychologists are also involved in building individual capacities for the Home Team.

Entry-level Officer Selection

HE HIGHLY DEMANDING and challenging nature of Home Team work require operators with strong cognitive, interpersonal and coping abilities. Psychologists help in the selection of entry level Home Team officers to ensure that they are mentally fit to carry firearms and discharge their duties. Similarly, police psychologists also help select suitable national service officers for deployment as officer cadets and neighbourhood police centre officers.

Specialist Vocational Selection

ANY OF THE vocations within the Home Team perform highly specialised duties. There are special tactics teams, rescue teams, dignitary protection teams, peacekeeping teams, counter assault teams, crisis negotiators, and firearms teams. Psychologists in the Home Team help in the selection and mental preparation training of some of these specialised vocations to ensure that the best person is suited for the right specialised operational deployment. Psychologists also conduct maintenance testing for some vocations to ensure that operators are performing at their optimal levels.

Crisis Negotiation Cadre

RISIS NEGOTIATION IS a stressful and demanding vocation, as ▶ negotiators need to respond sensitively and decisively in barricade siege, criminal and terrorist hostagetaking situations. Police psychologists deployed within the Crisis are Negotiation Unit (CNU) to select, support negotiation develop and operations. For instance, psychologists in the CNU conduct training and exercises for the CNU and in the process also assess and develop the responding skills of the negotiators.

Behavioural Analysis Cadre

SYCHOLOGISTS, WITH THE knowledge of human behaviour and mental processes. help maintain a cadre of officers trained in analysing offending behaviour and offences. Although these officers are not 'profilers', they are a community of officers who are trained in analysing the psychological factors related to specific offences so as to support their operational duties. For instance, cadre members, who may be intelligence analysts or investigators, are trained in understanding the psychological profiles of paedophiles. This understanding of the psychological factors in paedophilia

helps the operator better understand the crime and to perform their operational duties more professionally.

Paracounselling Cadre

MAINTAINING TEAM resilience within the units, psychologists and develop a train select cadre of volunteer paracounsellors. These paracounsellors are deployed within their units to support officers and teams through times of crisis. Psychologists help units by selecting, training, supervising and developing the skills of the paracounsellors to respond to a variety of crisis situations. For instance, psychologists maintain the operational readiness of the paracounselling cadre by briefing them on the mental readiness issues before major deployments so that they are ready to respond operationally during times of crisis.

Leadership Assessors Cadre

UILDING A STRONG leadership culture having means champions leadership of development within the teams and units. Psychologists in PPSD and BSU do this through building a cadre of leadership assessors. These leadership assessors familiar are with the leadership competencies and behaviour and are proficient at behavioural assessment. This cadre leadership besides of assessors,

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supporting the leadership assessment and development centres, also help develop a culture of developing leaders in the Home Team.

Organisational Health Activist Cadre

within BUILDING RESILIENCE Ν units. the PPSD maintains a pool of organisational change activists who help to drive the initiatives derived from the OHS. The cadre members are supported with the resources to facilitate the change process within the units. This helps address the systemic and organisational issues affecting the operational and mental readiness of units and through this, strengthen the organisational resilience of the units.

CONCLUSION

s Police Commissioner Ng Joo Hee aptly put it in his speech to ACCOP 2010, "Psychology is to policing, as physics is to construction, mathematics to finance, or history to diplomacy."15 Effective operations in the Home Team are dependent on having a pool of resilient and mentally-ready officers, teams and organisations. Psychologists, mindware experts in the Home Team, work daily in developing, maintaining and sustaining the operational response of the various departments. While ACCOP 2010 was a milestone event in the development of psychology in the Home Team by bringing together local and international law enforcement psychology experts, much remains to be done in moving psychology from research into practice. Law enforcement duties demand that operators interface with the community daily; mindware should thus be expanded to support interface. Psychology this daily can be used to understand the new affecting phenomenon Singapore and trends that may affect Singapore. Psychology can be used further to support the understanding, combating and rehabilitation of the enemy mind so that law enforcement maintains the competitive edge in the war against crime and offending. Psychologists in the Home Team need to also become more intertwined with the frontline operator to provide timely, relevant and practical support to the frontline operators.

While *mindware* in the Home Team has come a long way in the last two decades, the challenges in the next chapter of Home Team psychology is firstly about bringing psychology from the ivory towers of research into the trenches of combating offending, and secondly about enhancing the science behind current practices in law enforcement. To achieve these goals, Home Team psychologists must be developed into operational and deep domain experts in specific fields of law enforcement psychology. Home Team mindware will then stand ready to support Home Team operators in continuing to ensure the success of the Home Team.

ENDNOTES

¹ See opening address by Minister of Home Affairs K. Shanmugam, *'Mindware is complementing Hardware.'* Rapporteur summary of conference proceedings, Asian Conference of Criminal and Operations Psychology 2010, pp 1-2.

² See *Police Psychology in Singapore* by Khader, Koh and Tan (2002).

³ See *Psychological Services in the Home Team,* pp 13-19. See also Aumiller, G.S. (2007), *Education in Police Psychology and movement in making police psychology a specialty with APA*. Paper presented at 36th Annual Conference of the Society for Police and Criminal Psychology, Massachusetts, USA.

⁴ The panel was made up of Mr. Fred Long (Chief Psychologist, Ministry of Health), Mr. Ong Kian Chye (Chief Psychologist, Ministry of Defence) and Dr. John Elliott (Professor, National University of Singapore).

⁵ Mr. Peter Tan and Mr. Majeed Khader were appointed in 1993; Mr. Koh Chee Wee and Mr. Jansen Ang were appointed in 1995.

⁶ Mr. Tan Yew Kong was appointed prison psychologist in 1997.

⁷ See White Paper: The Jemaah Islamiyah Arrests and the Threat of Terrorism. Ministry of Home Affairs, Singapore.

⁸ See Stress in Police DVI Operations: Lessons from the Asian Tsunami (Quek, Ang & Diong, 2005).

⁹ See paper on *Effectiveness of Reasoning in Rehabilitation* (Tong & Farrington, 2006) as an example of the research by prison psychologists.

¹⁰ See for instance paper on the *Efficacy of Programme on Managing Youth Offenders* by Ong, Singh and Misir (2002)

¹¹ See Interviewing Terrorists: Suggestions for Investigative Interviews. Book chapter in *Criminal Profiling: An introduction to Behavioural Evidence Analysis* (ed. Brent Turvey, 2008).

¹² See Organisational Health in the Police: A 3-R Approach (pp 85-100), book chapter in *Work Stress and Coping Among Professionals* (editor Chan Kwok Bun, 2007).

¹³ CARE stands for Caring Action in Response to an Emergency. The National CARE Management System chaired by the Ministry of Health coordinates the CARE activities across the various ministries. See Long, F.Y. (2001), Psychological support in civil emergencies: the National Emergency Behaviour Management System of Singapore, *International Review of Psychiatry*, 13, 209 – 214.

¹⁴ See Seven Traits of a Home Team Crisis Leader: Developing the Home Team Crisis Leadership Framework, *Home Team Journal*, 1, 5-21.

¹⁵ See Rapporteur summary of conference proceedings of Asian Conference of Criminal and Operations Psychology 2010, pp 28-31.

REFERENCES

- 1. Asian Conference of Criminal and Operations Psychology (2011). Rapporteur summary of conference proceedings of *Asian Conference of Criminal and Operations Psychology 2010*, pp 28 – 31, Singapore.
- Aumiller, G.S. (2007). Education in Police Psychology and movement in making police psychology a specialty with APA. Paper presented at 36th Annual Conference of the Society for Police and Criminal Psychology, Massachusetts, USA.
- 3. Behavioural Sciences Unit, (2009). Seven Traits of a Home Team Crisis Leader: Developing the Home Team Crisis Leadership Framework. *Home Team Journal*, 1, pp 5-21.
- Khader, M., Ang, C.H., Koh, C.W., Diong, S.M., Koh, M., Poh, L.L., & Tan, C. (2007). Organisational Health in the police: A 3-R approach. In Chan, K. (Ed), *Work* stress and coping among professionals (pp85 – 99). Brill, Netherlands.
- Khader, M., Ang, J., Tan, E., & Chin, J. (2008). Interviewing terrorists: Suggestions for investigative Interviews. In Turvey, B. (Ed), *Criminal Profiling: An introduction* to behavioural evidence analysis (pp 528 – 538). Elsevier-Academic.
- Khader, M., Koh, C.W., & Tan, P. (2002). Police Psychology in Singapore. In Tan, A.G., & Law, L.C (Eds) *Psychology in Contexts - A Perspective from South East Asian Societies* (pp32 – 50). Lingzi Media, Singapore.
- 7. Long, F.Y. (2001). Psychological support in civil emergencies: the National

THE HOME TEAM USE OF BEHAVIOURAL SCIENCES....

Emergency Behaviour Management System of Singapore. *International Review of Psychiatry*, 13, 209 – 214

- 8. Ministry of Home Affairs, (2003). White Paper: The Jemaah Islamiyah arrests and the threat of terrorism. Ministry of Home Affairs, Singapore.
- Ministry of Home Affairs, (2010). Psychological Services in the Home Team: A commemorative book of ACCOP 2010. Ministry of Home Affairs, Singapore.
- Quek, R., Ang, J., & Diong, S.M. (2005). Stress in Police DVI Operations: Lessons from the Asian Tsunami. Paper presented at the International Military Testing Association

EDITOR'S NOTES =

Conference, Singapore.

- 11. Ong, G., Singh, M., & Misir, C. (2002). Managing and overcoming violence for youth offenders (MOVE). Technical report by Psychological Services Branch, Singapore Prison Service.
- 12. Quek, R., Ang, J., & Diong, S.M. (2005). Stress in Police DVI Operations: Lessons from the Asian Tsunami. Paper presented at the International Military Testing Association Conference, Singapore.
- Tong, L. S. J., & Farrington, D.P. (2006). How effective is the "reasoning and rehabilitation" programme in reducing offending? *Psychology, Crime and Law*, 12(1), 3-24.



Senior Principal Psychologist Jansen Ang is the Deputy Director of the Behavioural Sciences Unit housed at the Home Team Academy, Singapore. He is concurrently the Head of the Operations and Forensic Psychology Branch of the Police Psychological Services Division. Operationally, he is also the Chief Psychologist of the Crisis Negotiation Unit within the Special Operations Command of the Singapore Police Force where he works on selecting, assessing, training and developing a cadre of crisis negotiators. At the national level, he is the Head of the Police CARE Management System and is a member of the National CARE Management Committee coordinated by the Ministry of Health. He is also an Assistant

Professor (adjunct) in the School of Humanities and Social Sciences at the Nanyang Technological University where he teaches on the psychology of crisis stress management. As part of his work on leadership development, he is a mentor with the Police Command and Staff Course and also lectures on the Home Team Senior Command and Staff Course. He is a member of the Society for Police and Criminal Psychology (USA).

Mr. Ang holds a Masters in Forensic Psychology (UK) and his professional experiences involved developing psychological profile of various offences. He was also involved in defining the Police Leadership Competency Framework (LCF), the Home Team Crisis Leadership Competency Framework (HT CLCF), the Police Leadership and Command Development Centre (LCDC) and is currently involved in a project looking at the Home Team Command Leadership competencies. For his work in expanding the Mental Health and Resilience capabilities in the Home Team and in developing the concept of red teaming in operations, he was awarded the Home Team Achievement Awards. Mr. Ang also received the Distinguished Graduate Award (2009) on the Home Team Senior Command and Staff Course – the pinnacle leadership course at the Home Team Academy.

This article is co-authored with Dr. Majeed Khader, our Guest Editor and contributor for the cover article for this special edition. Dr. Majeed was also the Chairman of Asian Conference of Criminal & Operations Psychology (ACCOP) held from 18 to 20 May 2010. It was jointly organised by the Ministry of Home Affairs, Singapore Police Force, Singapore Prisons Service, Behavioral Sciences Unit at the Home Team Academy, the Police Psychological unit and The Society for Police and Criminal Psychology.

The Arab Revolution: The Role of Social Media

SHOBI PEREIRA¹

SOCIAL MEDIA AS A TOOL

N HIS BLOG for the New Yorker, Malcolm Gladwell observed that People with grievances will always find ways to communicate with each other.²

The relationship between the social revolutions in the Middle East and online social media is not a mere cause and effect connection. Revolutions in the past took place without the Internet though in its place other mass media tools were used. In fact, during the uprisings in Libya and Yemen, the Internet was cut off, but the waves of uprising persisted. Only history can judge whether this action of cutting off the Internet created a backlash that exacerbated the uprising.

Political and social revolutions through the course of history depict the convergence of the social masses towards a common cause as being proliferated by effective communication. Effective communications facilitate the social construction of realities shaped by shared experiences and ideals. The media is a tool that serves this function. It is a tool that can effectively present,

People with grievances will always find ways to communicate with each other.²

convince and spread rhetoric and ideologies through speeches, words and imagery to the desired audience. From Hitler's prolific speeches, to the posters of communist propaganda, BBC and WWII broadcasts, CNN and its presentation of Operation Desert Storm and WMD in Iraq, and more recently the role of Al Jazeera and the online social media in the Middle East uprising, these are tools that have been utilised effectively by social actors (including the government) to tip the balance and galvanise the masses towards their cause(s). At times, the government wins, and it is often branded propaganda. At other times, the anti-establishment wins, and it is called revolution, but revolutionaries too use propaganda to achieve their ends

SOCIAL INEQUALITIES AS TRIGGER TO REVOLUTION

Successful social Revolution generally entails a rhetoric that is often built upon social injustices packaged as a cause (e.g. overthrow of a corrupt regime) that is easily identifiable and deemed legitimate to its participants.

The revolution in the Middle East and North African countries was ignited by Tunisia's Jasmine Revolution. It began with the selfimmolation³ of Mohammed Bouazizi According to media accounts, on 17 December 2010, he doused himself with paint thinner and set himself on fire in front of a local municipal office. He was a 26-yearold fruit and vegetable seller. His livelihood had come under threat when the unlicensed cart he used was confiscated by the police. He was beaten as he resisted the police. Mohamed Bouazizi chose this form of protest in front of the local office mainly because they refused to hear his complaint and because, according to family and friends, he had been humiliated for too long and too often.⁴ The street protests began that

It was the perceived difference between what **should be** and what **was** that created the driving force for the country's uprising.⁵ same day. The unrest quickly spread to neighbouring towns, and then the whole country, lasting 32 days. On 14 January 2011, President Zine El Abidine Ben Ali fled to Saudi Arabia, ending a 23-year rule.

It is important to emphasise that it was humiliation and not poverty that was the spark for Bouazizi's self-immolation. This is the recurrent theme of the protests that subsequently took place in other Arab countries.

Scholars and think tanks have grappled with the question of why this revolt of the Arab street happened now and not at any other time in history. What leads to that moment when an idea grips a people and leads to an action of a massive scale and thus a revolt? The pre-conditions for the revolt have been there for some time. An empirical analysis of social and economic conditions published by the Abu Dhabi Gallup Centre argues that unemployment and poverty alone did not lead to the overthrow of Egypt's government:

It was the perceived difference between what **should be** and what **was** that created the driving force for the country's uprising.⁵

The Gallup study maintains that experience of hardship alone does not move people to resist. Quoting Barrington Moore's study of revolutions throughout history that to shift from misery to a mass movement people must first discover

Moral anger and a sense of social

injustice.⁶ the Gallup study points out that the realisation that societal distribution of pain is unfair and the suffering is not inevitable is the prerequisite to action. This is why the revolt happened at this point in history and an examination of the pre-conditions that existed in each of these countries is worth looking at.

A closer look at the grievances in Tunisia find complaints prevalent elsewhere in the Arab world. They fall under these main categories:

- a. rising prices,
- b. repression,
- c. severe corruption and
- d. unemployment

Hence, analysts and scholars have drawn parallels between the revolutions in the Middle-East and various others in history. As the former ASEAN Secretary-General Severino Rodolfo puts it:

"There is a pattern that exists before a people's revolt happens – unemployment, rising prices, repression, humiliation, torture, detention without cause, corruption; the widening gap in wealth between the haves and the have-nots, between the privileged few and the expendable many, between the rulers and the ruled; injustice, both personal and social."⁷

It is, he argues, fairly easy to predict that such grievances will some day reach a boiling point and drive away the ruling elite. However, what is hard to do, is to foresee when that boiling point is reached.

SOCIAL AGENTS OF CHANGE: THE IDEALISTIC, DISGRUNTLED BUT TECH SAVVY YOUTHS

G IVEN THE PRE-EXISTING conditions in Tunisia and Egypt, one other important fact needs closer examination – the demographics. There is one underlying feature of the Middle East crisis – a massive youth bulge.

About 60 percent of the region's population is under 30 years of age. As Fareed Zakaria writes in Time magazine: "These millions of young people have aspirations that need to be fulfilled, and the regimes in place right now show little ability to do so."⁸ He cites a recent survey of Middle Eastern youth that shows the Number One wish of the young in nine countries is to live in a free country. The desire to live in well-run, modern societies ranked very high as well.

At the same time, youth unemployment in some parts of the Middle East were "staggeringly high" at 25 percent. Compounding the problem of an unemployed educated youth were massively repressive and immensely corrupt regimes.

Paradoxically, youths in this region were technologically savvy. They had access to counterparts in foreign lands, compared their plight to other youths

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who able to fulfill their aspirations, and formed their own conclusions about the barriers and inhibitions they faced in their own political and social environment. With a bleak future and little to lose, these disgruntled youths became a "time-bomb" that was ready to explode when the right detonator came along. In the Middle East, it was in the form of Tunisian Mohamed Bouazizi.

Once ignited, these youths naturally turned to the form of communications their generation is familiar with and trust wholeheartedly (vis-à-vis the tightly controlled state media) – the online social media. The youth joined hands and forces through social media.

Not unlike other social spaces, social media is not homogeneous but a labyrinth of sub-realms that attract like-minded people. Linking the young people to the same realm, and hence, the same cause was the Arab identity. They were a group who spoke the same language, shared the same culture, in some instances the same religion and had been exposed in the past decade through satellite television globalisation to and universal values. So the links through culture and religion were strong but not that of nationalism since they lived in fear and without freedom under dictators and authoritarian regimes. The various forms of communication they had at their disposal not only showed them how their brethren in the West lived, but their neighbours as well. For example,

Saudi women could see their Kuwaiti counterparts drive, while they could not. It brought about an awakening.

Director General of Al Jazeera, Wadah Khanfar, has described the youths as the architects of a new reality:

"A new generation, well-educated, connected, inspired by universal values and a global understanding has created a new reality for us."9

In the Middle East, it is therefore the combination of an idealistic but disgruntled youth and the effective use and familiarity with technology that proved to be a heady brew.

During any kind of turmoil what most governments would want to avoid is the gathering of people in huge numbers. What social media facilitated was precisely that - the mobilising of people in a very short space of time. Social media lent speed and velocity to the unrest

"A new generation, well-educated, connected, inspired by universal values and a global understanding has created a new reality for us."9

and helped to spread dissonance by connecting the thought leaders and activists to ordinary citizens. By doing that it helped to expand the network of people who became willing to take action. These actions by the young people were spontaneous, unscripted, small-scale escalations of countless numbers of individuals, who had no leaders, but only small pockets of "heroes" active online. The online movement managed to change these individuals into political agents of change - to them it was an electrifying moment. Describing their personal experience of the Iranian Revolution, Annabelle Sreberny-Mohammadi and Ali Mohammadi wrote that "Revolutions are psychologically electrifying moments, full of emotional charge."10 It is the combination of social media, user-generated videos, images caught on cellphones, and satellite television coverage that fuelled the online rage.

CASE STUDY 1: HOW TUNISIANS USED SOCIAL MEDIA

NALYSTS ARE IN agreement that social media did not bring about the unrest in Tunisia. It was but a powerful tool in the hands of the techsavvy youth. Social media was used effectively as a tool for communicating information instantaneously among the youths of Tunisia and in keeping the media (foreign and uncensored underground media) informed of what was happening on the ground as their reporters and journalists were either restricted or could not report on the situation. In other words the youths became citizen journalists. The video that triggered it for Tunisia came from the peaceful protest started by Mohamed Bouazizi's mother The people of Sidi Bouzid overcame heavy censorship and police repression to make sure that their uprising did not go unnoticed. On December 17, a cousin of Mohamed Bouazizi, posted a video of a peaceful protest led by the young man's mother outside the municipality building on Facebook and YouTube. That evening, Al Jazeera's new media team, which trawls the web looking for videos from across the Arab world, picked up the footage via Facebook and aired it. Tunisian media in contrast. ignored the growing uprising until Nessma TV¹¹ broke the silence on December 29. That proved the first encouraging sign for protestors that the wall of censorship could crumble.

Certain conditions about online activity facilitated the people's power movement in Tunisia. According to Internet World Stats, Tunisia has 3.6 million Internet users - that is a third of the population. It also has one of the highest penetration rates on the African continent; at 34%, that is higher than the global average of 31.8%.12 Another pre-existing condition was a solid core of online activists from Tunisia. Throughout the uprising, Tunisian protesters relied on Facebook communicate with each other to Facebook, unlike most video sharing sites, was not included in Tunisia's online censorship. According to Selim Ben Hassan, the President of the Parisbased Byrsa citizens' movement, 1 in 10 Tunisians has a Facebook account.¹³ During the unrest thousands flocked to Facebook and Twitter, treating the

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medium as a news agency that provided updates on the ongoing protests and incidences of police brutality. Non-Internet users kept abreast of the protests via satellite news channels, including Al Jazeera, France 24 and Al Arabiya.¹⁴ The hashtags on Twitter also tell the tale of how the uprisings went from being local to national in scope: #bouazizi became #sidibouzid, then #tunisia.

Observers note that the manner in which Twitter was used in the unrest, especially in Egypt, created a communication circle that influenced the entire process of protesting. Tweets went out in real time to those within the protest grounds and without. Young revolutionaries used Twitter to inform and guide others on how to get past roadblocks and past security guards so that they could gather. Once in the midst of the protesters and in the gathering place, they tweeted about the protest itself, within the square and to the whole

Observers note that the manner in which Twitter was used in the unrest, especially in Egypt, created a communication circle that influenced the entire process of protesting.

world. This, some observers point out, influenced the way in which the protests grew. It created a circle of information and communication in real time that in many ways allowed for the unrest to grow over time and allowed for the mobilisation of groups of people. It proved an indispensable tool in mobilising "swarms" of people.

CASE STUDY TWO: THE TECH-SAVVY YOUTH OF EGYPT

N EGYPT A potent combination of social and traditional media worked in unison to drive the revolution. One medium fed the other. The content that was generated by the online social media gained credibility, legitimacy and hence traction after being endorsed by a powerful mainstream media in the region – satellite television station Al Jazeera.

Al Jazeera became the "voice" of the revolutionaries. It is worth noting that in Egypt the camera crew and journalists went "underground" voluntarily and kept the cameras rolling 24/7 because of a phone call received by the Director General of Al Jazeera, Wadah Khanfar. According to Khanfar, the protestor, whom he could not identify, told him that there would be genocide if the cameras were switched off at night.¹⁵ So two phone calls were made that same night by Khanfar - one to the newsroom to let the images go "live" through the night, and the second to the camera crew at Tahrir Square to keep footage rolling. Protestors drew confidence and courage from the coverage. A wide makeshift screen had been set up at Tahrir Square. The protestors watched themselves, while the rest of the world watched them as well.

Egypt is home to Africa's largest blogging community. A quarter of its 80 million people also enjoy online access. Rumours could not be verified but once video clips were uploaded on the numerous sites, e.g. Facebook, YouTube, and Twitter, they were assumed to be accurate. Users around the world became riveted by the minuteby-minute accounts of the latest events. Social media became a very important factor in the "real time" communication of events across the Middle East. It also created for the young revolutionaries an international show of solidarity.

For those who were less computer literate, the mobile phone proved to be the next best protest device. The humble communication device has morphed, thanks to technology, facilitating into an instrument interaction of three major sectors, viz., telecommunications, media and information technology. Latest mobile phone devices used live streams to broadcast images directly from the protests. Sites such as Ustream, Livestream and Bambuser enabled young protesters to take to the Internet with live filming while taking part in the protests.¹⁶ User-generated video also played an instrumental role in promoting real-time awareness of events in Egypt that the state was scrambling to contain. YouTube proved invaluable in such dissemination e.g. one of the most dramatic posts

was footage from a YouTube user "freeegypt" showing a man halting a water cannon truck by standing in its path.¹⁷ Twitter was used by protest organisers to instruct the masses on the

Social media became a very important factor in the "real time" communication of events across the Middle East. It also created for the young revolutionaries an international show of solidarity.

specific places to gather and specific times to gather at, providing up to date advice on the roads into the cities and the roadblocks set up.

The second wind for the Egyptian revolt, which had begun to flag, came from an interview with activist and Google executive, Wael Ghonim, who broke down and literally sobbed on television host Mona El Shazly's evening programme on a privatelyowned TV station. He had just been released from detention by the ruling National Democratic Party's Secretary General Hossam Badrawi. The interview, with amazing speed, made its rounds on YouTube - a testimony to the velocity with which information can spread, while volunteer translators gathered on Twitter to render his comments. His comments became the rallying point for the protestors. It brought new life to a sagging protest.¹⁸ The close-up shots of a man sobbing uncontrollably at the suffering

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endured by fellow Egyptians proved to be powerful television.

SHUTTING DOWN INTERNET AND MOBILE COMMUNICATIONS

HE CHALLENGE FOR social media arrived when the authorities decided to shut down mobile and Internet communications But this proved futile in the face of young people desperate for change. The youth began devising methods of circumventing the blackout. Cutting off nearly all Internet traffic for five days created a backlash in many ways and overseas organisations began working closely with the revolutionaries. Together, thev bypassed the various governmentorchestrated shutdowns. Social sites like Twitter and Facebook carried "status updates" that were a public guidance for the protesters. When domestic Internet connections were completely shut down, such updates were sent via mobile phones and new media sites (Facebook, Twitter etc) from Egyptians living abroad or from other Arab social network users living outside the country, helping independent media get the news out on television and newspapers.

The usually apolitical companies Google and Twitter joined hands to establish three mobile phone numbers (one in the United States, one in Italy and one in Bahrain) for people to call and record their tweets as a voice message.¹⁹ Users were instructed to log on to Twitter and listen to tweets rather than reading them. The new "audio tweets" gave this content a more personal feel as users could hear the voice of the tweeter and surrounding background noise. It was the first time that leading Internet search engines and social media combined forces amid widespread upheaval to keep flowing information despite state efforts to contain it and shape the public narrative. Other overseas organisations also pooled their resources to help the Egyptians. Writing about the "5 Ways the Protesters Are Beating the Blackout," Steven Hoffer of AOL News highlighted landlines as another method that Egyptians employed to bypass the net blockade.²⁰ Messages were transmitted, providing instructions on how to dial up a phone number to connect to the Internet. Among those providing such a service was the Parisbased French Data Network, which extended dozens of lines to Egyptian users. A global network of free speech activists on the Internet under the organisation Telecomix umbrella used new media tools to bypass the information blackout

SATELLITE TELEVISION'S ROLE

HILE EXAMINING THE role of social media in the Arab revolution, it is also important to step back and look at the broadband landscape and Internet connectivity issues in Egypt. Out of the 80 million people, only 20 percent have ever used the Internet and this was a privilege shared only amongst the middle and upper middle class. But 86 percent of the population owned television sets.²¹ So social media alone did not effect the change and the toppling of a ruler, but was a successful catalyst when combined with myriad methods of digital and traditional media. We also need to look at the role played by traditional media in "setting the scene" for these revolutions and that began a long time back.

Up until the advent of satellite television, the terrestrial broadcasters played a vital role in shaping the psyche of the Arab people. Under repressive regimes, the media was strictly controlled. So the arrival of the ubiquitous, cheap satellite dish meant a sea change in the psyche and formation of a pan Arab identity, simply because the range of programming changed dramatically. It could be said that the early seeds of the discontent in the youth were sown when in 1992 the first satellite station was started by Saudi Arabia, Middle East Broadcasting Center (MBC). Terrestrial broadcasters began fighting for eyeballs in what was fast becoming an overcrowded space. The most influential player in that set up was Al Jazeera. Its underlying effort was directed at highlighting the suffering Arab's plight. Al Jazeera's confrontational and fiery current affairs programmes resonated with its Arab audience. Its guests argued with passion and much gesticulation. It was not a white-washed version of an Arab current affairs programme. The globalised youth's universal values could well have come from watching these kinds of programmes. So it would come as no surprise that Al Jazeera became the agent they trusted to tell their side of the story to.

During the revolts, Al Jazeera was a vital part of the communication loop. Egyptians watched the Tunisian revolution play out in their living rooms and coffee shops on Al Jazeera and decided it was their time too. Al Jazeera became the one-stop centre for the videos and phone camera videos that circulated on the many social media sites and they were transmitted to the entire Arab world. The riots, uprisings and police brutalities were being watched across the Arab world, right in their living rooms. Al Jazeera became the voice of protest. Once the youths knew they had Al Jazeera as their partner they knew the state-owned and state-controlled media and censorship had lost their battle. They hated those establishments and it came as no surprise that at one stage of the protests in Egypt, they gathered in anger and waited outside the television stations their rage and anger apparent.

Al Jazeera is not just a popular television station, offering news and information to the Arab world,

but it is now the source of a new projection of Arab unity. It has succeeded in uniting and connecting a secular, political Arab identity. Clearly, Al Jazeera carries a certain "Arab narrative" which reflects Arab issues defined by an Arab identity. Throughout the Arab world, no one regime now controlled the message.

CONCLUSION

Some scholars and academics argue that their role was over-rated. They were neither fully responsible for the revolution nor were they relevant. As Malcolm Gladwell said, over the course of history, "people protested and brought down Governments before Facebook was invented."²²

They are partly right. In the case of the Middle East, social media undeniably helped "spread cognitive dissonance by connecting thought leaders and activists to ordinary citizens rapidly expanding the network of people who become willing to take action."23 However, underlying these series of actions the fundamental cost-benefit is analysis where social actors weigh the value of action versus inaction. The prevalence of poverty, social inequality and injustice provides an ideal backdrop for a brewing political revolution. One can argue that the Middle East revolutions would have taken place with or without social media. However, with social media, it just took place faster. It became a catalyst. For example, the President of the Internet Society of Tunisia, Khaled Koubaa recounted that:

"Three months before Mohammed Bouazizi burned himself in Sidi Bouzid we had a similar case in Monastir. But no one knew about it because it was not filmed. What made a difference this time is that the images of Bouazizi were put on

Al Jazeera is not just a popular television station, offering news and information to the Arab world, but it is now the source of a new projection of Arab unity.

Facebook and everybody saw it."24

Hence, the ability to wield the media to communicate causes and galvanise people can trigger actions in the form of social revolution Whether it is a speech broadcast over radio, posters, TV or YouTube images or tweets, an effective media with an expansive outreach (viral effect) has and will be the constant tool as public opinion can be influenced and groundswell shifted. It helps if these overt or subtle messages conveyed are legitimised by media deemed credible by its recipients. In fact, as Peter Beaumont of the Guardian says, "the medium that carries the message shapes and defines as well as the message itself."25

Brian Solis describes this process as one where the "density" of connections is pertinent. He argues that the any tool that increases the density of social connection is instrumental to the viral effect of messages communicated. Hence, "the increase density of information flow (the number of times that people hear things) and of the emotional density (as individuals experience others' perception about events, or 'social contextualisation) lead to an increased likelihood of radicalisation when people decide to join the revolution instead of watching it." Hence, he concludes, "if unity is the effect, density is the cause."26

Social revolution can be triggered by a myriad of factors. The impetus for people to partake can easily be tipped by the intensity of the sense of shared experiences and the strong belief that the benefits of participating outweigh the costs of doing so. These are the real determinant causes. Eventually, the "perfect revolution" requires a right concoction of social actors, with the right social motivations, using the range of social tools to bring into effect the desired social changes. In the case of the Middle East uprisings, social media was that effective tool used to tip the balance.

ENDNOTES

¹ The author thanks Neng Jye Yap and Dr. Lal Nelson for their inputs.

² Malcolm Gladwell, "Does Egypt need twitter?" February 2, 2011, http://www.newyorker. com/online/blogs/newsdesk/2011/02/does-egypt-need-twitter.html.

³ Self Immolation – the act of setting oneself on fire as a form of protest - has a centurieslong tradition in some cultures. In the 1960s, it was used by Buddhist monks in Vietnam to call attention to the alleged persecution of Buddhists by the South Vietnamese government and, later to protest the Vietnam War.

⁴ Yasmine Ryan, "The tragic life of a street vendor", *Al Jazeera*, 20 January 2011, http:// english.aljazeera.net/indepth/features/2011/01/201 111684242518839.html#.

⁵ Abu Dhabi Gallup Center, *In Egypt: The Arithmetic of Revolution*, March 2011, http://www. abudhabigallupcenter.com/146888/BRIEF-Egypt-Arithmetic-Revolution.aspx

⁶ Barrington Moore, Jr., *Injustice: The Social Bases of Obedience and Revolt*, Macmillan, London, 1978.

⁷ Severino Rodolfo C, "What Happens After People Power?" *The Straits Times*, 22 February 2011, The writer, a former Philippines diplomat, is now head of the ASEAN Studies Centre at the Institute of Southeast Asian Studies in Singapore.

⁸ Zakaria Fareed, "Why It's different this time" *Time*, February 28, 2011, page 18. Also available as "Why There's No Turning Back in the Middle East," February 17, 2011, http://www.time.com/ time/world/article/0,8599,2049804,00.html

⁹ Kim Zetter, "TED 2011: Al Jazeera Director on Power of Middle East Revolutions," Wired. com, March2, 2011. TED Ideas Worth Sharing started in 1984 as a conference bringing together people from three worlds - entertainment, technology and design. http://www.wired.com/ epicenter/2011/03/wadah-khanfar-at-ted/

¹⁰ Annabelle Sreberny-Mohammadi and Ali Mohammadi, Small Media, Big Revolutions: Communication, Culture and the Iranian Revolution, University of Minnesota Press, Minneapolis, 1994.

¹¹ According to Wikipedia, Nessma TV is a commercial TV channel that has a range covering Tunisia, Morocco, Algeria, Libya and Mauritania. All programmes broadcast on this channel are subtitled in French or Arabic. http://en.wikipedia. org/wiki/Nessma_TV

¹² Internet World Stats: Usage and Population Statistics, http://www.internetworldstats.com/stats1. htm. Its Internet usage numbers come mainly from data published by Nielsen Online, ITU, WWW and other local sources it considers trustworthy.

¹³ Associated Press, "Jobless youth in Tunisia riots using Facebook," January 12, 2011, http:// www.ndtv.com/article/world/jobless-youth-in-tunisia-riots-using-facebook-78826.

¹⁴ Al Jazeera, headquartered in Doha, Qatar, was launched in 1996 and is a news and current affairs channel in both English and Arabic; France 24 is an international 24 hour news channel, started in December 2006, with a view to cover international current events from a French perspective; Al Arabiya is an Arabic language television news channel, started in March 2003, and partly owned by Saudi broadcaster Middle East Broadcasting Centre (MBC).

¹⁵ Kim Zetter, fn 9.

¹⁶ Channel 4 News, *Arab Revolt: Social Media and the People's Revolution*, 25 February 2011, http://www.channel4.com/news/arab-revoltsocial-media-and-the-peoples-revolution.

¹⁷ http://www.youtube.com/watch?v=YtTUsqra-MU&feature=player_embedded.

¹⁸ Noar Malas, The Interview with Wael Ghonim that Galvanised Protesters, *Wall Street Journal*, February 8, 2011, http://blogs.wsj.com/dispatch/2011/02/08/the-interview-with-wael-ghonim-that-galvanized-protesters/

¹⁹ Tadias, How to Bypass Internet Shutdown, February 2, 2011, http://www.tadias.com/02/02/2011/ how-to-bypass-internet-shutdown/

²⁰ Steven Hoffer, Egypt Internet Ban: 5 Ways the Protesters are Beating the Blackout, *Aol News*, February 1, 2011, http://www.aolnews. com/2011/02/01/egypt-internet-ban-5-ways-theprotesters-are-beating-the-blacko/

²¹ These statistics are from Flip the Media, the blog of the University of Washington Master of Communication in Digital Media program, http:// flipthemedia.com/index.php/2011/02/the-arabrevolution-and-social-media/

²² Galdwell, fn 2.

²³ Simon Mainwaring, "Exactly what role did social media play in the Egyptian revolution?" February 13, 2011, http://simonmainwaring.com/ facebook/exactly-what-role-did-social-mediaplay-in-the-egyptian-revolution/ ²⁴ Peter Beaumont, The truth about Twitter, Facebook and the uprisings in the Arab world, *The Guardian*, 25 February 2011, http://www.guardian. co.uk/world/2011/feb/25/twitter-facebookuprisings-arab-libya.

²⁵ Ibid.

²⁶ Brian Solis, "Malcolm Gladwell, your slip is showing", 5 February 2011, http://www. briansolis.com/2011/02/malcom-gladwell-yourslip-is-showing/.

REFERENCES

- Beaumont, Peter (2011, Feb 25). The truth about Twitter, Facebook and the uprisings in the Arab world. *The Guardian*. Retrieved May 3, 2011 from http://www.guardian.co.uk/world/2011/ feb/25/twitter-facebook-uprisings-arab-libya
- Hunter, Elizabeth. The Arab Revolution and Social Media. (n.d.). *Flip the Media*. Retrieved May 3, 2011, from http:// flipthemedia.com/index.php/2011/02/thearab-revolution-and-social-media
- Mainwaring, Simon (n.d). Exactly what role did social media play in the Egyptian revolution?. Simon Mainwaring | Simon Mainwaring is a branding consultant, advertising creative director, blogger and speaker. Retrieved May 3, 2011, from http://simonmainwaring.com/ facebook/exactly-what-role-did-social-mediaplay-in-the-egyptian-revolution
- Malas, N. (n.d.). The Interview with Wael Ghonim that Galvanized Protesters -Dispatch - WSJ. WSJ Blogs - WSJ. Retrieved May 3, 2011, from http://blogs.wsj.com/ dispatch/2011/02/08/the-interview-withwael-ghonim-that-galvanized-protesters
- News Desk: Does Egypt Need Twitter? : *The New Yorker*. (n.d.). The New Yorker. Retrieved May 3, 2011, from http://www.newyorker. com/online/blogs/newsdesk/2011/02/doesegypt-need-twitter.html.
- Ryan, Yasmine. (2011, Jan 20). The tragic life of a street vendor. *Al Jazeera English*. Retrieved May 3, 2011, from http://english. aljazeera.net/indepth/features/2011/01/20111 1684242518839.html#
- 7. Severino, Rodolfo C (2011, Feb 22). What

Happens After People Power?. The Straits Times.

- Tadias Staff. How to Bypass Internet Shutdown at Tadias Magazine. (n.d.). *Tadias* Magazine. Retrieved May 3, 2011, from http://www.tadias.com/02/02/2011/how-tobypass-internet-shutdown
- Egypt: The Arithmetic of Revolution. Abu Dhabi Gallup Center. Retrieved May 3, 2011 from http://www.abudhabigallupcenter. com/146888/BRIEF-Egypt-Arithmetic-Revolution.aspx
- Jobless youth in Tunisia riots using Facebook . (n.d.). NDTV.com: India, Business, Bollywood, Cricket, Video and Breaking News. Retrieved May 3, 2011, from http://www.ndtv.com/ article/world/jobless-youth-in-tunisia-riotsusing-facebook-78826
- Malcolm Gladwell. Your Slip is Showing Brian Solis. Brian Solis Defining the convergence of media and influence. Retrieved May 3, 2011, from http://www. briansolis.com/2011/02/malcom-gladwellyour-slip-is-showing/
- Wael Ghonim interview updated again War in Context. (n.d.). War in Context. Retrieved May 3, 2011, from http://warincontext. org/2011/02/08/wael-ghonim-interview
- 13. Zakaria, Fareed. (2011, Feb 28). Why it's different this time. *Time*, pp 18.

EDITOR'S NOTES =



Shobi Pereira has been with the Social Change Research Branch of Research Division, Ministry of Home Affairs (MHA) since November 2010. Her domain expertise is New Media. Prior to joining MHA, Shobi was with the then National Population Secretariat, Prime Minister's Office (currently National Population and Talent Division).

A large part of her career has been spent in broadcast journalism when she joined the then Singapore Broadcasting Corporation (currently MediaCorp) in the early 80s. She has been a broadcaster/Newscaster both on local shores

as well as overseas, starting with Norwegian Broadcasting Corporation (NRK) in Trondheim, Norway; Cable News Network (CNN) in Atlanta Georgia, USA and Bloomberg LP in Tokyo, Japan.

Radicalisation: What (If Anything) is to be Done?

When Facts Get in the Way of a Good Story

C. LEUPRECHT & D.B. SKILLICORN

MODELS OF RADICALISATION

who ADICALS ARE THOSE are willing to indulge in politically-motivated violence. Radicalisation is the process by which ordinary individuals in some community make the shift from the societal norms to the margins. Over the past five decades, but particularly since 9/11, many researchers and intelligence practitioners have attempted to construct models of radicalisation. especially of Islamist radicalisation.

The benefits of such models are twofold. First, they can shed light on processes, stages, and trajectories (and, potentially, rates and timelines) by which individuals become radicals. As a result, it becomes feasible to construct methods to detect those who may (or will) become radicals, or to detect when they cross some boundary or reach some stage where radical action becomes probable. Thus a model of radicalisation leads naturally to early-warning systems for detecting radicals and their potential violence.

Second, such a model exposes, at some level, the motivations, incentives, drivers, and channels of influence that cause individuals to become radicalised. Motivations and incentives provide places where governments can apply counter-leverage to discourage motivation and provide disincentives. Knowing drivers and channels allows governments to block or limit them. Thus, a model of radicalisation suggests actions that can, to some degree, prevent radicalisation from occurring or reduce its prevalence.

Myriad models of radicalisation have been proposed, although the evidence for any particular one is quite weak. Models have to account for two phenomena: Why, in any sub-

community, some members become radicalised; and why many others, who seem by all accounts to be quite similar, do not. Many models derive their content by examining and explaining the first phenomenon, examining that is those who became radicals and searching for commonalities; but models that also provide plausible explanations for the second phenomenon, the fact that most sub-community members do not radicalise, are rare.

Existing models of radicalisation fall in three broad categories:

1. Models that ignore the internal structure of radicalisation. They are built on the assumption that radicalisation is too complex for useful explication, and focus instead on defining the boundary between non-violence and (Fedarcyk 2007). violence Such models pay attention that part of the only to of radicalisation process where an individual moves from some form of political dissatisfaction to becoming using violence to open If this boundary can be understood, and there is some way to detect individuals who cross it, then other of radicalisation aspects can be ignored from the standpoint of public safety.

Some version of this model is often the one implicitly used by intelligence and lawenforcement organisations, partly out of necessity. Such models naturally provide an early warning system, but do not identify points of potential leverage for reducing radicalisation.

2. Models that assume that attitudes relatively are constant within subcommunities. These assume that whether someone turns radical is determined by the incentive structure within each community (Berman 2009) In other words, many, perhaps most, of the members of a subcommunity may have the same grievances (for example, they may be politically dissatisfied) but many members face practical psychological or barriers them that prevent turning this dissatisfaction into violent action. Such models provide natural points of leverage for discouraging radicalisation by indicating governments where mav furnish effective disincentives. Channels of influence may also be detectable via their indirect effects on incentives; so, such models can also assist governments in blocking channels

3. Models that assume that attitudes vary within a subcommunity. These are built on the assumption that the variation in attitudes explains why some members radicalise while others do not (Horgan 2008, 2009). In other words, radicalism is embodied in a set of attitudes about what the problem is, and legitimate ways to address it. In such models, it is natural to match a spectrum of attitudes held with the stages of a progression from complacency via political/ religious dissatisfaction to politically motivated violence. If attitudes vary, then the mechanisms that cause this variation are germane; SO. these models are also more concerned directly with influence, and channels by which such influence enters a sub-community (for example, charismatic imams, or Internet web sites and forums). Such models provide both information about the structure of radicalisation (process, stages, timelines, rates) via patterns of the attitudes held individuals by and. indirectly, about the structure of motivations and incentives. Ergo, they provide help to governments in two ways, since a government might be able to change attitudes by public education or by addressing grievances, and might also be able to block channels of negative influence.

There are multiple versions of each type of model. Resolving which of the many proposed models of radicalisation accurately reflects what is actually going on, and whether different models apply to different circumstances, would require an extensive longitudinal study of an entire sub-community which, for a number of obvious reasons, is impractical. However, each model makes predictions about what should obtain, at any given moment in time, of a sub-community in which radicalisation is present or emerging. The properties of such a snapshot at a moment in time cannot verify a particular model of radicalisation, but they can falsify a model that predicts properties and structures that are absent

For example, models of the second kind predict that attitudes relevant to radicalism should be largely homogeneous across a subcommunity; if, instead. attitudes vary across the population in a way that matches the observed frequency of radicals, this would be counterevidence for such models. Models of the third kind often posit some kind of progression of attitudes: Mild social or political dissatisfaction that then finds a focus in religious dissatisfaction (dealt with by becoming religiously

fundamentalist), that then progresses to violent understanding of jihad, and so to violence. This progression is often assumed to be at least partly driven by external influences. A snapshot of attitudes that did not match this spectrum, and did not connect them to plausible channels of influence would be counter-evidence for models of this kind.

SURVEY AND SAMPLE

E CREATED A snapshot of a particular community by carrying out a survey of Muslims in Ottawa, Canada's capital, in 2008. Survey questions were selected to explore the full range of attitudes, influences, and channels that have been suggested in the literature. The survey's findings fail to confirm many of the models of radicalisation that have been proposed.

The survey questions addressed these main areas of content: Basic demographic information, attitudes to social and political issues that concern all Canadians; attitudes to social and political issues of particular relevance Afghanistan, Muslims (Iraq. to Palestine, and Israel); connections to other countries via relatives, media, and language; attitudes to and practice of Islam; and levels of Internet use. For social, political, and religious questions issues. were included that specifically elicited views on appropriate levels of action, both experientially and attitudinally and, indirectly, via attitudes to a number of terrorist groups of all flavours. Some questions were taken from the Pew Global Survey (2006) to allow comparisons with other countries.

Ottawa has a population just less than a million, comprising a population of about 50,000 Muslims. Target respondents were selected using government statistical data by winnowed removing family names judged unlikely to represent Muslim households. Responses were obtained from a total of n=455 Muslim residents. Subsequent focus groups were held to try and clarify surprising patterns of response.

RESULTS AND ANALYSIS

TANDARD STATISTICAL AND correlational analysis of the response data was carried out and is reported in McCauley (McCauley et al. forthcoming). The results described here were derived from а concurrent respondentanalysis using question factor Decomposition Singular Value (Golub and van Loan 1996) and is reported in greater detail in Skillicorn (Skillicorn et al. submitted). This concurrent analysis enables variation across the respondent population and, simultaneously, variation across question content to be extracted from the response data in a consistent way. In other words, structure in both the

population and the content of the questions can be elicited in a richer way because the structures across both domains must be aligned.

The variation in attitudes across this population is dominated by two independent (that is, uncorrelated orthogonal) variations. The or principal form of variation is one whose extremes are satisfaction (and activities demonstrating satisfaction); and dissatisfaction (and activities demonstrating dissatisfaction). The secondary variation relates the content of satisfaction/ to dissatisfaction, and begins with social/political issues, moves to a cluster of content related to smallgroup religious activity and support for groups that espouse violence, and then to religious/moral issues. The pattern of attitudes is thus a kind of "sandwich" as shown in Figure 1.

The extremes of the political/social axis of variation are:

- The positive extreme is associated with: Positive attitudes towards Canada, satisfaction with Canada's attitudes to immigrants, agreement that the government has helped a movement that the respondent believes in, a positive attitude to Israel, and agreement that force was justified in Iraq and Afghanistan.
- The negative extreme is associated with: Indications that respondents feel that members of their community have been discriminated against, that they have participated in political demonstrations, that they have attended political meetings, that the government has harmed a movement that the respondent believes in, that they have given money to political and religious

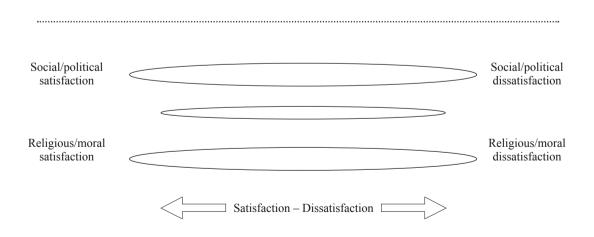


Figure 1: The "sandwich" structure of variation in observed attitudes from survey responses

groups, and they do not believe that the "War on Terror" was sincere.

• This axis captures variation in attitudes that are not specific to Islamic sub-communities but might be present in many communities, ranging from a conventional right-leaning suite of attitudes to a conventional activist and left-leaning suite of attitudes There are weak associations between attitudes at the positive end of this axis and demographic data such as home ownership but, in general, there is little association between variation on this axis and social or demographic differences. The presence of a positive attitude towards Israel within this axis of variation was surprising. We explored this further in focus groups where participants were also surprised to some extent but suggested that many Muslims have a grudging respect for Israel as a functioning Middle East democracy.

The extremes of the religious/ moral axis of variation are:

• The positive extreme is associated with: Disagreement that Sharia law should be imposed on all, and likelihood that the respondent speaks Persian. This latter is probably a surrogate for Iranian origin associated with escape from the Islamic regime that took over in 1979.

negative • The extreme is associated with: Agreeing that religion is important, respondents who pray with high frequency, positive attitudes towards groups such as Hezbollah. Hamas, al-Oaeda, Muslim Brotherhood, Tamil Tigers, and the IRA, as well as towards Iran, the experience of individual instances of discrimination, and positive attitudes to the concept of a Caliphate.

This axis represents variation in attitudes that are conventionally associated with Islamist radicalism (religious intensity, support for various terrorist groups, including those that have little or nothing to do with Islamist issues). It is not clear that this association is justified. That is, there is little indication that attitudes towards the negative end of the axis are associated with violence.

We conclude this partly because of the presence of the third axis of variation that seems to be associated with violence, since the extreme negative end is associated with support for groups that have espoused violence, and also participation in religious small groups and high frequency of mosque attendance. Equally importantly, there are clear differences between the pattern of attitudes from the extreme negative

end of this axis and the religious/ moral axis. Ergo, we consider this axis to be a better descriptor of 'radicalism' while the negative end of the religious/moral axis is more associated with religiously based or religiously grounded dissatisfaction than with violence.

The clear separation of these three kinds of attitudinal variation provides some indirect evidence of how attitudes change: if the content of satisfaction/dissatisfaction changes slowly, then a sample taken at a particular point in time should be unable to separate the content variations so clearly. Hence the strongly separated clusters of attitudes are evidence that different people are satisfied/dissatisfied about different kinds of issues and that, if the content of their satisfaction/dissatisfaction changes, then it does so quite quickly.

A number of issues that have been posited as associated with radicalisation showed little or no variation across this population. For example, access to and time spent on the Internet has been suggested as a path to radicalisation for those without direct connections to personal channels of radical influence However, there was no association between time spent on the Internet and any of the other factors. Likewise there was no association between access to and time spent watching or listening to international news channels and other factors. Levels of contact with relatives in other countries, particularly countries of origin, and languages in use, also had little association with other attitudinal patterns. Demographic properties had weak associations with attitudes; for example, being older, being better educated, and owning a home were correlated with greater satisfaction in the political/social domain but this would surely have been true for many other sub-communities.

IMPLICATIONS

NUMBER OF IMPLICATIONS for policies towards radicalisation follow from these results, to the extent that they can be generalised to other populations in Western democracies.

First, a common, although often not clearly enunciated, meta-narrative about radicalisation is that intensity of negative attitudes represents a kind of 'slippery slope' in which ordinary members of a community experience something that leaves them aggrieved, that then leads to negative political attitudes, that are compensated for by increased religious activity, that leads to extreme Islamist views, and so to the justification for, and perhaps participation in, violence. This metanarrative, that negative intensity by itself is a kind of warning sign, is not supported by our data. Instead, within the Ottawa Islamic community there are subgroups that are dissatisfied with social and political issues (and subgroups resemble from other communities with the same attitudes): other subgroups that are dissatisfied about religious and moral issues; and a smaller subgroup that seems to be predisposed to violence or support for violence There is little indication that intensity, even strongly negative intensity, in any of these domains leads to negative intensity in others. Rather, the content of dissatisfaction appears to be largely individual and driven not by large geo-political factors and ideas but - we speculate by process of elimination - by personality and life experiences.

Second, the policy levers available to governments are primarily in the social and political domain; but levels of dissatisfaction in this domain seem unrelated to radicalisation. It follows that government programmes to stem radicalisation by increasing satisfaction with social and political issues, whatever merit they may have in and of themselves, do not seem to offer much leverage against radicalisation. Governments have limited options to address and alter attitudes on the religious/moral domain (although, for example, the UK Government has made efforts in this direction), but even these more problematic levers appear to have little impact. Instead, most of the changes in attitudes along the religious/moral spectrum of variation are functions of individual and personal choice.

Third, there are indications that the constellation of support for groups that espouse violence, religious small group participation, and high levels of mosque attendance (surprisingly, these last two are not correlated with other markers of religious intensity such as frequency of prayer) may signal radicalisation. Of course, we did not necessarily expect to elicit survey responses from those actually involved in violence. However, the method of analysis allows for the creation of artificial sets of responses which can then be mapped into the set of actual responses. Creating such artificial response patterns assuming the kind of responses posited by the literature for political, social, moral, and religious issues produces placements of the artificial respondents that align well with the negative end of the 'radicalism' axis of variation

Fourth, many of the attitudes and actions that are widely assumed to be determinants of radicalisation show little sign of being relevant. These include demographic factors as well as factors capturing strength of association with countries of origin and access to the Internet.

The results described here and their implications are, of course, assailable on the grounds that they capture a particular moment in time in a particular local diaspora community. Although the Canadian situation is not quite the same as that of the US or UK, from a human

nature premise, it would nonetheless be surprising if the structure of the process of radicalisation were all that different. This work at least brings some empirical evidence to bear on the difficult question of how radicalisation works, providing a counterpoint to the anecdotal work and biased samples with which the literature is replete.

REFERENCES

- 1 E. Berman. Radical, Religious, and Violent: The New Economics of Terrorism. MIT Press, 2009.
- 2 J. Fedarcyk. Statement Before the Subcommittee on Intelligence, Information Sharing, and Terrorism Risk Assessment, House Homeland Security Committee, United States House of Representatives, 2007.
- 3 G. Golub and C. van Loan. Matrix Computations. Johns Hopkins University Press, 3rd edition, 1996.
- 4 J. Horgan. From Profiles to Pathways and Roots to Routes: Perspectives from Psychology on Radicalization into Terrorism, volume 618, pages 80-94. July 2008.
- 5 J. Horgan. Walking Away from Terrorism: Accounts of Disengagement from Radical and Extremist Movements. Routledge, Abingdon, 2009.
- 6 C. McCauley, C. Leuprecht, T. Hataley, and B. Biswas. The war of ideas: a poll of Ottawa Muslims. forthcoming.
- 7 Pew Global Attitudes Project. 2006. The great divide: How Westerners and Muslims view each other. Available at (http://pewglobal.org/reports/display. php?ReportID=253), accessed 24 October 2007.
- 8 D.B. Skillicorn, C. Leuprecht, C. Winn, Home-grown Islamist radicalization in the West: Using survey evidence to model the structure of radical attitudes, submitted.

EDITOR'S NOTES =



We first got to know about Associate Professor Christian Leuprecht's research on radicalisation when we met him during the Global Futures Forum (GFF), a conference organised by the Global Futures Forum and the Center for Excellence for National Security (CENS) at the S.Rajaratnam School of International Studies (RSIS), Nanyang Technological University, Singapore in 2010. He is presently the Associate Professor in the Department of Political Science and Economics at the Royal Military College of Canada, and cross-appointed to the Department of Political Studies and the School of Policy Studies at Queen's University where he is also a fellow of the

Institute of Intergovernmental Relations, the Queen's Centre for International and Defence Policy, and the Chair in Defence Management Studies.

His research has attracted in excess of \$3 million in extra-mural funding, including the Social Sciences and Humanities Research Council of Canada, Defence Research and Development Canada, the United States Department of Defence and the United States Department of Homeland Security. He has published nine books and 40 scholarly articles and book chapters in a broad array of international scholarly journals. He is a frequent media commentator and consults Canadian and international governments and their respective ministries on national security as well as demographic change. Besides holding a Ph.D. from Queen's University (2003), he also earned graduate degrees in Political Science (1998) and French (1999) from the University of Toronto as well as the Institut d'Études Politiques at the Université Pierre-Mendès France in Grenoble (1997). Leuprecht has been a visiting professor at the University of Augsburg in Germany (2011) and the Swedish National Defence College (2009) and the Bicentennial Visiting Associate Professor in Canadian Studies at Yale University (2009-2010). He has conducted fieldwork in places including Canada, Mexico, Germany and Singapore.



This article is also co-authored by D.B Skillicorn who is an Adjunct Professor in the School of Computing at Queen's University and holds a cross appointment at the Royal Military College of Canada. He is also a Coordinator for Research in Information Security, Kingston (RISK). He was awarded the 2009 IEEE Intelligent Transportation Systems Society and IEEE Systems, Man and Cybernetics Society Technical Committee on Homeland Security Technical Achievement Award for outstanding and sustained technical contributions to the field of Intelligence and Security Informatics. He has published a book entitled "Knowledge Discovery for Counterterrorism and Law Enforcement"

and is available on Taylor and Francis, and Amazon. His research is focused on adversarial knowledge discovery, building inductive models from data in settings where the interests of modellers and those being modelled are not aligned. This includes counterterrorism, law enforcement and fraud; but also increasingly areas such as customer relationship modelling.

Strategies for Risk Reduction Programmes for Violent Extremists:

Lessons from Singapore, Indonesia and Afghanistan

ISTORY IS REPLETE with the corpses of dead peace treaties. But when insurgent groups sign peace agreements, the question of demobilisation and reintegration of former fighters arises. Keeping the peace is sometimes as fraught with risks as fighting an insurgency. Similarly, countries that have been successful in disrupting terrorist networks and capturing terrorist operatives and their support cells face a problem of what to do with this growing number of violent extremists. Judicial trials can result in the death penalty or imprisonment for these extremists. But eventually, those sentenced to jail have to be released.

Violent extremists span the spectrum of right-wing neo-Nazi and Christian militias to those who call themselves "global jihadists." Global jihadists include those who trained as mujahids and fought the Soviet occupation of Afghanistan, as well as members of SUSAN SIM 1

national separatist groups which have aligned with al-Qaeda and, increasingly, self-radicalised individuals eager to carry out terrorist attacks to avenge what they believe to be the infidel's oppression of the *ummah*.

Much attention has been focused in recent years on the rehabilitation of captured jihadists because of the sheer numbers involved and the transnational nature of the networks. Yet no one really knows how many jihadists have ever been captured, perhaps 14,000 to 24,000 globally if the following figures are reliable:

 Pluchinsky (2008) posits that, at most, 5,000 jihadists have ever been detained outside of Iraq and Afghanistan. This includes the 779 held at Guantanamo, of which 70% were returned to their home countries or settled elsewhere (Washington Post, 29 May 2010). In 2009-10, according to Europol and other statistics, more than 400 "homegrown jihadists" were arrested in security sweeps in the US, Canada, Europe and Indonesia.

- Speckhard (2010) argues that only about 5,000-15,000 of the 100,000 militants who went through US detention in Iraq over eight years were dedicated jihadists, the others being economic opportunists or involved in sectarian violence.
- McCrystal (2009) asserts that more than 2,500 Taliban and al-Qaeda insurgents are in the Afghan prison system.
- Another 1,000 have been through the US detention facilities in Bagram and the number is growing as counter-insurgency operations intensify.

The emerging consensus is that since violent extremists cannot be locked up in perpetuity, they have to be rehabilitated while in custody and on release, helped to become productive members of society again. Or at least citizens who do not desire to kill and maim others because they do not share the same beliefs.

The debate thus far has been whether it is possible to deradicalise an extremist or if disengagement is the best that can be hoped for. Is behavioural change without attitudinal change enough? Can we accept that an extremist can voluntarily step away from the fight upon release from prison and not be tempted to go back at the urging of his erstwhile mates or to avenge a new insult or injury to his community or religion?

Compounding this problem is that we are not sure if we even understand the radicalisation process enough to counter it. Ten years after the September 11 attacks against the United States, we remain divided as to how to explain the continuing power of the al-Qaeda narrative of violence. How does it tap into resentment against authoritarian governments and turn it into violent action? Or is it appealing to some because it provides a simplistic narrative of power and identity for those seeking to become community heroes?

Several countries have learnt from experience that the reality is likely an amalgam of many motives and decided that if they are to prevent the creation and regeneration of domestic terrorist networks, they must have an intervention process that encompasses

The debate thus far has been whether it is possible to deradicalise an extremist or if disengagement is the best that can be hoped for.

the various phases of the radicalisation trajectory, starting with inoculation of the target recruitment pool, rebuttal or deterrence to discourage radicals from engaging in violent action, and rehabilitation of captured violent actors. No country claims to have found the perfect solution, the silver bullet to preventing or reversing radicalisation. The impetus driving these governments is the decision that they must try something because the real alternative to capture is to kill the terrorists in action.

The announced recidivism rate for participants in existing terrorist rehabilitation programmes varies from 0 to 10%. Such statistics imply that most of these programmes do indeed dissuade a large number of extremists from going back to their terrorist networks. Should rehabilitation of extremists thus be a crucial plank in global counterterrorism efforts, the new weapon in our toolkit? Unfortunately, current in research this area is inconclusive, as there has been no independent evaluation of the effectiveness of existing deradicalisation programmes. The key research question thus is how do we make such evaluations, how do we assess the effectiveness of programmes that claim to be successful in encouraging deradicalisation or disengagement from violence? Or is this merely an academic question?

THE CHALLENGE OF EVALUATING DERADICALISATION PROGRAMMES

T LEAST 16 countries have some form of national terrorist rehabilitation/ disengagement

Initiatives currently programme. in play include long-standing reintegration programmes for demobilised insurgents in countries like Northern Ireland and Columbia Other countries have been attempting deradicalisation of extremists for the last 7-8 years, as they swept up domestic jihadist cells. But these governments have generally been reluctant to provide information on their programmes or to articulate their criteria for success, perhaps because they fear that premature release of unfavourable data would undermine public support and cut off the funds and goodwill required for the proper functioning of such initiatives.

Most countries are also quick to insist that their programmes are specific to the domestic context, and not readily subject to external evaluation criteria that do not take local cultural factors and national security objectives into account.

Available data shows that most programmes have multiple objectives. The list in Figure 1 (page 52) is not exhaustive but covers many of the stated objectives.

All government-run programmes obviously have as an immediate priority, the extraction of intelligence to neutralise threats and build up a knowledge base of the nature of the threat.

Some programmes do not harness deradicalisation at all but provide vocational skill training on the assumption that a gainfully employed former terrorist or

Stated programme objectives	Examples
Deradicalise extremists	Singapore, Saudi Arabia
Reintegrate former fighters	Afghanistan, Columbia
Increase cooperation from extremists	Indonesia
Counter-insurgency	US detention ops in Iraq, Afghanistan
Peace-building	Northern Ireland
Early intervention to prevent radicalisation	Singapore, UK
Encourage community involvement	Singapore, UK

Figure 1: Examples of programmes to reduce the risk of violent extremists re-joining the fight

insurgent is more likely to disengage permanently from violence.

Given the variety of goals and methods currently included under the rubric of terrorist rehabilitation. leading academic specialists in this field like John Horgan prefer to use the more generic term "risk reduction programmes for violent extremists" to underscore the gap between deradicalisation and disengagement. I have adopted this term "risk reduction programmes for violent extremists" here as it neatly summarises the basic goal of existing efforts - to reduce the risk of violent extremists going back to the fight - but this does not imply a rejection of the efficacy of deradicalisation efforts

A recent study endorsed by the International Policing Organisation (Interpol) took on the challenge of evaluation. The QIASS Countering Violent Extremism Project developed a codebook for use in identifying the strategies employed by several governments in dealing with released terrorists to determine areas that might have contributed to successes or that failed to result in the participants' disengagement in violent activities. In site visits and face-to-face interviews with managers and staff of risk reduction programmes in five countries, a specially selected team of former law enforcement and intelligence practitioners and operational psychologists² asked a set of questions that included the following:

- 1. Before deciding to enroll a person in the programme, do you formally assess
 - whether the person has any serious mental illnesses?
 - the person's dangerousness or risk?
- 2. What kinds of professionals work within the programme?
- 3. Does the programme employ group or individual counselling?
- 4. Does it systematically assess the ways in which the participant initially became

"radicalised" and/or how he was recruited?

- 5. Does it have a specific way of measuring and documenting the participants' change or progress?
- 6. Does it have a specific set of criteria that it uses to make decisions about whether or not a participant is safe to be released back to the community?
- Is there systematic "aftercare" planning before returning a participant back to the community? Is there collaboration with community agencies?
- 8. Are participants monitored after they have completed the programme?
- 9. Do you monitor and measure "recidivism" after their release or completion? How do you define recidivism?
- 10. What is your primary objective for participants?

The QIASS project, whose findings were presented at the 79th Interpol Conference in Doha, Qatar, in November 2010, found a striking diversity among the objectives and approaches to strategic counter-terrorism in the countries studied. "Reducing the risk of engagement (and/or re-engagement) in terrorism was the key and singularly common feature across this array of programmes... None of the programmes we visited had systematic 'outcome' data that could be used to evaluate them, but each had some useful elements," the project team reported, concluding:

"Nearly everyone thinks systematic programme evaluations are important, but no one does them. This is a critical deficiency in this global effort. Knowledge of whether a programme is "working" cannot be established without objective and systematic evaluation. Unknowingly sustaining and growing a programme that is not working is costly, inefficient, and, at times, even counterproductive."

BEYOND RECIDIVISM RATES

HERE IS A tendency to focus on recidivism rates to assess the success or failure of national risk reduction programmes for violent extremists. Recidivism rates have been used historically to evaluate prison programmes and when used transparently according to clear criteria, can also be a useful gauge of whether rehabilitation/disengagement programmes for incarcerated violent extremists are working.

There are no rehabilitation programmes at the US high-value al-Qaeda detention facility in Guantanamo Bay. Risk mitigation lies in deciding which country not to transfer detainees to. Yet, for every detainee who rejoins al-Qaeda upon release, there are five who apparently do not.

A recidivism rate of 20% based on the traditional penal approach of deterrence and punishment would put Gitmo in favourable comparison with the criminal justice penal system in the US, where half of all persons released from prison return within three years.⁴

But we do not need advanced research to tell us that there is no acceptable rate of recidivism when dealing with violent extremists. The psychological damage that terrorist attacks inflict on public confidence in their governments means one released "former terrorist" who goes on to blow up a subway train is one recidivist too many.

The countries that have decided that they must implement some form de-radicalisation/disengagement/ of rehabilitation programme for captured terrorists usually do so in conjunction with larger strategic goals. It is in how well such programmes meet the strategic goals that one should rate their success, rather than through the narrow prism of recidivism rates. To use the oft-misused analogy of violent extremism as a cancer, we should not mistake adjunctive therapy for the primary treatment; risk reduction programmes for violent extremists must be used in conjunction with comprehensive counter-terrorism strategies to increase their efficacy.

THREE STRATEGIES IN THREE COUNTRIES⁵

O EXAMINE THIS point, this essay looks at three strategic counter-terrorism approaches to dealing with captured jihadists in three countries:

- Religious, social and psychological rehabilitation in Singapore – a comprehensive multi-faceted programme involving the distinctive for target community in providing ideological counseling to captured extremists and to engage in early intervention initiatives; most successful with those on the periphery of terrorist activity.
- Soft cultural approach in Indonesia – encourages terrorist leaders to collaborate while defusing community concerns of Western conspiracies; successful intelligence-driven approach but high recidivism rate among captured ideologues and criminal associates.
- Vocational training of insurgents in Afghanistan – assumes unemployment is key motivator for militancy and leverages on tribal honour for reintegration of released detainees; impact on counter-insurgency strategy as yet unclear.

The three countries selected exemplify different political models with varying levels of socioeconomic development.

Singapore is a small island state with 5 million people, 75% of whom are ethnic Chinese, 15% Malay

Muslim, 9% Indian; religious and ethnic harmony is thus finely balanced and preventive detention is employed to deal with extremist threats.

Indonesia, with more than 200 million Muslims, is a newly vibrant democracy, with extremist voices constantly pushing the political and cultural boundaries of the secular state, which is often paralysed by fear of unfavourable comparison to its authoritarian past.

Afghanistan is a conflict zone where the US has been fighting the Taliban for close to 10 years, where detention is a "toxic" issue, and the US military has belatedly decided to try a new detention policy based partly on a model developed in Iraq and other existing programmes, but adapted to the Afghan tribal culture and the country's ruined social, economic and physical infrastructure.

COMPREHENSIVE REHABILITATION IN SINGAPORE

HE SINGAPORE PROGRAMME is often mistakenly described as a copy of the Saudi programme. It was in fact developed by the Singapore Internal Security Department, (ISD) in consultation with two local Islamic scholars, soon after a domestic terrorist network, the Jemaah Islamiyah (JI), was uncovered and arrests made in 2001 and 2002. Although not then aware of the Saudi efforts to deradicalise their own militants, the Singapore ISD came to the similar conclusion that they needed to work with religious scholars because the Jemaah Islamiyah detainees believed they had taken a religious oath of obedience (the bai'ah) to the JI amir or group leader. The ISD took a gamble that the key to this religious lock could be turned by men with clear religious authority and asked two prominent ustaz to speak to the detainees. That first step led to the founding of the Rehabilitation Religious Group (RRG), a volunteer network of Islamic scholars with impressive credentials who vet each other and act in their personal capacities rather than for any organisation or school of Islam.

The founding of the RRG also meant the local Singapore Malay Muslim community was now involved in the rehabilitation of the detainees. Another group of volunteers formed the Aftercare Group to look after the financial and emotional needs of the families of the detainees.

This community involvement is crucial on a strategic level because it enables Singapore's Muslim minority to consider itself not as a community under siege but a crucial partner of the secular state in securing national security. One of JI's strategic goals was to damage relations between the Chinese majority and Malay minority in Singapore. That threat is now largely neutralised because of the work of the RRG and Aftercare Group, first

with the detainees and then expanded to include counter-radicalisation efforts such as public talks by the clerics on the true meaning of jihad.

The Singapore emphasis on religious counselling is based on a psychological study of the radicalisation pathway of the first two groups of JI members arrested in December 2001 and August 2002. The men had been monitored since a tip-off was received after September 11 and the first 15 to be picked up were suspected of planning and procuring materiel for several truck bombs to attack targets in Singapore. The second group included a mix of cell leaders and foot soldiers.

According to Eunice Tan (2007), in-depth interviews were conducted individually with 30 JI members by a team of psychologists in 2002. The team used a battery of psychological that measured intellectual tests functioning, personality. coping and values and an in-depth clinical interview to obtain data. From this information, a psychological understanding of the JI as a militant group was obtained, and a process model of the JI terrorist's road to radicalisation mapped out. The model in Figure 2 illustrates the path typically undertaken by the JI terrorist, who makes certain life choices as he transits

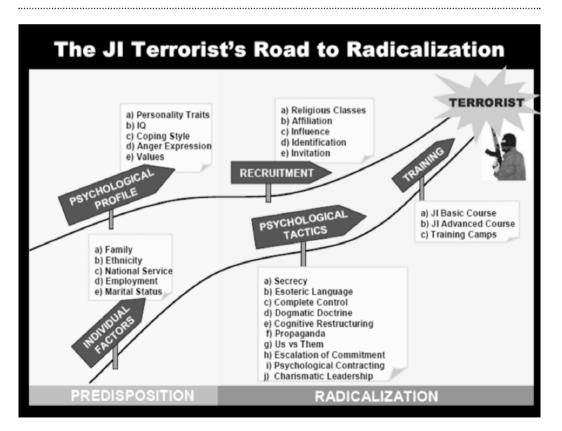


Figure 2: The radicalisation model developed by the Behavioural Sciences Unit of the Home Team Academy of Singapore

from a predisposition phase to a socialisation phase. Signposts situated along the route, such as individual factors, recruitment and training.

One key finding in this initial study was the high premium the detainees placed on religious values. This did not mean they were well-schooled in Islamic theology - their religious knowledge came largely from the JI Singapore cell leader - but that they saw themselves as good Muslims. And as they believed they had sworn a religious oath to their religious leader, it was felt the only way to unlock this hold by JI on these men was to have religious scholars engage with them and refute their justifications for violence based on JI's selective reading of the Koran.

The success of religious counselling is premised on the idea that the detainees will respect the scholarship of the clerics, especially since they were schooled in Islam's most famous theological universities in the Middle East. Not unexpectedly, greeted with the clerics were hostility at first and accused of being government puppets. But over time, most detainees appeared to welcome the dialogue with the clerics, even though they continued to insist that they were acting in defence of Islam. The Singapore clerics found it useful to keep to a structured counselling template to focus on the key JI beliefs first identified by a detainee as crucial to the JI ideology of violence. But

as most of the detainees had only a shallow understanding of the religion, what the counsellors provided was really an alternative framework to allow a detainee to change his mind about fighting and dying for JI.

Religious counselling is only one component of the Singapore rehabilitation model, which takes a holistic and multi-faceted approach and is now fully developed. Equally important programme components are:

- Psychological evaluation of detainee for critical thinking skills, propensity for hatred and violence, personality traits
- Counselling to cope with the stress of detention, including marriage counselling, if required
- Social rehabilitation to help a detainee prepare for his eventual re-integration into society through academic studies, vocational skills training, library access, work opportunities to increase his sense of self-worth and normal work habits
- Family visits and emotional and financial support for his family to preserve the family unit and enable it to act as a stabilising force in the detainee's life, replacing the terrorist network
- And on release, a support network that both nurtures reintegration and constrains recidivism.

Of the 60-odd people who have been detained by ISD in the last 8 years, two-

thirds have now been released, albeit under restrictive conditions. Some were released after 6 months of rehabilitation, others after 4-6 years. None of those released have attempted to rejoin JI or other militant groups.

The Singapore model, not unlike the Saudi programme, works because preventive detention under the Internal Security Act means the authorities can keep a militant locked up for as long as it takes to rehabilitate him. The law requires the authorities to justify each two-year detention order and so long as an individual is assessed to be a threat to national security, he can theoretically be detained indefinitely. But detention under the Internal Security Act also gives a detainee hope that he can be released sooner rather than later as the system is designed to be rehabilitative rather than punitive. If charged in court, he could get life imprisonment for terrorist conspiracy. But under the ISA, he could be out in two years if he cooperates and responds well to counselling.

It is interesting to note that even though Singapore and Saudi Arabia are poles apart in terms of sociopolitical dynamics - one is a secular state, the other a theocracy - both nonetheless came to develop similarly sophisticated terrorist deradicalisation programmes that look at the radicalisation trajectories of individual detainees - why and how they took up the path of violence - and try to change their minds and behaviour

through religious and psychological counselling and involvement of the community and family members.

Similarly, in both places, there is no exact science to determine that someone is truly remorseful and is walking away from terrorism. Decisions to release terrorists who have gone through rehabilitation programmes are an act of calculated optimism, armour-plated, usually, by extensive post-release surveillance controls. The post-release monitoring within Singapore's island borders may explain why despite the similarities, Singapore's recidivism rate is zero and Saudi's is 10 per cent.

INDONESIA'S AD HOC SOFT CULTURAL APPROACH⁶

HE INDONESIAN SPECIAL Detachment 88 anti-terrorism unit calls its disengagement programme an "ad hoc soft approach using cultural knowledge" because it was initiated by a unit chief and not funded by the Indonesian government. Detachment 88 defines its objectives as:

- To make arrested extremists cooperative for investigation
- To paralyse the network
- To change the mindset to non-violent jihad

Conducted largely by several police officers from the unit who emphasise their own Muslim identity to reach out to jihadist leaders in custody, it is more an interrogation strategy to extract useful intelligence than a behaviourmodification programme.

In fact, the police officers involved take pride in their ability to speak like the JI members and to convince them that they are "friends". They generally avoid engaging in theological debate with the militants but try to show by example their own religious values, e.g. taking breaks for prayer during interrogations. Perhaps reflecting the wider community's ambivalence about the US-led "war on terror," the police officers focus more on obtaining the cooperation of those knowledge they whose consider crucial to crippling the terrorist network than on trying to convince them that their beliefs are wrong.

In the course of arresting more than 600 militant jihadists since the 2002 Bali bombing, Detachment 88 developed a rubric to classify the JI members according to the extent of their radicalisation, using three variables:

- The individual's motive for joining the JI network – is he driven by spiritual, emotional or material needs?
- His role in the network is he a hardcore leader, an operative, a supporter or a sympathizer?
- His personal issues his financial and psychological state, as well as the wellbeing of his family, relatives and friends

As Figure 3 (page 60) shows, Detachment 88's matrix uses these three variables to "diagnose" the level of radicalism of a militant and that diagnosis is the key to deciding how to approach him. Given the number of militants involved, priority is, however, given to those who hold leadership positions in JI as they presumably have more intelligence to offer than the foot soldiers.

Detachment 88 has found that treating the JI leaders with respect often leads to cooperative behaviour. A former unit chief even brought detainees out of prison for meals and after the 2005 Bali bombings, took a group of JI leaders to a villa in Bali to brainstorm methods for identifying and capturing the perpetrators. These were controversial tactics decried by the Australian government and media, but appear to have facilitated collaboration in the short-term.

The numbers are impressive. There is no doubt the Indonesian strategy has been successful in meeting the key aim of encouraging detainees to provide intelligence on their network. Of the more than 200 captured JI militants approached, half were cooperative. The intelligence they provided has led to the disruption and capture of many JI cells and the discovery of arms caches. A number of released militants have remained in contact with their police handlers and accepted financial assistance. Two have even written books disavowing terrorism.

Level of radicalism/ Difficulty of approach	Motive for joining			Role in Network			
	Spiritual	Emotional	Material	Hardcore	Operative	Supporter	Sympa- thiser
Very radical/ Hard	X			Х	Х		
Radical/ Moderate		Х			Х	Х	
Less radical/ Easy			Х			Х	Х

Figure 3. Matrix used by Detachment 88 to diagnose level of radicalism of a detainee and approach required

But this ad hoc approach does not necessarily transform attitudes or behaviour, as Detachment 88 is increasingly discovering. More than 20 of the 60+ individuals captured soon after the discovery of a militant training camp in Aceh in 2010 had previously served prison terms for terrorist offences. Two of the recidivists were most disappointing: senior JI commander Abu Tholut and Abdullah Sunata, the leader of an associated group that had provided weapons and financing to militants fighting in the Ambon and Poso communal conflicts, had been deemed to be among the more successful participants of the Indonesian programme and had kept in contact with their police case officers right up to the discovery of the training camp, when their roles were uncovered.

This problem of recidivism is compounded by the relatively short prison sentences that violent militants receive. Except for the Bali bombers, three of whom were executed and a handful are serving life sentences, most JI militants get no more than seven years and serve barely half of their terms because of general amnesty and "remission for good behaviour."

Detachment 88 officers are candid in admitting that their programme makes no attempt to counter the extremist narrative. In fact the police implicitly acknowledge that the goal of the extremists is to help the Muslim community and a component of the programme is to show them alternative outlets for their passion. Militants are thus brought to orphanages and squatter slums and told that they should be helping these Indonesians instead.

The irony is that even the two most famous faces associated with the Indonesian programme – former JI leaders Nasir Abas and Ali Imron – are not required to denounce JI. Nasir

Abas, the leader of JI's Mantiqi III and who controlled the training camps in southern Philippines, served only a short prison sentence and now helps the Indonesian Police persuade captured militants to cooperate. He also does the rounds of TV and print media but his usual script does not express regret for his membership in JI; he argues instead that the Bali bombing was a disaster for JI because JI was then not ready for military action against the state and the civilian deaths undermined popular support for JI's agenda.⁷

Ali Imron, now serving a life sentence for his part in the 2002 Bali bombing, and whose brothers Mukhlas and Amrozi were among the three Bali bombers executed in 2008, still considers himself a member of JI, a designated terrorist organisation at the United Nations.8 In Indonesia, however, JI has yet to be designated a terrorist organisation as political considerations have made it difficult for the government to proscribe a group that some community leaders deny exists. While the majority of Indonesians do not support terrorism, many also remain skeptical that the campaign against JI is not some Western conspiracy to undermine Islam in Indonesia

The Indonesian authorities understand the problem on their hands, and recently set up a National Counter-Terrorism Agency (BPPT) to put in place a national effort with publicprivate partnership to counter extremist radicalisation. The head of the BPPT, Police Inspector-General (retired) Ansyaad Mbai, outlined its strategy in June 2010.⁹ The agency would focus on countering radical ideology through a programme of deradicalisation of detained and imprisoned extremists, and pro-active promotion of moderate alternatives, e.g.:

- Developing alternatives to radical ideology through partnerships with religious leaders and religious organisations;
- Emphasising moderate teachings and non-violent resolutions to religious conflict through massive religious education campaigns;
- Providing courses in history, technology and science to religious clerics, pesantren or madrasah heads and their students to enhance the curricula and the style of pedagogy.
- A massive book distribution programme to introduce persuasive and balanced studies of Islam and comparative religion through school libraries and religious study groups; and
- Media strategies designed to neutralise radical media campaigns and their ability to rally public sympathy.

Many Indonesia watchers will agree that this greater emphasis on community counter-ideology education is overdue. Not dealt with in this new strategic agenda but no less pressing are the problems within the prison system, including the overcrowding and lax supervision that allow militants to run prison mosques and radicalise other prisoners, and the early release of terrorist offenders without any assessment as to the risk they still pose. Without tackling this weak link and an overhaul of the parole system, Indonesia's efforts at countering violent extremism will be undone in the prisons.

MESHING COUNTER-INSURGENCY AND TRIBAL JUSTICE IN AFGHANISTAN¹⁰

HE OPENING OF a brand new US\$60 million detention facility in Parwan province in November 2009 marked the beginning of a new US strategy to ensure detention operations dovetail with the population-centric counter-insurgency approach. The US military has been aware for some time that the abuses associated with the old Bagram internment facility makes US detention of Afghans a very toxic issue and "a recruiting tool for terrorists." Turning the insurgents captured on the battlefield over to the Afghan prison system is not considered a viable option as overcrowding has turned the Afghan prisons into veritable jihadi universities. Former US commander Gen Stanley McChrystal described the problem in his July 2009 assessment, where he said the estimated 2,500 Taliban and al-Qaeda fighters in Afghan prisons were relatively free to radicalise and recruit the other 12,000 inmates.

"The US came to Afghanistan vowing to deny these same enemies safe haven in 2001. They have gone from inaccessible mountain hideouts to recruiting and indoctrinating ... in the open, in the ACS (Afghan Corrections System). There are more insurgents per square foot in corrections facilities than anywhere else in Afghanistan. Unchecked, Taliban/Al Qaeda leaders patiently coordinate and plan, unconcerned with interference from prison personnel or the military."

Internment under the law of armed conflict – which is the legal basis for internment in the Detention Facility in Parwan, or DFIP – means detainees have not been convicted in a court of law. It is about neutralising a threat while collecting intelligence on enemy movement, tactics and strategy. In a counter-insurgency campaign, rehabilitation and reintegration of former insurgents is key to pacifying a region and preventing widening circles of enemy support.

The US programme in Afghanistan contains elements from different models for individualised rehabilitation, but with two crucial differences. Detainee release is premised on the idea that low-value insurgents are accidental guerrillas, drawn into the battle by coercion or money, and not by a radical ideology wrapped in religion. As Vice-Admiral Robert Harward, the Commander of Joint Task Force (JTF) 435 that runs the

Parwan detention centre puts it: "From the clientele we see in our facility, it is more about money, jobs, and likeminded organisations (drug runners, warlords, criminal patronage, tribes who have foreign occupation or central government authority) coming together, more so than jihadi ideology."

The Afghan deputy commander of the JTF 435 agrees. Brigadier General Mohibullah believes that many of those in DFIP are there because of "lifestyle choices" they made; they joined the Taliban because they had no jobs whereas the Taliban pays four times what the Afghan military and police pay their recruits.¹¹

Since these are not radicals, they will benefit more from learning to use a sewing machine and reading a newspaper than psychological or religious counselling, JTF 435 believes.

Hardcore detainees, or those with blood on their hands, are a different category. Comprising about 5% of detainees in DFIP, they are segregated but can also earn rehabilitation and release by convincing the Detainee Review Boards that they regret their past and no longer pose a threat. If there is sufficient evidence, they might, on the other hand, be sent to an Afghan court to stand trial.

The DFIP programme is unique in that it is not just about reducing the risk of a detainee going back to the insurgency, but also about making sure that those not involved in insurgent activities are not wrongly interned, and that low-level insurgents do not become radicalised in detention, either by ideologues in the cell or anger over their treatment.

Suffice to say that DFIP is designed for transparency, to show Afghans and the rest of the world that it is not US policy to torture and abuse those in their custody. Hence the open-house policy for foreign media, US and Afghan politicians and human rights groups. Ironically, foreign media which have toured DFIP have tended to come away with the impression that it is too good for those who have threatened the lives of NATO and coalition forces. There are vocational training classes in Pashto and Dari literacy, conversational English (requested by 80% of the detainees polled), tailoring, carpet weaving, bread making and agriculture. share Detainees a well-equipped dental and medical facility with their American guards; many Afghans arrive with tuberculosis and hepatitis and leave healthy and on average 40 kg heavier. When their families come for visits, there is a new playground for the children and take-away packages for the wives. The facility is better than many state prisons in the US, American legislators sometimes marvel.

The detainees themselves sense the irony. A US Major at DFIP revealed that when he did exit interviews with detainees about to be released,"100% tell me they were very well treated, that they put on weight, got medical treatment and learnt something." One detainee even told the major he would be happy to stay on if he did not want his freedom more.¹²

The US endgame calls for the US to begin turning over control of detention centres in Afghanistan by 2011. So DFIP is also designed to be a model internment facility to train Afghan guards and prison authorities in a kinder, gentler way of handling those detained on security grounds. It practises what the Americans call culturally-sensitive approach" "a that brings together the formal and informal justice systems prevalent in Afghanistan. This includes relying on the concept of tribal honour in the reintegration and monitoring of released detainees.

Detainee releases are decided by a Detainee Review Board comprising serving US field officers who meet in a simulated courtroom in DFIP to hear testimonies by detainees and evidence from classified sources as well as character witnesses offered by detainees. If the board decides a detainee can be released, this is done at a tribal shura where the man is effectively turned over to the collective responsibility of his tribe. The detainee has to sign a pledge of non-violence that relies heavily on the Pashtunwali - Pashtun honour code - that a true Pashtun never breaks his promise. (The Taliban are largely Pashtun.) It ends with the statement: "I pledge that I am a man of honour and that violating the above agreement brings dishonour upon me, my family, my tribe and local community."

His guarantor signs a statement that accept that he was "properly detained" and that the guarantor, usually a father or tribal leader, "commits to supporting the good conduct of this former detainee and we understand that his future behaviour is a matter of our responsibility." These pledges and statements are read out at the shura so everyone knows what they have committed to do.

If the recidivism rate is an indicator of success, then DFIP is very successful. Only around 1% of those released from the new Bagram have been re-captured.

But as noted earlier, recidivism rates are only as useful as the criteria used. A senior Pentagon official has privately expressed concern that the current definition of recidivism sets the bar so high it might be masking the reality that a significant number of released detainees have rejoined the insurgency. Several informants have also been killed following the release of some detainees, although it is not clear if the killings were insurgency-related or the result of tribal or clan vendettas.¹³

WHAT LESSONS DO SINGAPORE, JAKARTA AND PARWAN OFFER?

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and weaknesses and are clearly not bulletproof. The key take-away they offer is the importance of setting clear goals applicable to the local context, and devising a clearly defined strategy for achieving these goals.

Singapore's over-riding objective is to prevent what it considers an existentialist threat: the authorities fear a terrorist attack will not only jeopardize the country's economy lifeline, but also tear the social fabric of society apart. The full spectrum of counterterrorism tools - from preventing the radicalisation and formation of a domestic terrorist cell to target hardening, comprehensive intelligence collection and robust law enforcement - are thus given ample resources. But the Singaporeans also realised early that mitigating the anxieties of the minority Muslim community was as crucial as preventing an actual attack.

With typical efficiency, the Singapore authorities thus set out to develop a gold standard countering violent extremism (CVE) programme that deals with the problem at both individual and community levels. Its rehabilitation programme terrorist alone is resource-intensive but the Singaporeans can afford it because the number of violent extremists in custody is small. The Singapore model is a small state's solution. But before we peg it as irrelevant to larger countries, it should be noted that Saudi Arabia has a similar programme to deal with its thousands of militants, albeit with a more controversial track record.

The **Indonesian** programme has until recently been targeted only at the individual militant and from the beginning, the over-riding goal was to extract intelligence that would lead to the capture of the perpetrators of the 2002 Bali bombing and after subsequent attacks, Noordin M. Top in particular.

Indonesian police officials tasked to deal with the terrorist threat knew that any wider ambition to embark on a national CVE programme would be hamstrung by wavering political will to deal decisively with an extremist exploits ideology that the low educational and religious knowledge of millions of Indonesians When the state switches overnight from authoritarian oppression to one that tolerates vigilante action by thugs claiming religious superiority and allows extremist leaders to preach their hatred with impunity, the silent majority is cowed and even law enforcement officials choose sides.¹⁴

In such a climate, it is perhaps nothing short of extraordinary that a small unit of 400-odd policemen has over the last eight years managed to dismantle the JI network in Indonesia and put away more than 600 militants. It, however, took a major terrorist attack to strip away the layers of denial As former Detachment 88 chief BG Tito Karnavian said in an interview: "The Bali bombing was the turning point of Indonesia recognising Jemaah Islamiyah as а terrorist group."¹⁵ After the 2002 suicide

bombings by JI killed 202 people from 23 countries, Australia and the United States helped fund the establishment and training of Detachment 88. Much of the unit's success since then has come from the sharing of technical intelligence by regional security services as well as Detachment 88's prowess in persuading captured militants to provide information.

Detachment 88's success in the last two years in tracking down Noordin Top and other terrorist leaders like Dulmatin – both were killed in raids – and in preventing a planned attack on the Indonesian President, as well as the obvious limitations of the current intelligence-driven "ad hoc soft approach" to rehabilitation, has only now allowed the authorities to begin to consider implementing a more comprehensive strategy.

In Afghanistan, the United States military is trying to lessen its footprint as an occupation force by engaging in a cultural experiment - co-opting an ancient tribal justice system to validate a modern military detention process even as it steps up military operations to tamp down a growing insurgency. It is as much a counter-insurgency operation to deny the Taliban a recruitment tool, as a soft power strategy to influence international opinion, particularly the human rights lobby and the global Muslim community. It is also about nation building, helping Afghanistan modern. effective build justice institutions under the rule of law. Success will likely be more elusive on some fronts than others.

SOME USEFUL PRACTICES

THOUGH THE strategies VEN • and goals are diverse in this small sample, there are several commonalities in implementation of their risk reduction programmes that hint at useful practices applicable across cultures. These tools cannot. definition. be by called best practices because their successful implementation is still debatable and without a standard evaluation tool. cannot be said to be better than other approaches.¹⁶ But most practitioners, who have extensive experience in handling terrorist suspects, will agree that the following practices, distilled from these three studies, are also essential techniques in their tool kit:

• Know your terrorist

Just as banks are required to "know your customer" to terrorist counter financing and money laundering. SO too do those designing risk programmes reduction for violent extremists. Programme managers need to understand the level of radicalisation and the pathway that took an extremist down the path of violence and realise that there is no one-size-fits-all model that all extremists will respond to.

Understanding his personality and assigning an appropriate case officer who knows how to deal with that personality type will also promote engagement. A case officer who is able to build trust and create dependency by a detainee will have greater success in convincing him to cooperate.

• Find the breaks required to trigger disengagement

Not all militants are motivated by a jihadist ideology. Some are truly accidental guerrillas who might respond better to vocational training. Whatever category a militant belongs to, there are two key breaks required to trigger disengagement and decrease recidivism:

- i. Break ideological mindset
- ii. Break group bonds

While the family can often replace the group bonds, it may require a religious authority to convince a detainee to accept more mainstream thinking.

• Counter their moral disengagement For successful rehabilitation, knowing a detainee's belief system is crucial as it provides the framework that allows him to cross the moral barrier to killing. With global jihadists, for instance, there is a common thread of blaming West Americans. the _ Christians Jews and NATO - for all the woes of Muslims worldwide. This displacement of responsibility, along with the demonising of the enemy as cobras, cockroaches or the devil, enables the usversus-them divide that the terrorist groups use to strengthen group bonds. Some programmes capitalise on the ideological splits within the jihadi movement to convince detainees to abandon their extremist beliefs.

• Treat detainees humanely

Global jihadists are told by their group leaders to expect The Manchester torture Manual, for instance, contains Lesson 18 on Prisons and Detention Some Centres detainees have reported being destabilised by respectful treatment; discovering that their enemies were not the evil people they were told to expect made them question the veracity of their leaders and more open to what a case officer or interrogator says.

• Win over their families

Many detainees have not seen their families for a while and crave contact and information Wives and children, in particular, can have a redeeming influence. While programme managers should be careful of seducing detainee through overt а rewards to his family, and insincerity, encourage thus practical help such as keeping the children in school can have a disproportionally beneficial impact. Family bonds are also important to fill the vacuum when created militant a disengages from his extremist network. Until then, his fellow extremists were his family.

• Involve the community

Giving non-government groups a role in terrorist rehabilitation. whether providing in religious counselling work opportunities or family assistance empowers majority" the "silent and community encourages policing, especially in facilitating early intervention as parents and school teachers do not feel they are betraying loved ones to strangers who might mistreat them.

CONCLUDING THOUGHTS

Structured RISK REDUCTION programmes are resourceintensive. Critics and supporters might well ask if the investment would not be better spent on national education or improving homefront security preparedness. The reality is that even with a very well thought-out programme, the risk will always be there that an extremist has gamed the system and has every intention of rejoining the fight upon release from prison or detention. It remains a calculated risk, which some governments ameliorate by implementing extensive post-release surveillance measures.

Research into the effectiveness of existing risk reduction programmes can thus be impactful on such national debates about budget prioritisation.

Research into the effectiveness of existing risk reduction programmes can thus be impactful on such national debates about budget prioritisation. government calculates How one "effectiveness" might, however, not be good enough for another. Instead of attempting to evaluate current programmes according to some yet to be determined measure of soundness, and risk incurring the wrath of governments, perhaps a more useful approach would be for an international body like the United Nations to help define standards for terrorist rehabilitation while programmes leaving it to nations to decide if they will implement such programmes.

The task will be daunting, as managers of national programmes need to be convinced that sharing their successes, and failures, will contribute to the greater good of countering violent extremism. The President of Interpol, Mr. Khoo Boon Hui, called for such an annual gathering of practitioners and experts at the launch of the QIASS CVE project report in Doha in November 2010. He suggested that just as the Shangrila Dialogue in Singapore has become a useful platform for security and defence ministers and senior officials from the Asia-Pacific to gather to hear expert views and meet privately among themselves, CVE practitioners would benefit from staging their own regular dialogue too.

In retrospect, the QIASS CVE project might be seen as contributing to this global dialogue. It may thus be useful to recall its observation that:

"In countering violent extremism, one size does not fit all (or even most). There may be no single 'right' answer to understanding violent extremism, but two suggestions are clear: Local knowledge is often a good place to start and people's motivational pathways in and through terrorism are often complicated. Extremism is not always driven by the explicit ideology or the 'cause'." conducted by the NATO Centre of Excellence Defence Against Terrorism (COE-DAT) in Ankara in October 2010. An earlier version of this paper was submitted to the NATO COE-DAT for publication in *Future Trends and Developments in Contemporary Terrorism*, Belgium: IOS Press, forthcoming.

The author was the Southeast Asia area expert for this project, which was led by former FBI Supervisory Special Agent Ali Soufan and Mark Fallon, formerly deputy commander of the Pentagon Task Force investigating al-Qaeda for trial before the Military Commission. The project research consultants were Randy Borum and John Horgan. The site visit team included Michael Gelles. Steve Kleinman, Barry McManus, Thomas Neer, Susan Sim, Stephen White and Daniel Freedman. The project was conducted under the auspices of the Qatar International Academy for Security Studies (OIASS) International Resource Center for Countering Violent Extremism. An executive summary of the final report can be obtained from http://www.qiass.org/exclusive. php. For the full report, contact info@qiass.org.

³ Jake Tapper, Gitmo Recidivism Rate Rises to 20 Percent Confirmed to ABC, abcnews. com, 6 January 2010, http://blogs.abcnews.com/ politicalpunch/2010/01/gitmo-recidivism-raterises-to-20-percent-confirmed-to-abc.html.

⁴ Jacquelyn L. Rivers, *Improving Criminal Justice and Reducing Recidivism Through Justice Reinvestment*, BJA Fact Sheet, US Department of Justice, November 2010, http://www.ojp.usdoj.gov/BJA/pdf/JRI_FS.pdf.

⁵ This discussion of the strategies pursued in the three countries featured here is based on independent field research and data collected over several years and while it has benefited from my participation in the QIASS CVE project and discussions with team members, should not be interpreted as representing their views or those of the QIASS project. I am grateful to senior security officials in Singapore and Indonesia and the Commander of Joint Task Force 435 and his staff in Kabul, Afghanistan, for sharing their views and providing access to data, programme staff and participants.

⁶ The author is grateful to Detachment 88 officers, in particular BG Tito Karnavian, formerly Head of Detachment 88 and now Deputy Head of the National Counter-Terrorism Agency, for explaining the programme and sharing their candid insights on its limitations.

⁷ Author interview, Jakarta, February 2010.

⁸ Author interview, Jakarta, August 2010.

ENDNOTES

¹ This article is based on a presentation by the author at the Advanced Research Workshop

⁹ Ansyaad Mbai, *Counter-Terrorism Through Cooperation: An Indonesian Perspective*, speech

delivered in Riyadh, 6 June 2010.

¹⁰ Parts of this section were originally published in a series of articles on DFIP that the author wrote for a Singapore newspaper in July 2010 following fieldwork in Afghanistan.

¹¹ Author interview in Khost province, Afghanistan, during a field trip to observe a tribal shura with Vice-Admiral Robert Harward, Commander of JTF 435, May 2010.

¹² Author interview, DFIP, Parwan, May 2010.

¹³ Confidential communication with author, January 2011.

14 A group called the Islamic Defenders Front (FPI) has, for instance, been harassing a sect known as Ahmadiyah for several years, and threatening anyone who called for tolerance. When a recent attack on Ahmadiyah members left three dead, and the Indonesian Police Chief said publicly that the victims had only themselves to blame, FPI stepped up its aggression further, calling for the ouster of the Indonesian President if he did not disband the Ahmadivah sect. See Jakarta Globe, Police Declare Victim a Suspect in Attack on Ahmadiyah in Banten, 17 February 2011, http://www.thejakartaglobe.com/home/policedeclare-victim-a-suspect-in-attack-on-ahmadiyahin-banten/423318; Jakarta Globe, FPI Vows to Disband Ahmadiyah 'Whatever It Takes', 18 February 2011, http://www.thejakartaglobe.com/ home/fpi-vows-to-disband-ahmadiyah-whateverit-takes/423477. There is increasing concern now that FPI members, emboldened that their violence has met little resistance, is building alliances with terrorist groups. See Karlis Salna, Expert warns of new Indon terror links, The Sydney Morning Herald, 15 February 2011, http://news.smh.com. au/breaking-news-world/expert-warns-of-newindon-terror-links-20110215-1auwb.html.

¹⁵ Author interview, Jakarta, December 2010.

¹⁶ The author thanks John Horgan and Randy Borum for the reminder that "best practice" definitions require an approach or technique to have proved its success in implementation be transferable elsewhere and demonstrated superiority over other approaches, to be so designated.

REFERENCES

 Bjelopera, Jerome P. and Mark A. Randol, *American Jihadist Terrorism: Combating a Complex Threat*, Congressional Research Service, Washington DC, 20 September 2010.

- 2 Europol, TE-SAT 2010 EU Terrorism Situation and Trend Report; TE-SAT 2011 EU Terrorism Situation and Trend Report, The Hague. Reports are available at http://www.europol.europa.eu.
- 3 Horgan, John and Kurt Braddock, "Rehabilitating the Terrorists? Challenges in Assessing the Effectiveness of De-Radicalisation Programmes", *Terrorism and Political Violence* 22 (2010), 267-291.
- 4 International Crisis Group, *Indonesia: Jihadi Surprise in Aceh*, Jakarta, 20 April 2010.
- 5 Jenkins, Brian Michael, *Incidents of Jihadist Terrorist Radicalisation in the United States Since September 11, 2001*, RAND, Santa Monica, 2010.
- 6 McChrystal, Stanley, Commander's Initial Assessment, Headquarters NATO International Assistance Force, Afghanistan, 30 August 2009.
- 7 Pluchinsky, Dennis A., "Global Jihadist Recidivism: A Red Flag", *Studies in Conflict* & *Terrorism 31* (2008), 182-200.
- 8 Qatar International Academy for Security Studies (QIASS), *Risk Reduction for Countering Violent Extremism: Explorative Review by the International Resource Center for Countering Violent Extremism*, Doha, 2010.
- 9 Sim, Susan, Three-Part Series on DFIP, The New Paper, Singapore, 23-25 July 2010, http:// stratnex.com/TNP1-Disneyland_Not.pdf, http:// stratnex.com/TNP2-Life_inside_DFIP.pdf, http://stratnex.com/TNP3-Justice.pdf, http:// stratnex.com/TNP4-Reconciliation.pdf.
- 10 Speckhard, Anne, "Prison and Community Based Disengagement and De-Radicalisation Programmes for Extremists Involved in Militant Jihadi Terrorism Ideologies and Activities", in Laurie Fenstermacher, Larry Kuznar and Anne Speckhard (Eds), Protecting the Homeland from International and Domestic Terrorism Threats: Current Multi-Disciplinary Perspectives on Root Causes, the Role of Ideology, and Programmees for Counter-radicalisation and Disengagement, Office of Secretary of Defense, Director, Defense Research & Engineering, Arlington VA, 2010.
- 11 Tan, Eunice, Road to Radicalisation: Terrorism from the Singapore Jemaah Islamiyah Experience, paper presented at the 26th Annual Conference of the Society for Police and Criminal Psychology, Springfield, MA, September 2007.

EDITOR'S NOTES =



Susan Sim is Vice-President for Asia of The Soufan Group, an international strategic consultancy with offices in New York, Doha, London and Singapore. Ms. Sim has extensive experience in law enforcement, intelligence analysis, journalism, and diplomacy, having been a police officer, a senior intelligence analyst with the Internal Security Department, Straits Times Indonesia Bureau Chief, Deputy Chief of Mission at the Singapore Embassy in Washington DC, and Senior Fellow at the S. Rajaratnam School of International Studies. Currently an Adjunct Lecturer and consultant with the Home Team Academy, she is also Chairman of the Research Committee of the National Crime Prevention Council of

Singapore. In 2009, she founded Strategic Nexus Consultancy, a boutique research firm specializing in home front security and counterterrorism analysis and training. Ms. Sim was educated at Oxford University and New York University.

Policing Terrorism

DAVID BAYLEY

COUNTER-TERRORISM EFFORTS S become more intense, especially post 9/11, police forces in major developed democracies confront a dilemma: How should they allocate resources between specialised counterterrorism teams that gather highly classified intelligence often used to disrupt potential terrorism activities and general-duties police that deal with everyday law and order events? Since resources are limited, there is a tendency to emphasise specialised counter-terrorism at the expense of general-duties policing. Is this wise? Or are general-duties police an asset that can be used in successful counterterrorism? My answer is that generalduties police do have an essential role to play. Using general-duties successfully counter-terrorism. for however. requires intelligent management based on a sound knowledge of what their particular contribution can be.

Jean-Paul Brodeur, a French-Canadian scholar, has described this as a struggle between "high" and "low" policing (Brodeur, 2007). The distinction is not a value judgment about kinds of policing, but refers to a difference in the character of police activity. High policing refers to the collection of intelligence, usually by specialised units operating covertly, in order to proactively disrupt and dismantle potentially violent attacks on government and society generally. On the other hand, low policing refers to the work of general-duties, mostly uniformed police designed to prevent crime and maintain order in response to the needs of individual citizens. Low policing is distinguished by being conducted openly and with the explicit cooperation of the public. It involves patrol, criminal investigation, and traffic regulation units. Contemporary policing faces the challenge of maintaining the correct balance between these two necessary police functions. When high policing is done at the expense of low policing, which often occurs after dramatic terrorist attacks, police

not only lose touch to some extent from their communities but lose some of the very capabilities necessary for successful counter-terrorism.

POLICE FUNCTIONS IN COUNTER-TERRORISM

POLICE FORCES DEAL with terrorism in a variety of ways in addition to covert intelligence gathering and disruption. They are:

- 1. Covert detection
- 2. Disruption/dismantling of terrorist plots
- 3. Risk analysis
- 4. Target hardening
- 5. Community mobilisation for prevention
- 6. Protection of important persons and infrastructure
- 7. Emergency assistance at terrorist incidents
- 8. Order-maintenance when terrorist attacks occur
- 9. Mitigation of terrorist damage
- 10.Criminal investigation of terrorist incidents

Obviously not all these tasks can be carried out by specialised counterterrorism teams. They will lead in the first two, but general-duties police will be involved, sometimes exclusively, in the remaining eight. Furthermore, uniformed general-duties police are also uniquely positioned to contribute directly to the first two - terrorism prevention and suppression. They do so in the following ways:

First, general-duties police have extensive knowledge of what the community regards as normal, something that specialised counterterrorism teams, with their narrower focus do not have. With the help of the community, general-duties police can identify people who do not belong in particular neighbourhoods or who act in suspicious ways.

Second, uniformed, general-duties police have knowledge about patterns of criminal activity that are associated with terrorism preparations, such as money laundering, extortion, blackmarket transactions, and theft of hazardous material.

Third, it is common in counterterrorism to recruit informers from people arrested for ordinary crimes. Such a task is not accessible to the specialised counter-terrorism police team but is to general-duties police, particularly the criminal investigations branch (CID).

Fourth, uniformed police can build partnerships with businesses and private security to protect essential places and facilities and to provide information about activities that may be precursors to terrorist attacks. Businesses and private security can be observant gatekeepers to places where large numbers of people routinely congregate, such as department stores or bus stations. They are in a position to supplement the uniformed police in protecting both populations and facilities.

This approach incorporates what has been called "situational crime prevention". This means the identification of high-risk targets where terrorists are most likely to strike, as well as the development of protection strategies to guard against them.

Fifth, because general-duties police are embedded within the community, for instance, Neighbourhood Police Singapore, Centres in they can contribute on the ground to develop a climate of opinion that discourages law-breaking, radicalism. and violence. This cannot be done by specialised counter-terrorism agencies, be it America's Federal Bureau of Investigation (FBI), Britain's Special Branch, or Israel's Shin Bet. Support by the community multiplies the effect that police operating only on their own can have in preventing terrorism.

INTEGRATING COMMUNITIES INTO HOMEFRONT SECURITY

N WESTERN COUNTRIES, particular efforts are being made to engage with new immigrant communities, especially those from Muslim countries. The British are especially concerned with immigrants from South Asia: French with the people from North Africa. At the same time, it is important to

recognize that most people in these immigrant communities do not support radicalism or violence. Nor, indeed, is religion the only cause of terrorism. The violent insurgency taking place in eastern India is based among people who have suffered from intense economic disadvantage for years - among them members of "tribal" or "backward" communities. In Northern Ireland, violence was undertaken by Catholics wanting unification with Ireland; in the U.S. the bombing of government buildings in Oklahoma City in 1995 was carried out by rightwing political militants angry at the national government.

General-duties police can play a unique part in the fight against especially with respect terrorism immigrant communities. new to They need to demonstrate to these communities that they will protect and serve them with the same attention and vigour they devote as others. This is something that specialised counter-terrorism units, given the covert nature of their work, cannot do. General-duties police, however, can engage with immigrant groups daily. In doing so, they can transform immigrants from being alienated outsiders to becoming a line of defence against terrorism.

The Metropolitan Police did this after the bombings on London transport on 7 July 2005. The Met recruited 4,000 Police Civilian

Service Officers (PCSOs) to patrol with police officers, especially in new immigrant neighbourhoods. Not given police powers, they help officers communicate with the public, in many cases, in foreign languages. And, it is hoped, reassure the public that the police are there to listen and respond fairly and equitably. They can also help defuse harmful rumours after violent incidents, as well as show immigrants that retaliatory violence against them will not be permitted.

THE SINGAPORE APPROACH

In the case of Singapore, as a city state, immigration is highly regulated and controlled, unlike other major cities such as New York and London where the inflow and outflow of immigrants are far more difficult to control. Besides that, rather than recruit Civilian Service Officers like the Met, the Singapore Police Force (SPF) has men who are serving in the National Service (NS). These NS men are already members of their own local communities, thus aiding in the smooth facilitation of SPF's outreach to the community.

At the same time, it is important to note that integrating immigrants into the community as a counter-terrorism measure may not be applicable to particular countries, such as Singapore. In Singapore, individuals prone to religious radicalisation and extremism are not immigrants, but people from their own local community. Hence, a different approach of integration has to be established to engage Singapore's own local community while concurrently helping other immigrants assimilate into Singapore culture.

Comments by Mr. Khoo Boon Hui Senior Deputy Secretary, Ministry of Home Affairs, Singapore during Prof Bayley's lecture on "*Balancing Homefront Security Needs between Specialized Counterterrorism and General Duties Police*" (Home Team Senior Command and Staff Course, 14 May 2010)

COORDINATING INTELLIGENCE

NCOURAGING GENERAL-DUTIES POLICE officers to engage with the community in order to obtain actionable intelligence does not occur without preparation and management. General-duties offices need to be directed about what to look for. They cannot observe everything. But they shouldn't be overloaded with long checklists of the indicators of potential threats. They need concise and limited cues, operative within short time-frames. At the same time, information received from generalduties officers must be quickly evaluated for its importance and passed along for action. Finally, intelligence about terrorism needs to be shared quickly among different levels of the police and across relevant government agencies. Since confidentiality about sources as well as operations is often necessary, this is not easy. It requires understanding among all members of the Home Team.

In the United States, "Fusion Centres" have been created in all states and some large cities to deal with these problems. The Fusion Centres coordinate information gathering, analysis, and sharing among security service. They also develop short time-frame checklists of information that general-duties police should be alert to. This means places where terrorists may be hiding, physical supplies they may be collecting, and preparations that precede a violent attack.

CONCLUSION

ENERAL-DUTIES POLICE ARE vital to the security of a nation in an era of terrorism. Even though there is increased attention around the world on specialised counter-terrorism policing, justifiably so, general-duties policing should not be neglected. General-duties police have an essential part to play in counter-terrorism efforts. They assist in preventing terrorism by protecting vital facilities and the general public, spotting potential terrorists, and maintaining close ties with the community, especially its new immigrants, which allows them to collect intelligence not available to smaller, specialised counter-terrorism units. They are also the primary responders for maintaining order after an attack. They assist injured people, facilitate evacuation of the wounded, investigate perpetrators, and counter false rumours.

In short, in dealing with terrorism, a balance between "high" and "low" policing must be achieved so that general-duties police and specialised counter-terrorism police support one another, maximising the unique capabilities of both.

REFERENCE

1 Brodeur, J.P. (2007). High and Low Policing in Post-9/11 Times, *Policing* 1 (1): 25-37.

EDITOR'S NOTES =



Professor David Bayley was our newest addition in July 2009 to the Home Team Academy Advisory Panel. He is a Distinguished Professor in the School of Criminal Justice, State University of New York at Albany. He was Dean of the School of Criminal Justice 1995-99. A specialist in international criminal justice, with particular interest in policing, he has done extensive research in India, Japan, Australia, Canada, Bosnia, Britain, Singapore, and the United States. His work has focused on police reform, accountability, foreign assistance to police agencies, and crimeprevention strategies. He has served as a consultant to the U.S. government and the United Nations on police reform in Bosnia.

He was a member of the international Oversight Commission for the reform of the police of Northern Ireland 2000-2007 and is currently a member of the UN's Global Police Policy Community advisory group. In 2005 he wrote the United Nation's program for community policing in the rebuilding and reform of police in peacekeeping operations. He is also a member of Harvard's Second Executive Session on Policing, 2008-2010. Professor Bayley's most recent book is *The Police In War: Fighting Insurgency, Terorism, And Violent Crime*, written with Robert Perito (Boulder, CO: Lynne Rienner Publishers, 2010).

In his recent engagements with HTA in May 2010, he lectured on the topic of *"Balancing Homefront Security Needs between Specialized Counterterrorism and General Duties Police,"* to students from the Home Team Senior Command and Staff Course. Professor Bayley's Paper on 'Policing Terrorism' also incorporates key elements from this lecture he delivered in HTA. The Panel Discussion that followed this lecture also involved our Senior Deputy Secretary for the Ministry of Home Affairs, Mr. Khoo Boon Hui. Mr. Khoo during the panel discussion provided relevant comments on the topic of immigration and the counterterrorism approach adopted by Singapore. Mr. Khoo's comments during this panel discussion have also been featured by Prof. Bayley in this paper to complement his perspective to Policing Terrorism.

AL-QAEDA and the Continuing Challenge of Counterterrorism and Homeland Security

BRUCE HOFFMAN

ERRORISM IS OFTEN portrayed as a mindless and irrational violence However. such characterisations ignore the fact that the most proficient groups have a strategy that informs their tactics and operations and that they hope will facilitated their victory. It is critical to understanding a terrorist group's strategy. Without doing so, it is impossible to craft a coherent response to this threat. Yet surprising, only rarely do governments, who are the terrorists' targets, ever step back and consider: What in fact is the strategy of their terrorist opponents?

CORE COMPONENTS IN AL-QAEDA'S STRATEGY

L-QAEDA'S STRATEGY TODAY comprises six core components. First, it seeks to overwhelm, distract and exhaust its adversaries, especially at a time of global economic travail. Al-Qaeda has asserted many times that its victory will not be achieved militarily, with the use of physical weapons and arms. Rather, al-Qaeda repeatedly claims that it will triumph by undermining the economies of its opponents, exhausting their finances and wearing out their militaries. The notion of wearing out its adversaries has been weaved within the al-Qaeda narrative. In Osama bin Laden's last video tape, released just days before the American presidential election in 2004, he claimed credit for only spending half a million dollars to stage the 9/11 attacks while the United States (US), in comparison, had to spend trillions of dollars on security. He also claimed responsibility for the current US sub-prime crisis and bad business practices that led to the fall of America's financial juggernauts. Of course such assertions are completely divorced from reality. But propaganda does not need to be true to be believed. It just has to be effectively communicated so that it is believed. And al-Qaeda's message in this respect today arguably has greater resonance than ever before given our continued economic troubles

Second, al-Qaeda also actively

seeks to create, foster, and encourage fissures and divisions within the global alliance arrayed against it. This entails the selective targeting of coalition partners in the U.S.-led war on terrorism both in operational theatres (e.g., attacks specifically directed against perceived "weaker" North Atlantic Treaty Organisation (NATO) partners in the International Security Assistance Force (ISAF) in Afghanistan such as the British, Canadian, Dutch, German, and Italian contingents, and at home, through attacks on mass transit and other "soft" targets in the national capitals and major cities of European countries allied with the U.S. (e.g., the 2004 Madrid and 2005 London bombings and the terrorist plots with links back to Pakistan foiled during 2008 and 2009 in Barcelona and Amsterdam).

al-Qaeda continues Third. to conduct local campaigns of subversion and destabilisation in critical operational theatres where failed or failing states provide new opportunities for al-Qaeda to extend its reach and consolidate its presence. and regions Countries such as Afghanistan, Pakistan, Somalia, the Sahel, East Africa, and especially, Yemen fall within this category.

Fourth, al-Oaeda also actively guidance, continues to provide assistance, and other help to local affiliates and associated terrorist movements This often support appreciably enhances local and regional terrorist attack capabilities and strengthens the resilience of these groups, thus presenting more formidable challenges to national and local police, military forces and intelligence agencies. Al-Qaeda thus works behind the scenes in these theatres as a "force multiplier" of indigenous terrorist capacity both in terms of kinetic as well as essential non-kinetic operations, including information operations, propaganda, and psychological warfare.

Fifth, al-Qaeda continues to seek out citizens of enemy countries, especially converts to Islam, who possess "clean" passports and thus can be more easily deployed for attacks in Western countries without necessarily arousing suspicion. In other words, these persons whose birth names remain in their passports rather than an adopted religious name potentially provide al-Qaeda with the ultimate "fifth column" - individuals whose appearance and names will not arouse the same scrutiny from immigration officials, border security officers, national police and security and intelligence services that persons from Muslim countries with Muslim sounding names might. European nationals who have converted to Islam and are citizens of countries that are part of the American visa waiver programme have thus far prominently figured in al-Qaeda's strategy.

Finally, al-Qaeda continues to be as opportunistic as it is instrumental.

In this respect, while its leaders doubtless continue to plan and plot major international terrorist attacks on a grand scale, they also are constantly monitoring the defences of their enemies, seeking out gaps and opportunities that can be quickly and effectively exploited for attacks.

The result is that today there are many al-Qaedas rather than the single al-Qaeda of the past. It is now a more loosely organised and connected movement that mixes and matches organisational and operational styles whether dictated by particular missions or imposed by circumstances.

THE FOUR ORGANISATIONAL DIMENSIONS OF AL-QAEDA

August 1988. Throughout its 20-year history, it has demonstrated a remarkable ability to adapt and adjust to obviate or even overcome the most consequential countermeasures directed against it.

Al-Qaeda today, accordingly, can perhaps be usefully conceptualised as comprising four distinct, but not mutually exclusive, dimensions. In descending order of sophistication, they are:

Al-Qaeda Central. This category comprises the remnants of the pre-9/11 al-Qaeda organisation. Although its core leadership has been profoundly weakened as a result of the US drone programme, this hardcore remains centered in or around Pakistan and continues to exert some coordination, if not actual command capability, in terms of commissioning attacks, directing surveillance and collating reconnaissance, planning operations, and approving their execution.

This category comes closest to the al-Oaeda operational template or model evident in the 1998 East Africa embassy bombings and the 9/11 attacks. Such high value, "spectacular" attacks are entrusted only to al-Qaeda's professional cadre: The most dedicated, committed and absolutely reliable element of the movement. Previous patterns suggest that these "professional" terrorists are deployed in predetermined and carefully selected teams. They will also have been provided with very specific targeting instructions. In some cases, such as the East Africa bombings, they may establish contact with, and enlist the assistance of, local sympathisers and supporters. This will be solely for logistical and other attack-support purposes or to enlist these locals to actually execute the attack(s). The operation, however, will be planned and directed by the "professional" element with the locals clearly subordinate and playing a strictly supporting role (albeit a critical one).

Al-Qaeda Affiliates and Associates. This category embraces formally established insurgent or terrorist groups who over the years have

benefited from bin Laden's largesse and/or spiritual guidance and/ or have received training, arms, money and other assistance from al-Oaeda. In some cases these groups have adopted the al-Qaeda moniker (e.g., al-Qaeda in the Arabian Peninsula, al-Qaeda in the Islamic Maghreb, and al-Qaeda in the Arabian Peninsula) but in others, groups like Lashkar-e-Toiba (LeT), Harakat ul-Mujahideen (HuM), Jemaah Islamiah (JI) or the Islamic Movement of Uzbekistan have aligned closely with al-Qaeda, but retained their original names.

Al-Oaeda Network. These are amorphous groups of al-Oaeda adherents who are likely to have had some prior terrorism experience, will have been bloodied in battle as part of some previous jihadi campaign in Algeria, the Balkans, Chechnya, and perhaps more recently in Iraq. and may have trained in some al-Qaeda facility before 9/11. They will therefore have had some direct connection with al-Oaeda, however tenuous or evanescent. Their current relationship, and communication, with even а central al-Oaeda command and control apparatus may be equally tenuous, if not actually dormant. The distinguishing characteristic of this category, however, is that there is some previous connection of some kind with al-Qaeda.

Specific examples of this

adversary include Najibullah Zazi who was arrested in September 2009 for plotting to stage simultaneous suicide bombing attacks on the New York City subway; the four British Muslims who carried out the 2005 suicide bomb attacks on London transport targets: and Ahmed Ressam, who was arrested in December 1999 at Port Angeles, Washington State, shortly after he entered the US from Canada Ressam, for instance, had a prior background in terrorism, having belonged to Algeria's Armed Islamic Group (GIA). After being recruited to al-Qaeda, he was provided with a modicum of basic terrorist training in Afghanistan. In contrast to the professional cadre detailed above. however. Ressam was given very non-specific, virtually open-ended targeting instructions before being dispatched to North America. Also, unlike the wellfunded professional cadre, Ressam was given only \$12,000 in 'seed money' and instructed to raise the rest of his operational funds from petty thievery. He was also told to recruit members for his terrorist cell from among the expatriate Muslim communities in Canada and the U.S.

Al-Qaeda Galaxy. These are homegrown Islamic radicals who have no direct connection with al-Qaeda (or any other identifiable terrorist group), but nonetheless are prepared to carry out attacks in solidarity with or support of alQaeda's radical jihadi agenda. They are motivated by a shared sense of enmity and grievance towards the United States and the West in general, and their host-nations in particular. In this case, the relationship with al-Qaeda is more inspirational than actual, abetted by profound rage over the U.S. invasions and alleged occupations of Iraq and Afghanistan and the oppression of Muslims in Palestine, Kashmir, Chechnya, and elsewhere. Critically, these people are neither part of a known, organised group nor even a very cohesive entity unto themselves. They include persons like Major Nidal Hasan, who shot 13 persons to death at Fort Hood, Texas in November 2009, and Mohammed Bouyari, the Dutch-Moroccan youth responsible for the November 2004 murder of Theo Van Gogh in Amsterdam.

NO LONGER A MONOLITHIC ENTITY

CROSS THE BOARD, al-Qaeda's continued ability to implement the above strategies on multiple operational levels in a variety of different theatres is proof of its resilience, implacability and the formidable challenge to international security that it still presents. Hence, while the thinning of its ranks achieved by the aforementioned Predator and Reaper unmanned drone attacks may indeed have weakened alQaeda, it is arguably far too early to declare victory over this formidable and intractable adversary.

TRAINING: INTERGRATING ACADEMIC AND PRACTITIONER VIEWS

NDERSTANDING HOW AL-OAEDA works should remind practitioners security of the need to pay as much attention to the terrorists' strategy as to the manifestations of that strategy - its tactics, targets, and weapons - that usually consume the most attention. One should not be contented with basic training or skills in a changing security landscape. Therefore, it is essential to develop critical thinking in operational officers. Officers must think in a systematic and focused manner, enabling them to identify patterns and understand trends as a way of anticipating future threats and attacks. Officers, accordingly, need to have both the knowledge set and skill set to respond immediately in crises as well as in times of non-crisis situations and to merge both academic and practitioner views.

Critical thinking is also designed to get officers to anticipate what adversaries may do, to plan ahead and go beyond their initial instructions in contingencies. Some may argue that in a crisis, one would rely mostly on gut instincts. However, the argument proposed here is that this gut instinct

has to be predicated upon the foundation of knowledge that they have acquired by reflecting on various scenarios and cases studies as well as understanding trends and patterns. Thus, officers can react logically based on firm and sound empirical evidence rather than illogically, based merely on anecdotal evidence.

PRACTICAL TIPS TO ENHANCE CRITICAL THINKING

from the AWAY STEER complaint that training modules are too theoretical, instructors had some practical have must experience in operations in order to gain credibility in the class. Lessons need not be held only in the classroom; the programmes can be dialogues, enactments of scenarios and gaming exercises. In this respect, gaming can help to tease out unexpected issues that may arise, resulting in the symbiosis of critical thinking and action. Ultimately, the purpose of the professional security education process is to translate thought into action.

To develop critical thinking, officers should harness tabletop exercises to embrace an intellectual process of applying critical thinking. Using London's July 7th simultaneous bombings as a scenario, officers can be challenged to use this overseas example to apply it in the Singapore context. Having operational planning staff work closely together will not merely enhance public confidence but also encourage the staff to think beyond their operational capabilities.¹

Another possible method to develop critical thinking and analytical skills is to utilise case studies, in particular comparative case studies. Case studies should be designed to frame desired responses and learning values. It is important to note that case studies should not be used only to explain how the incident unfolded but also to uncover the mindsets of key players and strategies of organisations that were harnessed during the moment of crisis, so as to build up a broader perspective and the foundation of flexibility.

CONCLUSION

L-QAEDA TODAY IS one of the most recognised international "brands" Its founder and leader. Osama bin Laden continues to be a compelling and inspirational figure in today's world. One has to now move on from seeing al-Qaeda as a local entity in Pakistan viewing Afghanistan, to or it networked organisation, as а а transnational entity. Al-Qaeda cannot be defeated using only the military or kinetic tools but requires a host of various other non-kinetic approaches that entail information operations and psychological operations, and government, economic reform and anti-corruption measures.

To cope with changing strategies by terrorist groups like al-Qaeda, integrating academic and practitioner perspectives in training becomes all the more important. Such integration will aid in the development of critical thinking, a skill that allows one to react fast in a crisis, to analyse situations beyond contingencies, based on credible knowledge and learning points.

ENDNOTES

¹ Since July 1997, SCDF has been conducting a series of large scale emergency exercises codenamed "Northstar" to deal with national emergencies based on different scenarios. These exercises, involving multiple government agencies, grassroots organisations and relevant private organisations, enable the agencies involved to test their joint response capability; they also allow SCDF, as the

Incident Manager for civil emergencies in Singapore, to improve the overall response framework for different emergency scenarios. Effective, immediate response by emergency services, and an equally effective response by grassroots organisations are crucial in both mitigating the incidents and upholding community resilience in the face of such crises. In the current security climate of evolving terrorist threats, the recent Northstar exercises have focused on terrorism scenarios based on actual cases. Following the 7/7 London bombings, Exercise Northstar V was conducted on 8 January 2006 based on a co-ordinated and simultaneous terrorist attack on four MRT (Mass Rapid Transit) stations and one bus interchange. More than 2,000 personnel from 22 agencies participated in this exercise. Emergency responders from multiple agencies provided onsite incident response and medical evacuation of mock casualties to the triages, while the relevant agencies handled the off-site crisis management. These included, amongst others, assistance to family members of the victims at the Family Assistance Center, co-ordination with the emergency departments in hospitals and handling media queries.

EDITOR'S NOTES =



Professor Bruce Hoffman, a distinguished member of the Home Team Academy Advisor Panel, has been studying terrorism and insurgency for more than thirty years. Professor Hoffman is currently a tenured professor in Georgetown University's Edmund A. Walsh School of Foreign Service where he is also the Director of both the Center for Peace and Security Studies and of the Security Studies Programme. Professor Hoffman previously held the Corporate Chair in Counterterrorism and Counterinsurgency at the RAND Corporation and was also Director of RAND's Washington, D.C. Office.

Professor Hoffman was Scholar-in-Residence for Counterterrorism

at the Central Intelligence Agency between 2004 and 2006. He was also adviser on counterterrorism to the Office of National Security Affairs, Coalition Provisional Authority, Baghdad, Iraq during the spring of 2004 and from 2004-2005 was an adviser on counterinsurgency to the Strategy, Plans, and Analysis Office at Multi-National Forces-Iraq Headquarters, Baghdad. Professor Hoffman was also an adviser to the Iraq Study Group.

A revised and updated edition of his acclaimed 1998 book, *Inside Terrorism*, was published in May 2006 by Columbia University Press. His forthcoming book, "*Anonymous Soldiers: The Jewish Underground, the British Army and the Rise of Israel*" will be published by Alfred A. Knopf (New York) in 2012.

This paper on approaches to combat al-Qaeda incorporates key elements of the guest lecture he delivered in the Home Team Academy on *"al-Qaeda's Strategy of Attrition,"* in July 2010.

The Nexus Between and Among

Internationally-Focused Terrorist Groups and Multinational Criminal Cartels

9/11, HOMELAND INCE and homefront security personnel from the United States. Singapore and nations around the world have become increasingly concerned about international terrorist organisations led by transnational non-state actors such as al-Qaeda. More recently, these experts also express rising alarm about an ever more cooperative "nexus" between and among internationally-focused terrorist groups, multinational criminal cartels and trafficking organisations. The nexus is а "marriage of convenience" based on expedient, mutually beneficial relationships that advance each type of organisation's objectives. The increased cooperation between internationally-focused terrorist organisations and criminal groups - particularly human, weapons, and drug traffickers — creates difficult challenges and possible opportunities

BG (RET.) RUSSELL HOWARD

for homeland and international security experts.

This article provides insights on the nexus, identifies the challenges and the opportunities that such a nexus brings to homeland/homefront and other security professionals, and identifies Singapore's Home Team Academy (HTA) as the model training and education organisation for addressing nexus threats.

SIMILARITIES AND DIFFERENCES BETWEEN TERRORIST ORGANISATIONS AND CRIMINAL CARTELS

NDERSTANDING THE SIMILARITIES and differences between terrorist organisations and criminal cartels will assist homeland security professionals and policymakers in crafting strategies to defeat each type of organisation, both

individually and collectively. In many respects, international terrorist and criminal organisations are similar. Both conduct illicit enterprises to support their activities and use similar tactics - including violence, fear and corruption — to achieve their goals and objectives. Many international cartels and terrorist organisations networks, eschewing operate as bureaucratic hierarchical and structures for those that are flat, more efficient, and less vulnerable to detection. Both bribe local officials and operate in "denied" areas characterised by few governmental controls, weak law enforcement and porous borders. Both take advantage of advanced technologies, particularly for communications. command and control. The two types of organisations also use the same methods to launder their money, the same document forgers and the same routes for their illicit activities. Finally, many of the most powerful criminal cartels, particularly drug cartels, and terrorist organisations such as al-Qaeda feature global operations conducted by transnational, non-state actors. They owe allegiance to no state and thus are beholden to no one but themselves.¹

Criminal syndicates and terrorist groups also differ in many ways. Many, but not all, terrorist organisations are ideologically motivated, with members serving a cause they believe will achieve greater benefit for a certain constituency, while criminal organisations generally serve no cause apart from creating wealth for the organisation itself. Their targets also differ: Criminal cartels use violence against the police and competitors, while the primary targets of terrorists, by definition, are civilians. Further,

They owe allegiance to no state and thus are beholden to no one but themselves.¹

on the whole, terrorist groups seek publicity, while criminal organisations actively avoid it.2 In an attempt at self-aggrandisement and projection of power, perhaps greater than they actually possess, terrorists seek publicity in the extreme, a tactic Trotsky called "political theatre." By contrast, criminal cartels do not seek publicity for two reasons: first, criminals try to maintain a low profile to avoid expending resources on avoiding detection and arrest; and second, when criminals go too far by becoming too violent, citizens react, often to the detriment of the criminals involved

Dr Bruce Hoffman best summarises differences the similarities and between the two groups. According to Dr. Hoffman, "most fundamentally, the criminal is not concerned with influencing affecting or public opinion: He simply wants to abscond with his money ... in the quickest and easiest way possible." Conversely, says Hoffman, "the fundamental aim

of terrorists' violence is ultimately to change 'the system' — about which the ordinary criminal, of course, couldn't care less."³

THE BIG THREE: HUMAN, WEAPONS, AND DRUG TRAFFICKING

HE THREE MOST resilient sectors organised international of crime are human, weapon, and drug trafficking (HWD-Trafficking). Often interconnected and mutually HWD-Trafficking supporting. is entrenched in the pervasive culture of corruption throughout the world. HWD-Trafficking is a major component of the multi-billions in profit earned by criminal organisations worldwide and is increasingly linked to the incomeearning activities of terrorists.

Globally, human trafficking is considered the third-largest source of profits for organised crime.⁴ Often confused with illegal smuggling, human trafficking is the transportation of people against their will for the purpose of exploitation. The distinction is that trafficked humans are taken against their will, while smuggled persons go willingly. Unfortunately, the end results of both human trafficking and human smuggling are often the same: Prostitution, indentured servitude, or abuse.

Most victims of trafficking are women and children, with forced prostitution being the most common form of exploitation. In 2007, the US Department of State estimated that more than 800,000 people each year cross borders under duress; when forced movement within countries is also included, the figure jumps to 2 to 4 million persons trafficked annually.⁵ The FBI estimates that US\$9.5 billion in annual revenue is generated from trafficking activities.6 Several factors have contributed to the global increase in human trafficking. High demand people-particularly for trafficked women used in the sex industry-and a low risk of apprehension are two of the most important. Weak laws against trafficking, corrupt officials that profit from the enterprise, and a culture of tolerance in the many countries where prostitution is legal, all contribute to the fact that traffickers stand a good chance of not getting caught or prosecuted for their crimes. At the same time, increasing demand has been fuelled by an explosion in the worldwide sex industry since the end of the Cold War. In the United States, the most significant numbers of trafficking victims come from Asia and the Pacific.

Weapons trafficking is the second-most lucrative enterprise for organised crime. Experts estimate the global illicit small arms trade totals from US\$2 to 10 billion per year.⁸ Small arms are produced in over 90 countries by more than 1,200 companies worldwide.⁹ An estimated 639 million small arms and light weapons are in circulation around

the globe — and these weapons "are relatively cheap, highly portable, easily concealable, long lasting and so easy to operate that a child as young as eight years old can carry and use them."¹⁰ These characteristics make small arms particularly susceptible to illicit trafficking. Children are the major victims of the trafficking in small arms; an estimated two million children have been killed with these instruments since 1990.¹¹ An additional 1.5 million people are wounded by small arms each year.¹²

Of interest to Singapore is the fact that Southeast Asia is particularly susceptible to small arms trafficking for a number of reasons Conflicts in Indonesia, Burma and the Philippines have created a market for illicit weapons. Stockpiles of weapons left over from the war in Vietnam exist in several countries, including Cambodia, where an estimated 500,000 to 1 million weapons remain in circulation.¹³ Illegally imported weapons from China and the Middle East are now "finding their way to insurgents, criminals and terrorists throughout the region" and are difficult to intercept because Southeast Asia's vast maritime and continental borders are difficult to police.14

Drug trafficking is now the biggest income earner for both multinational criminal cartels and international terrorist organisations. The total value of global illicit drug trafficking is estimated to be between US\$400 and 600 billion. The truth is, no one really knows what the actual value of the trade is, but the figures are astronomical. Indeed, the revenues generated by the drug trade fuel "the rampant corruption that eats away already fragile institutions," such as justice systems and economies.¹⁶ Unfortunately, and despite international interdiction efforts, the United Nations estimates that only 10 to 15 percent of heroin and 30 percent of cocaine is intercepted worldwide.¹⁷

Both good news and bad news exist regarding drug trafficking in Southeast Asia. The good news is that the once-infamous "Golden Triangle" that was responsible for producing more than 70 percent of the world's heroin now only generates about 5 percent,18 with Afghanistan now producing an estimated 95 percent of the world's heroin.¹⁹ The bad news for Southeast Asia is that amphetamines have replaced heroin as the most drug trafficked in the region. Amphetamine producers conveniently use the old heroin "drug routes" to traffic product, which is distributed regionally and internationally. In fact, Asia is "driving demand" for amphetamines, with "nearly half the region's countries reporting increases in methamphetamine use."20

THE NEXUS —WHY AND HOW THEY COOPERATE

ENERALLY SPEAKING, THE relationships between criminal cartels and terrorist

are "marriages organisations of convenience" that achieve self-serving goals. In most cases — particularly cooperation regarding between criminal cartels and Islamist extremist organisations — long-term alliances are unlikely. Drug cartels have no future in an al-Qaeda Caliphate, where drugs would be prohibited and using them would be a deadly offence. However, certain areas of common interest encourage close cooperation, at least for now. For example, illicit drug activity is now a major income source for both major international organised crime groups and terrorist networks like al-Qaeda.²¹ Organised crime is also a central weapons procurement source for terrorist organisations. from small arms to weapons of mass destruction. Terrorists use income from illicit drug trafficking to purchase weapons from criminal cartels and offer "protection" to criminal cartels as they transport product — drugs, weapons, humans — to middlemen and end users. It is a vicious cycle of self-serving cooperation.²³

Three other means of cooperation — route sharing, exploitation of porous borders, and document forgery — are instructive because they may provide opportunities for law enforcement officials to apprehend terrorists. Terrorist organisations and traffickers use the same routes in pursuit of their activities. In West Africa, the Balkans, Central Asia and other parts of the world, routes used for contraband — some, like the ancient Silk Route, established for centuries — are common paths for criminal traffickers and terrorists. These commonly travelled routes take advantage of porous borders and cooperative, corruptible border guards. Criminal cartels and terrorists also use the same document forgers. For example, "Thailand has emerged as one of the criminal world's main sources for fake and altered passports for frauds, fugitives and terrorists" — including al-Qaeda-linked operatives. ²⁷

Earning income from the same nefarious enterprises (illicit drugs being the most lucrative) is a common thread among criminal cartels and organisations. terrorist Terrorists providing security criminal for cartels in exchange for weapons is one example of the "marriages of convenience" that underscore terroristcriminal relationships. Using the same routes, taking advantage of the same porous borders and employing the same document forgers are all instances of terrorists and criminal cartels co-mingling for common purposes. These examples all create challenges for law enforcement and military security services, but they may also offer some opportunities.

ENDNOTES

¹ Alex Schmid, "Links Between Terrorism and Drug Trafficking: A Case of 'Narco-Terrorism'?" Working Group on Causes of Terrorism, International Summit on Democracy, Terrorism and Security (Madrid, Spain), 6-11 March 2005. Available at: http://english.safe-democracy.

org/causes/links-between-terrorism-and-drugtrafficking-a-case-of-narcoterrorism.html> (accessed November 1, 2010).

² Ibid.

³ Bruce Hoffman, *Inside Terrorism* Rev. ed. (New York: Columbia University Press, 2006), 36-37.

⁴ Francis T. Miko and Grace (Jea-Hyun) Park, "Trafficking in Women and Children: The U.S. and International Response," *Congressional Research Service Report for Congress* (updated March 18, 2002), 1. Available at: http://fpc.state.gov/documents/organisation/9107.pdf> (accessed November 5, 2010).

⁵ Claire M. Ribando, "Trafficking in Persons: U.S. Policy and Issues for Congress," *Congressional Research Service Report for Congress* (June 30, 2007), 2. Available at: <www.fas.org/sgp/crs/misc/ RL30545.pdf> (accessed November 7, 2010).

⁶ Ibid, 3.

⁷ Margot Hornblower, "Prostitution: The Skin Trade," *Time*, June 21, 1993. Available at: <www. time.com/time/magazine/article/0,9171,978751-5,00.html> (accessed November 4, 2010).

⁸ Peter Chalk, "Light Arms Trading in SE Asia," RAND Corporation Commentary, March 1, 2001, as reprinted from *Jane's Intelligence Review*, March 1, 2001. Available at: <www.rand. org/commentary/2001/03/01/JIR.html> (accessed November 7, 2010).

⁹ Rachel Stohl, "The Impact of Small Arms on Children and Armed Conflict," Center for Defense Information, December 12, 2008. Available at: <www.sfcg.org/programmeprogrammes/children/ pdf/The%20Impact%20of%20Small%20Arms%20 on%20Children%20and%20Armed%20Conflict. pdf> (accessed November 6, 2010).

¹⁰ "Small Arms Are Weapons of Mass Destruction," International Action Network on Small Arms, 2006. Available at: <www.iansa.org/media/wmd.htm> (accessed November 1, 2010).

¹¹ Ibid.

¹² Ibid.

¹³ "South East Asia and the Pacific," International Action Network on Small Arms, 2006. Available at: <www.iansa.org/regions/asiapacific/asiapacific. htm> (accessed November 6, 2010).

14 Ibid.

¹⁵ United Nations International Drug Control Programme, "Economic and Social Consequences of

Drug Abuse and Illicit Trafficking," *Technical Report* No. 6 (New York, NY: UNDCP, 1998). Available at: <www.unodc.org/pdf/technical_series_1998-01-01_1.pdf> (accessed November 4, 2010).

¹⁶ Eric Green, "Illicit Drug Trade Seen as Destabilizing Global Community," U.S. Bureau of International Information Programmes (USINFO), March 8, 2007. Available at: <www.america.gov/st/ washfile-english/2007/March/2007030717222611xen eerg0.8756372.html> (accessed November 4, 2010).

¹⁷ "Drug Treatment vs. Supply Side Measures," Drug Policy Alliance, 2002. Available at: <www. drugpolicy.org/library/factsheets/drugtreatmen/ index.cfm#notes> (accessed November 4, 2010).

¹⁸ Thomas Fuller, "No Blowing Smoke: Poppies Fade in Southeast Asia," *The New York Times*, September 16, 2007. Available at: <www.nytimes. com/2007/09/16/weekinreview/16fuller.html> (accessed November 6, 2010).

¹⁹ Matthew Lee, "Afghanistan Poppy Cultivation Skyrockets," *The Washington Post*, August 4, 2007. Available at: <www.washingtonpost.com/wp-dyn/ content/article/2007/08/04/AR2007080400671. html> (accessed November 6, 2010).

²⁰ Associated Press, "Amphetamine Use on Rise in Asia, Mideast," CBS News, September 9, 2008. Available at: <www.cbsnews.com/ stories/2008/09/09/health/main4429252.shtml> (accessed November 4, 2010).

²¹ "DEA.gov: Drugs and Terrorism: A New Perspective," reprint of a Drug Enforcement Agency report dated September 2002 in a post by "Dr. Bunsen," PartyVibe.com chat room on "Drugs," August 19, 2004. Available at: <www.partyvibe.com/forums/drugs/2002-dea-gov-drugs-terrorism-new.html> (accessed November 4, 2010). See also Juan Miguel de Cid Gomez, "A Financial Profile of the Terrorism of Al-Qaeda and its Affiliates-Part I," *Perspectives on Terrorism* Vol. 4, Issue 4 (October 2010). Available at <www.terrorismanalysts.com/ pt/index.php?option=com_rokzine&view=article&i d=126&Itemid=54 > (accessed November 4, 2010).

²² Glenn E. Curtis and Tara Karacan, "The Nexus Among Terrorists, Narcotics Traffickers, Weapons Proliferators, and Organised Crime Networks in Western Europe," A Study Prepared by the Federal Research Division, U.S. Library of Congress, December 2002, 15. Available at: www.loc. gov/rr/frd/pdf-files/WestEurope_NEXUS.pdf (accessed November 4, 2010).

²³ Mustafa Alani, "Organised Criminal Groups and Terrorist Groups—The New Phenomenon of 'Narcopolterrorism'," Gulf Research Center *Security & Terrorism Research Bulletin*, No. 4

(November 2006). Available at: <www.grc.ae/index. php?frm_module=contents&frm_action=detail_ book&frm_type_id=&pub_type=20&publ_ id=65&sec=Contents&frm_title=Newsletter&book_ id=23738&op_lang=en&sec_type=h&publ_ type=57> (accessed November 7, 2010).

²⁴ "PfP Combating Terrorism Working Group Meeting 28-29 Sep 2006, Garmisch, Germany," blog post on the website of the Partnership for Peace Consortium of Defense Academies and Security Studies Institutes, October 11, 2006. Available at: < http://www.pfpconsortium.org/ news/2006/10/11/pfp-combating-terrorismworking-group-meeting-28-29-sep-2006garmisch-germany > (accessed November 4, 2010). See also Krunoslav Antoliš, "Smuggling in South Eastern Europe," *Connections* Vol. 6, No. 1 (Spring 2007), 71–84. Available at <www.pfpconsortium.org/file/smuggling-insouth-eastern-europe-by-krunoslav-antoli> (accessed November 4, 2010).

²⁵ Louise I. Shelley, "Border Issues: Transnational Crime and Terrorism" in *Borders and Security Governance: Managing Borders in a Globalised World*, Marina Caparini and Otwin Marenin, Eds. (Zurich: Lit Verlag/ Geneva Centre for the Democratic Control of Armed Forces, 2006), 255-69.

²⁶ "Intelligence Reform and Terrorism Prevention Act of 2004: Title VII—Implementation of 9/11 Commission Recommendations," U.S. Department of State. Available at: <www.state.gov/m/ds/ hstcenter/41449.htm> (accessed November 4, 2010).

²⁷ Alisa Tang, "Thailand Now Fake Passport Capital for Criminal Underworld, Terrorists," *The Irrawaddy*/ Associated Press, September 8, 2005. Available at: <www.irrawaddy.org/article.php?art_ id=4963> (accessed November 4, 2010).

EDITOR'S NOTES =



BG (Ret) Russell Howard, another distinguished member of our Home Team Academy Advisory Panel, was head of the Department of Social Sciences and the Founding Director of the Combating anti Terrorism Center at West Point (USA). His previous positions include Deputy Department Head of the Department of Social Sciences, Army Chief of Staff Fellow at the Center for International Affairs at Harvard University, and Commander of the 1st Special Forces Group (Airborne) at Fort Lewis, Washington. Other recent assignments include Assistant to the Special Representative to the Secretary General during UNOSOM II in Somalia, Deputy Chief of Staff for I Corps, and Chief of Staff and Deputy Commander for the Combined Joint Task Force, Haiti/Haitian Advisory Group. Previously, General Howard was Commander of 3d Battalion,

1st Special Warfare Training Group (Airborne) at Fort Bragg, North Carolina. He also served as the Administrative Assistant to Admiral Stansfield Turner and as a Special Assistant to the Commander of United States Southern Command. BG (Ret) Howard was the Founding Director of the Jebsen Center for Counter-Terrorism Studies at The Fletcher School, before leaving in September 2008.

As a newly commissioned officer, he served as an "A" team commander in the 7th Special Forces Group from 1970 to 1972. He left the active component and then served in the U.S. Army Reserve from 1972 to 1980. During this period he served as an overseas manager, American International Underwriters, Melbourne, Australia and China tour manager for Canadian Pacific Airlines. He was recalled to active duty in 1980 and served initially in Korea as an infantry company commander. Subsequent assignments included classified project officer, U.S. Army 1st Special Operations Command, at Fort Bragg, and operations officer and company commander, 1st Battalion, 1st Special Forces Group in Okinawa, Japan.

General Howard holds two bachelor's degrees: B.S. in Industrial Management from San Jose State University and B.A. in Asian Studies from the University of Maryland. He also has two master's degrees: M.A. in International Management from the Monterey Institute of International Studies and MPA from Harvard University. He was an assistant professor of Social Sciences at the U.S. Military Academy and a senior service college fellow at the Fletcher School of Law and Diplomacy, Tufts University.

In 2010, he presented an Advisory Panel guest lecture in HTA for Home Team officers on "*The Nexus between Organised Crime and Violent Extremist Organisations*." This article contains some of the key learning points from this presentation.

Are White-Collar Criminals a Homogeneous or Heterogeneous Group?

ELATIVELY LITTLE THEORETICAL and empirical work has explored the role personality plays or could play in white-collar (WC) crime, and the resultant possible psychological profiling of WC offenders. Sutherland's work White-Collar Crime (1949) perhaps contributed to the view, stating that personality is completely irrelevant to understanding such crime, and the view sustains. Current theoretical reasons to disregard personality in white-collar crime are offered by Shapiro (1990), Ruggiero (1996) Coleman (1998). Coleman and (1998) specifically noted that "[WC] offenders are, generally speaking, found to be psychologically normal" (p.178). However, Bromberg (1965) observing that the behaviour of WC criminals in terms of narcissistic fantasies of omnipotence, found that WC criminals displayed little guilt and identified with the ideal of

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achieving success at any price. In line with these findings, Hogan and Hogan (2001) identified several sub clinical dysfunctional personality dispositions underlying managerial career derailment including sub clinical narcissism. Their study confirmed the hypothesis that the more diagnostic features of a Narcissistic Personality Disorder an individual in a high-ranking whitecollar position exhibited, the higher the probability that the person will commit a WC crime.

The first explicitly psychological study of WC crime was conducted by Collins and Schmidt (1993). Their study concluded that WC offenders displayed a greater tendency towards unreliability, irresponsibility, a disregard for rules and higher risktaking than non-offenders. Collins and Schmidt's study shows that the psychological study of WC offenders is as worthwhile as

other social science perspectives. Blickle, Schlegel, Fassbender and Klein (2006) extended the study of Collins and Schmidt (1993). They conducted the first study in Europe to relate personality measurements, measurements of behavioural selfcontrol and a measurement of personal values to economic crime committed by persons holding high-level positions in business. Although the results concerning conscientiousness different were compared to the interpretation of findings reported by Collins and Schmidt, their other findings are in line with the 1993 study that found WC crime predicted by gender (males more than females), low behavioural self-control. high hedonism, high narcissism, and high conscientiousness (after controlling for social desirability). The Swedish researcher Alalehto (2003) recommended that future research look into the personality and personality traits of WC offenders. He suggested that despite the small number of studies, and research on the effect of personality traits on WC crimes, some personality traits, such as extroversion, willingness to (dis) agree and neuroticism, as measured by the 'Big Five' personality model, are more prominent than others in the case of WC crime. A personality trait does not in itself determine criminality, but it is one among other factors (for instance, developmental,

environmental. situational or contextual influences) that mav trigger criminal activity. Alalehto notes no special treatment or special programme of rehabilitation has been proposed for WC criminals, although the impact of a financial offence of the magnitude possible by such an offender is stratospheric in comparison to the modest quantities stolen in typical larcenous crimes.

PURPOSE OF THE PRESENT STUDY

LTHOUGH THE STEREOTYPE high-powered of wealthy, corporate WC offenders has garnered media attention, relatively empirical little research exists on WC offenders in relation to psychological models of offending. The purpose of this exploratory study was, therefore, twofold:

- To examine demographic differences in individual WC crime offender characteristics; and
- 2. To explore if antisocial and narcissistic personality traits are relevant to WC criminals.

In this research, WC crime was defined as "those acts of fraud committed or theft by members of the business community who have used their position of trust or responsibility to achieve the criminal objective" (Johnstone, 1999, p. 124). For the purpose of this study, it is intended to adopt this narrow definition, and consequently a smaller scope of WC crime, referring only to individuals who have come into contact with the criminal justice system. Furthermore, it should be noted that this article does not enter the debate regarding the relationship of organised (economic) crime to WC crime.

METHODS

Sample

HE RESEARCH EXAMINED a sample of convicted WC crime offenders incarcerated in Belgian prisons. The 2010 Index of Economic Freedom (http://www.heritage.org/index/ranking. aspx) suggested Belgium as the 30th most economically free nation on the planet, meeting 70% of the criteria for this position; Singapore is second, and meets 86% of these requirements; the difference between the nations can be partially attributed to the differences in fiscal freedom for the Eurozone, as Belgium uses the transnational currency of the Euro. Belgium is subjected to greater financial regulation than Singapore. However this regulation makes offending more difficult, as there is more supervised practice limiting criminal opportunities available in less regulated environments. The sample was selected to provide a broad and heterogeneous view of the WC crime activity that is prosecuted under the Belgian criminal laws. As under Belgian law, WC offences do not fall within a single crime category, Johnstone's definition of WC crime (1999, p. 124) was therefore used instead. After screening the list of 1197 crime codes, six offence categories were included in the category: identity fraud in the occupation of a lawyer, forgery by civil servant, insurance fraud, fraudulent bankruptcy, revenue fraud, and VAT fraud. A conviction and incarceration within Belgium between 1st March 2005 and 28th February 2006 qualified offenders for inclusion in the sample.

Data was drawn from an official legal database held by a statistician employed at the Belgian Ministry of Justice, with an additional criterion that the sample only included those offenders who had an identification number at the "Dienst Individuele Gevallen" [Department of Individual Cases], a department of the Ministry of Justice, which is responsible formulating proposals for and recommendations concerning the different stages of the sentence implementation for each convict. A search of all records between 1st March 2005 and 28th February 2006 identified a total of 111 cases for the abovementioned crime categories. Of these, 39 were excluded because of the following reasons: wrong coding or indexed as an NWC crime, as defined by the definition of Johnstone (1999) (n=14), insufficient

information included in the files (n=12), and unavailable files (n=13). Of the remaining 72 cases, 28 cases were excluded, due to the large amounts of missing data needed to answer the research questions, leaving full 44 case files for analysis.

Materials

ATA COLLECTION WAS conducted through a case file review of official Belgian prison reports, all available written examining documentation of each respondent over a one-month period (May 2006). The Belgian prisoners' files were held at the "Dienst Individuele Gevallen" [Department of Individual Cases]. The case studies combined quantitative data from detention files and criminal records with qualitative data from interviews, observations, reports of psychological assessments, psycho-social reports, parole and/ or release reports, and letters from lawyers, family members, as well as letters written by the detainees.

Explanation of Variables

OR CLARITY AND to permit replication of the study, the variables 'offender profile', 'narcissistic traits' and 'antisocial traits' require explanation. Certain offenders were labelled by judges, psychologists, prison staff and social workers as typical 'WC profile' offenders. File review made it apparent that these offenders shared common characteristics, such as being charming, smooth talking, being narcissistic, or being manipulative. Participants without such a label in their files or who were labelled "street criminal" were classified in this study as 'non-WC offenders'. 'Narcissistic traits' and 'antisocial traits' were constructed for this study as two separate variables. Scoring positively for narcissistic personality disorder having narcissistic personality or traits (grandiosity, a need for constant attention and admiration, a lack of empathy) - both diagnosed by forensic psychologists - received a score 1 for having narcissistic traits, with a score of 0 if both indicators were not present. A similar approach was followed for antisocial traits, combining antisocial personality disordered offenders with those who had distinctive diagnosed antisocial personality traits (irresponsible, impulsive, aggressive, reckless, verbally aggressive, and cunning).

Ethics and Consent

RESEARCH ETHICS WERE based on the criteria specified by the British Psychological Society, and in compliance with the directing university guidelines on performing scientific research. These were:

1. Based on the approval from the Psychology Departmental

Ethics Committee of the Glasgow Caledonian University, as given on 9th March 2006.

- 2 Internal for consent the research was obtained from the Director General of the Belgian Prison Services. A request letter from the Free University Brussels. of Belgium, department of Criminology, and the Glasgow Caledonian department University, of Psychology, outlined the project methodology and rationale, including possible outcomes and ethical considerations.
- 3. Information on all persons in the research is to be handled with utmost confidentiality, ensuring the anonymity of the prisoners.
- 4. The data collected was to be used for research purposes only.

PROCEDURE

Statistical Analysis

Data was subjected to a series of univariate statistics, as well as bivariate correlations. Fisher's exact tests and chi-square tests were used to assess statistically significant differences between WC and NWC profiles. included demographic Analysis variables marital (age, education, status, occupation), juridical variables (arrest offence, length of sentence, prior convictions), and mental health variables (substance abuse, diagnosed personality

disorder(s), personality traits).

In addition to several bivariate and chi-square analyses comparing the frequencies of counts between groups, a binominal logistic regression was employed to identify predictors that would distinguish WC from NWC offenders The results of the bivariate and chi-square analyses are not mentioned in the results section, as the logistic regression supersedes the need for this preliminary comparison. logistic regression Binominal is typically used with dichotomous dependent variable(s) and with both categorical non-categorical and independent variables. The dependent variable which measures whether or not individuals were classified as a WC offender was scored as 1 while NWC offenders were classified as 0. The independent predictor variables were the offender's age, education, profession. juvenile delinquency. antisocial traits, and narcissistic traits. Data was analysed with SPSS for Windows version 13.0 results.

DESCRIPTIVE STATISTICS

Socio-demographic details of the sample

F THE REMAINING 44 WC criminals with full data, only two were female. Forty-one of the offenders were Belgian and the other three were non-Belgian nationals (Dutch,

Italian, and Moroccan). The age of the offenders ranged from 24 to 62 with a mean age of 42.8 years (SD = 9.95 years). 52% had no degree qualifications, 32% had secondary/ high school education only, and 16% had attended college or university.

Juridical information about the sample

HE PRISON SENTENCES imposed for the WC crime offence(s) ranged from 1 month to 10 years, whilst the mean length of the prison sentence imposed for this offence was 2.7 years (SD in months = 26.8). Some 20% (n=9) had been juvenile delinquents,¹ only 7% (n=3) had never had any previous contact with the justice system, defined as conviction. Of those who had prior convictions, 17% (n=7) had been convicted only for WC offences; 83% (n=34) of offenders demonstrated considerable versatility in their behaviour. With regards to the total number of convictions, 7% (n=3) of the offenders were convicted for the first time, 32% (n=14) had 3 to 5 previous convictions, 34% (n=15) had 6 to 10 previous convictions, and 27% (n=12) had 11 or more prior convictions.

Mental health details of the sample

HIRTY-FOUR OFFENDERS (77.3%) had completed psychological assessments and interviews in addition to a basic admission interview. Remarkably, 3 out of these 10 (all 3 classified in the 'WC group') talked themselves out of the assessment, assuring the psychologist that an interview alone would be sufficient as they would provide all (ostensibly needed. honest) answers No offenders were excluded from assessment due learning to disability, active mental illness, or major difficulties understanding the Dutch / French language. Offenders were assessed psychologists individually by employed by the Belgian Prison Service Whilst some offenders completed an extensive assessment battery of self-report and interview measures, others only completed a few measures. The mean number of tests administered was 4.5 (SD = 2.19). Overall, apart from an intelligence test (Raven's Matrices or WAIS-III) and a personality (MMPI-2 or NEO-PI-R), test personality data of the offenders was not systematically collected, comparisons making difficult. Nevertheless. as а result of psychological assessment, 25% of the offenders (n=11) were diagnosed with explicit personality disorders. Furthermore, 61.4% of the offenders (n=27) were diagnosed with personality disorder traits, mainly antisocial, narcissistic and/ or psychopathic traits.

Logistic regression

ASED ON THE results of the preliminary analyses, a binominal logistic regression analysis was conducted to examine the contribution independent variables the of to performance on the dependent variable profile'. *`offender* The variables significantly associated with the WC offender profile and stepwise entered into the logistic regression model were age, education, profession, juvenile delinquency, narcissistic traits, and antisocial traits. Although relevant in bivariate analyses, the employment, employment stability, prior convictions, trouble-free teenage, good family ties, school problems, and substance abuse variables were excluded from the logistic regression due to their missing numbers, decreasing even more the sample size, and subsequently the statistical power. According to Field (2005) stepwise methods are defensible "when used in situations in which no previous research exists on which to base hypotheses for testing" (p. 227). Field argues that this method is preferred over the default method of conducting the regression when carrying out exploratory work. For research purposes, antisocial traits (categorical variable) and narcissistic (categorical variable) traits were therefore first entered as predictors. Additional predictors were added individually to determine whether they contributed significantly to the model. Significance was assessed by a step chisquare test. In this test, the retention of each predictor must lower the variability significantly to justify the use of a more complex model. Table 1 shows the results of the logistic regression.

Independent variable	В	SE	Wald	Significance	Exp(B)	95%CI
Narcissistic traits	2.34	1.17	4.006	.045	10.385	1.05-102.73
Antisocial traits	-3.77	1.46	6.626	.010	.023	.001407
Age	.24	.09	7.454	.006	1.276	1.07-1.52

B = logit coefficient (unstandardized logistic regression coefficient)

SE = standard error of B

Exp (B) = indicator of the change in odds resulting from a unit change in the predictor

CI = confidence interval.

Table 1: Logistic regression for 'white-collar profile' versus 'non-white-collar profile

The model from this procedure statistically significant, and was showed good fit to the model (Chisquare=34.484, df = 3, p< .0001). The model correctly classified 38 of the 44 offenders (86.4%) into either WC offenders or NWC offenders. The three significant predictors of WC/ NWC profile were narcissistic traits, antisocial traits and age. None of the other three variables were significant predictors of main effects. Multicolinearity was assessed a priori, resulting in the elimination of the 'juvenile delinquency' variable as this could overlap in its explanation with the variable 'antisocial traits'

DISCUSSION

HE CURRENT STUDY contributes to WC crime research in number of ways. First, а and to the best of our knowledge, this is the first study that describes psychological characteristics of a WC crime group, and also acknowledges that economic crime occurs beyond the Anglophone community. Second, an implication of the current findings is that WC offenders do not form a homogeneous group with respect to demographic, juridical and mental health variables. There is no one general profile of such offenders, though one group of WC offenders differs markedly from (stereotypes of) conventional offenders. Third, the present study sought to examine potential differences in personality personality disorders and traits among WC offenders. In contrast to the studies of Shapiro (1990), Ruggiero (1996) and Coleman (1998) who dismiss personality features, the results of this investigation shows that certain aspects of personality could be important predictors in whitecollar crime. The study indicates that it may be possible to discriminate between WC offenders, and that such differentiation may be reflected in a personality profile. Pure WC offenders were more likely to have narcissistic tendencies. Conversely, this group was less likely to demonstrate physical aggression, or consistent irresponsibility at work and antisocial behaviour, in comparison to NWC offenders. Their general behaviour may be thus unremarkable.

Eventually, it will be necessary determine how well to these findings generalise to other groups, particularly female white-collar offenders, as research suggests that there are a number of offenders who fall into this classification (Daly, 1989). The generality of the model across financial markets should also be tested. Nevertheless, the findings of this study provide an initial view into the psychological, demographic and criminal career characteristics of the WC offenders beyond the USA, and show comparable features in the European variety of the offender. Our conclusions in this exploratory

study should be confirmed by larger studies, also using a control group of NWC offenders. This should include systematic collection of consistent personality information in WC offenders, so better differentiating WC offender types from other offenders the law-abiding. and Oualitative research may reveal the motivations, attitudes, values and beliefs WC offenders bring to their offences, as a paradox of having narcissists and stable psychopaths in the workplace. The desire to be successful, seen to be effective and to be rewarded for this success may lead a person to seek their desired outcome at all costs This is a desirable quality of an employee. But their achieving this through dishonest and unethical methods is not; particularly as it may make the overall company liable if the business knew that the employee was acting illegally. A grasp of the motivations, characteristics and behaviours of WC

The desire to be successful, seen to be effective and to be rewarded for this success may lead a person to seek their desired outcome at all costs.

offenders would facilitate explanatory psychological models of criminal WC behaviour with applications for assessment, prediction, intervention and evaluation. Treatment programmes for WC offenders could be developed and implemented, with different WC profiles involving different programme emphases.

The results of the present study offer a preliminary view of WC offenders convicted and incarcerated in Belgian prisons, but we propose that the findings are general. Our results, however, require some caveats. When performing a file review of official prison reports, it is important to note that there is no control over the data quality, as the original data was not for collected research purposes. Furthermore, not every item/variable was systematically recorded in the original official files. The reviewer was limited to existing data, and had less ability to examine many variables of potential interest, losing 28 cases from a total of 72 screened for the research because they were missing thorough psychological assessment or psychological observation. Our study specifically addresses offenders who were referred for psychological assessment and/or interviews: offenders referred for evaluation may reflect WC offenders generally. Another difficulty with this study was that personality data of the remaining 44 offenders was not always systematically collected, and a large variety of different tests had to be administered. Moreover, it is worthwhile to note that the variables 'narcissistic traits' and 'antisocial traits' were coded dichotomously as "present" or "absent". A shortcoming of this categorical approach is that co-morbidity of personality disorders

and personality traits is the norm (Loranger et al., 1997; Westen & Shendler, 1999). Additionally, our small sample size (n=44) limited statistical power to detect potentially meaningful differences in the group of WC offenders, namely between the WC offenders and the NWC offenders. Nevertheless, our findings suggest that several systematic patterns exist within WC offenders, and some differentiation of such offenders is necessary.

ENDNOTES

¹ According to Belgian law these are offenders under the age of 18 years old.

REFERENCES

- 1 Alalehto, T. (2003). *Economic crime: does personality matter?* International Journal of Offender Therapy and Comparative Criminology 47: 335-355.
- 2 American Psychiatric Association (1994). Diagnostic and statistical manual of mental disorders (4th ed.). Washington, D.C.: American Psychiatric Association.
- 3 Blickle, G., Schlegel, A., Fassbender, P., Klein, U. (2006). Some personality correlates of business white-collar crime. International Association for Applied Psychology 55: 220-233.
- 4 Bromberg, W. (1965). *Crime and the mind*. New York: Macmillan.
- 5 Cohen, J. (1988). *Statistical power analysis for the behavioural sciences* (2nd ed.)
- 6 Hillsdale, NJ: Lawrence Erlbaum Associates.
- 7 Coleman, J. (1998). *The criminal elite: understanding white-collar crime*. New York: St. Martin's Press.
- 8 Collins, J., Schmidt, F. (1993). Personality, integrity, and white-collar crime: a construct validity study. *Personnel Psychology* 46: 295-311.

- 9 Daly, K. (1989). Gender and varieties of whitecollar crime. *Criminology* 27: 769-794.
- 10 Erdfelder, E., Faul, F., Buchner, A. (1996). GPower: a general power analysis programme. Behaviour Research Methods, Instruments, & Computers 28: 1-11.
- 11 Field, A. (2005). Discovering statistics using SPSS (2nd ed.). London; Thousand Oaks, California; New Delhi: Sage Publications.
- 12 Hogan, R., Hogan, J. (2001). Assessing leadership: a view from the dark side. *International Journal of Selection and Assessment* 9: 40-51.
- 13 Johnstone, P. (1999). Serious white-collar fraud: historical and contemporary perspectives. *Crime, Law & Social Change* 30: 107-130.
- 14 Loranger, A., Janca, A., Sartorius, N. (1997). Assessment and diagnosis of personality disorders. The ICD-10 international personality disorder examination (IPDE). Cambridge: World Health Organisation, Cambridge University press.
- 15 Piquero, N., Exum, M., Simpson, S. (2005). Integrating the desire-for-control and rational choice in a corporate crime context. *Justice Quarterly* 22: 252-280.
- 16 Ruggiero, V. (1996). Organised and corporate crime in Europe: Offers that can't be refused. Aldershot: Dartmouth.
- 17 Shapiro, S. (1990). Collaring the crime, not the criminal: reconsidering the concept of white-collar crime. *American Sociological Review* 55: 346-365.
- 18 Sutherland, E. (1949). White-collar crime. New York: Holt, Rinehart & Winston.
- 19 Walters, G., Geyer, M. (2004). Criminal thinking and identity in male white-collar offenders. *Criminal Justice and Behaviour* 31: 263-281.
- 20 Westen, D., Shendler, J. (1999). Revising and assessing axis II, part II: toward an empirically based and clinically useful classification of personality disorders. *American Journal of Psychiatry* 156: 273-285

EDITOR'S NOTES



Professor Vincent Egan has a PhD in Psychology from the University of Edinburgh, a Clinical Psychology doctorate from the University of Leicester, and worked as a clinical psychologist at UK Regional Secure Unit for Mentally Disordered Offenders for 6 years, particularly specialising in personality disorder. In 2000, he was awarded a chair in psychology at Glasgow Caledonian University, where he ran the forensic psychology MSc for 6 years. He has since returned to Leicester University, where he initially directed the

Assessment and Treatment of Sexual Offenders programme, and now directs the campusbased forensic psychology MSc. He continues to see patients (primarily sexual and/or violent mentally disordered offenders) for legal reports, which keeps his clinical skills up. He has 75 publications, and another 6 currently in review.

Prof Egan has been actively involved with the Behavioural Sciences Unit (BSU) in HTA. In Nov 2009, BSU organised a three-day lecture series in HTA, featuring Prof Egan, who spoke on, "*The psychology of sexual offending, understanding sensational interests and the psychology of extremism.*" He also presented a paper during the Asian Conference of Criminal and Operations Psychology (ACCOP), jointly organised by the Ministry of Home Affairs, Singapore Police Force, Singapore Prisons Service, Behavioral Sciences Unit at the Home Team Academy, the Police Psychological Unit and The Society for Police and Criminal Psychology, in 2010 entitled "*Is it Premature to Dismiss Formal Risk Assessment and Psychometric Testing of Potential Terrorists?*"



Aline Bauwens is a PhD student at the Vrije Universiteit Brussel, Department of Criminology, Pleinlaan 2, 1050 Brussels, Belgium. Email: aline.bauwens@vub.ac.be Aline is currently completing her PhD on 'The Transformation of Offender Rehabilitation?', under the supervision of Professor Sonja Snacken. Prior to that, she obtained a MSc in Criminology at the Vrije Universiteit Brussel, and a MSc in Psychology in Criminal and Penal Contexts at the Glasgow Caledonian University. She has been employed as senior researcher, both in academic and non-academic contexts.

The **Value of** Simulation-Based Training in Reducing Decision Avoidance

LAURENCE ALISON AND SARA WARING

INTRODUCTION

HE OCCURRENCE OF events such as critical incidents, terrorist and environmental attacks disasters may be few and far between in most countries. However, the threat they pose to public safety and national security can be devastating. In 2010 alone, thousands of people were killed or injured in incidents such as the Haiti Earthquake, the Pakistan floods, the Chinese earthquake, or bombings in Baghdad and Lahore, to name but a few. Additionally, whilst such incidents are rare, the threat of terrorism appears to be growing, an increased demand creating for developing expertise in crisis management. Building resilience in national security and public safety is ever more reliant on developing experts in crisis management who can act quickly in making decisions and taking action.

Whilst academic research indicates that it takes ten years of experience to develop expertise in any field (Elliot,



Figure 1: The aftermath of the Haiti Earthquake

2005), the rarity of these events presents a challenge for developing expertise in managing crisis incidents. For such rare incidents, practitioners cannot rely solely on field experience to foster expertise. But by the same token, they cannot afford to manage events as novices because making mistakes costs lives and leaves practitioners open to the scrutiny of political and public audiences. Problems thus arise as to how practitioners can be prepared for events that are either rare or have never occurred but are likely to in the future and of how such expertise may be accelerated



Figure 2: Professor Laurence Alison and the Home Team Academy

THE CENTRE FOR CRITICAL AND MAJOR INCIDENT PSYCHOLOGY: COLLECTING EXPERIENCES

HE CENTRE FOR Critical and Incident Psychology Major at the University (CAMI) of Liverpool takes a pragmatic and naturalistic approach, working with practitioners to develop solutions to practical problems (Fishman, 2004). CAMI adopts the perspective that there is no substitute for conducting studies with 'real world' participants, those professionals who actually undertake the job on a day to day basis (Eyre & Alison, 2007). In line with this approach, research at CAMI is founded on the experiences of many thousands of professional participants from the UK and overseas (US, Canada, Australia, Singapore, India, China, France, Germany, Italy, the Netherlands, Romania, Norway, and Sweden).

Through the use of electronic debriefs, the experiences of numerous practitioners managing some of the

most high profile critical incidents occurring in the UK over the last decade have been collated. Events have ranged from weather-related incidents such as the 2004 tsunami, to the counter-terrorism operations of the 7/7 London bombings in 2005. This database provides a collection knowledge from of numerous practitioners relating to how they communicate. risk assess and formulate decisions in complex and hazardous environments. In essence, this is a database of pooled experiences across a variety of critical incidents that together paint a picture of more than 10 years worth of experience in critical incident management.



Figure 3: Electronic debrief at CEPOL European Police College

This database can be analysed to highlight potential pitfalls and develop training that specifically targets areas of importance. In this way, a reciprocally beneficial relationship may be forged between academics and practitioners that will serve to improve the management of these rare events. CAMI is already involved in forging such relationships internationally through feeding back findings of focus groups and research to practitioners to assist with learning. For example, in consultation with Dr. Majeed Khader of the Home Team Academy, Professor Laurence Alison and Professor Graham Wagstaff have run workshops, lectures, leadership tactical decision games, and seminars decision-making. stress and on Professor Alison has also delivered lectures and simulations for The Centre of Excellence in Policing and Security, highlighting the importance of leadership and decision-making to numerous senior police officers from across Europe.

EMOTIONS AND DECISION AVOIDANCE

PITFALL NE POTENTIAL highlighted through analysis of this database experience is of the prevalence impact that emotions have and critical incident management. on Practitioners' descriptions of their working environment commonly parallel those discussed in naturalistic decision making (NDM) literature, characterised by time pressure. uncertainty, lack of information, high stakes, and where goals are often unclear and conflicting (Orasanu Connolly, 1993). The NDM & approach defines itself as "an attempt to understand how people make decisions in real-world contexts that are meaningful and familiar to them" (Lipshitz, Klein, Orasanu & Salas, 2001, p.332). The strength of this is approach lies in its ability to utilise environmental factors in its analysis of decision making. Critical incidents are said to occur in a culturally rich and complex environment where practitioners are held accountable for their decisions and actions (Alison & Crego, 2008). Accountability refers to the evaluation of an individual, group or organisation's decisions, actions or behaviours by an audience with the power to deliver sanctions or rewards based on their appraisal (Hall et al, 2003: p. 33). Practitioners frequently note the pressure that accountability places them under, causing them to worry about how decisions and actions will be appraised by others post-incident.

The notion of holding individuals to account when tragedy occurs is instilled from childhood onwards (Mayer & Cronin, 2008) and assists us with making sense of these events by breaking them down into cause and effect (Gephart, 2003). Accountability exists as a deterrent to prevent others from behaving inappropriately by making them aware that decisions and actions will be appraised and punishments may ensue if performance is judged to be unacceptable. In public services such as the police, there has been increased focus on implementing accountability structures and procedures to minimise improve performance and errors (Poister, 2003). Overall, research indicates that accountability can lead decision makers to invest more cognitive effort into reaching decision (Tetlock, Skitka & Boettger, 1989) and to decrease such effort in illegal or inappropriate behaviour (Mitchell et al, 1998). However, it can also lead individuals to adopt decision-avoidance strategies in an attempt to avoid blame (Tetlock & Boettger, 1994), with decision makers becoming paralysed in selfdoubt, trying to anxiously avoid criticism through taking obsessive precautions against worst-case scenarios (Tetlock, 1992).

Emotions such as anticipated regret have been implicated in this process of decision avoidance. Regret refers to feeling sorry for losses or transgressions

How someone feels about the options that are available can assist them with making a choice and in directing goals for action (Craig, 2008). whilst anticipated regret refers to the level of regret an individual anticipates feeling in the future (Wong & Kwong, 2007). Anticipated regret occurs because people imagine how their decision may impact on the future state of their world and then compare it with their desired outcome, a process known as counterfactual thinking (van Dijk, Zeelenberg & van der Plight, 2003). The bigger the discrepancy between the imagined and the desired outcome, the more regret an individual is likely to anticipate feeling. This can be compared to the choice of cutting a blue or red wire where the consequences of getting it wrong in one scenario would result in ruining a perfectly good plug, whilst in another it would result in the death of fifty innocent people. One can anticipate feeling much more regret in the latter scenario than the former. Add to this the pressure of being held accountable by others for the death of these fifty innocent people and it is understandable why anyone would wish to avoid the responsibility for such a decision.

Decision makers use these anticipated emotions to direct their behaviours in the present (Hardy-Vallée, 2007). It should come as no surprise to find that people prefer to feel joy rather than sadness and are motivated to maximise positive emotions and minimise negative ones. How someone feels about the options that are available can assist them with making a choice and in directing goals for action (Craig, 2008). When a decision maker anticipates selecting one particular option over another will cause them to feel more regret, they are unlikely to select that option. Emotions also provide a guide to the importance of decisions so that we may prioritise the order in which we attend to and the amount of cognitive effort invested in decisions (Higgins, Grant & Shah, 1999).

Anticipated emotions are, in part, driven by past experiences. Although there is a tendency to wrongly predict the intensity and duration of emotions (Wilson & Gilbert, 2003), they still play a part in enabling individuals to learn from mistakes (Reimann & Bechara, 2010). Anticipated regret then may serve as a predictive threat that warns decision makers to plan carefully before acting (Mandel, 2003). The problem arises when emotions such as anticipated regret lead to decision avoidance, particularly in high stakes environments such as managing threats to national security. Here decision makers may adopt the maxim that to avoid being blamed for a decision, it would be preferable not to decide for now until either further information is available. the situation changes or the decision can be passed on to somebody else.

Anderson's (2003) rationalemotional model highlights the role that anticipated regret plays in leading individuals to adopt an aversive stance to a decision that can result in avoidance. Anderson (2005) notes the difficulty in defining this concept because it is challenging to correctly identify the absence rather than presence of a decision, especially when the decision maker may have been unaware that the opportunity to make a decision with the potential improve their situation to was present. Anderson (2003) puts aside the difficulties in defining decision avoidance and instead focuses on identifying decision avoidance phenomena such as: the status quo bias (a preference for options that cause no change in the state of the world), omission bias (preference for options that require no action), inaction inertia (a tendency to omit action when a similar. more attractive offer was previously passed up) and choice deferral (choosing not to make a choice for the time being).

Overall, people associate more regret with action than inaction even when the consequences are equally negative; This is referred to as the action effect (Zeelenberg, van den Bos, van Dijk, & Pieters, 2002). Each of the decision avoidance strategies allows individuals to avoid action and so may reduce their feelings of anticipated regret. However, the outcome of adopting any decision avoidant strategy to manage a crisis incident can be disastrous. Cook and Tattersall (2008) note that being decisive is integral to the policing role of managing an incident where "any delay to reduce risk may actually produce risk" (p. 26). For example, in deciding whether to arrest

a suspect on suspicion of terroristrelated activities, arresting too early may jeopardise the potential to collect further evidence. Conversely, delaying an arrest for too long or avoiding the decision altogether may put members of the public at risk. Decision avoidance leads to a lack of action so that nothing is being done to minimise the negative impact of the threat. The risky, high stakes, uncertain nature of incidents that pose a threat to national security, where information is lacking and time is scarce, all add to the pressure for decisions to be made quickly before opportunities are missed.

As these events are rare, the opportunity for practitioners to learn to effectively utilise their emotions instead of allowing their emotions to rule them is scarce. There is a growing need to find ways of allowing practitioners to practice managing critical incidents under conditions that induce the same emotional responses they would feel in real incidents. By doing so, practitioners can learn how to make decisions under such constraints and to utilise them to their best advantage. Whilst practitioners are unable to rely on personal field experience to develop expertise for managing rare events, simulationbased training (SBT) may provide the opportunity for practitioners to experience what it is like to make decisions under such conditions.

SIMULATION-BASED TRAINING

IMULATIONS ARE HIGH fidelity replications of complex. dynamic, real life events that measure their credibility on the extent to which experienced decision makers have taken them seriously and engaged as they would in operational settings (Klein & Woods, 1993). CAMI. information obtained At by practitioners through electronic debriefs is invaluable to the creation of simulations that successfully recreate critical incident environments. It is ill-advised to approach simulation development with the belief that the information contained within publicly accessible reports provides sufficient enough insight into critical incident environments so as to allow for their accurate replication. These documents often fail to detail the minutiae of an operational incident which when taken together have an impact on a practitioner's ability to formulate decisions in that setting, such as the pressures of managing large influxes of information. The ability to obtain in-depth information from practitioners with first-hand experience of managing these rare events is invaluable

The use of simulations can enhance the performance of practitioners in real incidents because skills learned in simulations may be transferred to real incidents (Ward, Williams & Hancock, 2006). Simulations allow practitioners to develop a catalogue of decision making experiences in an environment that replicates rare incidents whilst allowing mistakes to be made and learned from without putting real lives at risk (Crichton, Flin & Rattray, 2000). The transferability of skills is dependent, however, on the extent to which simulated environments are able to replicate the complexity of real incidents so that learning transfers to 'on the job' performance (Rosen et al, 2008).

Fidelity, the degree to which a simulation is able to replicate environment. the operational is an important aspect of getting practitioners immersed in simulation environments so that they behave as they would in reality. Caird (1996) distinguishes between physical and psychological fidelity using the term "physical fidelity" to refer to the accuracy of a simulation to replicate the operational environment. Conversely, psychological fidelity refers to the extent to which a simulation requires the user to experience the same sensory and cognitive processes for task completion as they would in operational settings.

Caird (1996) states that level of fidelity should be based on whether physical or cognitive tasks are being investigated. Here the issue is in alerting practitioners to the impact that emotions have on their ability to make decisions in these fast paced, highly staked, accountable environments, to identify when they may be at risk of becoming inert and to develop strategies to overcome this. Such issues are predominantly cognitive and as such would require simulations that focus psychological fidelity. These on simulations would therefore need to create the perceptions, emotions and behaviours that occur in real crises (Cottam & Preston, 1997), such as tension, time pressure, uncertainty, frustration and a sense of inadequate information (Borodzicz, 2004). should encourage Overall. SBT practitioners to feel a sense of 'presence' such that they subjectively experience being in one place or though environment even thev are physically situated in another (Witmer & Singer, 1998).

At CAMI, using Hydra and other technology, numerous simulations have been developed to aid the furthering of knowledge and to assist practitioners with training in critical incident management. Subject areas covered in simulation development include counter-terrorism, weather, disease. critical infrastructure and serious crime investigation. Through experience with developing SBT, it is noted that this task can be both time consuming and financially costly, particularly for live exercises. However, where psychological fidelity is a priority, computer based simulations can be utilised to minimise both time and cost

Jain and McLean (2008) have

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developed a framework of incident management (Figure 4) comprising three major dimensions:

- Incident a natural or humancaused event requiring an emergency response to save lives or property,
- Domain a group of entities sharing similar characteristics in relation to incident management), and
- Life cycle phase prevention, preparedness, response, recovery and mitigation.

Using such a framework to map out the development of computerbased simulations allows modules of a simulation to be reutilised in different sequences to develop new simulations, saving both time and money. This framework also serves to keep those developing SBT goal-focused so that the storyline and presentation of information is directed toward specific learning By maintaining focus points. on these learning points it is possible to use the feedback from one simulation to develop new simulations. This creates a cycle that links simulation development, training and learning.

In this manner, simulations may be utilised to identify at what

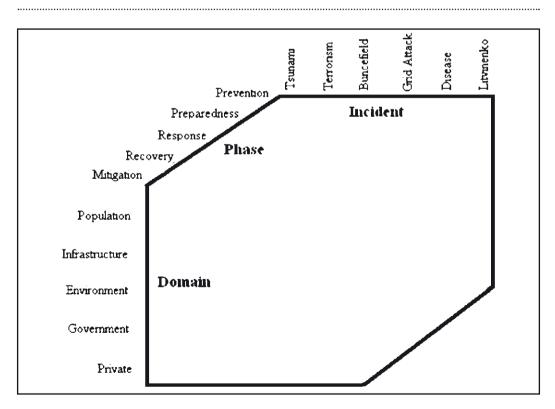


Figure 4: Framework for Incident Management (Adapted from Jain & McLean, 2008)

stages in an incident practitioners may be most at risk of becoming decision avoidant. Through repeated exposure to SBT, practitioners will be able to build experience in coping with decision-making under such emotional strain and indeed learn to identify internal, emotional, and external environmental cues that put them at risk of becoming decision avoidant. In being able to identify when there is a risk, practitioners may further develop individual strategies for minimising the effects that emotions have on decision-making or in utilising these emotions to make timely and effective decisions. Regret is largely experience driven after all and may serve as an alert that something is wrong.

Along with developing practical ways to utilise information gleaned through years of communication and development of trust with practitioners, CAMI is now moving toward developing evidence-based measurement tools to assess the effectiveness of simulations to achieving the learning goals they developed were for (Cannon-Bowers Salas Tannerbaum & Mathieu, 1995). This is the next important step in ensuring that training is as effective as it can be in preparing practitioners to manage incidents that threaten national security should they arise. This will then complete the learning circle whereby practitioner experiences of managing rare incidents feeds into the development of SBT to assist in developing incident management expertise. Each simulation will be assessable in terms of its ability to contribute toward particular learning goals, and information obtained from each simulation with regard to practitioner performance will feed directly into the development of future simulations (Figure 5).

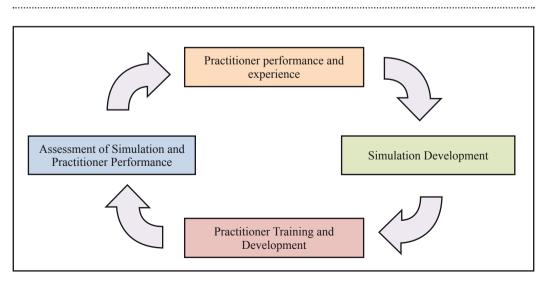


Figure 5: Cycle of Practitioner Focussed SBT Learning

CONCLUSION

N CONCLUSION, WHILST INCIDENTS that threaten national security are few and far between, the need for practitioners to develop expertise in incident management is an everconcern. Simulationincreasing based training represents a method through which practitioners may develop skills in managing these rare incidents without placing lives Through focus groups, at risk practitioners have identified the these fast impact that paced. highly pressured and scrutinised environments have on their emotions and how this in turn can affect their ability to formulate decisions and take action. Emotions can be an important aid to decision making but should not be allowed to rule practitioners' judgments. Through the use of SBT, practitioners may be able to learn to utilise their emotions to their advantage, to identify when they are at risk of becoming decision avoidant and to develop strategies for minimising this avoidance.

REFERENCES

- 1. Alison, L., & Crego, J. (2008). *Policing critical incidents: leadership and critical incident management.* Devon, England: Willan.
- 2. Anderson, C. J. (2003). The psychology of doing nothing: Forms of decision avoidance result from reason and emotion. *Psychological Bulletin*, 129(1), 139 167.
- 3. Anderson, C. J. (2005). Alternative

perspectives on omission bias. *Behavioral & Brain Sciences*, 28 (4), 544.

- 4. Borodzicz, E.P. (2004). The missing ingredient is the value of flexibility. *Simulation and Gaming*, *35*, 414-426.
- Caird, J.K. (1996). Persistent issues in the application of virtual environment systems to training. Proceedings of the HICS: *Third Annual Symposium on Human Interaction with Complex Systems* (pp. 124-132). Los Alamitos, CA: IEEE Computer Society Press.
- Cannon-Bowers, J. A., Salas E., Tannenbaum S. I., & Mathieu, J.E. (1995). Toward theoretically based principles of training effectiveness: a model and initial empirical investigation. *Military Psychology*, 7, 141–164.
- Cook, T., & Tattersall, A. (2008). Blackstone's senior investigating officers' handbook. Oxford: Oxford University Press.
- 7. Cottam, M., & Preston, T. (1997). An overview of the value and use of simulations in the academic, business and policy communities. *Journal of Contingencies and Crisis Management*, 5(4), 195-197.
- Craig, B. (2008). Interoception and emotion: A neuroanatomical perspective. In M. Lewis, J. M. Haviland-Jones & L. Feldman Barrett, *Handbook of Emotion* (3rd Ed) (pp. 272– 288). New York: Guildford Press.
- Crichton, M., Flin, R. & Rattray, W.A. (2000). Training decision makers – Tactical Decision Games. *Journal of Contingencies* and Crisis Management, 8(4), 209-217.
- 10. Elliott, T. (2005). Expert decision-making in naturalistic environments: A summary of research. Australia: DSTO.
- Eyre, M., & Alison, L. (2007). To decide or not to decide: decision making and decision avoidance in critical incidents. In D. Carson, R. Milne, F. Pakes, & K. Shalev (Eds.), *Applying psychology to criminal justice* (pp.211-231). Chichester: Wiley.
- Fishman, D.B. (2004). Pragmatic psychology and the law: Introduction to part II. *Psychology*, *Public Policy and Law*, 10(1-2), 3-4.
- Gephart, R. P. (2003). The textual approach: Risk and blame in disaster sensemaking. *Academy of Management Journal*, 36(6), 1465-1514.
- 14. Hall, A. T., Frink, D. D., Ferris, G. R., Hochwarter, W. A., Kacmar, C. J., & Bowen,

BEHAVIOURAL SCIENCES TO UNDERSTAND AND BUILD EXCELLENT ORGANISATIONS......

M. G. (2003). Accountability in human resources management. In C. A. Schriesheim& L. Neider (Eds.), *New Directions in Human Resource Management* (pp. 29–63). Greenwich, CT: Information Age Publishing.

- Hardy-Vallée, B. (2007). Decision-Making: A Neuroeconomic Perspective. *Philosophy Compass, Vol. 2, No. 6*, pp. 939-953.
- Higgins, E. T., Grant, H. & Shah, J. (1999). Selfregulation and quality of life: Emotional and nonemotional life experiences. In D. Kahneman, E. Diener& N. Schwartz (Eds.) *Well-being: The Foundations of Hedonic Psychology* (pp. 244 – 266). New York: Russell Sage Foundation.
- 17. Jain, S., & McLean, C. (2008). Components for an incident management simulation and gaming framework and related developments.*Simulation*, *84*, 3-25.
- Klein, G. A., & Woods, D. D. (1993). Conclusions: Decision making in action. In G. A.Klein, J. Orasanu, R. Calderwood, & C. E. Zsambok (Eds.), *Decision Making in Action: Models and Methods*. Norwood, NJ: Ablex Publishing.
- Lipshitz, R., Klein, G., Orasanu, J., & Salas, G. (2001). Focus article: Taking stock of naturalistic decision making. *Journal of Behavioral Decision Making*, 14, 331-352.
- Mandel, D. R. (2003). Counterfactuals, emotions, and context. Cognition & Emotion, 17(1), 139 – 159.
- Mayer, C. M. & Cronin, D. (2008). Organizational accountability in a just culture. Urologic Nursing, 28(6), 427 – 430.
- Mitchell, T. R., Hopper, H., Daniels, D., George-Falvy, J. & Ferris, G. R. (1998). Power, accountability, and inappropriate actions. *Applied Psychology*, 47(4), 497 – 517.
- Orasanu, J. & Connolly, T. (1993).The reinvention of decision making. In G. A. Klein, J. Oransanu, R. Calderwood, & C. E. Zsambok (Eds.). *Decision Making in Action: Models and Methods* (pp. 3 – 20). Norwood, CT: Ablex.
- Poister, T. H. (2003). Measuring performance in public and nonprofit organizations. San Francisco, CA: John Wiley & Sons, Inc.
- 25. Reimann, M. & Bechara, A. (2010). The somatic marker framework as a neurological theory of decision-making: Review, conceptual comparisons, and future neuroeconomics research. *Journal of*

Economic Psychology, 31(5), 767-776.

- Rosen, M. A., Salas, E., Silvestri, A., Wu, T. S., &Lazzara, E. H. (2008). A measurement tool for simulation-based training in emergency medicine: the simulation model for assessment of resident targeted event responses (SMARTER) approach. *Simulation in Healthcare*, *3*, 170-179.
- Tetlock, P. E. (1992). The impact of accountability on judgment and choice: Toward a social contingency model. *Advances in Experimental Social Psychology*, 25, 331-376.
- 28. Tetlock, P. E. ,& Boettger, R. (1994). Accountability amplifies the status quo effect when change creates victims. *Journal* of Behavioral Decision-Making, 7, 1-23.
- Tetlock, P. E., Skitka, L., &Boettger, R. (1989) Social and cognitive strategies for coping with accountability: Conformity, complexity, and bolstering. *Journal of Personality and Social Psychology*, 57, 632-640.
- Van Dijk, W. W., Zeelenberg, M., & Van der Pligt, J. (2003). Blessed are those who expect nothing: Lowering expectations as a way of avoiding disappointment. *Journal of Economic Psychology*, 24, 505 – 516.
- Ward, P., Williams, A.M., & Hancock, P.A. (2006). Simulation for performance and training. In K.A. Ericsson, N. Charness, P.J. Feltovich, & R.R. Hoffman, (Eds.), *The Cambridge Handbook of expertise and expert performance: Its development, organization, and content* (pp. 243-262). Cambridge, UK: Cambridge University Press.
- Wilson, T. D. & Gilbert, D. T. (2003). Active forecasting: Knowing what to want. Advances in Experimental Social Psychology, 35, 345 – 411.
- Witmer, B. G., & Singer, M. J. (1998). Measuring presence in virtual environments: a presence questionnaire. *Presence*, 7, 225-240.
- Wong, K. F. E. &Kwong, J. Y. Y. (2007). The role of anticipated regret in escalation of commitment. *Journal of Applied Psychology*, 92(2), 545-554.
- Zeelenberg, M., van den Bos, K., van Dijk, E. & Pieters, R. (2002). The inaction effect in the psychology of regret. *Journal of Personality* & Social Psychology, 82(3), 314 – 327.

EDITOR'S NOTES —



Laurence Alison is Professor of Forensic & Investigative Psychology & Director of the Centre for Critical and Major Incident Psychology at The Institute of Psychology, Society and Health, University of Liverpool. He is recognised for his internationally significant work on decision making in critical and major incidents, specifically with regards to operational debriefing, simulation- based training, the acceleration of expertise and decision error and inertia. Alongside Professor Crego (Metropolitan Police Service), he has contributed to the analysis and debriefs of over 200 critical and major incidents, including the London Bombings, the

response to the Boxing Day Tsunami and a series of high profile murder and rape incidents. He lectures nationally and internationally on these topics and has published over 100 articles, books and book chapters on these subjects. He was one of the key note speakers during the 2010 ACCOP where he delivered an address entitled, "Avoiding Decision Paralysis in High Stake Environments: Tales from the Police Incident Command Room."



Sara Waring is a PhD student within the Centre for Critical and Major Incident Psychology at The Institute of Psychology, Society and Health, University of Liverpool. Her area of interest centres on examining the impact that accountability has on judgment and decision making in critical policing contexts including crisis negotiation and sexual assault investigation. Sara has been involved in the debriefing of both critical incidents and police training exercises. She has also delivered numerous practitioner reports to UK emergency services such as police and fire and rescue as well as

delivering practical advice in relation to organisational and decision making issues.

Intelligence Decision-Making for Counter-Terrorism Operations: Improving Effectiveness

MARK R. KEBBELL

INTRODUCTION

OUNTER-TERRORISM (CT) OPERATIONS often involve an overwhelming volume information to that needs of be analysed and understood. Much of this information is not helpful and merely adds 'noise' Operation operation. to an Crevice, in England, illustrates the challenges large volumes of data create. This operation, an investigation into a terrorist plot to bomb a shopping centre in England, generated a body of information that virtually required the entire operational resources of MI5. Data that was analysed included the results of searching addresses, 45,000 hours of 30 monitoring transcription, and 34,000 hours of surveillance, and 4,020 telephone calls (Intelligence and Security Committee 2009). Such an enormous volume of information can overwhelm the

cognitive abilities of individuals, increasing the likelihood of error and increasing the potential for bias. In Operation Crevice, two terrorists, Mohammed Siddique Khan and Shazad Tanweer, were associated with the terrorist cell but were overlooked. They later blew themselves up on the London Underground on 7 July 2005 (Intelligence and Security Committee 2009).

Of course, it is to be expected that those who intend to harm us through acts of terrorism will hide their intentions and make their identification difficult for us to determine. Nevertheless, a number of different strategies can be used to minimise the likelihood of error when processing large volumes of data. These include identifying factors that hinder accurate perception of risk, strategies that can improve our decisionmaking and future mechanisms for improving our effectiveness.

FACTORS THAT REDUCE OUR ABILITY TO MAKE GOOD DECISIONS

HERE IS A substantial body concerning of literature situations where informational complexity overwhelms our ability to pay attention to all the data that is available. In these situations necessarily we do not make decisions. Many decisionpoor makers are surprisingly capable in identifying the most important data to pay attention to and may rely on 'intuitive' ideas about what is happening based on recognising pieces of information that seem most relevant (Martin, Kebbell, Porter and Townsley, 2010). This can be incredibly quick and effective. However, the rarity of terrorist attacks means decision-makers may not have the necessary expertise to make these effective intuitive decisions and may rely on heuristics to help make decisions. Heuristics are cognitive short cuts to reduce problems complex into simple rules that work effectively. While heuristics can be effective, they can also lead to biases and inaccuracies (Kebbell, Muller & Martin, 2010; Slovic et al., 1977).

For example, the representative heuristic concerns judgments made about a person or event based on perceived similarity to a particular known group or event (Tversky Kahneman, 1974). This can & be helpful, especially when there is a great deal of ambiguous and deceptive evidence available by allowing analysts to rely on knowledge about similar situations or offenders. However, this heuristic also have negative impact can when reliance on this mental short cut leads to subsequent decisions being made on false assumptions and stereotypes. For example, in Operation Crevice, Mohammed Siddique Khan and Shazad Tanweer were perceived to be criminals rather than terrorists because of intercepts of their conversations concerning criminal activities (Intelligence and Security Committee 2009).

Another relevant heuristic is the *availability heuristic* which leads to information that can quickly be brought to mind gaining more prominence than other equally valid evidence (Tversky & Kahneman 1974). This heuristic can be advantageous when the most relevant information for a task is than peripheral available more information, leading to accurate decision-making. On the other hand, information overload is a recognised problem in complex CT operations and the availability heuristic may lead to more recent evidence being given more weight than is justified. This may lead to error if investigators cannot easily recall equally important older evidence. In light of the increased attention and concern surrounding perpetrators, terrorism and its greater amounts of information are collected, and the likelihood that the availability heuristic will be unconsciously utilised to handle data overload also increases. For example, one explanation for the wrongful shooting of Jean Charles de Menezes (Independent Police Complaints Commission, 2007) is that the attempted suicide bombings from the previous day may have made the threat of suicide bombings at the fore of the officers' minds.

Similarly, confirmation bias leads to information that is consistent with expectations being sought and information that is contradictory being ignored or devalued (Cook & Smallman 2008; Klayman & Ha 1987; Wason 1960). In CT operations, intelligence analysts may make assumptions about factors such as terrorist cell construction or

Visualisation can be used to keep uncertainty explicit, which is important for reducing bias at both analyst and decision-maker levels of CT operations and helps, given the highly visual nature of human decision-making.

typical perpetrator features and may seek confirmation of these leads without considering alternative possibilities — particularly if they have made a commitment to a course of action based on these assumptions. Confirmation bias potentially affected the Haneef case (Clarke 2008; Vogel & Kebbell, 2010), in that ambiguous information, such as Dr. Haneef booking a one-way ticket to India, was interpreted as indicating his involvement in a terrorist plot.

STRATEGIES FOR PROCESSING LARGE DATA-SETS

CT HE TIME PRESSURE in operations means that the applicability and feasibility of time-intensive. analytical decisionmaking methods is reduced and CT operation members may be forced to rely on faster intuitive methods (Hammond 2007). With the previously mentioned potential biases, it is important that mechanisms are put in place that minimise the potential for these errors. One such method is simply being aware of potential bias and correcting it. Unfortunately, this does not seem to be always successful because many biases are working at a subconscious level (Wilson & Brekke 1994). In the case of CT cases this can involve making bias obvious, and reducing bias through an awareness of where bias is likely. At a basic level this may include visualisation of data.

Visualisation can be used to keep uncertainty explicit, which is important for reducing bias at both analyst and decision-maker levels of CT operations and helps, given the highly visual nature of human decision-making. We have shown that for a complex CT operation, visualisation improves the identification of high risk individuals whilst simultaneously enhancing identification of individuals who are of less risk, thus offering the best of both worlds with regards to risk assessment (Kebbell & Evans, 2010).

One decision-aid utilised in law security enforcement and national for assessing intelligence includes the analysis of competing hypotheses 1979). This involves (Heur Jr. identifying different hypotheses about what is happening, documenting data that supports or refutes an hypothesis including identifying what evidence should be collected in the future that their assessments to ensure are not being deviated from. This procedure is intended to reduce bias by enhancing data collection, integration and monitoring. Other methods of enhancing decision-making include the key assumptions check, structured decision-making, red-teaming, devil's advocate, Team A/Team B, and scenario development (Central Intelligence Agency, 2009). There is little evidence to support the use of any of these techniques and experimental validation is a critical next step. However, they do seem to offer the potential to improve decision-making.

Another method with considerable potential involves using structured professional judgment to make decisions. For example, the Static-99 is a tool used for assessing the risk of future sex offending in convicted sex offenders and is calculated using historical, fixed (or static) factors: Personal demographic information. official criminal history, and the gender of and relationship to victims. This procedure is reasonably accurate. though far from perfect, and typically outperforms clinical judgment (Beauregard & Mieczkowski 2009; Grubin 1998; Sjöstedt & Långström 2001) because it removes many of the factors associated with bias, including those involved in making judgments that do not relate to risk, such as how likeable or attractive the individual is, how friendly they are to the assessor, and whether they fulfill the assessor's stereotypes of an offender. Structured decision-making is a more objective way of looking at data that can encourage a more systematic and critical exploration of information in CT situations, and overlaps with other ways of encouraging critical assessment. To date, structured decision-making does not seem to have been empirically evaluated to any significant extent in the CT domain despite having considerable potential to do so (Porter & Kebbell, in press). For example, in the context of Islamist terrorism, critical factors may include beliefs that retaliation is justified against the West and that it is legitimate, and the accessing of violent and extremist materials. Indeed, when combined with infocomm technology (ICT) solutions, this would seem to be an ideal way to process large datasets.

Finally, it has already been mentioned that there seems to be a preference for intuitive decisionmaking in risk assessments. This suggests that individuals responsible for assessing risk may be effectively trained in assessing risk by familiarising themselves with prototypical cases that lend themselves to a more intuitive recognition judgment (Martin, Kebbell, Porter & Townsley, 2010).

THE WAY FORWARD

The way forward seems to involve a variety of approaches to decisionmaking that should include:

- 1. Realistic expectations of what is possible. Realistic expectations need to exist concerning the un-aided capabilities of decisionmakers to process intelligence in CT operations.
- 2. Simulation training. Realistic simulations should form the basis of a great deal of training in this domain. Such training should be modelled on previous events and likely future events. This training should be designed to enhance the likelihood of effective intuitive as well as analytical thinking.
- 3. Use of decision support tools. Decision support tools should be developed, including for example, structured professional judgment and the Analysis of Competing Hypotheses. These should be tested in simulated environments.
- 4. Use of ICT. Modern information technology is responsible for much of our

difficulties with regards to the collection of enormous amounts of data, but can also provide the solutions. Decision support tools should be developed and enhanced and where possible be combined with ICT to maximise effectiveness.

CONCLUSION

OMPLEX CRIMINAL INVESTIGATIONS such as CT operations have considerable risk of error. As is stated in the Australian Federal Police submission to the Clarke Enquiry (AFP, 2008):

The volume of information in counter terrorism investigations can be overwhelming and require significant resources and technology to analyse and assess it. In these circumstances, ensuring that police do not miss relevant information that could lead to the collection of admissible evidence or mitigate risk to the community can be a significant challenge (p.11).

Whilst such difficulties are inherent in CT operations, mechanisms proposed here, combined with realistic expectations, have the potential to provide a firm setting for effective analysis of large volumes of data.

REFERENCES

- 1. Australian Federal Police (2008). Submission to the Clarke Inquiry. Attorney-General's Department, Commonwealth of Australia, Canberra.
- Beauregard, E & Mieczkowski, T 2009, 'Testing the predictive utility of the STATIC-99: A Bayes analysis', *Legal and Criminological Psychology*, vol. 14, no. 2, pp. 187–200.
- 3. Central Intelligence Agency 2009, A Tradecraft Primer: Structured Analytic

Techniques for Improving Intelligence Analysis, CIA, Washington D.C.

- 4. Clarke, MJ 2008, *Report of the Inquiry into the Case of Dr. Mohammed Haneef: Volume One*, Attorney-General's Department, Commonwealth of Australia, Canberra.
- Cook, M B & Smallman, HS 2008, 'Human factors of the confirmation bias in intelligence analysis: Decision support from graphical evidence landscapes', *Human Factors: The Journal of the Human Factors and Ergonomic Society*, vol. 50, no. 5, pp. 745–754.
- 6. Hammond, KR 2007, *Beyond Rationality*, Oxford University Press, Oxford and NY.
- Heuer Jr, RJ 1999, Psychology of Intelligence Analysis, Central Intelligence Agency, Government Printing Office, Washington D.C.
- 8. Intelligence and Security Committee 2009, *Could 7/7 Have Been Prevented? Review of the Intelligence on the London Terrorist Attacks on 7 July 2005*, Office of Public Sector Information, London.
- Independent Police Complaints Commission (2007). Stockwell One. Investigation into the shooting of Jean Charles de Menezes at Stockwell underground station on 22 July 2005, Independent Police Complaints Commission, London.
- Kebbell, M.R. & Evans, J. M. (2010). The influence of informational complexity and visualisation on perceptions of risk in a simulated terrorist operation. ARC Centre of Excellence in Policing and Security, Unpublished Manuscript, Griffith University, Brisbane, Australia.
- Klayman, J & Ha, Y-W 1987, 'Confirmation, disconfirmation, and information in hypothesis testing', *Psychological Review*, vol. 94, no. 2,

EDITOR'S NOTES =



Associate Professor Mark Kebbell is a Chief Investigator with the Australian Centre of Excellence in Policing and Security. His expertise and research is in the area of Investigative Psychology particularly with regards the investigation and prosecution of serious crime. Within the Centre he is the lead Chief Investigator on the Risky People and Intelligence Methods. In addition, he is working on an investigative interviewing project with colleagues Powell and Hughes-Scholes and Victoria Police Service. His previous work has included writing the guidelines for police officers in England and Wales (with Wagstaff) for the assessment of eyewitness evidence. He has worked on more than

seventy criminal cases, principally involving murder or serious sexual assault, and has given expert evidence on numerous occasions including uncontested psychological evidence in an Old Bailey appeal case. Academically, the quality of his work has been recognised by the award of a British Academy Postdoctoral Fellowship for Outstanding Younger Scholars. He is the Editor, with Professor Graham Davies of the book "Practical Psychology for Forensic Investigations and Prosecutions" published by Wiley.

Professor Mark Kebbell was also a speaker at the Asian Conference of Criminal and Operations Psychology (ACCOP) in which he presented a paper entitled, "A risk assessment and response framework for identifying individuals at risk of communicating acts of violent extremism".

pp. 211-228.

- Martin, K., Kebbell, M.R., Porter, L.E., & Townsley, M. (2010). *Analyst decision-making: An evaluation of thinking styles*. Unpublished Manuscript, ARC Centre of Excellence in Policing and Security, Griffith University, Brisbane, Australia.
- Porter, L.E. & Kebbell, M.R. (2010). Radicalization in Australia: Examining Australia's convicted terrorists. *Psychiatry, Psychology and Law.*
- 14. Sjöstedt, G, & Långström, N 2001, 'Actuarial assessment of sex offender recidivism risk: A cross-validation of the RRASOR and the Static-99 in Sweden', *Law and Human Behavior*, vol. 25, no. 6, pp. 629–645.
- 15. Slovic, P, Fischoff, B & Lichenstein, S 1977, 'Behavioral decision theory', *Annual Review* of *Psychology*, vol. 28, pp. 1–39.
- Tversky, A & Kahneman, D 1974 'Judgment under uncertainty: Heuristics and biases', *Science*, vol. 185, no. 4517, pp. 1124–1131.
- Vogel, L. & Kebbell, M.R., (2010). Judgement and decision-making in the controversial Dr. Haneef counter-terrorism operation: A simulation approach. Unpublished Manuscript, ARC Centre of Excellence in Policing and Security, Griffith University, Brisbane, Australia.
- Wason, PC 1960, 'On the failure to eliminate hypotheses in a conceptual task. *Quarterly Journal of Experimental Psychology*, vol. 12, no. 3. pp.129–140.
- 19. Wilson, T D & Brekke, N 1994, 'Mental contamination and mental correction: Unwanted influences on judgments and evaluations', *Psychological Bulletin*, vol. 116, no. 1, pp. 117–142.

Capturing Investigative Knowledge: Methodological Scaffolding for Measuring Thinking Styles of Police Investigators

GEOFF DEAN AND ZOE STAINES¹

INTRODUCTION

RICSON AND HAGGERTY (1997) refer to police as 'knowledge workers'. Indeed, police work and in particular, investigative work is knowledge-based and involves managing such knowledge in an efficient and effective manner (Dean and Gottschalk, 2007). Dean (2009) has coined the term 'Knowledge-Policing² (KMP) Managed underscore the knowledge-dependent nature of policing in particular and law enforcement in general. In essence, KMP entails the harnessing of practitioner-based knowledge and technological support systems in order to systematically manage the application of policing knowledge in all its forms, levels and depth to serious and complex policing problems.

However, Knowledge Management (KM) within the policing sector has been largely Information Technology (IT)-based and has, thus, failed to effectively capture and manage tacit knowledge (Dean and Gottschalk, 2007). This can lead to a brain drain phenomenon when experienced investigators retire from or leave the service (Hirschman in Vickers and Kouzmin, 2001:16; and Colaprete, 2004:89).

Previous research in this area of investigative thinking by Dean (2002, 2005) and Dean, Fahsing and Gottschalk, (2006, 2007a) found investigators have certain styles of thinking they prefer to use during an investigation (Dean, Fahsing and Gottschalk, 2007b). These cognitive styles also influenced newcomers to investigative practice (Filstad, Dean, Fahsing, and Gottschalk, 2007) and some investigative thinking styles are strongly associated with the use of creativity in investigations (Dean, and Gottschalk, 2007b: Fahsing Dean, Fahsing, Gottschalk and Solli-Sæther, 2008).

Hence, this current research proposes the use of Dean's (2000) previous research on investigative thinking styles as the methodological scaffolding for developing a measurement instrument that can capture and hence improve the management of tacit investigative knowledge within the policing sector.

COGNITIVE PREFERENCES OF INVESTIGATORS

NVESTIGATIVE PRACTICE, WHILST procedurally-driven, is at its base level, a cognitive process. It is how an investigator 'thinks' about collecting information and evidence and building a case from it that will stand in Court and determine the success of an investigation. It is this 'investigative knowledge' in the heads of investigators that is the focus of our research work.

It is important to appreciate that all investigations have a certain degree of complexity depending on the nature of the case, the evidence available or lack of it, and the inherent pressures of the investigative process. The process of investigation involves obtaining, sorting and sharing information, intelligence and knowledge in a meaningful way, in order to identify, interview and where sufficient evidence exits, to arrest and charge a suspect. However, the process does not end there. One's investigative work is then open to public scrutiny - what one did or failed to do - is tested in a Court of Law. No other occupational context has the eye of the public so constantly focused on it and a practitioner's investigative work so rigorously picked over from beginning to end by police managers, prosecutors, lawyers, magistrates, judges, and the media.

Throughout this process, investigators are continually thinking about how they will obtain certain information and evidence

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to make a case. Such thinking, or cognitive activity, is not just related to the 'what' of collecting content but involves putting together a mental jigsaw puzzle about which data, information and intelligence Investigators must fits where. themselves whether certain ask arrangements of the crime puzzle meaningfully fit together. They must also consider alternative ways to look at the crime scene and collate content that provides a better fit or explains the crime more holistically. Moreover, other mental gymnastics come into play about the 'how' of the process of investigation itself. Throughout an investigation, investigators must reflect on and ask themselves: "Have I done anything in a way that can get me into trouble or ruin the investigation?" The investigator must consider whether they have been too aggressive, rude, insensitive, or racist towards complainants, witnesses, suspects, members of the public and so forth. In other words, the larger frame in which investigative practice takes place is at the level of cognitive decision making.

Investigative decision-making was, therefore, the framework explored by Dean (2000) in his research doctoral about how experienced detectives described their experience in the process investigation. Dean (2000)of conducted interviews with 64 detectives nationally and internationally, and employed a phenomenographic method for elucidating the cognitive preferences 'thinking styles' of these or detectives. A phenomenographic methodology seeks to identify and describe the qualitative variation in individuals' experiences of a phenomenon. particular Hence. the aim of phenomenography is to reveal these 'qualitatively different ways' (Marton, 1986:31) in which something experienced. is In relation to this study of investigative phenomenon in knowledge, the question was the qualitatively different ways in which detectives experience the process of carrying investigation. out a criminal From this research, Dean (2000) developed four disparate 'thinking 'Method', 'Challenge', styles': 'Skill' and 'Risk'. Each style and their inter-relationships are briefly

described below.

'Method' Thinking Style

HE METHOD THINKING style is underpinned by a preference following established for rules and procedures (such as Standard Operating Procedures) in order to gather information and build evidence in an investigation (Dean, 2000, p. 87). The procedural steps outlined by Dean (2000:88) are referred to as the '5Cs' of investigation. and included collecting; checking; considering; connecting; and constructing. These five basic steps are approached in a cyclical way and are underpinned by three main conceptual processes, which are: Fact establishment (collecting, checking); reflective analysis (considering); and evidence building (connecting, constructing) (Dean, 2000:131).

While the method style ensures investigator the follows that appropriate organisational the procedures in order to build a prima facie case, Dean, Fahsing and Gottschalk (2007:21) assert that "...successful work by detectives dependent upon more than is following the book." In particular, more complex investigations may require the investigator to adopt alternative approaches, rather solely upon relying than the method style (Dean, Fahsing and Gottschalk, 2007:24).

'Challenge' Thinking Style

EAN (2000:135) DESCRIBES the Challenge Style as being underpinned by an intense motivation that is driven by the job, the victim, the criminal and/or the crime. The job is perceived by the challenge thinker as an opportunity to rid their community of 'villains' and ensure that it is safe and free of crime. There is also a perceived need to seek 'justice' for the victim as well as pit the investigator's wits against the wits of the criminal. Finally, the stimulating nature of the crime also provides motivation for the challenged thinker, and generally, the more interesting the crime, the more challenged and motivated the detective becomes (Dean, 2000:138).

Because the challenge thinking style involves deep emotional involvement by the detective, it can lead to extreme feelings of elation and 'immense satisfaction' if the crime is successfully solved (Dean, 2000:135). Alternatively, failure to solve the crime can also result in feelings of 'failure' and extreme frustration (Dean, 2000:135). At an extreme level, Dean (2000:146-147) states that the challenge style can lead to the "... fragmentation of other aspects of the detective's life in such a way that often the price to be paid for this addiction to the investigative challenge is broken marriages, absent fathers and alcoholism " These problems are often associated with the stress of police work and are widely discussed in the literature on 'police personalities' (Bonifacio, 1991:162; Kirschman, 2006:181; and Kenney and McNamara, 1999:96). In this regard, the challenge style is perceived as a 'two-edged sword' and is only particularly useful when mediated by other approaches (Dean, 2000:157).

'Skill' Thinking Style

'SKILL' THINKING Style HE revolves around the concept of 'relatability'. A detective who employs the skill style is successful at relating to and building relationships with others in order to either elucidate important case-related information, or to ensure the successful prosecution of a particular suspect. Dean (2000, p. 161) describes three levels of relationship building: The crime level (including witnesses, victims, suspects etc.); the criminal justice system level (including magistrates, judges, juries and the public/community etc.); level (including the need to involve oneself and build relationships within the community, as encouraged by a 'community policing' approach).

In order to relate to the various individuals at the three levels outlined by Dean (2000:161), the detective is required to master four 'core abilities', which are: Communication; personal flexibility (including the ability to adopt different attitudes/ communicative styles depending

upon whom one is communicating with); maintaining an investigative focus (as well as knowing when to be more open-minded); and maintaining emotional detachment (as well as balancing this with an acceptable level of emotional involvement to encourage relatability) (Dean. 2000:177-185). The skill style is grounded by the notion of information as the 'life-blood of an investigation' and the presumption that most of the important investigative information comes from communication with others.

'Risk' Thinking Style

HE 'RISK' THINKING Style the last of the styles is discussed by Dean (2000) and is underpinned by the notion of taking justified risks. Risks taken by detectives must be 'legally justifiable', logical (make sense as pertaining to the rest of the investigation), and laterally justified (i.e. be economically and conceptually practicable) (Dean, 2000:231). By taking proactive risks, the detective aims to create new leads. This proactivity revolves around three investigative processes, which are: Creativity (the creation of new/different ideas); discovery (of relevant and important information) and development (of information into knowledge and evidence) (Dean, 2000:194). In this regard, the risk style is particularly useful in more

complex or older investigations where investigative leads have dried up (Dean, Fahsing and Gottschalk, 2006:224).

COGNITIVE PATHWAYS OF INVESTIGATIVE KNOWLEDGE

HE HUMAN BRAIN is a patternmaking and pattern-matching organism looks which for 'efficiencies' in decision-making thought processes. The brain tends to use well-worn or 'practiced' neural pathways of decision making as the first option when presented with a problem to solve. This is efficiency at work. Rather than compute all the possible multiple combinations of a solution first, the brain will rely on experientially-learnt mental pathways. If these 'preferred' neural pathways do not come up with a solution then the brain has to be kicked up a gear to look at other less trained ways of thinking.

Therein lies the dilemma for investigative thinking. People get used to thinking in certain ways about certain phenomena, especially when they undergo 'training' to do a particular job a certain or 'right' way, or by a rule book. We become rigid in our thought patterns because the brain 'perceives' this as 'efficient' to do so. It must be said that most of the time these predetermined 'preferences' for particular cognitive pathways of thinking work well enough. The dilemma comes when preferred ways of investigative thinking do not work or are unable to find a way through the crime puzzle.

Investigators when faced with leads that dry up, brick walls, and stalled investigations, need to be able to mentally 'flick a switch' to a different way or level of investigative thinking as presented in this paper. Our current research endeavour is to quantitatively take the first steps in providing that 'mental switch' for investigators.

Dean (2000) represented his four investigative thinking styles, outlined in the previous section, in a hierarchical continuum, as shown in Figure 1. This continuum It must be said that most of the time these pre-determined 'preferences' for particular cognitive pathways of thinking work well enough. The dilemma comes when preferred ways of investigative thinking do not work or are unable to find a way through the crime puzzle.

is not intended to indicate that one thinking style is necessarily 'better' than another style. Instead, a particular thinking style may be more or less appropriate depending upon the complexity and age of the investigation.

Such a continuum can be thought

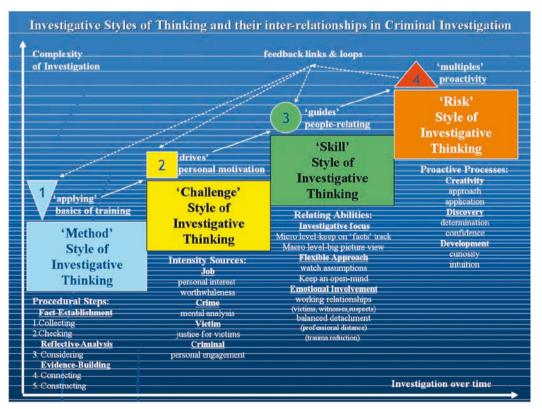


Figure 1: Dean's Hierarchy of Investigative Thinking Styles

of in neural network terms as a cognitive pathway where each style of thinking is a nodal point that branches out in various directions, depending on the mental route taken by an investigator. Hence, these different nodal points (thinking styles) combine and interact in multiple ways to form a distinct cognitive pathway of neural connections which represent the 'preferred' route or way of thinking for each individual investigator.

Therefore, the individual variation in investigative thinking lies in the patterning of the pathways (i.e. the type and number of cognitive styles and which of their elements are used by a particular investigator), not in the relationship of the parts to one another as they will always have the same hierarchical arrangement in terms of these four layers of thought patterns. In other words, the fourpatterned investigative thinking styles and their key elements, shown in Figure 1, are stable and constant. Individual variation is in the pathways taken, not the parts used.

As illustrated in Figure 1, a less complex and new investigation might be solved using only the method style. However, a more complex and/or older investigation will require the challenge, skill or risk styles, or a combination of all of these in order to solve it.

Police investigation units operate in a knowledge-intensive and timecritical environment (Chen et al, 2002). The activities and work carried out by police forces in crime investigations are mainly reactive. Glomseth and Gottschalk (2005) argue that police investigation units have the value configuration of a value shop, similar to law firms. The value shop is an organisation creates value by that solving unique problems. A value shop is characterised by five primary (Smith and Flanagan, activities 2000): Initial crime scene assessment, assessment of incoming information, appropriate selecting lines of enquiry, case development and postcharge case development. Future research should establish theoretical and empirical relationships between investigative behaviour and valueshop performance. This work also has the ability to be used in order to develop and monitor this relationship between investigative behaviours and value-shop performance or investigative outcomes.

At a more personal level, closer attention should be paid to improving the management of knowledge accumulated by police detectives in order to ensure that it is captured and transferred according to key knowledge management processes. Currently, it seems that policing agencies pay a great deal of attention to improving information technology-based knowledge management systems at the expense knowledge improving tacit of

management systems (Chen et al, 2002:272-274). When this occurs, the expert knowledge accumulated by experienced detectives is lost to the organisation when they retire from or leave the force (Colaprete, 2004: 89). In turn, this leaves a knowledge deficit that must be filled by incoming detectives despite their level of experience.

Dean's (2000) four investigative thinking styles have the capacity to be used as templates for the sharing of operational tacit knowledge

Currently, it seems that policing agencies pay a great deal of attention to improving information technology-based knowledge management systems at the expense of improving tacit knowledge management systems

via the establishment of focused training programmes. Furthermore, these investigative thinking styles have the capacity to be utilised as a type of 'selection criteria' when organising detectives in task forces. It is logical that since the four styles complement one another, a task force that includes detectives who employ the four different styles will operate at a better standard than one that includes only those who employ one or two of the styles. Similarly, individuals who master a range of skills will also be better equipped to deal with the considerable variety

of problems encountered during criminal investigations. This is similar to Benson and Standing's (2001: 235) suggestion that:

...education in meta-cognitive skills and thinking styles... give subjects a greater range of apparatus to choose from. Provided that their situational analysis is appropriate their solutions should be more effective.

Before Dean's (2000) work can be utilised to improve tacit knowledge management (and in particular, the transferral of tacit knowledge) in the policing field, there must initially be some method of identifying and/or assessing the cognitive preferences or thinking styles employed by detectives. Dean et al. (2006, 2007a, 2007b, 2007c, 2008) have gone some way in developing an instrument to carry out this task. However, their research presents a number of gaps that this research attempts to fill. The following sections provide an overview of the methodology employed in this research as well as preliminary results from a series of item validation studies.

METHODOLOGICAL SCAFFOLDING FOR MEASURING COGNITIVE PREFERENCES

OST OF THE literature on survey instrument development outlines specific steps to be undertaken. These can range from three to ten or more steps,

and include development of an initial item pool, construction of a first draft of the instrument, exploratory tests and analysis/finalisation of the instrument (Sarantakos, 1993:175-176; Stone, 1993:1265; Frazer and Lawley, 2000:19; Biemer and Lyberg, 2003:27; DeVellis, 2003, p. 60-96; and Sumer et al, 2005:529). DeVellis (2003:86) also points out the need to complete an item validation study prior to exploratory factor analysis, in order to determine the face and content validity of the items in the initial item pool.

The methodological scaffolding for our research work involves three major stages of development, which represent an amalgamation of the stages discussed in the survey research literature. These include the initial development of the survey items through a series of item validation studies, followed by an exploratory factor analysis survey and a final confirmatory factor analysis survey. Figure 2 outlines this research sequence, its nature and the various research foci.

As illustrated above, there are three parts to this research methodology that will result in a structural equation model of investigative cognitive preferences. This research work is still in its early stages. However, some preliminary research findings on the first part only – the item validation studies – will be discussed in terms

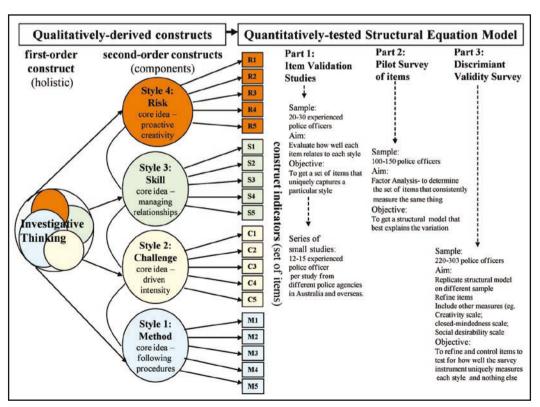


Figure 2: Methodological Scaffolding for Investigative Knowledge Research

of further refinements necessary at this stage in order to develop a valid and reliable instrument for capturing investigative knowledge.

PRELIMINARY RESEARCH FINDINGS

WO ITEM VALIDATION studies have been carried out so far with a sample population of 12 police detectives from the Singapore Police Force and 12 police detectives from the Victorian Police Service in Australia.

A 32-item survey instrument was distributed to this sample population. Within this preliminary item pool, 20 obtained measures of good validity from the Singaporean group while 18 obtained measures of good validity from the Victorian group. This represents 62.5% and 56.3% of the preliminary item pool for each of the respective groups, indicating that around just under half of the items require revision or rejection.

It is interesting to note that the items relating to the Risk and Skill styles were less likely to obtain scores indicating good validity than the items relating to the method and challenge styles. This may be due to the fact that the skill and risk styles are inherently more abstract concepts. In this regard, they are more difficult to reflect in the items and perhaps also more difficult for participants to comprehend than the method and/or challenge styles. The results of the item validation study also indicated a possible overlap between the skill and risk styles. In particular, the use of creativity and instinct (risk) when interviewing and relating to important persons (skill) is an overlapping dimension that requires further exploration.

IMPLICATIONS FOR FUTURE RESEARCH

S INDICATED BY THESE initial findings from the item validation studies, further refinement of around half of the preliminary item pool is required before a preliminary instrument constructed can be Refinement is particularly necessary with respect to the risk construct items in order to ensure these items do not overlap with the other constructs. However, once this initial stage is completed and the survey instrument yields good validity and reliability during exploratory and confirmatory testing phases, it is hoped that it will be utilised to capture the cognitive approaches police investigators take to criminal investigations. In turn, suggested knowledge management practices resulting from this research may include:

• Protocols for establishing investigative partnerships that are suitable to the learning requirements of novice detectives (i.e. matching novices with established detectives according to their learning requirements);

- Establishment of training programmes that focus upon the particular learning requirements of novice and established detectives; and
- Establishment of selection criteria for task forces that include a diversity of cognitive approaches.

CONCLUSION

HE SIGNIFICANCE OF our research work is the development of a robust and methodologically sound instrument capturing the investigative for knowledge that is locked up in the heads of experienced investigators so that such knowledge informs investigative practice. The basis of this research rests on the fact that all investigations have a degree complexity built into of them depending on the nature of the case. The complexity of the case must be matched by the complexity of the investigative team's thinking styles.

Finally, the command structure of a typical policing organisation should be used to encourage knowledge creation and transfer, rather than stifle it, as it is often accused of doing (Hashemian and Mahdizade, 2008:108; Ainsworth, 2002:38). According to Vickers and Kouzmin (2001:16), better utility of the hierarchical structure of policing organisations can facilitate the 'cascade' or filtering of knowledge through the ranks (Kiely and Peek, 2002:177). The sharing of critical investigative knowledge should be the aim of all policing organisations.

ENDNOTES

^{1.} The authors would like to thank the Queensland State Government Department of Tourism, Regional Development and Industry for their financial support of this research.

^{2.} A fuller account of 'Knowledge-Managed Policing' (KMP) can be found in Dean, Fahsing and Gottschalk (2010) Organised Crime: Policing Illegal Business Entrepreneurialism, Oxford University Press.

REFERENCES

- 1. Ainsworth, P. B. (2002). *Psychology and Policing*. Devon: Willan Publishing.
- 2. Benson, S. and C. Standing. (2001). Effective Knowledge Management: Knowledge, Thinking and the Personal-Corporate Knowledge Nexus Problem. *Information Systems Frontiers*. 3(2):227-238.
- Biemer, P. P. and L. Lyberg. (2003). *Introduction to survey quality*. Hoboken, New Jersey: John Wiley & Sons.
- 4. Bonifacio, P. (1991). *The psychological effects of police work: a psychodynamic approach*. New York: Plenum Press.
- Chen, H. and J. Schroeder and R.V. Hauck and L. Ridgeway and H. Atabakhsh and H. Gupta and C. Boarman and K. Rasmussen and A.W. Clements. (2002). COPLINK Connect: information and knowledge management for law enforcement. Decision Support Systems. 34: 271-285.
- 6. Colaprete, F. (2004). Knowledge Management in the Criminal Investigation Process. Law and Order. 52(10: 82-89.
- 7. Dean, G. (2000). The Experience of Investigation for Detectives, unpublished

BEHAVIOURAL SCIENCES TO UNDERSTAND AND BUILD EXCELLENT ORGANISATIONS.

PhD thesis, Brisbane, Australia: Queensland University of Technology.

- Dean, G. and I.A. Fahsing and P. Gottschalk. (2006). Profiling police investigative thinking: A study of police officers in Norway. *International Journal of the Sociology of Law.* 34: 221-228.
- 9. Dean, G. and Gottschalk, P. (2007). *Knowledge Management in Policing and Law Enforcement: Foundations, Structures, Applications.* London, UK: Oxford University Press.
- Dean, G. and I.A. Fahsing and P. Gottschalk. (2007a). In search of police investigative thinking styles: an exploratory study of detectives in Norway and Singapore. *International Journal of Learning and Change*. 2(1): 20-33.
- Dean, G. and I.A. Fahsing and P. Gottschalk. (2007b). Creativity as a determinant of thinking style in police investigations. *International Journal of Police Science and Management*. 9(2):112-121.
- Dean, G. and I.A. Fahsing and P. Gottschalk. (2007c). Qualitative and quantitative study of police investigative thinking styles. *International Journal of Knowledge and Learning*. 3(1):76-87.
- 14. Dean, G. and I.A. Fahsing and P. Gottschalk and H. Solli-Sæther. (2008). Investigative thinking and creativity: an empirical study of police detectives in Norway. *International Journal of Innovation and Learning*. 5(2):170-185.
- Dean, G. (2009). The Investigation of Criminal Entrepreneurialism. Paper presented at ANU/Berkeley Workshop on Criminal Investigation. 10-11 December, Canberra. Australia.
- 16. DeVellis, R.F. (2003). *Scale development: theory and applications*. California: SAGE Publications.
- Ericson, R.V. and K.D. Haggerty. (1997). *Policing the Risk Society*. Oxford: Oxford University Press.
- Filstad, Dean, Fahsing and Gottschalk. (2007). Newcomers use of colleagues as role models: Research propositions for investigative thinking styles of law enforcement detectives. *Knowledge and Process Management*. 14(2):71-80.

- Frazer, L. and M. Lawley. (2000). *Questionnaire design and administration*. Brisbane: John Wiley & Sons Australia Ltd.
- Glomseth, R. and P. Gottschalk. (2005). Research propositions for determinants of police investigation performance. *Electronic Government*. 2(3): 292-304.
- Hashemian, N. and M. Mahdizade. (2008). Knowledge Management in Police Work. *The International Journal of Knowledge, Culture and Change Management*. 7(11): 105-112.
- 22. Kenney, D. J. And R. P. McNamara. (1999). Police and policing: contemporary issues. 2nd ed. Westport, CT: Praeger Publishers.
- Kiely, J.A. and G.S. Peek. (2002). The culture of the British police: views of police officers. *The Service Industries Journal*. 22(1):167-183.
- 24. Kirschman, E. (2007). *I love a cop: what police families need to know.* New York: Guilford Press.
- Marton, F. (1986) Phenomenography a research approach to investigating different understandings of reality. Journal of Thought 21 (3): 28-49.
- 26. Sarantakos, S. (1993). Social Research. Melbourne: Macmillan Press.
- 27. Smith, N. and C. Flanagan. (2000). The Effective Detective: Identifying the skills of an effective SIO. London: Home Office, Policing and Reducing Crime Unit. Available: http://www.belui.ru/Doc/ Mejdunar/Angl/8/Effective%20Detective. pdf (accessed March 1, 2009).
- 28. Stone, D.H. (1993). Design a questionnaire. British Medical Journal. 307: 1264-1266.
- Sumer, H.C. and R. Bilgic and N. Sumer and T. Erol. (2005). Personality attributes as predictors of psychological wellbeing for NCOs. *The Journal of Psychology*. 139(6): 529-544.
- Vickers, M. H. and A. Kouzmin. (2001). New managerialism and Australian police organisations, A cautionary research note. *The International Journal of Public Sector Management*. 14(1):7-26.

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EDITOR'S NOTES



Geoff Dean is Associate Professor in the School of Justice at the Faculty of Law. His areas of expertise, teaching specialisation and research are in police knowledge management, the cognitive psychology of investigative thinking, criminal and terrorism profiling, global organised crime and international policing. He is the principal author of *Knowledge Management in Policing and Law Enforcement: Foundations, Structures, Applications* published by Oxford University Press in the UK in 2007. Dr. Dean was principal Guest Editor of a Special Issue on 'Local Research Links to Global Policing' in Police

Practice and Research: An International Journal, Vol 9, No. 4 in 2008. His latest book, as principal author is *Organised Crime: Policing Illegal Business Entrepreneurialism* published by Oxford University Press in September 2010.

Associate Professor Dean has been actively directing the Queensland University of Technology Bachelor of Justice Studies (International Policing) degree for officers from the Singapore Police Force. In September 2010, he presented a guest lecture to Home Team officers at HTA on *"Knowledge-Managed Policing of Global Criminal Entrepreneurialism"*.



Zoe Staines, the co-author of this paper, also presented a joint paper with Associate Professor Geoff Dean on "Measuring Cognitive Preferences of Police Investigators: Research Validation of Survey Instruments," at the ACCOP in 2010.

Creativity in Policing: Building the Necessary Skills to Solve Complex and Protracted Investigations

ZOE STAINES¹

INTRODUCTION

ESPITE AN INCREASED focus on proactive policing in recent years, criminal investigation is still perhaps the most important task of any law enforcement agency. As a result, the skills required to carry out a successful investigation or to be an 'effective detective' have been subjected to much attention and debate (Smith and Flanagan, 2000; Dean, 2000; Fahsing and Gottschalk, 2008:652). Stelfox (2008:303)states that "The service's capacity to carry out investigations comprises almost entirely the expertise of investigators." In this respect, Dean (2000) highlighted the need to profile criminal investigators in order to promote further understanding of the cognitive approaches they take to the process of criminal investigation. As a result of his research, Dean (2000) produced a theoretical framework of criminal investigation, which included four disparate cognitive or 'thinking styles'. These styles were

the 'Method', 'Challenge', 'Skill' and 'Risk'. While the Method and Challenge styles deal with adherence to Standard Operating Procedures (SOPs) and the internal 'drive' that keeps an investigator going, the Skill and Risk styles both tap on the concept of creativity in policing. It is these two latter styles that provide the focus for this paper.

This paper presents а brief discussion on Dean's (2000) Skill and Risk styles before giving an overview of the broader literature on creativity in policing. The potential benefits of a creative approach as well as some hurdles which need to be overcome when proposing the integration of creativity within the policing sector are then discussed. Finally, the paper concludes by proposing further research into Dean's (2000) skill and risk styles and also by stressing the need for significant changes to the structure and approach of the traditional policing organisation before creativity in policing is given the status it deserves.

COGNITIVE APPROACHES OF CRIMINAL INVESTIGATORS – LINKS BETWEEN DEAN'S 'SKILL' AND 'RISK' STYLES

(2000:14) PROPOSED that EAN investigators' bv profiling cognitive styles, it would enable us to determine whether particular approaches tended to produce better investigative outcomes than others. If so, this knowledge could be used as a template for future investigative training. The outcome of Dean's (2000) research was a theory of criminal which encapsulated investigation. four disparate investigative thinking styles - the Method, Challenge, Skill and Risk styles. These four styles were considered equally important and each style represented a piece of the overall 'jigsaw puzzle' of investigative knowledge required for the completion of a successful investigation. While all four styles are important, this paper is particularly concerned with the skill and risk styles and their overlapping dimension - creativity. This is because most policing organisations focus either predominantly or solely on training their personnel in the application of the method and to some extent, the challenge style.² Comparatively, little attention is paid to the development of the creative of investigative personnel. skills The following section provides an overview of the skill and risk styles before discussing creativity as the concept that links the two styles.

Dean's (2000) Skill Style is based upon the concept of information as the 'life blood' of an investigation. It concerns the approaches investigators collecting in and relaving take information and evidence from and to other people including witnesses, suspects, victims, other police, judges, juries, the general community and/ individuals involved other in or the investigative process. The key to the skill style is being able to 'relate' in order to extract relevant information. Some detectives in Dean's (2000:178, 181) research identified the importance of 'role-playing' in order to relate to various individuals. One detective stated: "Well, I suppose that Shakespeare said it: it all boils down to everybody plays many parts." (Dean, 2000:181) This relates to what other detectives referred to as investigative 'flexibility' (Dean, 2000:173). Dean (2000:203) linked this concept of flexibility to creativity, and suggested that it involved the ability to think laterally. Another detective in Dean's (2000:184) research stated: "the other thing I think about investigations is... that, I know this sounds to be contradictory, but you become so focused on being unfocused." The need for a good investigator to relate and be flexible is supported by other in this area (Siegel, researchers

2009:278; Tong, 2009, 7; Hobbes, 1991:600).

Dean's (2000)Risk Style is pro-activity with concerned and creativity in investigations. The key is to proactively create or uncover investigative leads by approaching an investigation in a creative way (i.e. a way in which it has not previously been approached). One detective in Dean's (2000:203) research stated: "Why do it the way everybody the day before did it? Try and think of something different." This is particularly important when investigative leads are sparse and conventional approaches do not work. Another detective in Dean's (2000:203) research said: "You are only limited by your own imagination as to what you can do and how you can do it." The key is to take justifiable risks and push the limits of an investigation, without 'crossing the line' (Dean, 2000:195). It is important that those detectives who employ the risk style do not move beyond the constraints of the law or of their internal organisational policies.

EMPIRICAL ANALYSIS AND OVERLAPPING DIMENSIONS

ORK HAS BEEN undertaken by Dean et al (2006; 2007a; 2007b, 2008) and the author of this paper to develop an instrument that empirically tests Dean's qualitatively-derived constructs. The purpose is to develop an instrument that may be used to 'profile' criminal investigators. This tool may then be used to develop knowledge management protocols the capturing for and sharing investigative knowledge of this organisations policing throughout ensuring investigative that (e.g. partnerships are suitable to the specific learning requirements of investigative personnel or ensuring that investigative teams include a diversity of cognitive approaches).

Work on the instrument thus far has indicated an overlap between Dean's skill and risk styles, which can best be explained in terms of creativity in policing (Dean et al, 2007b, 119). In particular, the use of creativity and instinct (risk) when interviewing and relating to important persons (skill) are overlapping dimensions that require further exploration before this instrument can achieve good measures of validity and reliability.

In order to inform the future development of this instrument, this paper further explores the concept of creativity in policing by presenting an overview of the literature. It then considers the importance of creativity investigation criminal before in discussing possible hurdles when fostering this approach within the policing realm. Finally, one possible re-conceptualisation of Dean's (2000) 'Skill' and 'Risk' styles is discussed with a view to informing the future development of the aforementioned investigative profiling tool.

CREATIVITY IN POLICING - A BRIEF OVERVIEW

by CREATIVITY' IS DEFINED Amabile et al (2005, 367) as "coming up with fresh ideas for changing products, services and processes so as to better achieve the organisation's goals." Since the work of 'thief-takers' in the 18th and 19th centuries (Tong, 2009:1-2), creativity and intuition have been perceived as essential qualities of any criminal investigator. Fictional characters such as Sherlock Holmes have worked to further entrench these notions of the 'born detective' who is naturally creative intuitive and (Brasol, 1926:15). Early in the twentieth century, Brasol (1926:15) stated:

As a rule, government authorities are still dwelling in the fantastic atmosphere of the super-detective of the Sherlock Holmes type who is supposed to know everything even before it happened, and whose principal investigative asset seems to be that rather mysterious faculty of 'intuition' which, like an X-ray, penetrates under the thief's skin.

Since Brasol's (1926) description of the so-called 'super-detective', much has been written about the importance of creativity and intuition in policing. The following section provides a brief overview of some more recent commentaries on the importance of creativity in policing.

Plummer (1999:98) and others (Riley, 1999:630; Mastrofski et al, 1995:545; Kennedy and Moore, 1995:279) stress the importance of creativity from a community policing perspective. In particular, Plummer (1999:98) perceives community approach that policing as an encourages creativity by overcoming some of the traditional constraints of the conventional policing organisation. Since the widespread integration of community policing within Singapore and internationally, greater emphasis has been placed on the need to further develop the 'creativity' aspect of this approach. Some recent commentators on the creative aspects of policing include Dean (2000), Smith and Flanagan (2000), Innes (2003), Fahsing and Gottschalk (2008), Tong (2009) and Carson (2009).

As previously mentioned, Dean's (2000) skill and risk styles both tap the need for creativity in policing. While Smith and Flanagan (2000) did not focus specifically on the cognitive styles of police investigators, they also argued that creativity was an important aspect of criminal investigation. Smith and Flanagan (2000) coined the term 'effective detective' after researching the skills demonstrated by effective senior investigating officers (SIOs). They asserted that effective detectives demonstrate a number of 'creative

skills', including lateral thinking and 'exploring new ideas' (Smith and Flanagan, 2000:63). Building on Dean (2000) and Smith and Flanagan's (2000) prior research, Fahsing and Gottschalk (2008:652) also recognised creativity as one characteristic of an 'effective detective' The authors stated that "detectives can be creative in their job by generating new ways to perform their work, by coming up with novel procedures and innovative ideas, and by reconfiguring known approaches into new alternatives" (Fahsing and Gottschalk, 2008:652). While innovation is an important aspect of creativity, other authors discuss the importance of also investigative 'hunches' or intuition.

Innes (2003:10) referred to the need for detectives to listen to their 'hunches', "...think creatively in obtaining evidence and be adroit at using and manipulating information." Similar to Innes (2003), Tong (2009) recognised the importance of 'hunches' and intuition in his conception of the 'art' and 'craft' of investigation. Tong (2009:7-9) stated that instincts and hunches work to guide an investigator and enable them to develop "creative lines of enquiry." In this regard, intuition and creativity share a reciprocal relationship, whereby the former feeds into the latter and vice versa.

Finally, Carson (2009:216) used Tong and Bowling's (2006) work on the art and craft of investigation as a basis for discussing methods of developing and disseminating detectives 'creative' skills. The author identified the methods by which detectives *use* creative approaches to investigation in the hope that this knowledge might be captured

While most discussions regarding the need for creativity in policing have been published in academic journals, practitioners also recognise the importance of creativity in policing.

2009:218). and shared (Carson, particular, Carson (2009:219)In highlighted the role of abductive reasoning and abstract thinking in creative approaches to investigation. Abductive reasoning uses lateral thinking and creativity to construct various hypotheses and determine which is 'best' or most plausible by applying logical simplicity and/or instinct (Fann, 1970:43-50).

While most discussions regarding the need for creativity in policing have been published in academic journals, practitioners also recognise the importance of creativity in policing. Chief David Couper, who was previously the head of the Madison, Wisconsin Police Department in the United States of America (USA), importance recognised the of creativity in his speech at the Police Executive Research Forum annual meeting, which was later published

the FBI Law Enforcement in Bulletin. Couper (1994) identified creativity as one of the 'seven seeds' of policing, which must be given priority in future development of policing trends and approaches. He recognised the problematic nature of the authoritarian police organisation in stifling creativity and stated: "It is unfortunate, because the problems facing law enforcement and society today require not more of the same, but new and creative ways and methods of policing" (Couper, 1994).

In a similar tone, Detective Mark Kollar (2005) from the Ohio Police in the USA highlighted the need for creative approaches to policing, including creative methods of peaking suspect's stress levels during а interrogation. Kollar (2005:104)also pointed out the importance between of knowledge sharing investigators and stated: "It is up to the investigator to use his creativity, or the creativity of others, to think in new innovative ways to develop investigative strategies to solve crimes while staying within the law."

The fact that creativity has so often been mentioned in the policing literature indicates that there is some value in this approach. The following section briefly considers the benefits of creativity in policing, before going on to discuss various problems encountered when attempting to translate this approach into realistic policing measures.

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POLICING THE 'GREY AREAS' – WHY IS CREATIVITY IN POLICING SO IMPORTANT?

N HIS BOOK STREETLIGHTS and Shadows: Searching for the Keys Adaptive Decision-making. to Klein (2009) focused upon how people make decisions in ambiguous situations, which he referred to as 'grey areas'. He argued that intuition is more important than procedures when aiming to equip people with the skills to successfully navigate these grey areas and consistently make good decisions. While basic guidelines are a necessary starting point, Klein (2009:18) states that people "have to move beyond rules to achieve mastery." In this regard, individuals must cultivate and develop their 'intuition' if they are to achieve success. This is particularly relevant when considering the complex and dynamic challenges faced by police in modern society.

It seems that the eternal struggle of police is to stay one step ahead of the criminals they pursue. In the modern environment, technological advances have made this task all the more difficult. Indeed, the *types* of crime that are being committed and the *ways* in which those crimes are being executed are constantly changing as criminals adapt to and exploit new forms of technology. There is a need for police to change and adapt in response to these ever-changing threats. In this climate,

The complexities of investigative processes and the use of scientifictechniques are far from providing a 'silver bullet' solution to offering foolproof investigations. Rather, the modern detective needs to command a broader range of knowledge and a more critical appreciation of the available evidence than in the past (Tong, Bryant and Horvath, 2009:218).

Research indicates that creative individuals are more likely to be able to adapt to changing situations and tasks (Scott et al, 2004:361). In this respect, creativity training may assist in helping police investigators to move beyond their established schemas to consider alternative possibilities or solutions to problem solving tasks. At a more specific level, training in abductive reasoning is considered important to achieving this outcome (Carson, 2009:219). There is a great deal of research in the field of psychology that proposes specific training measures for abductive reasoning, and this research could quite easily be transferred to the policing domain.

While the need to change and adapt to new types of crime is extremely important in the modern policing context, creativity may also enable criminal investigators to identify new approaches to more complex or older investigations. For instance, most police would be familiar with the idea of the 'self-solver' as opposed to the 'whodunit' or 'cold case' which represents more complex and protracted investigations (Innes, 2002:671). Innes (2002:672) points out that the majority of homicide investigations in the United Kingdom are 'self-solvers', with around 70 per cent being solved in the early stages of the investigation. However, those cases that fit into the latter category of the 'whodunit' or 'cold case' are generally much more difficult to investigate. It is these 'grey areas' which may require a creative response by criminal investigators in order to generate leads. This creative approach might involve looking at the case from a completely new angle, taking a new approach to interrogation, utilising new information sources or speaking with members of the community that were not originally approached. The use of creative problem solving methods such as Edward de Bono's 'six thinking hats' in team situations or Osborne's creative problem solving model, may also help in these contexts (de Bono, 2000; Puccio et al, 2010:154).

The use of creative or lateral thinking styles can also help the criminal investigator to overcome the concept of 'cognitive closure', whereby a 'blinkered' or close-minded approach is taken to the process of suspect identification and evidence gathering. Kruglanski (2004:22) stated that cognitive closure can lead the individual to "...process information less extensively and carefully and generate

fewer competing hypotheses to account for the data that they have available". Alternatively, a creative approach can counteract this problem by encouraging the individual to consider different accounts of the 'crime story'. Again, the use of abductive reasoning, which involves the identification of alternative scenarios, is pertinent here. There are numerous stories across the globe of criminal investigations that have gone awry because investigators have come to concrete conclusions too early on. These sorts of situations may be overcome via the use of creative thinking styles and/or the application of more creative approaches.

Creativity is an important aspect of criminal investigation. While creativity will not work every time, it will certainly mean that a broader of investigative range avenues are pursued leading to a greater probability of success. Even though creativity may aid police investigators in a number of ways, little effort has been made to proactively foster and encourage creative approaches within the policing domain. Tong (2009:9) states that:

Not only are few detectives perceived as being able to practice the 'art', but the manner in which they achieve this is shrouded in mystery... there is no script or method available to trainee detectives on how they may reach this elevated cultural status.

There may be a number of reasons why calls for further investment in creativity have fallen upon deaf ears. The following section highlights some possible reasons for this.

HURDLES IN INTEGRATING AND FOSTERING CREATIVE APPROACHES

ESPITE CONTINUED CALLS for further investment in creative approaches, few changes have been made in the policing sector. In fact, Bryant (2009:61) points out that investigators are often warned *against* using creativity and intuition in their police work.

Creativity and intuition are largely perceived as the antitheses of the positivist-scientific approach to which criminal investigations must adhere. Indeed, evidence against a suspect cannot be based on intuition alone. However, Waddington (2004:142) states that despite the importance of creativity, many detectives insist they "only deal in facts." It is true that detectives *must* deal in facts if they are to build a prima facie case against a suspect. However, the perceived incompatibility of the creative and scientific approaches is false. While a detective *must* deal in facts, the way those facts are interpreted or the 'crime story' that is constructed from those facts is inevitably the subject of creative enterprise. Furthermore, creative approaches may actually help investigators *find* the facts upon which they must rely. Indeed, creativity can aid the police investigator to further develop a case *without* encouraging them to ignore the relevant facts. Thus, it is unfortunate that detectives who *do* practice the 'art' of investigation are not recognised and encouraged to pass this critical knowledge/approach on to newcomers. Indeed, creativity is a crucial knowledge resource that must be tapped by policing organisations if their personnel are to remain one step ahead of the criminals they pursue.

In addition to the aforementioned problem, police suspicion of creativity may also be due to the fact that it is often perceived as an 'unconventional' characteristic (Runco, 2007:288), and thus contradicts the conformist approach that is encouraged in most police agencies (Nordin et al, 2009:11). The characteristic of conventionalism is a product of and reinforced by the hierarchical nature of the traditional police agency, which typically operates as a paramilitary type organisation (Vickers and Kouzmin, 2001, 12; Hashemian and Mahdizade, 2008:108; According Chan. 1996:110). to Hashemian and Mahdizade (2008:108) and Smith (2008:210), the command structure of a typical police organisation works to suppress creativity and entrepreneurial behaviour. In this regard, it is no surprise that the call to foster creativity in policing has gone unheeded. It would seem that creativity is the very characteristic policing organisations that most attempt to discourage. This may be because creativity and unconventional behaviours are often associated with unethical behaviours.

In the post-Fitzgerald atmosphere in Queensland, Australia and certainly in other jurisdictions where corruption has previously been a problem, there is an unspoken fear that unconventional behaviours equate to unethical behaviours. However, proponents of creativity in policing do not propose that police ignore ethical or legal constraints (Dean. 2000: Kollar 2005:104). As Kollar (2005:104) and Dean (2000) state, creativity should be expressed within the constraints of the law and organisational policies to which the investigator is bound. Furthermore, Baucus et al (2008) argued that creativity can be fostered without encouraging unethical behaviour Thus, the suspicion that creativity will necessarily lead to unethical behaviours is somewhat unfounded.

The points mentioned above highlight the problematic nature of integrating creativity into traditional policing organisations. In light of these obstacles, it is understandable that the cultivation of creativity has not yet been a focus of policing agencies. Indeed, these hurdles will need to be overcome if creativity in policing is to be perceived as an authentic policing approach in the future.

RE-CONCEPTUALISATING DEAN'S 'SKILL' AND 'RISK' STYLES

EAN'S (2000) FOUR investigative thinking styles have the capacity to be used as templates for the sharing of

operational tacit knowledge and the subsequent training of police detectives. As indicated in this paper, there is a need to go beyond training detectives to rely upon investigative procedures (method style) towards encouraging detectives to allow their experiences, intuition and creativity to guide them in an investigation (skill and risk styles). This will generate personnel who are innovative, creative and who can adapt to the dynamic nature of criminal investigation. Unless we have investigators who are able to adopt different approaches to investigating crime, leads will continue to dry up and they will continually be faced with the dilemma of the investigative dead end.

Before Dean's (2000) cognitive styles can be used as knowledge management templates, there is a need to further explore the similarities between the skill and risk styles and to determine whether these two approaches can be validly treated as two different styles. An alternative approach may be to augment and amalgamate the Skill and Risk styles into an overarching 'creative' style. In this regard, the creativity involved in relating to individuals during an investigation (skill) would be treated as one application of creativity and innovation in policing (risk style). The transformation of Dean's (2000) fourpronged theory of investigation into a theory that contains three cognitive styles - the method, challenge, and 'creativity' styles - may be a truer representation of the approaches that police investigators take to criminal investigation. Future empirical research will determine whether this three-pronged alternative yields confirmatory results.

CONCLUSION – CONSIDERING THE FUTURE FOR CREATIVITY IN POLICING

HILE CREATIVITY IN policing has been the subject of ongoing narrative over the previous century or so, little has been done in a practical sense to foster and encourage creative approaches within the policing domain. However, there is growing consensus that creativity is important to policing, and in turn, the narrative about creativity and intuition in policing has moved beyond the realm of fiction and 'mystery' towards a more practical discourse about how police work can benefit from creative approaches. Still, this ongoing discourse is of little value if it is not translated into the reality of policing. Given the traditional structure and approach of most policing organisations, it is unsurprising that they have been somewhat 'suspicious' of creativity as an authentic policing approach.

This paper proposes the use of Dean's Theory of Investigative Thinking to facilitate the improvement of knowledge management strategies in the policing realm. In particular, attention must be paid to the ways in which policing organisations can facilitate the sharing and cultivation of creativity in policing. If this can be achieved, policing organisations can expect their personnel to be more adaptive and innovative and thus, circumvent problems associated with 'cognitive closure' or the investigative dead end While there various are organisational hurdles to be overcome before creativity in policing is given the status it deserves, we can at least agree that there are various benefits to be gained from the integration of this approach.

ENDNOTES

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^{2.} The challenge style can be considered as an innate characteristic held by most investigators and deals with the qualities that 'drive' an officer to step up to the investigative 'challenge'. The challenge style is often the reason that police become involved in policing in the first place.

REFERENCES

- Amabile, T. And S. Barsade and J. Mueller and B. Staw. (2005). Affect and creativity at work. *Administrative Science Quarterly*. 50:367-03.
- Ask, K. and P. Granhag. (2005). Motivational sources of confirmation bias in criminal investigations: the need for cognitive closure. *Journal of Investigative Psychology and Offender Profiling*. 2(1): 43-63.
- 3. Baucus, M. and W. Norton and D. Baucus and S. Human. (2008). Fostering creativity and innovation without encouraging unethical behaviour. *Journal of Business Ethics.* 81:97-115.
- 4. Brasol, B. (1926). Foundations of criminology.

Journal of the American Institute of Criminal Law and Criminology. 17(1):13-39.

- Bryant, R. (2009). Forms of reasoning and the analysis of intelligence in criminal investigation In S. Tong, R. Bryant and M. Horvath, *Understanding criminal investigation*. Chichester: Wiley and Sons: 35-67.
- Carson, D. (2009). Detecting, developing and disseminating detectives' creative skills. *Policing* and Society. 19(3):216-225.
- Chan, J. (1996). Changing police culture. British Journal of Criminology. 36(1):109-133.
- 8. Couper, D. (1994). Seven seeds for policing. *FBI Law Enforcement Bulletin.* 63(3).
- 9. de Bono, E. (2000). *Six thinking hats*. London: Penguin Books.
- 10. Dean, G. (2000). *The experience of investigation for detectives*. Queensland University of Technology, unpublished PhD dissertation.
- Dean, G. and I. Fahsing and P. Gottschalk. (2006). Profiling police investigative thinking: a study of police officers in Norway. *International Journal of the Sociology of Law.* 34:221-228.
- Dean, G. and I. Fahsing and P. Gottschalk. (2007a). In search of police investigative thinking styles: an exploratory study of detectives in Norway and Singapore. *International Journal* of Learning and Change. 2(1):20-33.
- Dean, G. and I. Fahsing and P. Gottschalk. (2007b). Creativity as a determinant of thinking style in police investigations. *International Journal of Police Science and Management*. 9(2):112-121.
- Dean, G. and I. Fahsing and P. Gottschalk and H. Solli-Sæther. (2008). Investigative thinking and creativity: an empirical study of police detectives in Norway. *International Journal of Innovation and Learning*. 5(2): 170-185.
- 15. Fann, K.T. (1970). *Peirce's theory of abduction*. The Hague: Martinus Nijhoff.
- Fahsing, I. and P. Gottschalk. (2008). Characteristics of effective detectives: a content analysis for investigative thinking styles in policing. *International Journal of Innovation* and Learning. 5(6):651-663.
- Hashemian, N. and M. Mahdizade. (2008). Knowledge management in police work. *The International Journal of Knowledge, Culture and Change Management.* 7(11):105-111.
- Hobbes, D. (1991). A piece of business: The moral economy of detective work in the eastend of London. *The British Journal of Sociology*. 42(4): 597-608.

- Innes, M. (2002). The process structures of police homicide investigations. *British Journal* of Criminology. 42(4):669-688.
- Innes, M. (2003). Investigating murder: detective work and the police response to criminal homicide. Oxford: Oxford University Press.
- 21. Kennedy, D. and M. Moore. (1995). Underwriting the risky investment in community policing: what social science should be doing to evaluate community policing. *The Justice System Journal*. 17(3):271-289.
- 22. Klein, G. (2009). *Streetlights and shadows: searching for the keys to adaptive decision making*. London: The Massachusetts Institute of Technology Press.
- 23. Kollar, M. (2005). Creative criminal investigations. *Law and Order*: 53(9):100-104.
- Kruglanski, A. W. (2004). *The psychology of closed mindedness*. New York: Psychology Press, Taylor & Francis Books.
- Mastrofski, S. and R. Worden and J. Snipes. (1995). Law enforcement in a time of community policing. *Criminology*. 33(4):539-563.
- Nordin, M. and D. Pauleen and G. Gorman. (2009). Investigating KM antecedents: KM in the criminal justice system. *Journal of Knowledge Management*. 13(2):4-20.
- 27. Plummer, L. (1999). Community policing: thriving because it works. *Police Quarterly*. 2(1):96-102.
- Puccio, G. and J. Cabra and J. Fox and H. Cahen. (2010). Creativity on demand: historical approaches and future trends. *Artificial Intelligence for Engineering Design*, *Analysis and Manufacturing*. 24:153-159.
- 29. Riley, J. (1999). Community policing: utilising the knowledge of organisational personnel.

Policing: An International Journal of Police Strategies and Management. 22(4):618-632.

- 30. Runco, M. (2007). *Creativity theories and themes: research, development and practice*. San Diego, California: Elsevier Academic Press.
- Scott, G. and L. Leritz and M. Mumford. (2004). The effectiveness of creativity training: a quantitative review. *Creativity Research Journal*. 16(4):361-388.
- 32. Siegel, L. J. (2009). *Introduction to criminal justice*. Belmont, CA: Wadsworth.
- Smith, R. (2008). Entrepreneurship, police leadership and the investigation of crime in changing times. *Journal of Investigative Psychology and Offender Profiling*. 5: 209-225.
- Smith, N. and C. Flanagan. (2000). The effective detective: identifying the skills of an effective SIO. *Police Research Series*. B. Webb. Policing and Reducing Crime Unit. Home Office, 1-68.
- 35. Stelfox, P. (2008). Investigative practice and performance management: making the marriage work. *Policing*. 2(3):303-310.
- Tong, S. and B. Bowling. (2006). Art, craft and science of detective work. *The Police Journal*. 79:323-329.
- Tong, S. (2009). Introduction: a brief history of crime investigation In. S.Tong, R. Bryant and M. Horvath, *Understanding Criminal Investigation*. Chichester: Wiley and Sons: 1-10.
- Tong, S. and R. Bryant and M. Horvath. (2009). Understanding criminal investigation. Chichester: Wiley and Sons.
- Vickers, M. and A. Kouzmin. (2001). New managerialism and Australian police organisations, a cautionary research note. *The International Journal of Public Sector Management.* 14(1):7-26.
- Waddington, P. (2004). Investigating murder: detective work and the police response to criminal homicide. *British Journal of Criminology*. 44(1):142-144.





Zoe Staines is a Research Assistant and Tutor in the School of Justice at the Faculty of Law, Queensland University of Technology. She is currently undertaking PhD research on knowledge management in policing and in particular, on the development of a valid and reliable instrument that can profile the cognitive preferences of police investigators. Zoe also currently works as a Research Officer for the Queensland Floods Commission of Inquiry.

Resilience as a Buffer Against Burnout:

A Survey of Job Demands, Resilience and Burnout Among Singapore Prison Officers

KAREN HO KAR WOON & SARA DELIA MENON

A prison WITHIN environment presents a unique set of challenges to the Home Team officer. Prisons are necessarily restrictive environments with diverse inmate populations, including those who consistently violate rules, demonstrate hostility, and use violence against prison staff and fellow inmates. They place hefty demands on prison officers to maintain the security of their facilities and everyone in them. In Singapore in particular, the Prison Officer's job scope has evolved from one that focuses on ensuring security and discipline within the prison, to one where he is trained and expected to engage in meaningful interactions with inmates. He is not just a guard, but a "Captain of Lives," with a mission to "Rehab, Renew, Restart" those in his custody.

Comparing across cultures, the Singapore prison officer will find that he is not alone in his experience of stress within a prison environment. A review of the literature on prison officers reveals a trend of relatively high burnout rates as a result of work in a constant high-stress environment (Keinan & Malach-Pines, 2007; Lambert, Hogan & Altheimer, 2010; Whitehead & Lindquist, 1986). Hurst & Hurst (1997) found that more than half of the prison officers in Kentucky, United States, were reported to suffer from burnout, while closer to home, Moon and Maxwell (2004) found that South Korean prison officers cited major stressors such as ambivalence towards inmates, negative interaction with co-workers and work overload as significantly contributing to their work stress, job dissatisfaction, and health problems.

Factors which have been identified as contributors to stress and burnout in prison officers include individual characteristics (e.g. position, gender, age, tenure and educational level); the work environment and available job resources (Brough & Williams, 2007; Griffin, 2006; Lambert, 2004). Of these, work environment was found to play a bigger role than personal

characteristics in predicting prison staff burnout (Lambert et al., 2010), where the perceived safety of the work environment appeared to be most salient (e.g. Brown & Benningfield, 2007; Triplett et al., 1996). Of note, Van Voorhis et al. (1991) reported that officers in maximum-security settings were more negatively affected by workplace stress than officers employed in other security level settings. This can be attributed to a perception of increased responsibility inherent in and unique to, maximum-security settings that necessitates a continuous state of high alertness. For example, officers have to remain vigilant to ensure that inmates do not attack fellow officers or other inmates, and do not attempt suicide (Brown & Benningfield, 2007; Harding & Zimmerman, 1989).

Burnout can impact the security and rehabilitation efforts of a prison service, as symptoms of burnout include undesirable work and personal behaviours in the form of increased absenteeism and lowered work commitment (Cheek & Miller, 1983), psychological outcomes such as an increased dissociation with people at work (Lambert et al., 2010); and heightened cynicism and pessimism (Lombardo, 1981; Shamir & Drory, 1982). As Garland (2004:p452) put it, burnout can be an "undetected but potent handicap of prison rehabilitation". Given this backdrop, it makes sense to identify groups of officers within the prison system who

may be most in danger of experiencing burnout and design interventions that specifically target burnout symptoms.

In the management and recovery of stress and burnout, one often-mentioned construct is resilience. Although it is thought that each person has an innate level of resilience, studies have shown that resilience can be enhanced through training programmes (e.g. Waite & Richardson, 2004; Bradshaw et al., 2007). Resilience is often defined in terms of an individual's ability to handle stress, such as viewing stress as a challenge or opportunity (Kobasa, 1979), having a sense of self-efficacy, engaging the support of others, adopting an action-oriented approach (Rutter, 1985) and being able to tolerate negative effects (Lyons, 1991). Resilience has been found to contribute to positive consequences in spite of and through life's adversities (Campbell-Sills, Cohan & Stein, 2006; Connor & Davidson, 2003), where the resilient individual mitigates the negative effects of stress through an understanding and appropriate use of available resources (Werner & Smith, 1992).

The demonstrated relationship between job demands. work environment and burnout seems to suggest that prison officers working within a maximum-security setting may be the most susceptible to experience of burnout. the The current study seeks to examine this phenomenon within the Singaporean prison context and also to explore

the function of resilience as a buffer against the experience of burnout. We hypothesise that:

- Officers deployed to the maximum-security prison will report higher perceived job demands as compared to officers deployed to the medium-security prison
- 2. Officers who report higher perceived job demands will further report higher levels of burnout
- 3. Among officers who report higher perceived job demands, those who exhibit higher levels of resilience will report corresponding lower levels of burnout as compared to those who show lower levels of resilience.

METHOD

Participants

134 OFFICERS in one LL maximum-security prison were invited to participate in this study. Due to vacation and sick leave, work commitments and personal reasons, response rate was 83.6%, with 112 participants in the final sample. The matched comparison group consisted of 130 officers from three medium-security prisons. Only male officers (from all institutions) were included in this study as no female officers are deployed in the maximum-security prison (which houses only male prisoners). Demographic factors such as age, years of service and rank were controlled to make sure that these factors would not impact perceived job demands, resilience and burnout levels. The final sample group consisted of 242 participants.

Procedure

ESSIONS WERE ARRANGED for group administration the of questionnaires at the various institutions. Participants were briefed on the study and then asked to complete the questionnaires during each session. Participants whom the investigator was unable to meet were given a package consisting of an informational sheet on participants' rights, a brief on the study and a cover letter with instructions for the completion of questionnaires.

Measures

a. Burnout: The Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981) was used to measure participants' symptoms. burnout The MBI is a 22-item self-report questionnaire that taps on three proposed factors of the burnout syndrome (e.g. 'I feel used up at the end of the workday' and 'I have accomplished many

worthwhile things in this job'). Respondents rate the extent to which they experienced the item within the past month on a 7-point Likert scale (0 = very mild to 6 = very strong). The MBI is widely used as a measure of burnout in the correctional literature, and demonstrated good reliability in the current study (Cronbach's alpha was .86).

- b. Correctional officer job demands: Job demands specific to the prison setting were measured with the 10-& Williams Brough item (2007) Correctional Officer Job Demands scale. Respondents were asked to indicate how much each item contributed to their stress on a 5-point Likert scale (1 = not at all to 5 = a great deal).High scores represented high levels of job demands. Some examples of the items include 'possibility of violence from offenders', 'lack of support from management' and 'having to be constantly alert and on guard'. Cronbach's alpha for the current study was .85.
- c. Resilience: The Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) is a 25-

item self-rated questionnaire measuring resilience. It measures aspects of resilience such as personal competence, responses and approaches to stress and relationships with others. An example of an item is 'coping with stress strengthens me'. Items are rated on a scale from 0 ('not true at all') to 4 ('true nearly all the time'). The CD-RISC has been validated in several studies with various populations (Campbell et al., 2005; Connor & Davidson, 2003; Khoshouei, 2009). Internal consistency for the overall resilience score (Cronbach's $\alpha = .92$) was high.

RESULTS

Perceived Job Demands and Burnout

U TEST ANN-WHITNEY indicated officers that working within a maximumsecurity prison reported higher perceived job demands than those in a medium-security prison, U = 5354 z= -3.551 p < 0.001, two-tailed. There was no difference found in resilience scores between the two groups. However, the data suggests that officers in maximum-security prison experienced greater levels of burnout than officers in medium-security

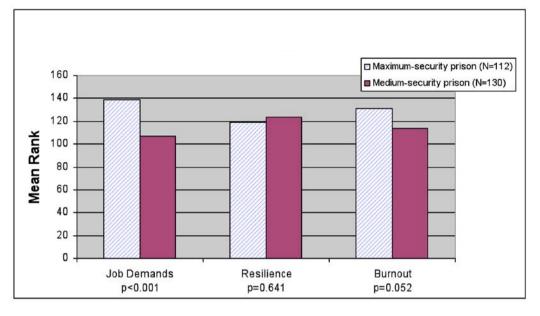


Figure 1: Comparing Officers within Maximum-Security Prison and Medium-Security Prisons

prison (difference approaching significance). (See Figure 1)

Relationship between Job Demands, Burnout and Resilience

HIERARCHICAL REGRESSION ANALYSIS was conducted on officers' burnout levels, perceived job demands and resilience scores. The results of the analysis are reported in Table 1. Perceived job demands significantly accounted for burnout, $R^2 = .31$, F(1,240) =107, p < .001 in Step 1. For Step 2, resilience was added in as a variable, $\Delta R^2 = .06$, F(1,239) = 22.9, p < .001. Low resilience levels were found to be predictive of burnout, over and above job demands.

Step		b	Std Error (b)	β	R ²	ΔR^2	F
1	(Constant)	17.97	3.66				
	Job Demands	1.30	0.13	0.56*	0.31*		107.56
2	(Constant)	44.90	6.59				
	Job Demands	1.24	0.12	0.53*			
	Resilience	-0.35	.072	-0.25*	0.37*	0.06*	70.37

* p < .001

Table 1: Summary of Hierarchical Regression Analysis for Variables Predicting Burnout (N = 242)

SIGNIFICANCE OF SURVEY

HE CURRENT STUDY adds to the literature on understanding the function of resilience as a buffer against burnout. Although the cross-sectional design of the study does not allow for the testing of causality between variables, the current results can serve as the groundwork for future longitudinal studies looking into the mediating effect of resilience on burnout.

Consistent with Van Voorhis et al's (1990) findings, results from the current study show that officers from the maximum-security prison perceived higher levels of job demand when compared to their medium-security counterparts. This is not surprising, given that the maximum-security prison in Singapore houses inmates with the highest risk category (e.g. inmates who have heightened violence risk, are on life imprisonment or have terminal illnesses). In addition, the prevalence of self-harm behaviour and major institutional offences within the maximum-security prison is 10.9 and 2.4 times higher, respectively, than in mediumsecurity prisons. Although the data seems to suggest that maximumsecurity officers also experience correspondingly higher levels of burnout, the difference in scores did not reach statistical significance. This

is consistent with the study by Lasky et al. (1986), which also found that officers working in various security levels did not differ in reported symptoms of distress.

Data from the study also supports the role of resilience as a buffer against the experience of burnout in prison officers. This is an important finding. In a climate where officers are expected to play multiple roles and take on an increasing number of tasks, it is unrealistic to expect or maneuver a change in the demands of one's job role. Furthermore, given that one's resilience can be strengthened through training. enhancing resilience is valid а pathway through which we can increase operational readiness and combat burnout of our Home Team officers.

IMPLICATIONS FOR STAFF INTERVENTION

General

T PRESENT, ALL prison officers undergo resiliency training during their Basic Officers Course (BOC) at the Home Team Academy. Trainees are introduced to concepts such as stress and resilience, and guided through a discussion on how these may impact their work as prison officers. Officers are also taught cognitive reframing and stress

management techniques aimed at strengthening their coping response. BOC training is also a platform through which prison officers are informed about their options for follow-up care (e.g. peer supporters or the Mental Resilience counselling service) should their repertoire of usual coping strategies be insufficient. A Civilian's Resilience Module was also developed, to cater to the needs of non-uniformed staff within the prison service. Basic level training is then further augmented through yearly resilience events and the dissemination of material on strength building and resilience.

Specific

LTHOUGH DATA FROM this study revealed inconclusive results about the difference in levels of burnout between maximum and medium security officer groups, previous findings have shown that with higher officers perceived job demands were more likely to experience greater levels of burnout. There have also been requests from ground units working with high-risk inmate populations for specialised support programmes for their staff. As a result, the Mental Resilience Unit plans to implement an 'Annual Mental Health Screening' exercise for officers working within highrisk areas. These serve to provide

regular data points to help monitor fatigue and burnout levels of officers, which can be used to trigger further intervention where needed.

CONCLUSION

EOPLE ARE A valued resource of the Home Team. It is thus important and to preserve enhance the mental well-being of our prison officers so that they can do their job of executing justice, maintaining security and rehabilitating offenders. Staff interventions aimed at mental wellness need to be based on sound. scientific evidence in order to increase the efficacy of such programmes and initiatives. Findings from this study increase our confidence in the value of developing resilience in staff training programmes. Furthermore, they also point to the importance of considering individual needs within different groups of officers. Future research would do well to expand on these current findings, as well as identify other variables that contribute to the prevention of burnout in prison officers.

REFERENCES

- Bradshaw, B. G., Richardson, G. E., Kumpfer, K., Carlson, J., Stanchfield, J., Overall, J., Brooks, A. M. & Kulkarni, K. (2007) Determining the efficacy of a resiliency training approach in adults with type 2 diabetes. *Diabetes Education*. Jul-Aug; 33(4):650-9.
- 2 Brough, P., & Williams, J. (2007). Managing

occupational stress in a high-risk industry: Measuring the job demands of correctional officers. *Criminal Justice and Behavior*, 34, 555-567.

- 3 Brown, K. L., & Benningfield, M. (2008). Death row correctional officers: Experiences, perspectives, and attitudes. *Criminal Justice Review*, 33, 524-540.
- 4 Campbell-Stills, L., Cohan, S. L., Stein, M. B. (2006). Relationship of resilience to personality, coping, and psychiatric symptoms in young adults. *Behaviour Research and Therapy*, 44, 585-599.
- 5 Cheek, E. E., & Miller, M. (1983). The experience of stress for correctional officers: A double bind theory of correctional stress. *Journal of Criminal Justice*, 11, 105-130.
- 6 Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, 18, 76-82.
- 7 Garland, B. (2004). The impact of administrative support on prison treatment staff burnout: An exploratory study. *The Prison Journal*, 84, 452-471.
- 8 Griffin, M. L. (2006). Gender and stress: A comparative assessment of sources of stress among correctional officers. *Journal of Contemporary Criminal Justice*, 22, 4-25.
- 9 Harding, T. W., & Zimmermann, F. (1989). Psychiatric symptoms, cognitive stress and vulnerability factors: A study in a remand prison. *British Journal of Psychiatry*, 155, 36-43.
- 10 Hurst, T., & Hurst, M. (1997). Gender differences in mediation of severe occupationalstress among correctional officers. *American Journal of Criminal Justice*,22, 121-137.
- 11 Keinan, G., & Malach-Pines, A. (2007). Stress and burnout among prison personnel: Sources, outcomes, and intervention strategies. *Criminal Justice and Behavior*, 34, 380-398.
- 12 Khoshouei, M. S. (2009). Psychometric evaluation of the Connor-Davidson Resilience Scale (CD-RISC) using Iranian students. *International Journal of Testing*, 9, 60-66.
- 13 Kobasa, S. C. (1979). Stressful life events,

personality, and health: An inquiry into hardiness. *Journal of Personality and Social Psychology*, 37, 1-11.

- 14 Lambert, E. G. (2004). The impact of job characteristics on correctional staff members. *The Prison Journal*, 84, 208-227.
- 15 Lambert, E. G., Hogan, N. L., & Altheimer, I. (2010). An exploratory examination of the consequences of burnout in terms of life satisfaction, turnover intent, and absenteeism among private correctional staff. *The Prison Journal*, 90, 94-114.
- 16 Lasky, G. L., Gordon, B. C., & Srebalus, D. J. (1986). Occupational stressors among federal correctional officers working in different security levels. *Criminal Justice and Behaviour*, 13, 317-327.
- 17 Lombardo, I. X. (1981). Occupational stress in correction officers: Sources, coping, strategies and implications. In E. Zimerman & D. Miller (Eds.), Corrections at the crossroads. Beverly Hills, CA: Sage.
- 18 Lyons, J. (1991). Strategies for assessing the potential for positive adjustment following trauma. *Journal of Traumatic Stress*, 4, 93-111.
- 19 Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2, 99-113.
- 20 Moon, B & Maxwell, S. R. (2004). The sources and consequences of corrections officers' stress: A South Korean example. *Journal of Criminal Justice*, 32, 359 – 370.
- 21 Rutter, M. (1985). Resilience in the face of adversity: Protective factors and resistance to psychiatric disorders. *Journal of Clinical Psychopharmacology*, 10, 598-611.
- 22 Shamir, B., & Drory, A. (1982). Occupational tedium among prison officers. *Criminal Justice and Behaviour*, 9, 79-99.
- 23 Triplett, R., Mullings, J., & Scarborough, K. E. (1996). Work-related stress and coping among correctional officers' orientation to the integrated environment. *Journal of Research in Crime and Delinquency*, 28, 291-308.
- 24 Van Voorhis, P., Cullen, F. T., Link, B. G., & Wolfe, N. T. (1991). The impact of race and

gender on correctional officers' orientation to the integrated environment. *Journal of Research in Crime and Delinquency*, 28, 472-500.

- 25 Waite, P.J., Richardson, G.E. (2004) Determining the efficacy of resiliency training in the worksite. *Journal of Allied Health*. 2004 Fall;33(3):178-83.
- 26 Werner, E. and Smith, R. (1992). Overcoming the Odds: High-Risk Children from Birth to Adulthood. New York: Cornell University Press.
- 27 Whitehead, J., & Lindquist, C. (1986). Correctional officer job burnout: A path model. *Journal of Research in Crime & Delinquency*, 23, 23-42.

EDITOR'S NOTES =



The Mental Resilience (MR) unit in prisons was set up in 2004 with the task of building staff capabilities in the areas of resilience and crisis preparedness. MR is comprised of three psychologists and one resilience officer. The team also works closely with the CARE Management Team from the Singapore Civil Defence Force (SCDF) to conceptualise and deliver resilience programmeming for SCDF staff.

Ms. Sara Delia Menon (Senior Manager, MR, in the right) and Ms. Ho Kar Woon, Karen (Psychologist, MR, in the left) work closely to apply psychological principles to enhance the resilience of prison officers. They are involved in the formulation and implementation of staff training, provision of in-house staff counseling services, and development and co-ordination of CARE (Caring Action in Response to an Emergency). MR also provides psychological assessment services for specialised staff units in SPS.

As part of their commitment to evidence-informed practices, they have completed a study looking into the role of resilience in the management of correctional officer burnout. Selected findings from the study will be presented at the Second World Congress on Positive Psychology in Philadelphia in July 2011.

Help and Hope for First Responders with PTSD

т was my pleasure to make a presentation at the first Asian Conference of Criminal and Operations Psychology (ACCOP) held in Singapore in May 2010. I was particularly excited to share a unique programme with my Asian and other international colleagues. For the past several years I have been volunteering at the West Coast Post Trauma Retreat (WCPR), a residential treatment programme for first responders experiencing severe work related stress. There are only two such programmes in the world: WCPR and the On-Site Academy in Massachusetts, upon which WCPR was originally modelled. Believing that there is worldwide commonality to first responder stress, it was my goal to introduce WCPR in the hopes that others might use the model to set up similar retreats in their countries.

Who Are We?

CPR IS LOCATED in rural Northern California, about one-and-a-half hours north page 154 HOME TEAM JOURNAL

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of San Francisco. We meet in a rented, multi-story Episcopal retreat centre overlooking a wide bay and rolling hills. Large oak trees dot the hills and birds sail the winds that blow in from the nearby ocean. Deer wander through the parking lot. The centre is old and drafty with dormitory-style accommodations for the residents. There is a communal dining room, where we conduct the morning checkins and educational sessions, a chapel with stained glass windows, a library, and, what is fondly called the "Rubber Room" - a large, round room where the debriefing work is done.

The idea for WCPR began in 1999 after one of our current peers completed a stay at the On-Site Academy and came home determined to start a similar programme on the West Coast. Since 2001 we have completed nearly 60 sessions and treated about 400 first responders. Retreats are held monthly, starting on Sunday afternoons and ending Friday mornings. (We also offer one session per year, known as the SOS programme, for the spouses and significant others of first responders.) Both the first responders retreat and SOS operate under the umbrella of the non-profit First Responders Support Network (FRSN).

WCPR is peer-driven and clinically guided. First responders designed the programme and approve the staff that consists of clinicians, chaplains and peers, all of whom volunteer their time. We work in teams where everyone has equal input into the management of the retreat and the residents. There are 6 or 7 residents per retreat and the ratio of staff to residents is about 3 to 1. The cost is USD \$2750, usually paid by insurance, an employer, or sometimes by the responders themselves. (The SOS programme is underwritten by a local community group and is free.)

Why Do We Do It?

OU MAY ASK why we choose to spend several weeks a year sitting in a creaky old building, listening to heartbreaking stories, eating too much, and sleeping too little for no pay. The answer for each volunteer is a variation on the general theme of deep pride and respect for the difficult job emergency responders do. For some of us, particularly peers who have been through the programme, it is a chance to give back to others and an opportunity to make a difference – the very thing that motivates emergency responders and therapists in the first place.

Who Are Our Clients?

HE MAJORITY OF our clients come from law enforcement departments: municipal (city) officers (53%): Sheriff's police deputies, who work countywide, Highway (10%);State Patrol Officers (7+%) and correctional officers (2+%). Sixteen percent of our residents are local or wildland fire fighters. Police and dispatchers (2+%), military fire personnel (4+%), emergency room nurses, and ambulance personnel (3+%) constitute rest the 80 percent of our clients are male and 20 percent are female. Most live in California (78%) and of that group, 56% live within driving distance to the retreat house. Sixteen percent live out of state, 3 percent live in military quarters and 1 percent is from out of country, primarily Canada, although we have had residents from England, Trinidad, Tobago, and Guam.

How Do We Select Our Clients?

LIENTS ARE REFERRED to WCPR by former clients, by their employer, or by a therapist. Some find us through our website (www.wcpr2001.org). Our preference is for clients who are currently in therapy, have been medically evaluated and are regularly taking their medications. This fits about 50% of our clients. We do not require a diagnosis of Post Traumatic Stress Disorder (PTSD), only that the applicant is experiencing severe symptoms. Some clients are working, some are on medical leave - a few are retired.

Each potential client is interviewed twice by telephone once by a clinician and once by the peer coordinator, Mike Poole. The clinician interview takes 1.5 hours and follows a standard format. Applicants may be excluded when they lack a specific work-related incident to debrief, are a current suicide risk, have a personality disorder or an active substance abuse problem, and cannot meet the requirement that all clients are to be sober or drug free for 30 days prior to the retreat.

HOW DO WE DO IT?

CPR USES A multidimensional strategy in our work with distressed first responders: Extended debriefing of an index event, psycho-education, focus on the family, peer support, bilateral stimulation – also known as Eye Movement Desensitisation and Reprocessing (EMDR) - spiritual support, and rituals.

Extended debriefing: This technique is at the heart of the WCPR programme. It is modelled after the critical incident stress management model (Everly & Mitchell, 2000) and Edna Foa's prolonged exposure treatment (Foa, Hembree & Rothbaum,

2007; Foa, Keane & Friedman, 2000). It takes place in the Rubber Room with two clinicians, a chaplain and three "inside" peers (see below). Before the debriefing, clients are asked to list their critical incidents, both work related and personal – first, worst and the most recent. This can be challenging as many of our clients have experienced multiple serious incidents. Peers then help each client to select the incident causing him or her most current difficulty.

The extended debriefing takes three days and covers three phases. Each client gets thirty to sixty minutes per phase, although many go on much longer. The fact phase is a detailed recollection of the event, scrolled out frame by frame. The thought phase covers a detailed recollection of the negative thoughts that occurred during the event, such as "I am going to die." The reaction phase covers a detailed recollection of the negative thoughts about oneself that occurred during or after the incident, such as "I'm a failure," "I'm weak," "This is my fault," and focuses on emotional and somatic reactions to the event

One of the hallmarks of our clients' problems is avoidance. Requiring them to confront their incidents, albeit in a safe, confidential, non-judgmental setting, is intense and highly emotional. For some it is the first time they have ever talked about what happened to them and how they felt about it.

Educational modules: Emergency Responders are basically problem-

solvers with specialised skills and education. Hands-on training is a familiar, culturally- acceptable format. It is one thing to believe that you freeze under pressure and are, therefore, weak. It is another to learn about the psychophysiology of stress and the involuntary nature of your central nervous system in a classroom setting as your fellow students are nodding their heads and the room is filled with the laughter of recognition.

EmergencyResponders'Exhaustion Syndrome (ERES): FirstResponders often regard their reactionsduring and after their incidents as signsthat they have failed at their jobs. Manyare depressed, isolated, and exhausted,both physically and emotionally - furtherevidence that they are "damaged goods".Teaching clients how their jobs and howthe emergency response culture hasinfluenced their reactions, normalisestheir reactions, reduces self-blame, andpaves the way for them to address theirissues and seek treatment without shame.

First Responder Personalities: Emergency Response Professionals are expected, and expect themselves, to react with speed, accuracy, courage, stoicism and competency under all circumstances, no matter how dire. This expectation is reinforced by the emergency response culture, the public, and often by childhood experiences. Any hesitancy or emotional reactions, in public or private, are viewed with disdain and lead to selfblame. Examining their behaviour within the context in which it occurred, reduces isolation, challenges the fallacy of uniqueness, and reframes self-contempt.

Psychophysiology of Stress: This module goes into detail about the body's response to real and perceived threats with special emphasis on the involuntary reactions of the central nervous system. Clients learn that reactions such as auditory shutdown, tunnel vision, memory, and time distortion, are not under their conscious control. While humans can learn to modify their reactions to chronic stress, no amount of courage, training, or preparation can re-wire the human nervous system.

Psychopharmocology: A visiting psychiatrist, culturally competent with regard to the emergency services culture, asks the entire group to describe how PTSD affects body, mind and soul. She then discusses how specific medications act upon these symptoms. She spends a lot of time answering clients' questions and addressing concerns about the legal and medical consequences of taking medication. Some are worried about reduced reaction time, others are confidentiality apprehensive about and department policies. Many have resisted taking medication despite severe problems with sleep or anxiety. Armed with information, they are now more willing to consider seeking a medication evaluation.

Alcohol and Substance Abuse: Many of our clients have been selfmedicating with alcohol and other

drugs (typically abuse of prescription pain medication). Some openly admit to this and others do not. Some have sought help from public groups, such as Alcoholics Anonymous (AA), but have not continued due to concerns about confidentiality or fear of running into someone they know or have just arrested. Alcohol education at WCPR is provided by emergency response professionals, who themselves are recovering alcoholics, familiar with the unique concerns and evasions of the emergency response culture. They discuss alcohol's effect on the body, the family, the job, assist clients in self-diagnosis, and distribute materials about available resources such as AA meetings for First Responders. Afterwards, all residents are required to attend an AA meeting held in the facility, whether or not they admit to having a drinking problem.

Forgiveness: This is the most recently added module and a topic we believe has not yet been specifically applied to emergency responders. Recent research on the relationship of forgiveness to recovery from trauma suggests that it has great utility for this population. Many residents have had their incidents made worse by administrative betrayal, as well as negative reactions from family, friends and the media. Learning to forgive, not condone, is an important step toward resolution of their symptoms. Teaching a science of forgiveness, with actionable steps, facilitates the process.

Focus on the Family: On Thursday, we present an educational model about

family life and ask the clients to consider how previous significant relationships, primarily their families of origin, affected the way they have reacted to their current incidents. We give them four incomplete sentences to finish:

"When I was growing up I knew...."

"When I was growing up I could never...."

"I learned early on that...."

"The primary unspoken rule in my family was...."

We ask them to choose one significant relationship, current or past, to debrief in the rubber room. We structure this debriefing around three unfinished statements:

"Because of that relationship I believe that...."

"Because of that relationship I continue to feel like I...."

"Because of that relationship I am afraid that I...."

Many of our clients come from families burdened with alcoholism, abuse, and trauma. They have been first responders for their families since childhood. Connecting their past histories to their current reactions is, for some, a stunning insight.

Peer Support: There are two categories and three levels of peers. "Outside" peers do a variety of things in addition to interacting with residents. They cook, clean, provide transportation, and sleep by the front door in case a client tries to leave prematurely or can't sleep and needs to talk. They monitor clients' whereabouts and advise the debriefing team of any problematic issues or behaviors they observe outside the rubber room "Inside" peers are the most experienced and have special training. They are part of the debriefing team and sit inside the rubber room. The three levels of peers are as follows.

- **Level 1:** First time peers. They are often returning clients.
- Level 2: Peers with basic peer support training or experienced returning clients. They are assigned to follow up with the clients and monitor clients' 90day plan (The 90-day plan of action begins immediately after the retreat. Plans usually include mending and/or improving family relationships, taking care of unfinished business at seeking medical work. and/ psychological or treatment. establishing new coping skills, improving health conditions, and bibliotherapy). Level 2 peers call clients within days of their returning home and continue to call at agreed upon intervals. This follow-up is voluntary, but the

majority of clients participate.

Level 3: Peers with 48 hours of training in peer support and critical incident stress management, five years full time emergency experience, and two years of peer support and debriefing experience. (WCPR offers the only hands-on California state-approved advanced peer support training.)

Peers are given ethical and behavioural guidelines to follow and must sign an agreement to follow these guidelines. They participate in all aspects of the WCPR programme, including staff meetings, educational and sessions. morning check-in. Because they have walked in the clients' shoes, and are often themselves former clients of WCPR, their very presence is an enactment of survival and positive coping skills. The stories they share challenge our clients' distorted beliefs that they are unique in their suffering. Peers have the operational know-how that most clinicians lack. Clinical thinking informs tactical assessment and tactical assessment enhances clinical thinking. Many of our clients oscillate painfully between remorse for actions taken and remorse for actions not taken The non-judgmental feedback of peers who have been in similarly difficult incidents means more than the feedback of clinicians who have never "walked the walk."

Eye Movement Desensitisation and Reprocessing (EMDR): There are

two EMDR sessions (also known as bilateral stimulation). It is beyond the scope of this paper to describe EMDR other than to say that it is a structured, accelerated information processing approach developed to treat PTSD. Therapists who use this technique have received specialised training.

Session #1 is an installation session designed to introduce the clients to EMDR and give them psychological tools they can use to feel safe and secure during the retreat. They are asked to do three things:

- 1. Create an image of a safe, calm place to which they may withdraw when they are feeling distressed.
- 2. Identify inner resources, character traits they can count on, such as persistence or guts.
- 3. Identify their "back up," some real or imagined person they can lean on during troubled times.

We find these three tools are generally applicable to post-retreat coping as well. When needed, additional stress reduction tools, such as deep breathing, are taught and clients are encouraged to use them to reduce their anxiety during the retreat.

Session #2 is designed to process the index event and any other associated events. The purpose of this session is to explore if and how much the client's negative beliefs have or have not changed, to install any positive beliefs now associated with the original incident or memory, and to check for any remaining unresolved issues. This session takes one and a half hours.

Spiritual Support: There is non-denominational police а or fire chaplain at every retreat. The Chaplain sits in on all phases of the retreat, including the debriefing and is available before the morning check-in (or as needed) for individual spiritual counselling. He or she gives a blessing or grace before the evening meal and gives each resident a small gift at graduation.

Ritual: Many of the repeated processes during the retreat week act as rituals, anchors marking the transition from one state to another Check-in (see paragraph below), for example, is a ritualistic way to start the day. One of our most powerful rituals begins and ends the week. On Monday, all the residents receive two (sometimes three) smooth river rocks. They are asked to think about the emotional burdens that have been weighing them down - people, incidents, grudges, regrets, and so on and to write one burden on each rock. No one besides themselves will ever see this rock. All the rocks are placed in a backpack which sits in the middle of the rubber room during the debriefing. On Friday, before graduation, at which time residents are given certificates and gifts, everyone walks down a wooded path. At the base of a large tree, there is

a big pile of rocks left by former clients. Clients are given a choice to leave their rocks on the pile, keep some and leave the rest, or take them all away. It is a sombre moment. One by one they approach the pile. Some hesitate before deciding, and others make their move rapidly and with confidence.

A TYPICAL RETREAT SCHEDULE

UR DAY STARTS at 0800 and ends at 2200 or later. Everyone, clinicians, clients, and peers begins with the morning check-in, a roundtable reporting about memories, insights, symptoms, triggers (people, stories etc. that cause one to involuntary recall or experience a negative event from the past), dreams, and sleep. This can take up to one –and- a- half hours.

The schedule, reproduced below in an abbreviated format, is posted for all to see. Some events occur simultaneously; for example, peers assist clients to make a list of their critical incidents while staff is meeting to discuss clients.

Sunday PM: Staff meet, residents arrive	Wednesday. AM: Check in, staff meet, debriefing content		
Sunday Evening: Greeting, Staff and resident introductions, hand out & review WCPR policy & procedures, complete Trauma Symptom Inventory (TSI), EMDR resource installation, client-to-client interviews	Wednesday. PM: Lunch, video, debriefing, ES: Alcoholism and Alcohol Abuse		
Monday. AM Check in, education session (ES) Emergency Responders Exhaustion Syndrome	Wednesday. Evening: Alcohol video, dinner, AA meeting		
Monday. PM: Lunch, Detailed Assessment of Post- Traumatic Stress (DAPS), staff meet, listing of critical incidents, extended intake interview, review of release forms, staff review of intakes, discussion of the debriefing process, video	Thursday. AM: Check in, staff meet, ES: Relationship and Family Issues, debrief relationship and family issues, ES: Forgiveness		
Monday Evening: dinner, debriefing: phase 1	Thursday. PM: Lunch, staff meet, finish family and relationship issues, EMDR one on one sessions, staff meet		

Tuesday. AM: check in, staff meet, ES: Rescue	Thursday. Evening: Letter to oneself, Post
Personalities, debriefing cont.	Traumatic Growth Inventory, 90 day discharge
	plan, exit survey, ES: Medication, Therapy, Sleep
	and Substance Abuse
Tuesday. PM: Lunch, video, debriefing continues.	Friday. AM: Check-in, staff debriefing, TSI readministered, residents debrief by themselves, back pack ritual, graduation
Tuesday. Evening: Dinner; ES: Psychophysiology of	
Stress; debriefing continues.	

WHY DOES WCPR WORK?

Setting: The live-in retreat setting takes residents away from their ordinary surroundings and familiar habits of thought and behaviour. It creates a space where clients can challenge themselves emotionally, endure prolonged exposure to their incidents, withstand intense confrontation of their avoidant, maladaptive coping habits, and question their distorted thinking, knowing that whatever time of day or night, someone who understands is nearby.

Trust: Confidentiality is the foundation of trust and a critical element of our ability to create alliances with clients. We stress confidentiality from Day One, verbally and in writing. We make no reports to employers, family, or therapists unless the client signs a release. When residents receive phone calls, we will take messages, but not acknowledge anyone's presence. Everyone wears a name tag that includes only their first name and role

as clinician, peer or chaplain. Anyone without a nametag will be stopped before they enter the building.

Authentic Caring: Clients come to us isolated and depressed. Many have forgotten how to have fun and have abandoned hobbies and recreational activities. They are fearful of each other and suffer from incident envy. They worry about taking up space better used by someone more deserving. We reel them in. Peers come in to make nourishing meals and decadent desserts. Clients, who have often felt overlooked and unappreciated for their efforts and their injuries, are astonished that so many people are there to serve them without pay. They are surprised to meet clinicians and chaplains who behave like real people, willing to be transparent. Tears, anger, and fear begin to alternate with laughter and silliness. The clients start bonding with each other.

By Friday, the people who are packing to leave are not the same people who showed up the previous Sunday. Some have changed dramatically, some are still damaged, but all have the balm of hope, a game plan for the future, a toolbox filled with new coping skills, and the promise of an enduring network of support.

HOW ARE WE DOING?

Research Findings Summarised

USE THREE standardised E and one original instrument to measure outcome: The Traumatic Stress Inventory (TSI), the Detailed Assessment of Post Traumatic Stress (DAPS), the Post Trauma Growth Inventory (PTGI), and an exit survey we designed ourselves. We also collect statistics regarding return to work (see below). Analyses are on-going and supervised by clinical director, Dr. Mark Kamena, with the assistance of several doctoral students. A summary of the results thus far indicate that most clients have made a significant step towards recovery.

TSI (n=147): All subscales and summary scales show a significant decrease in trauma symptoms from Sunday to Friday.

PTGI (n=253): Clients report a great degree of change in Factor 1 - relating to others (expression emotion, putting effort into relationships, and needing others) and in Factor 5 – appreciation of life. They reported moderate change in Factor 2 - new possibilities (openness to change, new paths, new opportunities) and Factor

3 - personal strength (accepting the way things worked out, a feeling of self reliance.) Factor 4 - change in spirituality, the reported difference was small.

Exit Survey (n=253): Consistent ratings over 90% positive. 100% of surveys analysed state that clients would recommend WCPR to their friends.

DAPS (n=225): The DAPS is administered at the start of the retreat and again at 30, 60 and 90 days post treatment. Scores are presented as a mean (the arithmetic group average, sensitive to extreme scores) and the median (the point at which half the scores are above and half below). Scores over 65 are considered clinically significant. The total PTSD scale is a sum of three scales: 1) Reexperiencing the trauma: (Flashbacks, dreams/nightmares, intrusive thoughts upsetting memories etc.), 2) Avoidance people, places, conversations (of etc. associated with the trauma); and 3) Hyper-arousal (startle response, sleeping difficulties, hyper-vigilance, poor concentration, irritability etc.). The pre-treatment total PTSD scale score for our clients was 90 (mean) and 92 (median). Post treatment scores were 66 (mean) and 64 (median).

Return To Work: WCPR has no vested interest in whether or not clients return to work. Our aim is to reduce symptoms, prevent suicide, and help clients back to a wholesome personal and family life. Fay et al (2006) contacted 99 WCPR clients one year after their retreat. Approximately 92%

of those who were working at the time they attended the retreat, were still working. Six percent who were not working were able to return to work, and the remainder had retired or still had pending disability claims.

REFERENCES

- 1 Briere, J. Trauma Symptom Inventory and Detailed Assessments of Post-Traumatic Stress. Available from Psychological Assessment Resources (www.4parinc.com).
- 2 Cress, S. (ed.) *First Responder Support Network Clinician Orientation Manual.* (unpublished manual, available from frsn.org).
- 3 Everly, G. and Mitchell, J. (2000). Critical Incident Stress Management: Advanced Group Crisis Interventions, 2nd ed. ICISF, Baltimore, MD.
- 4 Fay, J., Kamena, M., Benner, A., Buscho, A. and Nagle, D (2006). "Emergency Responder Exhaustion Syndrome (ERES): A Perspective on Stress, Coping, and Treatment in the Emergency

Responder Milieu. *Law Enforcement Executive Forum*. 6 (3), pp. 159-187.

- 5 Foa, E., Hembree, E. and Rothbaum, R. (2007). *Prolonged Exposure Therapy for PTSD*. Oxford University Press, N.Y.
- 6 Foa, E., Keane, T. and Friedman, M. (Ed.) (2000). *Effective Treatments for PTSD*. Guilford, N.Y.
- 7 Kirschman, E. (2007). *I Love a Cop: What Police Families Need to Know-Revised*, Guilford Press, N.Y.
- 8 Kirschman, E. (2004) *I Love a Fire Fighter: What the Family Needs to Know*, Guilford Press, N.Y.
- 9 Luskin, F. (2001) *Forgive for Good*, Harper Collins, N.Y.
- 10 Shapiro, F. (2001) *Eye Movement Desensitisation* and Reprocessing (EMDR) Basic Principles, Protocols, and Procedures Second Edition, Guilford Press, N.Y. (see also: Eye Movement Densitization and Reprocessing International Association: www. emdria.org.)
- 11 Tedeschi, R. & Calhourn, L. (1996) Post Traumatic Growth Inventory. *Journal of Traumatic Stress*, 9, 455-471.

EDITOR'S NOTES =



Dr. Ellen Kirschman is a clinical psychologist and the author of *I Love a Cop: What Police Families Need to Know-Revised* and *I Love a Fire Fighter: What the Family Needs to Know*. She is a member of the International Association of Police Chiefs and co-founder of the website, policefamilies. com. In 2010, she was given an award for Outstanding Contribution to Police and Public Safety by Division 18 of the American Psychological Association. Currently, she devotes her time to training public safety professionals and their families in the US and Asia, writing, and volunteering at the West Coast Post Trauma Retreat for first responders. For more information on her books and workshops, contact her at <u>www.ellenkirschman.com</u>

Dr. Kirschman was part of the International Panel of Advisors for ACCOP where she also presented a paper entitled, "West Coast Post Trauma Retreat: Help and Hope for First Responders with PTSD".