

HOME TEAM JOURNAL

by Practitioners, for Practitioners

Issue
no. **15**
Oct 2025



The Home Team From Concept to Culture

Fireside Chats and Simulation Labs:
Incubating the One Home Team Culture

Learn, Network, Stretch and Reflect:
Insights from 16 Home Team Leaders
on their Leadership Journeys

The Unseen Force:
Home Team Psychologists at the
Frontlines

Eyes in the Sky:
Using Drones for Recon, Rescue and
Crime Prevention

Shashi Jayakumar on
Preparing for Emerging National
Security Challenges

THE LEADERSHIP INTERVIEW

"Being a leader is about being open, being honest, and living the values that you preach, about working collectively. I say "collectively" because at the end of the day, it is about working as a team, about recognising and embracing the people you lead."

ANWAR ABDULLAH

Chief Executive
Home Team Academy (2021-2025)



HOME TEAM JOURNAL

The *Home Team Journal* is a publication by the Home Team Academy in collaboration with the Ministry of Home Affairs of Singapore and its departments, which are collectively known as the Home Team. It is a journal by practitioners and researchers for practitioners and specialists in safety and security.

PUBLISHER

Home Team Academy

ADVISORS

Wilson Lim

Chief Executive, Home Team Academy

Winston Wong Sung-En

Deputy Chief Executive, Home Team Academy

EDITOR

Susan Sim

MANAGING EDITOR

Tan Puay Seng

ASSISTANT MANAGING EDITOR

Salimah Alias

All correspondence should be addressed to

HOME TEAM JOURNAL EDITORIAL BOARD

Home Team Academy

501 Old Choa Chu Kang Road Singapore 698928

Those wishing to submit manuscripts should send abstracts of proposed articles to the Editor at MHA_HT_Journal@mha.gov.sg.

THE HOME TEAM ACADEMY WOULD LIKE TO THANK THE FOLLOWING FOR THEIR SUPPORT:

Jansen Ang
Singapore Police Force

Leon Chan
Singapore Police Force

Chen Yeang Tat
Home Team Science & Technology Agency

Chua Yeng Eng
Training & Competency Development Division,
Ministry of Home Affairs

Ee Kiam Keong
Gambling Regulatory Authority

Rockey Francisco Junior
Singapore Prison Service

Evelyn Ho
Home Team Science & Technology Agency

Majeed Khader
Chief Psychologist, Ministry of Home Affairs

Lian Ghim Hua
Immigration & Checkpoints Authority

Ling Young Ern
Singapore Civil Defence Force

Amanda Tan
Yellow Ribbon Singapore

Ng Huey Ling
Ministry of Home Affairs

Angeline Ong
Internal Security Department

Ong Choon Beng
Immigration & Checkpoints Authority

Daniel Seet
Singapore Civil Defence Force

CONTENTS

Issue no.15 - Oct 2025

FOREWORD

- 03 **Chief Executive,
Home Team Academy**

LEAD

- 05 **THE LEADERSHIP INTERVIEW with Anwar Abdullah
Chief Executive, Home Team Academy
(August 2021 – January 2025)**

Susan Sim
Editor, Home Team Journal

- 16 **LEADERSHIP DEVELOPMENT IN THE HOME TEAM**

Jasmin Kaur, Denyse De Silva, Justin Phua & Long YingYing
Home Team Academy, Public Service Division,
Immigration & Checkpoints Authority, Singapore Prison Service

CATALYSE

- 35 **STRENGTHENING THE HOME TEAM CONCEPT THROUGH TRAINING:
THE HOME TEAM ACADEMY'S ROLE**

Goh Tze En & Kittybond Koo
Home Team Academy, Singapore

SYNERGISE

- 45 **THE UNSEEN FORCE BEHIND SINGAPORE'S HOMEFRONT SAFETY & SECURITY:
THIRTY-FIVE YEARS OF HOME TEAM PSYCHOLOGY**

Majeed Khader, PhD
Chief Psychologist, Ministry of Home Affairs, Singapore

- 55 **MAKING THE HOME TEAM OPERATIONS CENTRE A REALITY:
TRANSFORMATION OF THE SINGAPORE POLICE FORCE'S OPERATIONS CENTRES TO
SUPPORT THE HOME TEAM**

Nini Chow & Jeffrey Sim
Singapore Police Force

- 61 **THE EVOLUTION OF COMMAND AND CONTROL AT SINGAPORE'S CHECKPOINTS**

Chong Cheng Jin Euroy, Fadhillah Mohamed Faizan, Ganesh Nithyaseelan, Lim Teng Hoon Candice, Neo Zan Sheng Novyn
Immigration & Checkpoints Authority, Singapore

CONTENTS

Issue no.15 - Oct 2025

TRANSFORM

- 70 EYES IN THE SKY:
THE HOME TEAM UNMANNED AERIAL VEHICLES COMMAND**
Seah Yew Keng and Joel Leng
Singapore Police Force
- 77 ADVANCING HOME TEAM PSYCHOLOGY:
HARNESSING TECHNOLOGY FOR DEEPER PSYCHOLOGICAL INSIGHTS**
Sandra Lee, Leung Chi Ching, Ken Chen, Lee Yu Jing, Cherie Goh*
Home Team Psychology Division, *Singapore Civil Defence Force

PREPARE

- 89 THE THREE ERAS OF SINGAPORE'S NATIONAL SECURITY**
Shashi Jayakumar
Executive Director, SJK Geostrategic Advisory

PONDER

- 109 CAN THE HOME TEAM MODEL BE REPLICATED ELSEWHERE?
LET'S START WITH THE HOME TEAM ACADEMY**
Russell D. Howard
Member, Home Team Academy Advisory Board (2007-12)

RECENT PUBLICATIONS

- 112 BY HOME TEAM STAFF**



Copyright © 2025. All rights reserved.

No part of this publication (content and images) may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, scanning, recording or otherwise, without the prior written permission of the Home Team Academy.

The opinions expressed in this issue are the authors' and do not necessarily reflect those of the Home Team Academy or the authors' departments.

FOREWORD



When I joined the Singapore Police Force almost 30 years ago, the idea of the Home Team was still largely conceptual. Then Minister for Home Affairs Wong Kan Seng felt the eight departments under his charge that were responsible for public safety and security in Singapore should work together more cohesively to better deal with any crisis that cut across the agency jurisdictions.

The departments were not being asked to give up their rich heritage or professional identities – we would still be police, immigration, corrections, civil defence, anti-narcotics and intelligence officers, we were assured in internal briefings held through 1995 and 1996. Still, in those early years, it was hard to see how a concept could be translated into real change, how telling us to think and act as a team would make us greater than the sum of our parts. But if rebranding the police football club as Home United meant it could draw the best soccer players from across all eight agencies to play as one team in the national soccer league, then surely we could also operate collectively as “The Home Team, Here to Make it Right”, as a jingle that had already begun playing on the airwaves in 1995 promised.

Fast forward to 2025, and we are today not just One Home Team, where joint operations and shared resources are the norm, but we also have two agencies created expressly to harness our joint strengths and determination to use training and technology as force multipliers in our mission to better serve the Singapore public.

The Home Team Science & Technology Agency (HTX) turns five this year, and the Home Team Academy (HTA) will mark its 20th anniversary next year. Despite their relative youth, there is no doubt both agencies have contributed immensely towards the building of the Home Team DNA and are now poised to help all our departments bound into Transformation 2030 as “a future-oriented, trusted Home Team”.

Having assumed the post of Chief Executive of HTA in January this year, I am proud to see how collaboratively the Academy works to not only reinforce the Home Team concept through integrated milestone training programmes, but also to foster a strong Home Team Culture.

Indeed, it is only fitting that on the 30th anniversary of the introduction of the Home Team concept, the *Home Team Journal* is dedicating this issue to the theme of “One Home Team – From Concept to Culture”. And that The Leadership Interview for this issue is with none other than the former Chief Executive of HTA, Anwar Abdullah.

Anwar, who retired from public service after 32 years with the Home Team, speaks for many of us when he says: “I’ve seen how, before the Home Team concept, and after the Home Team concept, there’s a vast disparity in terms of how we work, how we tackle and address situations. Pre-Home Team days, we were very department-centric. I do my job. You do your job. There were minimal interactions.” But now, he notes, officers from different agencies “integrate seamlessly during a major operation.”

The difference between then and now is that every Home Team officer is today equipped beyond their own roles and primary responsibilities to appreciate the roles of other agencies and step in to assist each other in the larger mission of keeping the public safe.

How we got to that state and continue to make sure everyone who joins the Home Team understands its ethos, values and mission – in short, the Home Team Culture – is explained in an article by my colleagues from HTA’s Centre for Home Team Integration (Training & Heritage).

Another team of writers led by the Centre for Leadership at HTA uses the life stories of several Home Team leaders across various vocations to explore the essence of leadership and the lessons and networking opportunities they drew from the structured learning programmes curated by HTA, the postings assigned by Ministry Headquarters, and the guidance of their career coaches and mentors. Fittingly, the writers themselves hail from different Home Team agencies and services.

Statements about organisational culture often contain buzzwords like catalyse, synergise and transform. These are action words for the Home Team. As several of the articles in this issue show, it has become second nature for our departments and officers to share good ideas and best practices, creating synergy, and with careful planning and a bit of technology, transform them into collaborative ventures benefitting the entire Home Team community. Our psychological services, our operations centres, our unmanned aerial vehicle division – these began as standalone units within the SPF that have evolved into Home Team commands. Our border checkpoints are today also a testament to the viability of integrated command and control, where several agencies report to one unified command, ready to operate collectively while carrying out specific agency roles.

And how does the Home Team prepare for the future? As Coordinating Minister for National Security and Minister for Home Affairs K Shanmugam reminded us recently, we cannot act in a vacuum but must understand how global developments affect our security.¹

The *Journal* has thus invited Shashi Jayakumar, one of Singapore's leading geopolitical thinkers and a good friend of the Home Team, to explain what the changing national security paradigm means for us. Emerging challenges must be dealt with through an evolving security architecture that must work synergistically, and which continually refines its approach, including sensitising the public to the challenges that lie ahead, he counsels. This is a trajectory we are already on and constantly refining, of which the latest iterations involve improved coordination at a Whole-of-Government level in the management of national crises. And as readers of

the *Journal* know, this publication also helps to keep the public informed of trends affecting their safety and security and the counter-measures the Home Team has been putting in place.

We round up this special issue with a provocative idea by a member of HTA's inaugural advisory board, Brigadier-General (Ret) Russell Howard, a distinguished military leader and academic, who is currently a Senior Fellow of the US Joint Special Operations University and President of Howard Consulting Services. Russell has always believed in the power of an inter-agency approach to homeland security and recently visited HTA to see the changes we have been making. He left even more convinced of "the Home Team Academy's potential for global impact", he writes. Replicating the HTA model in developing countries could make a significant difference in the capacity of some to deal with domestic security threats, he argues.

Finally, I would like to place on record our appreciation to *Journal* Editor Susan Sim who steps down after this issue. Susan, who has been editing the *Journal* since the inaugural issue in 2010, tells me she has learned a lot from reading the manuscripts of Home Team staff about the evolving crime, safety and security landscape, and how Home Team officers overcome challenges with ingenuity and dedication. "When HTA first started the *Home Team Journal*, the idea was to make it a repository for sharing expert knowledge and multi-agency perspectives with the added bonus of promoting a common identity," she says, adding: "I believe it has met its goals. And now, it is time for loftier ambitions."

As One Home Team, we stand united – innovating, adapting, and rising to every challenge. Our strength lies in the dedication of each member and our shared mission, driving us to be the guardian of Singapore's safety and security. Let us all keep pushing boundaries and reaching to greater heights, together as One Home Team.

WILSON LIM
Chief Executive
Home Team Academy

¹Shanmugam, K, Home Team Promotion Ceremony 2025 – Speech by Minister for Home Affairs and Minister for Law, 17 April 2025, <https://www.mha.gov.sg/mediaroom/speeches/home-team-promotion-ceremony-2025/>

THE LEADERSHIP INTERVIEW

with Anwar Abdullah

Chief Executive, Home Team Academy (August 2021 – January 2025)



"It is all about teamwork. I'm huge into people, because I can have a vision, I can dream about achieving something, but at the end of the day, it is about how I can inspire, how I can share and articulate my vision, and how I mobilise the people to work collectively to achieve that vision or mission."

”

After he agreed to sit for The Leadership Interview, Anwar Abdullah sent *Home Team Journal* Editor **Susan Sim** a document titled "My Story". "It'll help you understand my Home Team journey," he said. It is a story, written while he was with the Singapore Civil Defence Force (SCDF), of a former "kampong boy" who considers himself fortunate to have been able to save lives and property working on some of the most significant firefighting operations in Singapore, and search and rescue missions at home and in disaster zones abroad.

Anwar's story is about respect for others. Reflecting on his career highlights during a leadership programme more than a decade ago, he had written:

My experience in the SCDF Operations department illustrates that a fantastic outcome can be attained when you care for, respect and trust people. With proper guidance, encouragement, and empowerment for officers to grow personally and professionally, many will be driven and motivated to excel in their work. With increasing confidence and good resilience, they will always be ready for new challenges. Thus, it is essential to recognise that [to paraphrase author and

activist Christine Caine], to build a dedicated team, you must see someone else's strength as a complement to your weakness and not a threat to your authority ("My Story", 29 July 2011).

This core belief has only grown as he became Chief Executive of the Home Team Academy after 28 years with the SCDF. "You don't demand respect; you earn respect," he stresses during The Leadership Interview. And to earn that respect, a leader must be open and honest about their weaknesses and live the values of the Home Team "because at the end of the day, it is about working as a team, about recognising and embracing the people you lead."

These are teachable traits, he notes. The Home Team Academy's role as incubator of the Home Team DNA and training laboratory for leadership development means that it also offers a safe learning ground for aspiring leaders to "understand themselves, who they are and what makes them able to work at a team level." Are they good observers and listeners, courageous yet humble, decisive yet comfortable with ambiguity?

At the same time, he is emphatic that it is not HTA's job to sieve out weak leaders. "The onus is on the individual to determine how they turn out as a leader. Good, bad, weak – that is the individual's responsibility." And beyond embracing every job and training programme as "a learning opportunity", there must be "passion, belief and energy", he says. Anwar stepped down as Chief Executive of

the Home Team Academy a few days after the interview. He will, however, continue to pursue the issues he is "still very passionate about ... be it in leadership development, emerging technologies, especially in the area of Artificial Intelligence, or humanitarian assistance." Following is an edited transcript¹ of the *Journal's* interview with former CE HTA, Anwar Abdullah:

YOU DON'T DEMAND RESPECT, YOU EARN RESPECT

You're about to retire after 32 years with the Singapore Civil Defence Force and the Home Team Academy. What are your career highlights that you feel best reflect the spirit of the Home Team, of what it means to be a guardian of safety and security in Singapore?

I worked with SCDF for over 28 years and spent three and a half years at Home Team Academy. Both experiences were quite different. Let me elaborate a little bit more on my time in the SCDF. That's where I started my career, journey to be a lifesaver, and training as a firefighter.

As you know, SCDF's key focus is protecting and saving the lives and property of Singaporeans and visitors. This mission inspired me to join and interested me in being part of the lifesaving force.

When I joined SCDF in May 1993, the Home Team concept had not been developed. We were focused on our key missions, whether in the Singapore Police Force, SCDF, Central Narcotics Bureau, Immigration, or the other departments under the Ministry of Home Affairs. So, for me, joining SCDF was about a belief and passion in doing something that I thought would be very meaningful and useful.

So that's where I started, and there was no turning back. I'm glad I managed to pull through, to experience a lot of tangibles – involved directly in saving lives and property – and intangible lessons that allowed me to learn as an individual and to grow as a leader. I cherish these experiences, especially managing a diverse multigenerational workforce, which was a massive exposure for me,

and handling crises and major incidents. At the same time, later in my career, I had the opportunity to develop and implement policies to enhance and improve emergency management in Singapore.

I was "fortunate" because I was involved in several major, significant incidents over the last 30 years—the Nicoll Highway collapse, the Little India riot, the massive Bukom Island refinery fires, and the various chemical warehouse fire incidents. I was involved significantly enough to contribute and, simultaneously, to learn and help further sharpen the capability and readiness of the lifesaving force.

I was also fortunate enough to be exposed to humanitarian work. I was a member of the ASEAN Committee on Disaster Management, and we developed the ASEAN Agreement on Disaster Response Management and Emergency Response right after the Boxing Day Tsunami in 2004.

Subsequently, when I held the post of Director of Operations in SCDF, I was entrusted with humanitarian work at the United Nations level. I was a member of the International Search and Rescue Advisory Group, INSARAG, first as a member, then entrusted to co-lead and co-chair the review of the INSARAG guidelines in 2018. These guidelines were endorsed in 2019 and are now used worldwide as international search and rescue guidelines.

The second half of my very fulfilling career was as the Chief Executive of the Home Team Academy. I guess I was fortunate to be entrusted with this responsibility, which differs from what I did for the previous 28 years, which involved operations and policy.

¹The interview was transcribed by Tan Puay Seng and Melissa Teh. This transcript has been edited for length and clarity.

Key Milestones

1993: Joined the Singapore Civil Defence Force (SCDF) after graduating with an Economics degree from the University of Newcastle, Australia.

1994 – 2001: Served first as Rota Commander, then as Officer Commanding at Alexandra Fire Station

2001 - 2003: Chief Instructor at the Civil Defence Academy

2003: Obtained a Masters of Science in Risk, Crisis and Disaster Management from University of Leicester, United Kingdom, on a government-sponsored distance learning programme

2003 - 2008: Commander, 2nd Civil Defence Division, HQ SCDF

2004: Appointed Member of ASEAN Committee on Disaster Management

2008 - 2016: Director, Operations Department, HQ SCDF

2016 - 2019: Senior Director, Emergency Services, HQ SCDF

2018: Appointed Co-Chair of United Nations International Search and Rescue Advisory Group (INSARAG) Guideline Review Committee

2019- 2021: Deputy Commissioner, Operations and Resilience, HQ SCDF

August 2021: Appointed Chief Executive, Home Team Academy

January 2025: Retired from government service

The Academy is pretty much a corporate university. This is where we train and groom Home Team officers—civilians, trainers, and leaders—to actualise their full potential and grow and operate collectively as One Home Team.

What is your central message that management guru Howard Gardner says a leader must have to inspire people so that he can be effective?

I can confirm that. I think that as a leader, it is critical that, number one, you be able to inspire and be looked on as someone who can lead and bring the team or the organisation to the next level. I think that's imperative. To be a leader is not so straightforward. You must acquire the ability to be considered a leader without demanding that you be the leader. I think it's essential that you are seen through your behaviour, knowledge, and character as somebody they can look up to to achieve the mission and goals they aspire to achieve. I think that's pretty much the essence of being a leader.

You cannot force respect or demand recognition as a leader. If you do that, you can only lead so much. You are not able to inspire, and you are not able to work collectively and synergistically as a team. To mobilise people anytime, anywhere, whenever, the impetus is on you to give your support. You don't demand respect; you earn respect.

To be a leader, you always start with the ability to invest in and share your values with people. For me, it's pretty much about being open, honest, and living the values that I preach, working collectively. I say "collectively" because, at the end of the day, it is about working as a team, about recognising and embracing the people you lead.

That's always been my starting point on every occasion where I've been entrusted with responsibility, whether in SCDF or HTA.

Do you share with your officers your life story, or do you use more teachable moments by citing examples of failures?

There are many ways. I'll happily share relevant life stories, experiences, challenges, and the moments I learnt and grew. I think that's being open. I've been transparent. One of the guiding principles that I have always believed is important is admitting that you have specific weaknesses.

How can we work as a team collectively? I believe we must share teachable moments. Although leadership is a very complex area, it is teachable and can be developed.

And your personal mantra is?

My mantra is always to do your best and give your best. That's my starting point. The second

important element is how you deliver and work the outcome collectively as a team. It is all about teamwork. I'm huge into people, because I can have a vision, I can dream about achieving something, but at the end of the day, it is about how I can inspire, how I can share and articulate my vision, and how I mobilise the people to work collectively to achieve that vision or mission.

How do you mobilise people?

You must communicate effectively and clearly. Then they know what they are doing, why they are doing it. You don't force people to do it. You can't just do it without even explaining why we're doing it, the rationale, the objective, and how best we can do it together. Communication is essential. While you are communicating, it is also crucial as a leader to listen, gather feedback, and gather perspectives. It's about an ability to impress and assure them that this is exactly what we want to do, and we do it as a team.

The Nicoll Highway collapse in 2004, for instance, was a very difficult operation. You were the ground commander for the rescue operation, and your team was able to recover two of the victims, but it would have been very dangerous to recover the last one. How were you able to communicate with your team that it was time to stop searching, to retreat, because otherwise the risks were too high.

It was a very difficult decision. At the end of the day, as leaders, you must make difficult decisions; it's part and parcel. But what is imperative again is communicating. I had to keep on communicating why we had to stop. They [SCDF officers] were very passionate, very driven. Pretty much determined. We were all driven, determined to locate the last missing person because we recognised it's important, you know, that we recovered the body, that it was essential to the family. I think we were all very clear about that. But at the end of the day, safety considerations drove the decision, due to the poor working conditions in that environment. This is where we must communicate with our people why such an operation has to cease.

Inevitably, the team felt disappointed, but we must embrace and recognise that.

AT HTA, WE ARE CONTENT DEVELOPERS WHO ALSO RUN PROGRAMMES

You were trained to be a firefighter and to lead search and rescue operations – not exactly desk-bound jobs. What was your reaction when told you would become the Chief Executive of HTA? Was this a job you wanted? Did you feel prepared for it?

It was a surprise and exciting. I was excited about it. Either way, it's an opportunity to learn, grow and contribute to the Home Team and nation differently. Of course, I was sad at the same time because I had spent 28 years, you know, in SCDF, where I developed friendships and played a significant part in sharpening and enhancing its operational readiness capabilities and emergency management system. But I thought of this post as part of, and I'm a firm believer in, lifelong learning.

I think that's one of the essential characteristics a leader must possess – the ability to learn and grow continuously.

HTA allowed me to learn something new, grow, and contribute in a different capacity. I thought it was exciting and challenging, but I could put my hand in and learn how to contribute to a small and lean organisation.

I've always thought of HTA as a microcosm of the Home Team because it's got everybody in it, except perhaps for SCDF since you have your own training academy given the specialised nature of your mission. Coming from a uniformed organisation, HTA would have been a completely different outfit for you. How did you prepare for the job?

I didn't come "totally unprepared". Throughout my 28 and a half years in SCDF, I was exposed to all kinds of work – at the frontline, managing policy, developing policies, and these entailed a lot of dealing with people. I've dealt with people on the ground, on the frontline, and people in HQ. And I've also dealt with people who are civilians. And I did understand what the Home Team Academy is about. So, it was not alien to me. But you're right. There are many question marks and uncertainties,

but that's where the excitement is, and I'm pretty game to embrace challenges.

Do you now see yourself as an administrator or as a trainer?

I think I'm both. I must be both to understand better how the Home Team Academy can deliver the values we are developing. For our programmes, I work collectively with the team to create and implement them.

I also need to feel I'm part of the delivery system. So, I'm pretty much like I was in SCDF, grounded by the fact that I must be involved in the delivery system to understand it better. I'm involved. I engage the participants in fireside chats and their class discussions. I go through the evaluations with the HTA centres. I sit with them on reviews and content development, engaging with the leaders and going through each course. The assessment and reviews give me excellent feedback on whether participants find our programmes exciting, rewarding, and meaningful, and what areas we need to refine further and develop.

I believe HTA has a very rigorous process of training the trainers. Have you gone through it yourself?

We are not trainers per se because we develop content. We engage trainers from the Home Team or our partners. We create the curriculum for train-the-trainer programmes, which are meant for all Home Team departments. So, this is where I engage with the trainers to understand what kind of assessments and learning they have acquired from our train-the-trainer programmes.

At HTA, all our people are content developers who also run the programmes. We don't teach. We engage partners and competent people to teach. For example, INSEAD, the S Rajaratnam School of International Studies, Civil Service College, and Lee Kuan Yew School of Public Policy provide subject matter experts, but we sit in and understand their challenges. I also have a dedicated engagement session with the trainers as part of the programme.

What have you learnt from the trainers?

I engage with trainers, trainees and the participants. They give me a complete picture. With the trainers, I ask them how we can better help them understand the requirements and profiles of the trainees. They must understand who their trainees are, because we are not only training Home Team officers, but now we have Whole-of-Government officers attending our courses too.

What have you changed after receiving feedback from participants or trainers? Can you give an example?

We've changed the flow of the programme, for example, the timing of overseas trips, based on our engagement and participant feedback. We used to do the trips at the end of the main programme, but the participants said it would be more meaningful if they were done during it. When they say there are certain areas or topics that they would love to be engaged in, we review them, and if they are relevant to be part of the entire programme, we will incorporate them. This is where I think it's beneficial to have dialogue and engagement, so our programmes are dynamic and relevant.

Sometimes, we must make hard choices, such as what to include and remove. It's always easy to include, but it's challenging to remove. We have processes and systems in place and removed a couple of programmes we deemed no longer relevant.

YOU HAVE TO ALLOW LEADERS TO LEARN

I have been asking Home Team leaders if they think the public service does a good job of selecting and grooming its leaders. But since a key objective of HTA is to train leaders, let me ask if you believe it is possible to train leaders? Is it HTA's job also to sieve out weak leaders?

No, fortunately not. But we don't believe there are "weak leaders" per se. When we are given the responsibility to train leaders, we train leaders. However, the onus is on the individual to determine how they become leaders. Good, bad, weak — that is the individual's responsibility.

Let me expand a little. A leader must possess certain qualities and learn a few things to be a good leader. They must also be good observers and listeners. It is essential that they can listen to feedback. This is part and parcel of being a leader.

Our leadership programmes at HTA are designed in a certain way because we want our leaders to understand themselves, who they are, and what makes them able to work at team level. So, we train, or rather, we impart the relevant characteristics and knowledge, so they know what they need to be good leaders. As I've said, they must be mindful of this and continue to learn. As John F Kennedy said, "Leadership and learning are indispensable to each other."

I think it is essential to be humble and courageous. You are not a good leader if you are too nice and everything is okay. Leaders must be prepared to make decisions, be decisive, and be comfortable with ambiguity.

You asked me how I felt when I moved to HTA and into the unknown. To me, it was a learning opportunity. So, this is what we imbue in all our participants – learning. But at the end of the day, how they turn out depends on the individual. Will they be able to share, inculcate, or develop the good characteristics to be a future leader?

Do you fail them [trainees perceived to be weak leaders]?

We don't. We have no right to fail them. We don't embark on that because our leadership programme is different. We are here to nurture, develop, expose them to, and share with them the best leadership traits – to allow them to learn.

What if during a leadership programme at HTA, you see an individual who shows great promise in getting things done but you have questions about his or her leadership style or ethics – what do you do?

We are not able to judge them. Also, we don't nurture or train people to think one way. There are many ways to do things. It is up to your leadership ability. Some people lead differently. Some mobilise

people differently. We encourage them to learn how best to achieve an outcome, but the outcome must be collectively worked on. So, it's transparent to us whether he or she has a different style. But what matters most is how they achieve it. The outcome must be good for them, the people they lead and the organisation they come from.

We are guided by the Home Team's ethics and public service principles. If you believe a participant does something that doesn't seem desirable during a programme, you will have to chat with the participant.

In the last decade or more, we've had Home Team leaders who got into trouble, with one imprisoned for corruption, and that seems quite unforgivable for Home Team leaders. Do you think something could have been done at an earlier level to either pick up on their problem areas, or perhaps, people were just too kind, not willing to get involved, because these were personal issues, personal matters that eventually developed down a different path?

It's hard for me to comment because we don't delve into personal problems here. We teach leadership skills and development here. But generally, I would say, a department needs to watch closely in terms of grooming their officers because we can only do this much if an officer decides to do otherwise due to other driving factors. What is essential is that the system must be able to allow this kind of conversation to start if they have issues or problems.

Is that something HTA should get more involved in?

I think it's pretty much on HR [Human Resource]. We are not involved in this sensitive area of career development without knowing more about the officers.

Does the Home Team have a whistleblower policy?

We do. Every Home Team department does. Issues must be addressed at the department level, and if they are deemed serious, we will flag them up to the Ministry because this impacts the public's trust in the Home Team department.

In the past, when issues have come up or when complaints were made, I think the usual practice was to call CPIB in. Is it now more the case where the internal audit department looks at it first and decide whether there's a case to be answered for?

I think the arrangement remains the same. When and if feedback is surfaced, the respective department will investigate, and if it's severe enough to warrant it, we will flag the issue up. That is the process and procedure.

WE SPEND A LOT OF TIME TRAINING OUR LEADERS TO MANAGE CRISES

How do you define leadership? And who is the leader you most admire and why, because that gives us an idea of how you define leadership.

I don't have any specific leader I admire because several leaders spread across different timelines inspire me. I think, at the end of the day, it links to the leader's ability to be visionary, with the ability to make hard decisions, the extraordinarily courageous ability to communicate and mobilise, the ability to work as a team to achieve, and the ability to learn from mistakes.

If I look at time and space, Gandhi is one leader who comes to mind. One of his quotes, usually linked to lifelong learning, is: "Live as though you're going to learn tomorrow, learn as though you're going to live forever."

Gandhi mobilised the masses passively, non-aggressively. So, to me, that's the leader who, despite the hardship, is selfless and able to sacrifice. Ego never exists.

The other leader who is quite inspirational to me is Winston Churchill. He could withstand the onslaught of the Germans, the Battle for Britain, mobilised very dispirited armed forces, and gathered public support to withstand the challenges Britain went through. And of course, our late Lee Kuan Yew, who brought us from a backwater to where we are today, with all the challenges, mobilising, and gathering of support, and the team he brought together.

Is a good leader necessarily an effective crisis leader? What are the qualities you look out for when deciding on someone to lead in a crisis?

Because of the nature of our work, we are expected to deal with crises at any time, so our leaders must be competent, knowledgeable and practical. That's why we spend a lot of time training, developing, and grooming our leaders for crises, particularly crises. Still, generally a leader must also be able to manage the day-to-day, not only during a crisis, because you don't have crises daily. Hopefully not. However, you must manage your organisation, the people in particular, and the changes in expectations and demands from the public. I think it is imperative that our leaders can handle these demands.

Crisis management requires the same skills but also something a little bit more unique because a crisis, like what we saw during COVID-19, can be very fast and furious. Leaders must be agile and adaptive, work collaboratively, be resilient, communicate clearly and make decisive decisions based on available data.

Being on top of the situation is imperative. That's why our crisis leadership programme is critical in the sense that we are able to achieve synergistic understanding between not only the Home Team officers but also at the Whole-of-Government level, so they know each other, trust each other, and can make decisions for the betterment of the team.

What for you has worked well in maintaining staff morale and professionalism in a crisis?

It's a lot of collective effort, engagement, communication, and assurance. I think we also need to recognise the importance of continuously strengthening our bonds and trust. Our HTA officers are very passionate and driven despite their small numbers.

HTA IS NOT A TYPICAL UNIVERSITY

What is your vision for HTA?

When entrusted with HTA, I think my vision was for the Academy as a corporate university to provide highly valuable learning outcomes to help our Home

Team officers meet current and future changes and challenges. That's our key objective, but how do we achieve it? As I said earlier, this is where our fundamental vision is to transform how we embark on our training and learning. I must make HTA a pivotal element of this effort to prepare for the future and win the public's trust. So, how do we do it? This is where the next level comes in, to make our programmes highly valued and sought after. We've developed a centre of excellence for leadership in general and in crisis. Our leadership in simulation capability also drives that outcome. It's a learning outcome, embracing technology, uplifting our knowledge and ability.

I've never quite understood the concept of a corporate university.

We are not a typical university. We don't have a teaching staff; we're pretty much a content creator. We identify the critical course starting skills relevant for the Home Team officer now and in the future. We work closely with the Ministry, especially the Training and Competency and Human Resource Division and the various Home Team Departments to identify the current and future skills and competencies to be developed. That's our job. Then we work synergistically with the other training schools to avoid duplicating what the Home Team departments do. They specialise in tradecraft. We don't, but we level up to the next value chain. We also listen to their needs and identify the skills and competencies we must develop for our officers and leaders.

So that's our role: identify the critical skills and competencies, work synergistically with our key stakeholders and partners to develop the programmes or courses. We identify partners and work with the Home Team departments to fulfil the Home Team's needs to serve the public better. Unlike typical universities that offer qualifications, we deliver in a different form that is meaningful and relevant to the needs that no other university meets. We run programmes, but we don't do them alone. We bring in experts and our partners.

And now you also send officers to do degree programmes at SUSS, the Singapore University of Social Sciences.

We do so collectively at the Home Team level, although HTA manages the SUSS degree programme in public

Partnership with Singapore University of Social Sciences (SUSS) on the Bachelor of Public Safety and Security Programme

Developed by SUSS and supported by MHA, this degree programme was launched in 2020 to provide students, including Home Team officers, with theoretical knowledge and training in intervention strategies in the areas of policing, emergency management, investigation, rehabilitation, crime reduction and terrorism. HTA works closely with the stakeholders to oversee content development and programme evaluation. The curriculum is also continuously reviewed by SUSS and MHA to ensure its relevance and value to the security industry and to better prepare students for the fast-changing world. As at early 2024, more than 500 Home Team officers and other students have enrolled, both full-time and part-time, in the programme. The first batch of MHA-sponsored officers graduated from the programme in October 2023.

safety and security. We help oversee the sponsored students' progress, the course development, and some of the course content.

Is that why you have former Home Team officers who are now at SUSS?

No, not really. I think that is more of synergy, because the university recognises the value of Home Team officers and hires them as faculty members through the open market or for some after they retire, because they are more aligned to our mission and understand what our needs are. Some course contents are highly sensitive, and we don't want distorted versions, such as the drug policy. This is where SUSS recognises that HTA is an authority on public safety and security, and we have a part to play. We partner with them to curate specific modules to make the content factual and accurate.

Is the degree programme in public safety and security available to non-Home Team officers?

Yes, it's open to the public. Most of them are A-level students. It's gaining popularity because we and SUSS recognise that this knowledge is also relevant to the

private sector in today's context. In fact, graduates of the programme are employed both in the public and private sectors. We are in discussion with SUSS about collaborating on a postgraduate programme.

When will that come about?

Well, in the next few years, because the process will be long. We also want it to be accredited, so I think we can all look forward to that.

I'M NOT WORRIED ABOUT GROUPTHINK

Let's discuss this 'One Home Team' mindset. As you said, you joined SCDF before the concept of the Home Team was introduced. I don't think anyone would argue that it's not a great idea. But how is it working out so far if the Home Team is introducing the Home Team Culture Guide now, almost 30 years later? And what is Home Team Culture? Is it teachable?

I think it's teachable and reinforces the respective culture at each Home Team department. It's about courage, integrity, principle, transparency, and honesty. I think these are the values of each Home Team department. So collectively, how do we amplify these values at the Home Team level? The Home Team concept broadens your awareness of what you are doing, to see yourself beyond who you are now, and to be mindful that you are part of a team.

The idea has benefited me significantly throughout my 32 years of service. I mean, being a ground man myself, being involved in operations for many, many years, I've seen how, before the Home Team concept, and after the Home Team concept, there's a vast disparity in terms of how we work, how we tackle and address situations. Pre-Home Team days, we were very department centric. I do my job. You do your job. There were minimal interactions. But that has become history.

Now that the concept of One Home Team is well ingrained, we at the Home Team Academy are basically responsible, among other things, for developing the Home Team DNA. That's why our heritage and values inculcation play an important part, as does our Home Team Foundation Course.

People can integrate seamlessly during a major operation, so to me, that is a major difference between where we were then and where we are today on the ground. The benefits are that our Home Team officers can focus on their roles and assist within their means without compromising their areas of responsibility. For example, when a police officer arrives, once they have done their roles, and before the arrival of the ambulance, what can they do to facilitate the ambulance's arrival that will benefit the victim or the public in distress. Our police officers are also trained to perform CPR when needed. This is where I think synergy benefits our Home Team officers and the public we serve.

We saw that during the Little India riot.

I saw it in many incidents.

I mean in that incident, SCDF was on the ground first because it started with an accident. And there was an SCDF officer who tried to calm the situation down before more police officers arrived.

Indeed, they have been equipped beyond their roles and primary responsibility, broadening their knowledge without compromising their primary roles. As I said, I've seen it many times on the ground and even at the policy level.

I'm seconded here at HTA. Thirty per cent of HTA officers are seconded; seventy per cent are civilians. It's challenging, but we have the same mission — delivering the best learning outcomes and values of the Home Team. It's HTA's job to strengthen the Home Team culture by fostering the 'One Home Team' mindset.

What does this One Home Team mindset mean? Most organisations are allergic to anything that smacks of groupthink. How do you avoid groupthink if you have a One Home Team mindset?

We are mindful, but having groupthink is not the intent. It's about identity. As I said, you can still be a Home Team officer but you are a police officer. You have your roles, responsibilities, and considerations, without compromising the outcome. The police are trained differently in incident response than SCDF and have different priorities than CNB. I don't think the group thinking will prevail because they serve

different needs and considerations, but collectively, there is also a Home Team consideration. It's about how they work seamlessly and synergistically to manage the situation better and deliver service without compromising their outcomes.

Likewise, at the leadership level, what is essential is enriching individual perspectives. This is because they learn from each other. In any scenario, when a police officer responds, what are the considerations? At the same time, SCDF, when they respond, what are their considerations? You recognise they are different but still serving the same mission.

We used to call that the Home Team plus officer.

Yes, indeed, those were the early days. But the idea is that they are being trained to handle a situation professionally. Above all, they are getting it done seamlessly, effectively, and fitting the Home Team and the public's needs. So, I'm not worried about groupthink per se.

What are the wicked problems that HTA faces? Do your stakeholders sometimes disagree on causes and solutions, forcing you to adopt processes that may generate undesirable consequences?

It's always a work in progress. For example, if you want to develop certain programmes, not everybody will have the same starting point because we're dealing with ten departments plus one. So, the reality is that we will get input and feedback. But we need to impress upon them, for example, why do you want to run this programme, what are the benefits, and what will the commitment and engagement be.

A good example, if I may share, is the new course that we will run, this frontline supervisor course. It's a need articulated by our frontline officers where we see our Home Team Foundation Course has proven its value when the young officers, after going through our programme, have a better understanding and better appreciation of who they are as an individual department officer, and collectively as a Home Team officer. We know this through our conversations with the participants and through feedback. Every time an HTA programme runs, I chat with participants.

Likewise, when we started the Home Team Foundation Course, there was a lot of scepticism. Why are we doing this? Why are we spending two weeks away from work? You know, we're all busy. But this is where communication and socialising with them work. What is the intent of the programme? And what is it about? Why make it compulsory residential? Nothing beats them going through the experiential learning, then they recognise the value. So, the Foundation Course has gained immense popularity and demand, so much so that the other Home Team front-line senior officers, who went through this programme in the earlier days, requested that we have such a programme to bring the senior frontline supervisors on the ground together.

So, you see, it has created this demand expectation, and we're more than happy to do as they ask. As I said, we cannot do it alone. As they say, "It takes a whole village to raise a child." We need the entire Home Team involved, so it's a collective effort with the Ministry and the departments.

Do you see a difference between younger officers, and those who joined the Home Team, maybe 10-15 years ago?

They are different because of the nature of exposure and engagement, but collectively, they have the same purpose, except that the exposure and experiences are different. This is why I mentioned earlier the importance of recognising the multigenerational workforce. We are thus very particular about how best to engage them for our programmes.

What does that mean?

The learning modality must evolve and change to suit the type of officers we are engaging. How do you engage Gen Z, particularly the digital natives? Gen Z is very vocal, and so this is where we train the trainers. The trainees may have already taught them how to handle younger learners best and what kind of learning methodologies are suitable for them. Some are very auditory learners, and some are very visual.

So, firstly, we need to recognise that they have their own preferences for how they learn. We recognise

this and have been doing so. Programmes are being formulated to factor in this consideration and need.

For example, now we have more hybrid classes and provide participants with instructions and guidance in advance. It may not be possible to tailor to every single learner differently in a class, because that will disrupt the class dynamics. So, we try to bring and group our trainees as close as possible regarding their years of service so that there are similar learning preferences. It is essential to curate and understand the profiles of the officers.

What is next for you?

Well, for sure, I'm going to take a good break and then see how best to pursue my interests. I'm still very passionate about pursuing my current areas of interest, be it leadership development, working on emerging technologies, especially in the area of Artificial Intelligence, or humanitarian assistance. So, these are the potential areas that I might continue. I still have that passion, belief, and energy.

LEADERSHIP DEVELOPMENT IN THE HOME TEAM

Jasmin Kaur, Denyse De Silva, Justin Phua & Long YingYing
Home Team Academy, Public Service Division,
Immigration & Checkpoints Authority, Singapore Prison Service

ABSTRACT

Leadership development within the Home Team is about cultivating effective, future-oriented and resilient leaders. A comprehensive and tiered leadership development framework, comprising postings, training experiences and mentorship, supports Home Team leaders so that they are equipped to navigate complex and dynamic environments. This article uses human stories as a tool to convey the essence of leadership development in the Home Team. From the Home Team leaders across various vocations who were asked to reflect on their leadership journey, three themes came across strongly: structured learning can be effective in imparting the meta-competencies the Home Team requires of its leaders; peer learning and the broadening of networks are a key driver of personal growth; and officers model themselves on supervisors and senior leaders who inspire them.

BUILDING HOME TEAM LEADERS

Leadership development plays a key role in the success of an organisation (Jeong, 2024). Leaders in the safety and security public sphere today operate in a complex climate with conflicting priorities. They need to navigate short-term challenges in a more demanding world, while ensuring that they stay focused on long-term growth and development. They also need to embrace new technologies and ways of working at a faster pace than ever before (Scotti, 2024). Homefront security organisations that want to thrive and succeed in delivering positive outcomes for their citizens must accordingly grow effective, future-oriented and resilient leaders.

To identify and groom successive generations of leaders, the Ministry of Home Affairs (MHA) and its Home Team departments (the Home Team) have over the years built a comprehensive leadership development framework that seeks to impart the essential skills and experiences required of Home Team leaders across the various schemes of service and vocations as they lead their agencies in ensuring a safe and secure Singapore.

This encompassing, tiered suite of leadership development initiatives aims to develop the breadth and depth of experiences that will strengthen the leadership skills of Home Team leaders. These include professional development courses, stretch assignments, exposure to senior management and strategic postings – all underpinned by a robust talent engagement framework (see Figure 1). This is consistent with



Figure 1. Leadership Development in MHA

research elsewhere on leadership development that shows the development of human capital within an organisation involves the interaction of the systems, processes and culture of the organisation (Kjellstrom et al., 2020; Van Velsor & O'Connor, 2007).

Within the Home Team, there is a training roadmap with milestone programmes. These programmes bring police, emergency personnel, immigration, prison, anti-narcotics and civilian leaders together to develop and learn through structured professional courses (see Figure 2).

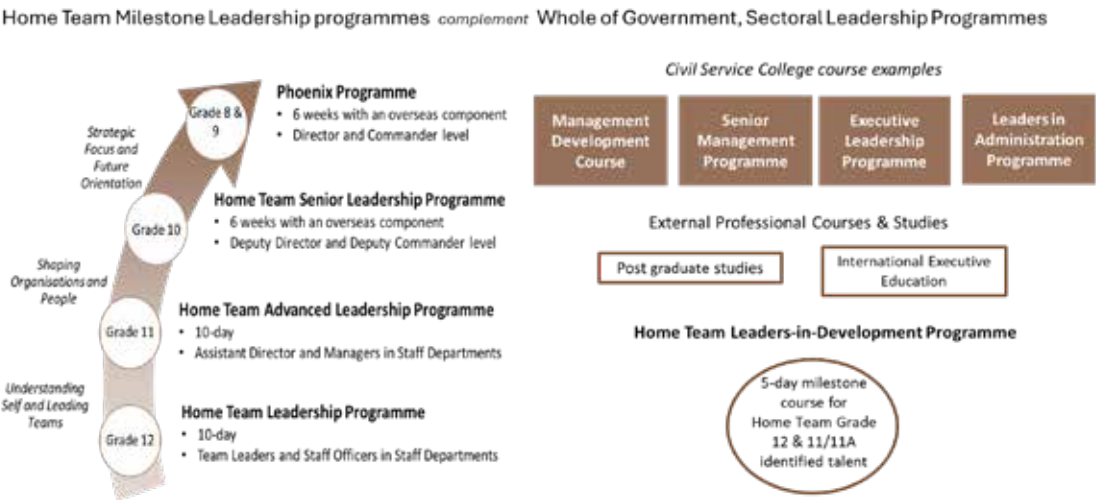


Figure 2. Home Team Training Roadmap

INSIGHTS FROM 16 LEADERSHIP JOURNEYS

To unpack the leadership journeys of Home Team officers across schemes of service, vocations and ranks, the authors interviewed several Home Team leaders who have benefited from leadership development initiatives and have since taken on leadership appointments at various levels.

The interviewees provide a wide bench of leadership experiences across the Home Team (see Table 1). Their reflections cited here offer insights on the factors they see as supporting them as Home Team leaders. These insights and the key episodes in their careers they recalled have been analysed and broadened into key themes. Across their varied experiences, three key themes have emerged as essential in their leadership journeys.

1. Structured learning is an opportunity to learn new content and skills benefitting self-development. As the stories below demonstrate, structured learning can be effective in imparting the meta-competencies that support growth into effective, future-oriented, and resilient leaders.
2. Development programmes offer great opportunities to broaden networks and mindsets. Peer learning and stepping into uncharted territory are a key driver of personal growth.
3. Meetings, both formally and informally, with leaders offer impactful lessons. This modelling behaviour is a significant driver of development for many Home Team officers.

Table 1. The 16 Home Team leaders interviewed for this article
(in alphabetical order)

Legend:

CNB: Central Narcotics Bureau
HTA: Home Team Academy
ICA: Immigration & Checkpoints Authority
MHQ: Ministry of Home Affairs HQ

SCDF: Singapore Civil Defence Force
SPF: Singapore Police Force
SPS: Singapore Prison Service

HASE: Home Affairs Senior Executive (civilian generalists)
HTSS: Home Team Specialist Scheme (officers in specialist services such as Psychology and Intelligence)
IMPACT Teams are ad hoc workgroups set up to stretch officers in greenfield or important areas of work in the Home Team

Home Team Leaders	Years of service with the Home Team (as of 2024)	Key Postings and Leadership Experiences
<u>Chia Shang Yi</u> Senior Assistant Director, Planning & Organisation Department (Plans & Policy), SCDF	12	Chia went through several SCDF postings, comprising operational roles like Commander (Marina Bay Fire Station), and staff roles in Industrial Regulations and Policy & Development. She was also seconded to MHQ in the Planning and Organisation Division as Senior Assistant Director (Strategic Planning), where she was part of the organising team for Home Team Festival.
<u>Alan Chow Mun Keong</u> Senior Director Operations, SCDF	24	Chow has been Director (Civil Defence Academy), Commander 1 st SCDF Division, Head Operations Branch prior to his current posting. He had also been posted to MHQ as AD (Ops Management), Homefront Security Division.
<u>Rockey Francisco Junior</u> Deputy Commissioner (Policy & Transformation), SPS	23	Rockey has held various leadership positions in SPS such as Director (Operations) and Director (Community Corrections Command) prior to undertaking his current role as Deputy Commissioner (Policy & Transformation). He was also previously posted to the MHQ as Deputy Director (Civil Defence and Rehabilitation), Policy Development Division.
<u>How Kwang Hwee</u> Deputy Commissioner (Policy), SPF	26	How has served as Deputy Commissioner (Investigations and Intelligence), Director Criminal Investigation Department, Director Operations, Commander of Bedok Division in the SPF. Outside of SPF, he was Senior Director (Policy Development Division), MHQ, and Senior Assistant Director, Industry Division, at the Ministry of Trade and Industry.

Kalaivanan s/o Pannerchilvam Deputy Director (Customer Operations), ICA Services Centre	13	Kalaivanan has served various operational and staff postings at the Checkpoints, ICA Headquarters and at ICA's Training Command. He was on a 6-month attachment to New York Mission, where he was involved in the discussions and negotiations on the Global Compact for Safe, Orderly and Regular Migration. He was also seconded to MHQ's Joint Ops Group as a Senior Assistant Director in Crisis Preparedness, where he was deeply involved in Covid-19 work. He returned to ICA as a Deputy Commander in Airport and Woodlands Commands before assuming his current post.
Jasmin Kaur Director (Home Team Centre for Leadership), HTA	21	Kaur is a HTSS (Psychologist) officer and currently posted to the Home Team Academy as Director, Home Team Centre for Leadership. She had been involved in psychological programme delivery, development and evaluation, and worked in the Data & Analytics Branch in SPS. Prior to her current position, she was seconded to the Ministry of Social and Family Development as Senior Deputy Director of the Family Policy Office.
Sunny Lee CEO, Yellow Ribbon Singapore and concurrent CEO, Yellow Ribbon Industries Pte Ltd	27	Lee has had numerous postings as a civilian HASE officer in MHQ, in Planning, Communications, Crisis Preparedness and International Relations. He took on his first Director-post in 2013 and went on to be Senior Director (Community Partnership & Communications Group) in 2019.
Kelly Lim Pheck Khoon Director (Operations), ICA	28	Lim started her career as a civilian officer, and converted to the ICA scheme. She has taken on various leadership positions in ICA, such as Deputy Commander (Airport Command), and Director (Planning and Review). She was also seconded to MHQ as Senior Director (Finance & Admin Division).
Malathi D/O Muthu Veran Commander, Airport Police Division, SPF	25	Malathi is currently Commander, Airport Police Division. She has operational experience as Deputy Director Operations (Security & Readiness), Deputy Commander (Police Transport Security Command), and Head Operations and Training (Tanglin Police Division). She was seconded to MHQ as Deputy Director (Strategic Relations) in the International Cooperation Planning Division, and also served as Head of the INTERPOL Liaison Office in Bangkok.

Ng Siew Hua Director (Media Relations), concurrent Press Secretary to Minister (Home Affairs), Media Relations Division, Community Partnership and Communications Group, MHQ	14	Ng is a civilian HASE officer whose career has been in the Public Communications track, with a posting as Deputy Director (Policy Development) from 2020 – 2023, where she dealt with policies pertaining to Race, Religion and Politics. She was also seconded to the then-Ministry of Communications and Information, working in the Information Operations Centre, from 2015-2017, where she was part of a team coordinating and strengthening Whole of Government communications efforts. She was appointed as Vice-Chairperson of the 2017 HASE Symposium, leading a team of HASEs to organise an annual event for the HASE officers in the Home Team.
Parthiban s/o Mathevanan Senior Assistant Director (Rehabilitation), Policy Development Division, MHQ	11	Parthiban, a CNB officer, is currently on secondment to MHQ, where he deals with drugs and prison-related policies. This is his second secondment, having previously served as Manager (Transnational Crime & Drugs) from 2020-2021. Parthiban's last designation in CNB was Commanding Officer, Enforcement 'G' Division. He was part of a cross-Home Team IMPACT Team on Strengthening the Joint Home Team Approach from 2021-2023, and was a member of the Phoenix Community Committee for FY2022.
Rafidah Bte Suparman Director, Risk Management & Assurance, SPS	32	Rafidah has held various key leadership positions in SPS, including Superintendent of the-then Changi Women's Prison, Senior Assistant Director (Programme Management), Deputy Commander (Cluster B), and Director (Corporate Communications & Service). She was also seconded to MHQ as Director (Organisation Development & Training).
Shaiful Herman Bin Shali Senior Director, International Cooperation and Partnerships Division, MHQ	18	Shaiful, an SCDF officer, is leading MHQ's international relations. His previous postings include Commander 1 st SCDF Division, Deputy Director Fire Safety Department, Commander Fire Investigation Unit, and Commander Tampines Fire Station and Director HazMat. He was previously seconded to MHQ as Assistant Director (Security Policy), Joint Operations Division.
Tan Fong Chin Director (Strategic Planning), Planning & Organisation Division, MHQ	18	Tan is a Commercial Affairs Officer currently on secondment to MHQ where he is responsible for orchestrating the long-and short-term planning processes in the Home Team, setting organisational performance standards, and Home Team Transformation efforts. Prior to this, he was seconded to the Infocomm Media Development Authority as Director, Network Project Office, where he coordinated anti-scam measures across telecommunications channels. These secondments followed a career in CAD, primarily in the Securities and Maritime Fraud Division.

Tan Mei Yan Senior Assistant Director (Regulatory Operations and Policy), Joint Ops Management & Policy, Joint Operations Group, MHQ	13	Tan is a HTSS (Intelligence) officer who has served as Head (Technology Development) in the Analytics Research and Technology Development Division, and Head (Leads Enrichment Centre) in the Police Intelligence Department. She was also a member of the IMPACT Team on Enhancing Data Sharing and Analytics across the Home Team from 2021-2023. She is currently on secondment to MHA's Joint Ops Group.
Tang Zhixiong Aaron Deputy Director CNB, Operations, CNB	18	Tang has served in enforcement, investigation, and policy in CNB, including a stint as Senior Assistant Director (Capital and Major Investigations). He was also seconded to MHQ's Policy Development Division and Planning and Organisation Division. He took on his first major leadership appointment as Director Intel after he returned to CNB.

LEARN, RELEARN, AND REFLECT

Professional Development Courses and Learning Opportunities

Most of the leaders interviewed said they benefitted greatly from the Home Team's structured learning opportunities. These are milestone leadership programmes and sector-specific courses that Home Team leaders attend to develop professionally in their leadership and other core skills and practical knowledge. Home Team officers with leadership potential are identified early in their careers and emplaced on a talent development programme (the Home Team's in-house talent management programme such as the Home Team Senior Leadership Programme [HTSLP], previously known as Home Team Senior Staff and Command Course, or the Public Sector Leadership Programme) to enable structured development as future senior leaders of the Home Team. Additionally, the Home Team provides ample learning opportunities, such as the 360 Degree Feedback Exercise for Middle Managers and above, which offers valuable feedback for personal and professional growth. Officers are also encouraged to attend professional courses in other sectors and across the civil service.



The Home Team milestone developmental courses I went through were very useful in helping me lead well. In particular, when I went through the Home Team Senior Leadership Programme and the Phoenix Programme, I found the contents to be very carefully curated. I benefitted most from the effective communications modules.

- Kelly Lim, ICA



Much of the Home Team Senior Leadership Programme course content can be applied in our day-to-day work. We underwent modules on crisis management, coaching, persuasion, delivering bad news, and so on, in a safe space.

These are scenarios we may face in our real-life work. We did have lots of hands-on application during the modules, where we had to practise in front of our course mates and in a safe space. This helped prepare us for future leadership roles.

- Tan Fong Chin, MHQ



I am now better equipped to manage changes in my unit because of the change management skills I learnt from the Home Team Senior Leadership Programme that I attended in 2020. When I was much more junior, I was tasked to plan for the re-organisation of the fire safety department and I proposed something I had in mind to my boss. Although I heard the views of my colleagues, the change management process and communication could have been better. We recently went through a re-organisation for the HazMat department. This time, I sought views from my staff about their roles and workload, explained to them why the re-organisation was necessary, and the value that it would bring to the department and organisation. If I were to compare both episodes, I felt I did better this time because I am more adept at change management. I am more cognisant that people are naturally resistant to changes, and I knew how to get buy-in from my team to manage the changes.

- Shaiful Herman Bin Shali, SCDF



The Senior Management Programme I attended in 2014 was a very structured leadership milestone course for the wider civil service for officers holding Director-level appointments. Through such courses, you pick up leadership skills, and learn about methodologies of analysing and doing various things. Such training is a useful complement to learning on the job.

- Sunny Lee, YRSG



In the EDGE programme [a leadership programme from the infrastructure and environmental sector], I gained valuable insights from my fellow participants from other government agencies. They shared their approaches to risk management, the regulations that they were working on, and the challenges faced. These discussions broadened my perspective, allowing us to identify what we had in common, and be aligned on shared outcomes in Singapore's interests. You will enjoy this kind of interaction that's really frank and candid, offering a deeper understanding of how different agencies navigate complex issues.

- Chia Shang Yi, SCDF



What I took away most from the Home Team Leaders-in-Development Milestone Course was that you are leading from the middle, which means you have people who are above you, your bosses, and there is some amount of management that needs to be done. Then the next thing is leading across, which means you have to engage your peers, your fellow supervisors, and then that's where you seek alignment in terms of moving in the same direction. That gave me a better perspective of what my role is – my job is connecting people, connecting between tasks that my team needs to do, with what other people are trying to do.

- Tan Mei Yan, MHQ



The Home Team offered the opportunity for us to participate in a series of curated development journeys, which I found to be very useful. For instance, during the Senior Management Programme conducted by Lee Kuan Yew School of Public Policy, NUS, that I attended in 2023, I had the opportunity to learn, interact and network with participants from both public agencies as well as the private sector. As the cohort comprised both local and international participants, the exchanges allowed me to see the same issues from the lens and perspectives of different stakeholders. This is particularly useful as we don't operate in a vacuum.

- Alan Chow, SCDF

Several interviewees had also attended professional courses in other sectors and across the civil service and found them useful complements to learning on the job and the leadership mentoring opportunities offered by the Home Team.



I attended the Learning Organisation: Developing Leaders for Learning Programme in 2002. It covered comprehensively the five Learning Organisation (LO) principles – personal mastery, mental models, team learning, shared vision, and systems thinking. The LO Programme also focuses a lot on reflecting on my behaviours as an individual and the impact of my behaviours as a leader based on these five principles.

This is the most impactful programme that I have attended because I felt the change in me. For example, as I was more aware of my own mental models, I was mindful not to be too quick to dismiss any ideas and suggestions from my staff and be more open to listen to them. It allowed me to better engage them, build trust and strengthen our relationships. The principle on shared vision also gave me a different perspective of how a vision should be developed. As a leader, the unit vision is not about what you want – it is about what your team wants and helping them to achieve it beyond their expectations by removing obstacles, empowering them, providing guidance and support, and aligning it to the organisation's mission and vision.

Not all leadership learnings can take place in a classroom. On my own, I will reflect after attending leadership programmes, observing my supervisors' leadership styles, watching leadership videos, and reading leadership and management books, to support my leadership journey.

- Rafidah Bte Suparman, SPS

Reflection as Learning

Madsen (2020) argues that leaders develop through the receptiveness to continuous and deep learning that is carried out through critical reflection. The importance of reflection was illustrated by some interviewees as being essential in supporting their continuous development.



I would say that even when I participate as a fireside chat host in the leadership development courses, whether it is in SPF courses or the Home Team courses, I also benefit from these sessions. The questions from the participants often provoke self-reflection...when you are asked in such a setting, you step back, you think about it, you do a bit of quick analysis and assessment and you're able to then consolidate some of the things that happened. Although I am there to share my experiences with the younger officers to support their leadership development, I also learn from them and these interactions support me in my leadership journey too.

- How Kwang Hwee, SPF



I have been practising self-reflection for many years due to my professional practice as a psychologist. However, there are times when reflection on one's broader direction and goals is not possible as I get involved in the hectic day-to-day jobs. During courses like the Home Team Senior Leadership Programme and the Senior Management Programme, there was ample time for self-reflection and peer learning that allowed me to take a good look at areas of growth and consolidation as a leader.

- Jasmin Kaur, HTA



The 360 Degree Feedback Exercise for the Home Team Leaders-in-Development Milestone Programme was useful, especially the verbatim feedback. My supervisor gave me feedback that I could speak up more. Although I know that I am an introvert and I do not say much, having the feedback from my supervisor – someone I look up to – and understanding the potential impact for not speaking up in my leadership journey was useful.

- Tan Mei Yan, MHQ

Broadening Networks and Mindsets

All leaders said they found themselves broadening their networks and mindsets as a result of interactions with other Home Team, Whole-of-Government and external colleagues during strategic secondments/postings, stretch assignments, and milestone courses. These networks play a significant role in supporting their development as leaders.

Strategic Postings

To broaden leaders' perspectives on Home Team-wide issues and help them build networks, MHA has intentionally planned and facilitated strategic postings for individuals at appropriate timeframes. These could be within the Home Team Department, to MHA Headquarters, and to other public sector agencies. There could also be short-term attachments with other public or private sector organisations. These opportunities allow Home Team leaders to gain exposure and widen their breadth of experiences, making their careers more meaningful and impactful.



My posting to PDD [the Policy Development Division in MHQ] in 2013 was a key learning opportunity. Firstly, it's the exposure to the issues. It's totally different from prison work. You really see things at the higher level and purpose, and you see the Home Team work – the interconnections within the Home Team as well as the whole of Government. Secondly, it is the exposure to the Political Office Holders and senior management. You learn the workings of the Ministry, and how they support, lead, and coordinate the Home Team Departments. So that posting in PDD was something I am appreciative of, where my understanding and perspectives were broadened.

- Rocky Francisco Junior, SPS



The postings that I had were quite diverse, and in each of the postings, I learnt a lot. Because all these different postings require different management skills. Managing a small team of IOs [Investigation Officers], managing a team of enforcement officers, working with various bosses in MHQ, managing men in Intel, are very different, but along the way, certain leadership values remain, but they are refined and strengthened.

Postings actually do play a very important part in how you develop a leader. So, a leader should be exposed to as diverse a range of postings as possible.

- Aaron Tang, CNB



My posting to the Ministry of Communications and Information [now known as the Ministry of Digital Development and Information] was a good experience, because after being in the Home Team for a while, you only think of Home Team issues. There are a lot of other Ministries which have very hot button issues that can potentially also have an impact on MHA. For instance, even noise in HDB [Housing and Development Board] areas, can impact what [the] Police are doing.

Being in MCI helped me to see a larger spectrum of Public Service issues and communications. What are people worried about? What are people interested in? What are the things that annoy people in Singapore? Those are the kind of things that we have to think about.

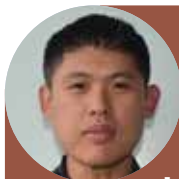
- Ng Siew Hua, MHQ



In the INTERPOL Liaison Office in Bangkok, you lead a team of around 12 international officers, some from Europe, mostly from Asia. And you support the region in operations, and upskilling of the police officers in terms of training and tools that INTERPOL provides. You travel quite a bit to support them. It teaches you to be independent in the international domain. You also need to do things differently because you are working with people from different cultural backgrounds; it grows you in terms of adaptability.

Sometimes in the Civil Service, we're so accustomed to doing certain things in a routine manner. This posting helped me to think of how to do things differently, to think out of the box, which I try to adopt in today's current situation or in my other postings.

- Malathi D/O Muthu Veran, SPF



I was involved in the planning of the inaugural Formula 1 Singapore event in 2008 during my posting with the Homefront Security Division [now Joint Ops Group]. The experience allowed me to be involved in the planning and coordination of the F1 event with different groups of stakeholders (ranging from the Police and Singapore Tourist Board counterparts to private sector entities such as the F1 event organiser). The experience expanded my horizons: I had to take in the considerations of the different groups of stakeholders, and how various parties can view the same issues quite differently. You also learn how to calibrate and balance everybody's needs and considerations so that the outcome is acceptable to all parties.

- Alan Chow, SCDF



My postings in MHA gave me first-hand experience in working at a Whole-of-Government level. In ICPD [International Cooperation Planning Division], I was working on this workstream which involved agencies such as the Ministry of Foreign Affairs, Ministry of Health, AGC [Attorney-General's Chambers] and the various Home Team Departments, and you could really see how the agencies come together to protect Singapore's interests in the area of international drug policy. I was exposed to all these different stakeholders – how to work with them, how to get them on board in alignment with us, manage different views and expectations, and so on, and I will bring these back to apply to future postings. I wouldn't have this opportunity or gained the experience in doing this type of work if I did not have the secondment experiences.

- Parthiban s/o Mathevanan, MHQ



My posting to the Ministry of Social and Family Development was a steep learning experience as I took on a policy position within the social sector, which was far removed from my experiences as a psychologist in the Home Team. The exposure allowed me to learn more about my strengths and shortcomings, which made me a stronger leader. Working on broader social issues increased my insights on the considerations that different ministries have on the same issue and the consensus building that supports WOG [Whole of Government] solutions.

- Jasmin Kaur, HTA



It is these various postings that have helped shape who I am today – how I deal with issues and how I work with people. For example, when I went to P&O [Planning & Organisation] from CPCG [Community Partnership and Communications Group], I had to be mindful that the nature and tempo of work of these two Divisions are quite different. This also meant I could not simply use the same leadership style that I was applying in CPCG to P&O, and I had to adjust accordingly. These different postings helped me learn how and when I apply different leadership styles to different situations.

- Sunny Lee, YRSG



My secondment to Planning and Organisation was an eye-opening experience that allowed me to deepen my understanding of staffing and provided valuable exposure to different leadership styles. The insights gained allowed me to refine my staff work and the way I lead, which I have since applied back in SCDF. I feel that secondment opportunity is an important and useful component of the whole Home Team leadership development framework that we have.

- Chia Shang Yi, SCDF

STRETCH

Home Team leaders are purposefully assigned assignments beyond their areas of work, to challenge, expose and develop their potential. Through the process, the leaders work with diverse groups of officers, on a wide range of topics, including issues new to them. Feedback is also typically sought on performance, for developmental purposes.

One common theme on stretch assignments that emerged in the interviews was that it took the leaders out of their comfort zone. Studies show that stretch assignments have a positive impact on employee performance and talent management as it allows leaders to grow in their capability (De Pater et al., 2009; Gurvis, McCauley & Swofford, 2016). This was evident from the sharing of the Home Team leaders as well.



I was tasked to lead an IMPACT team to study how we can further embrace and push technology to change the concept of operations in the Home Team. What was important was the experience of leading a team of Home Team officers who are unfamiliar to you, trying to gel and bring everyone together for an important study and to complete this assignment. Along the way, we are also giving feedback about their performance, not just to them, but writing to their supervisors. It's a good experience.

- Shaiful Herman Bin Shali, SCDF



On reflection, the moderation of dialogue sessions at one of the Home Team Leaders' Forums, including with CEO, Decathlon, was for me stepping out of my comfort zone. It was something that I've never done before. And I think sometimes you have to fake it till you make it. You need to trust that there was a reason why you were chosen. And you just do your best. So I think that was how I approached it. Of course, there was a bit of preparation – I read up on the speaker and spoke to some of the past moderators to prepare myself.

I would say that applies to other stretch assignments and even postings as well. I always tell people there are a lot of things that you may not realise that you might learn something from.

- Ng Siew Hua, MHQ



If I look back to earlier in my career, when I was Head Operations in Central Division [in SPF], one of the projects that I was involved in was doing a review of the structure

of the Central Division, looking at the developments in the area and coming up with the recommendation to create the third Neighbourhood Police Centre. Learning from how then-Commander Lau Peet Meng led the team – we looked at statistics and we were quite data-driven in our work. At that time, the use of data was not as extensive as it is today. Then it was a lot more gut feel, a lot more based on experience. In that project we used a lot of data – we went to get data from SingStat [Department of Statistics] and we used a lot of economic data, which was not very common for Home Team type of work at that time. That pushed my boundaries, my perspectives, on how we need to better use data, beyond our traditional Home Team data, to be able to allow us to better sense-make and analyse and support our case. As a leader, I was pushed to do something I was not very comfortable with.

Putting younger officers in projects outside their work has its value. I have personally benefitted from not just the project, but really learning from a leader who inspires and who helps me to think out of the box. We continue to do that by putting our young officers in such projects for their development.

- How Kwang Hwee, SPF

It's the People You Meet Along the Way

While postings, courses and projects expand the Home Team leaders' horizons, it is the networks and friendships made throughout the courses, postings and project teams that make the most lasting impressions on the leaders and continue to support them in their leadership journeys.



As many of us attended courses together and/or had the opportunity to work alongside during postings and project work, I think it would be fair to say that we 'learned

and grew up' together. Though from different Home Team Departments, many of us can simply pick up the phone and call each other to resolve work matters. The trust and relationships built up from both work and non-work related engagements is most invaluable when resolving urgent operational matters.

- Alan Chow, SCDF



The Home Team Senior Leadership Programme is useful because it allows all the Home Team officers to come together, better

understand each other's work and build connections. Because of the networking and trust built throughout the course, I can just pick up the phone and ask them for views, advice or support. The networking in the Home Team is important because the unity of our Home Team leaders is pivotal in leading our staff to have a 'One Home Team' mindset to keep Singapore safe and secure, especially during national crisis.

- Rafidah Bte Superman, SPS



You have leaders from the various Home Team Departments coming together, and because it's usually quite a long period of about six weeks or more, you have the protected time to be able to get to know one another better, and to develop that relationship.

- Kelly Lim, ICA



Then there are the relationships and networks you form. For example, How Kwang Hwee [current Deputy Commissioner of Police, Policy] – he was my peer and then my boss at PDD, when he became the Senior Director of PDD. There were also Lian Ghim Hua [current Commissioner, ICA – Designate] and Daniel Seet [current Deputy Commissioner (Future Technology & Public Safety), SCDF] whose stints in MHQ coincided with mine. These relationships and networks were forged – where we got to know each other and work with one another – growing and developing together as middle management then in MHQ but also future senior leaders in our respective Home Team Department.

- Rocky Francisco Junior, SPS



Going for the Home Team Senior Leadership Programme was very useful. I really cannot emphasise this enough. At the point I attended the course, I did not know any of my course-mates. Since then, I have had the opportunity to work with so many of them, and it helps greatly because they know you as well. Together, we have built a bond and trust. It seems to me that the organisers knew that we would be working together 3-4 years down the road. And this type of relationship goes beyond the transactional – if there is anything I can do to support my course-mates in their daily work, I'll be more than happy to do it and I believe that is the same for my course-mates.

- Tan Fong Chin, MHQ



During my time in the Crisis Preparedness Directorate, CPD, I worked alongside police officers, SCDF officers, and these relationships continue to go on beyond that. So for example, Louis Loke, who was my colleague in CPD, became Deputy Commander at Woodlands Division, which is our direct police counterpart in Woodlands, and it is very easy for me to just pick up the phone or for him to just call me and keep that relationship going. The networking started because of CPD.

- Kalaivanan s/o Pannerchilvam, ICA



We had a spate of bomb hoaxes and had to coordinate with the Singapore Armed Forces. My course mate [from the SAF Senior Commander's Programme] called me immediately, he told me that he's on duty, he needed to make a decision quickly, and he needed my assessment for that. Because of the relationships you build, you're able to solve the problems quite quickly because you know each other and you're able to share that information much quicker than if it goes from the SAF and down the channel, to the staff, then back to me.

- Malathi D/O Muthu Veran, SPF



Because I've been in service for some time, with all these different postings and things that I've worked on, especially the secondments, they have really opened the number of contacts and networks that I have. So it's much easier for me to contact people to ask for help. Or let's say I want to hire someone, then I can call people to ask for references. That makes the job a lot easier and smoother.

- Ng Siew Hua, MHQ

Networks are also formed through non-formal settings. For instance, the Phoenix Community is a self-run committee managed by the Home Team talent community, which is divided into smaller community groups (CG). CGs are led by an advisor who is a senior Home Team leader at the Senior Director or Deputy Head of department level. It promotes informal interactions among the community and creates opportunities for officers to network and cross-share on their areas of work.



The CG allows personal exchanges to happen at a deeper level, which I don't think fireside chats will provide, because your CG advisor and members share advice and views with you at a more intimate level, which is very useful. Our CG also arranged for learning journeys to get to know each other and our work better. For example, we visited the various Home Team units at Bedok Police Division, Changi Airport, Woodlands Checkpoint, and Punggol Fire Station and NPC.

- Parthiban s/o Mathevanan, MHQ



An advice that my former supervisor, the Deputy Director in Joint Operations Group gave me was to think a bit differently when supervising staff: Just as you learn and grow from opportunities given to you by your boss, so when opportunities come your way as a leader, you should look at who you want to assign a job to in order to expose them to something that they can grow and learn from. I thought this was a very powerful way of thinking about each member of my team, of what is needed for them to grow, and then assigning them tasks with that kind of a strategy.

- Kalaivanan s/o Pannerchilvam, ICA



It's always useful to know somebody somewhere that you might need to reach out to one day, and be able to ask that person questions, because sometimes it can be a little awkward to do so when you meet in a formal setting, e.g. a meeting. With informal communities, you can skip that step, because you already know what they do from all these prior informal interactions. These communities help with these kinds of background knowledge that you can only get in informal settings.

- Tan Mei Yan, MHQ



Having previous bosses who have become friends, and whom you can bounce ideas off, e.g. those who are more senior than you in terms of being a director – they have the experience of how to deal with certain issues. For example, how do you plan for HR issues? How do you talk to people in terms of coaching? Those experiences they share and feedback that they give me have been very useful. And because they know me well after having worked with me, they also understand how I would approach certain things. Like, now that you're a director, maybe you should consider doing it this way instead. These tips have been very helpful.

- Ng Siew Hua, MHQ

LEADERS BUILDING LEADERS

One key strength of the Home Team lies in leveraging experienced leaders to mentor and develop new leaders. This can happen in formal settings like the workplace where there is direct coaching and mentorship from supervisors, or informal settings like fireside chats.

Learning from supervisors

By virtue of their proximity, supervisors play a key role in guiding and shaping the leaders into who they are today.



During the course of my work, there could have been a lot of questions asked, a lot of roadblocks put in front of me. But my supervisors gave us their blessings and said just do what you think is right. That is very important: to trust our men on the ground, if you know that your men are doing the right thing, their hearts are in the right place; there is no need to micromanage. I remember when an incident happened in the wee hours, I called and woke my Deputy Director in CNB up and told him a suspect had escaped during an operation. He only said one sentence. He said, "Aaron, go get her." He didn't ask any questions. He didn't say, "Did you do this? Did you step in? Did you call police?" Nothing. That is empowerment. And we got her.

- Aaron Tang, CNB



The concept of personalised coaching sounded weird to me at first. Initially, I was apprehensive and didn't feel like I've got anything to be coached on. But when you go through it, you discover quite a lot of perspectives, and I benefitted from coaches who had experience coaching C-suite kind of people as well. I realised the issues I faced weren't too different from what other leaders faced. I feel that this programme should continue to be afforded to our leaders.

- Shaiful Herman Bin Shali, SCDF



It was a refreshing experience to have the perspectives of someone external who was able to grasp the issues so well. He would also allow the space for critical self-reflection and follow-up. His experience in coaching leaders across the Singapore government gave him a good sense of the challenges and ways of working. In one of my later sessions, I sought his advice on improving the work climate for my organisation. He provided a sounding board, and shared resources that I used to build a stronger division.

- Jasmin Kaur, HTA

Learning from mentors and coaches

Several of the interviewees stressed the importance of having good and supportive leaders in the Home Team to provide leadership guidance.



The Home Team culture and set up is one where I think people value and recognise the value of mentorship and coaching and are prepared to give as much, or sometimes more, than what they have received. So over the years, throughout my career, I've had the benefit of learning from mentors and coaches, either formally or informally. Often, it is structured by the HR [Human Resource]. Over the course of my career, I've had the benefit of having Mr Soh Wai Wah and Mr Aubeck Kam as my mentors. I have gained from some of their insights, some of their perspectives and some of their wisdom as I have grown as a SPF officer, So I firmly believe that mentorship continues to be critical for the Home Team.

- How Kwang Hwee, SPF



We're very fortunate to have good leaders who make time and help officers along so that they can do their work better, and they can understand why they are doing what they are doing and its importance. And again, we don't have good leaders by chance – it starts with recruiting them, developing them, making sure they have the right skills, people management, and that their heart is in the right place. So, while I say good leaders, this did not happen by chance; it's an intentional, deliberate process of choosing and developing our people and leaders. It's not 100% foolproof but we certainly have had more hits than misses.

- Rockey Francisco Junior, SPS

Gleaning from Senior Leaders

The imbibing of leadership attributes can also take place informally, as when one gleans from what other senior leaders say, or how they behave. Many of the leaders interviewed said they benefitted from the experiences and insights shared by senior leaders during fireside chats. These chats with senior leaders are a deliberate leadership development opportunity worked into various milestone courses for Home Team leaders. The interviewees especially appreciated the authentic and candid sharing by seasoned senior leaders during these interactions.



During the fireside chats, we had senior leaders come in and share their diverse experiences, perspectives, and opinions with us, and I found that very enlightening.

One key leadership quality that I hold firmly is that a leader must be principled in decision making. Through the fireside chats, I saw that this was indeed a common leadership quality across the senior leaders. Being principled is important because it determines how you deal with issues – that you are consistent and do not do things arbitrarily.

- Sunny Lee, YRSG



What I always remember was when then Director of Central Narcotics Bureau Ng Ser Song came in, he told us: I'm not going to tell you about the leadership traits and the things that you ought to have. I'm going to share with you all my failures. So I thought that was really something very different because he said that I'm going to share with you all the instances that I failed, you know as a leader, because I don't want you to go through what I went through.

- Kelly Lim, ICA



I remember at one of the fireside chats during the Home Team Senior Leadership Programme, one of the Home Team leaders shared that you need a group of friends that you can turn to for peer support. At first glance, it may sound like generic advice, but when you think more deeply about it, in our careers, we focus very much on the work. But we should not forget about the friendship part – you really need a group of peers supporting you, whom you can turn to for independent and objective advice.

- Tan Fong Chin, MHQ

Other than fireside chats, the impartation of desirable leadership qualities can also take place from observations of the behaviour of senior leaders – how they walk the talk. Several interviewees shared their experiences of learning through observation of positive leadership traits from their leaders.



From the first secondment in MHQ, I got to see how the culture was being built up. At that point of time, PS [Permanent Secretary] started emphasising and being very vocal about digitalisation and training. I think that's also when the push for this digitalisation training started. One thing I learnt from PS is how he builds and drives culture in the organisation. So now that I am back in MHQ again in PDD, I can see the difference. I see how important a leader is in shaping the culture. So now you see training and digitalisation is pretty much entrenched in MHA. When new people come in, the seniors tell them training is important and that this is something which we should leverage because it helps us in our work.

- Parthiban s/o Mathevanan, MHQ



I was in the Operations Department in SPF as a staff officer. In 2006, we were running a lot of operations because of major events like the General Election, the International Monetary Fund-World Bank meeting. And you learn from your bosses. Aubeck Kam was then Director Ops – I observed his high energy level, the clear vision, direction, as well as the attention to details. The energy level was amazing, and I saw how he sustained the energy level. So as a young officer, when you see this, you are inspired by it and you learn. As you become a senior leader, you remember this. When I was a junior officer then, I appreciated these leadership qualities, so now that I am in a senior position, I hope the young officers continue to appreciate these qualities in their leader.

- How Kwang Hwee, SPF



I will never forget one of the rehearsals for the Workplan Seminar 2018 when I was tasked to present to a Minister. Right before the actual day, we had a Commissioner's vetting session, and I screwed up that vetting. My mind went blank so I thought that I would be reprimanded and then maybe Commissioner will replace me. But instead, Commissioner showed patience and offered guidance on how to improve my presentation. He advised me not to memorise word for word but focus on the key points that I wanted to convey. This advice has stayed with me ever since. More than just advice, it was a defining moment that taught me a leader's role is not just to correct mistakes but to embrace them as opportunities to develop and nurture their staff to grow with confidence.

- Chia Shang Yi, SCDF



You notice PS, whether in the tea sessions, or an interview with somebody, he shares his thoughts openly, and he shares his thinking and perspective and principles on issues. Those are really important nuggets that you actually can learn from in terms of how you want to see yourself as a leader. Or as a leader, what kind of guiding principles you should have.

- Kalaivanan s/o Pannerchilvam, ICA

BRINGING IT ALL TOGETHER

These interviews with various leaders across the Home Team, representing different disciplines and vocations (uniformed, specialist, civilian), and work experiences spanning 10 years to more than 25 years of service, show the spirit of giving back is strong as they have all benefitted from the leaders who came before them. As they note, leaders build leaders in the Home Team in a continuous virtuous cycle. Whether through structured programmes, formal mentorships or learning and impartation in informal settings, there is a wealth of leadership experiences that can be extracted, learnt, and passed on, creating an ecosystem that amplifies the organisational emphasis on leadership development.



The Home Team is one of the best places to be if you like to work with people and you enjoy developing and contributing in different aspects of leadership. We are a 24-7 organisation; you need leaders throughout the organisation. So that when people sleep, there continues to be leaders on the ground leading teams, running operations, making decisions, and these are life and death decisions. So for the Home Team, leadership is critical.

- How Kwang Hwee, SPF



The Home Team really is a wonderful place to be a leader in. Everyone is just so passionate and mission-focused that it is not difficult to motivate them to do their best. In fact, this is an organisation where I believe iron really sharpens iron. How I grew as a leader really is because of the positive energy and values which my supervisors, my peers and my officers rubbed off on me. I wouldn't be able to do it without them.

- Aaron Tang, CNB

with the organisational climate that supports the development of leaders at various levels with the appropriate ethos, skillsets and capabilities (McCauley et al., 2010). The leadership journeys discussed here suggest the Home Team's deliberate and proactive strategy to broaden the mindsets and networks of its leaders through formal and informal learning opportunities is working. It is evident that leaders across different schemes are finding common benefits that support their development as leaders in safety and security.

In the Home Team, people are its greatest asset, and the continued development of leaders who can nurture and lead the Home Team through the dynamic, complex and ever-evolving landscape is clearly a key priority that drives the success of the organisation.

Leadership development is a multi-prong effort that requires a deliberate and proactive strategy

ACKNOWLEDGEMENTS

The authors are grateful to the Home Team leaders featured in this article who were patient and generous in their sharing of their leadership journeys. They epitomise the spirit of giving back by sharing their personal stories. Our regret as we worked on this article is having to abbreviate the wealth of experiences they shared with us.

ABOUT THE AUTHORS



Jasmin Kaur

is a Home Team psychologist, currently posted as Director of the Home Team Centre for Leadership at the Home Team Academy. She has had numerous postings at various psychology units in the Singapore Prison Service, as well as a stint with its Data & Analytics Branch. She was previously seconded to the Ministry of Social and Family Development as Senior Deputy Director of the Family Policy Office.



Denyse De Silva

is a Home Affairs Senior Executive currently seconded to the Public Service Division's Human Resources Policy Team. In the Home Team, she has served in the Ministry of Home Affairs Human Resource Division's Leadership Development and Organisation Development teams.



Justin Phua

is from the Immigration & Checkpoints Authority (ICA). He has had several operational and staff postings at Woodlands Checkpoint and ICA Headquarters, and was previously seconded to the Joint Operations Group in the Ministry of Home Affairs Headquarters. Following post-graduate studies, he is now working on developing and improving the ICA Services Centre's digital services and capabilities.



Long YingYing

is a Singapore Prison Service (SPS) officer. She has served operational and staff postings at both men and women prison institutions and SPS Headquarters, as well as a secondment to Joint Operations Group in the Ministry of Home Affairs Headquarters. After her post-graduate studies in positive psychology, she is now leading corporate communications and corporate relations efforts in SPS.

REFERENCES

De Pater, IE, Van Vianen, AEM, Bechtoldt, MN, & Klehe, U. (2009). Employees' challenging job experiences and supervisors' evaluations of promotability. *Personnel Psychology*, 62, 297–325.

Gurvis, J, McCauley, C & Swofford, M. (2016). *Putting Experience at the Center of Talent Management*. Center for Creative Leadership. www.ccl.org

Jeong, S. (2024). *Creating competitive leadership advantage: 4 ways that scaling development powers engagement, retention & ROI*. Center for Creative Leadership. www.ccl.org

Kjellstrom, S, Stalne, K, & Tornblom, O. (2020). Six ways of understanding leadership development: An exploration of increasing complexity. *Leadership*, 16(4), 434-460.

Madsen, S. (2020). The key to leadership development is critical reflection. *Forbes*. www.forbes.com/councils/coachescouncil/2020/05/26

McCauley, CD, Kanage, K, & Lafferty, K. (2010). Leader development systems. In E Van Velsor, CD McCauley, & MN Ruderman (Eds.) *The Center for Creative Leadership Handbook of Leadership Development*, 3rd edition, pp.29-62.

Scotti, L. (2024, December 13). *How leaders can grow in today's fast-paced tech environment*. Forbes. <https://www.forbes.com/sites/mastercard/2024/12/13/every-small-business-needs-its-own-digital-toolbox-to-flourish-heres-why/>

Van Velsor, E, and O'Connor, PMG. (2007), Developing Organizational Capacity for Leadership. In R Hooijberg, JG Hunt, J Antonakis, KB Boal, and N Lane (Eds.) *Being There Even When You Are Not (Monographs in Leadership and Management, Vol. 4)*, Emerald Group Publishing Limited, Leeds, pp. 31-49.

STRENGTHENING THE HOME TEAM CONCEPT THROUGH TRAINING: THE HOME TEAM ACADEMY'S ROLE

Goh Tze En & Kittybond Koo
Home Team Academy

ABSTRACT

The Home Team Academy (HTA) plays a central role in cultivating and strengthening the Home Team concept and culture through training. Through integrated milestone training programmes, leadership development initiatives, and innovative learning approaches, HTA systematically develops Home Team officers who embody the core values of Honour and Unity. The academy's strategy includes a foundational course for new officers, leadership programmes, and a permanent exhibition which reinforce the shared heritage, identity and mission. These programmes also support Ministry-wide cultural touchpoints such as the annual Home Team Day.

FOSTERING A STRONG HOME TEAM CULTURE

The Home Team concept was introduced 30 years ago, in 1995, by then Minister for Home Affairs Wong Kan Seng as a response to increasing threats to Singapore's security. The aim was to create a nimble, united team capable of timely response, grounded in the idea of various agencies working as one with a shared mission to keep Singapore safe and secure.

At the official launch of the Home Team in 1997, Wong, alluding to the challenges ahead, noted that to be successful in this mission, officers working in the various agencies under the Ministry of Home Affairs (MHA) needed to be committed to "thinking, learning, and working together" (Wong, 1997). That

was probably as close to an unofficial definition of Home Team culture that has underpinned its endurance over the last three decades.

Historically, "thinking, learning and working together" was operationalised through joint operations, training, and shared resources. More recently, the idea of a Home Team culture is being entrenched through the commemoration of the annual Home Team Day. Launched in February 2024, Home Team Day seeks to recognise the dedication and sacrifices of Home Team officers, strengthen unity across Home Team Departments, foster a shared sense of purpose, and reaffirm commitment to the MHA mission of keeping Singapore a safe and secure home for all, and the core values of Honour and Unity.



Figure 1. Current Home Team agencies: Ministry of Home Affairs Headquarters (MHQ), Singapore Police Force (SPF), Internal Security Department (ISD), Singapore Civil Defence Force (SCDF), Immigration & Checkpoints Authority (ICA), Singapore Prison Service (SPS), Central Narcotics Bureau (CNB), Home Team Academy (HTA), Home Team Science and Technology Agency (HTX), Gambling Regulatory Authority (GRA) and Yellow Ribbon Singapore (YRSG). Over 29,000 officers make up the Home Team (Ministry of Home Affairs, 2024).

Studies on organisational culture generally show that organisations that focus on developing and strengthening their group culture benefit significantly in productivity, talent attraction and retention. There is, however, no easy definition of organisational culture. Definitions range from broad descriptions, such as “how things are done around here” (Drennan, 1992), to more comprehensive formulations such as “the values that lie beneath what the organisation expects, supports and rewards” (Schneider, 1988) and “the norms and values of the organisation shared by employees” (Kotter & Heskett, 1992).

In his book on *Public Service Leadership*, former senior Singapore civil servant Tan Yong Soon offers this definition based on a study by Schein (1996) explaining the impact of the Economic Development Board’s managerial culture on Singapore’s socio-economic history:

Culture is what a group learns over a period of time as that group solves its problems of survival in an external environment and its problems of internal integration. Three fundamental levels at which culture manifests itself are: observable artifacts, values, basic underlying assumptions (Tan, 2025).

As Tan and others have observed, culture is also vital to sustaining organisational and societal values. A strong, healthy organisational culture, when aligned with sound strategy and clear leadership, drives positive outcomes such as alignment with organisational mission, strong performance, greater cooperation, reduced job stress, increased employee loyalty, and enhanced attractiveness to potential employees (Kotter & Heskett, 1992; Groysberg et. al, 2018).

In recent years, MHA leaders have made clear that culture is a key factor in fostering a common ethos and shared values across the Home Team (Shanmugam, 2024). Strengthening the Home Team culture remains a priority, as it underpins all efforts and embodies the essence of the Home Team concept. This was reiterated by Home Affairs Minister K Shanmugam in his speech at Home Team Day 2025:

We have been attempting to inculcate that culture into every one of our officers and over

the years, step by step, we have developed now, a full calendar of joint training courses, joint exercises, as well as social activities that cut across departments, bringing different people together from different departments, like the Home Team Games and SPRIGHT games These touchpoints coming together across Home Team departments, allow officers across the Home Team to come together to learn, to work, and to play.

Last year, we published the Home Team Culture Guide. It articulates our shared values and desired behaviours to help our officers, especially the newer officers, to understand what it means to be a member of the Home Team (Shanmugam, 2025).

With the importance of culture firmly established, the Home Team Academy (HTA) serves as a key institution in cultivating and reinforcing the Home Team culture across departments.

ROLE OF HTA IN SOCIALISING THE HOME TEAM CULTURE

Established in April 2006, the Home Team Academy plays a crucial role in the Home Team training and learning (T&L) ecosystem and embodies the Home Team concept in support of national goals. It represents the aspiration of unity within the Home Team, fostering shared values, and ethics, and a culture of professional excellence. HTA provides centralised training and facilities to develop Home Team officers and leaders, while enhancing collaboration and innovation across the entire Home Team.

In March 2015, the Home Team Transformation 2025 plan was launched to ensure the Home Team’s continued effectiveness and relevance. In line with this, HTA has been preparing Home Team officers for an increasingly complex operating environment through comprehensive, integrated training. This approach, which includes milestone training programmes and the Home Team Gallery, aims to strengthen Home Team culture and foster a ‘One Home Team’ mindset, where officers from each Home Team agency see themselves as part of a larger team, working on their individual missions, but ultimately keeping Singapore secure. The aim is to develop collaborative,

thinking and future-ready officers and leaders capable of navigating cross-agency challenges as one effective Home Team.

HTA also enhances operational synergy by leveraging technology for joint operations training, both within the Home Team agencies and with other government agencies. This integrated, forward-looking strategy seeks to equip Home Team officers to work cohesively in combating evolving threats and safeguarding Singapore's security.

Nurturing Collaborative Home Team Officers and Leaders

As the primary touchpoint for the training of Home Team officers throughout their careers, HTA has a pivotal role to play in seeding a 'One Home Team' mindset and cultivating a strong Home Team culture across all levels of the Home Team. It employs a multifaceted approach to develop future-ready Home Team officers. The academy's integrated milestone programmes, such as the Home Team Foundation Course, Home Team milestone



A STRONG HOME TEAM CULTURE STARTS WITH YOU!

E

ENGAGE

Get to know colleagues from other Home Team Departments. Learn more about their work, areas of interest and challenges.

C

COLLABORATE

Think about whether you can impact or play a part in other Home Team Departments' work. Seek opportunities to optimise outcomes by working with colleagues from other Home Team Departments.

P

PARTNER

See the public whom we serve, as partners in keeping our home safe and secure. Build trust with them at every opportunity.

The Three Dimensions of the Home Team Culture		
<p>We keep Singapore safe and secure</p> <p>Singapore's national interests must always come first.</p> <p>We prepare ourselves early to deal with contingencies.</p> <p>We embrace learning, new tools and technology.</p> <p>We value the public's support and partnership.</p>	<p>We are stronger as One Home Team</p> <p>We achieve more when we collaborate with each other.</p> <p>We show appreciation for each other.</p> <p>We take pride in each other's achievements and the Home Team's achievements.</p>	<p>We discharge our duties with honour</p> <p>We act with integrity and professionalism, and have the courage to do what is right.</p> <p>We believe that the public's trust and confidence in us is the foundation of our ability to deliver on our mission.</p>

Figure 2. The Home Team Culture Guide launched at Home Team Day on 24 February 2024

leadership training programmes, and the Civilian Milestone Programmes, emphasise shared values and seek to develop a united workforce capable of tackling dynamic challenges collaboratively.

Inculcation of Shared Heritage, Values and Culture

Launched at the inaugural Home Team Day in 2024, the Home Team Culture Guide is integrated into the academy's milestone training programmes. Developed jointly by HTA, and the Planning and Organisation, and Human Resource divisions at Ministry headquarters, the guide is designed to help officers understand the Home Team's united approach and shared values — Honour and Unity.

The Guide explains the origins of the Home Team concept, highlights key milestones, and details how each agency's culture complements the Home Team culture. The three dimensions of the Home Team culture include:

1. We keep Singapore safe and secure.
2. We are stronger as one Home Team.
3. We discharge our duties with honour.

Importantly, the Guide emphasises that each officer and each agency has a role to play in cultivating a strong Home Team Culture, encompassing shared values, and exemplary behaviours and mental models. This unified approach, to be reinforced annually through Home Team Day, ensures the Home Team can remain successful in fulfilling its mission of

keeping Singapore safe and secure. (Please see Figure 2 for extracts from the guide.)

In line with prevailing research that organisational culture “perpetrates and reproduces itself through the socialisation of new members entering the group” (Tan, 2025), HTA builds on the Home Team Culture Guide to reinforce the group culture by incorporating the shared values and principles into carefully curated modules within its integrated milestone training programmes. These principles include the importance of placing national interest first and building public trust in the Home Team's work.

SEEDING THE 'ONE HOME TEAM' MINDSET THROUGH MILESTONE COURSES

A key milestone course run by HTA for new-entrant senior Home Affairs Uniformed Services (HUS), Home Affairs Services (HAS) officers, and civilian officers from across Home Team agencies is the **Home Team Foundation Course (HTFC)**.

The HTFC builds upon the Home Team Culture Guide's emphasis on a united approach, fostering better integration and collaboration in joint operations and planning within the Home Team. It features several modules, including two key ones: Operating as One Home Team and Home Team Culture, and Home Team Guiding Principles. These modules are designed to imbue Home Team officers with a common set of ethos and values, defined by Honour and Unity, which serves as the moral compass guiding Home Team

officers towards the vision ‘to make Singapore our Safe and Secure Best Home’. Ultimately, these modules help them understand the importance of discharging their duties fairly and impartially, upholding the integrity of the Home Team, and maintaining public trust.

The Operating as One Home Team and Home Team Culture module also emphasises the significance and relevance of the Home Team concept. It imparts the importance of contributing as an effective team member, especially in the current security landscape, by illustrating the joint Home Team approach through operations, training, shared facilities, community engagement, logistics, and communications. These modules allocate dedicated time for discussions between Home Team officers, facilitating the exchange of ideas and fostering mutual understanding of the Home Team concept and culture. Together, the modules taught in HTFC are crucial in shaping Home Team officers’ stronger appreciation for the Home Team concept, culture, and a shared identity at an early stage of their career, fostering closer collaboration among value-driven officers across the Home Team.

Since HTA started the HTFC in 2018, there have been 51 runs up to Oct 2025, with 1,539 Home Team senior officers who have completed the course. HTFC received consistently high ratings across all 51 runs. This compulsory programme with up to seven runs in each year, has undoubtedly become one of the mainstays of joint training for new entrants that brings together officers from across Home Team agencies at the start of their careers. This intensive course demonstrates the Ministry’s emphasis on a strong Home Team identity, values and culture. The investment is tremendous, involving subject matter experts and authorities from several MHQ divisions, from Planning and Organisation, Joint Operations Division, Human Resource to Legal Division, and all seven Home Team departments and three statutory boards coming together to jointly train Home Team officers and demonstrating to them what it means to be a member of the Home Team.

Another course run by HTA to strengthen the joint Home Team approach, culture and develop adaptable officers is the **Home Team Frontline Supervisors Course (HTFSC)**. Similar to HTFC, HTFSC shares the same commitment to fostering better integration and collaboration. However, HTFSC differs in its focus on developing adaptable supervisory leaders at the operational level. Following recommendations from an

internal MHA review in late 2022, HTA worked closely with MHQ Divisions and Home Team Departments to put together a carefully curated 10-day programme that was successfully piloted in April and July 2025. This course focuses on Station Inspectors and their equivalent HUS and HAS ranks from SPF, SPS, SCDF, ICA, CNB and MHQ. It demonstrates how the Home Team works as one, with the aim to foster deeper bonds, better understanding, and reinforcing shared values.

The course design strategically incorporates the three dimensions of Home Team culture through both content and delivery methods. “We keep Singapore safe and secure” is reinforced in modules on the Home Team Concept, and Home Team Transformation, equipping officers with a shared mission focus. “We are stronger as One Home Team” comes through inter-departmental learning visits and joint simulation exercises that build trust and collaboration. “We discharge our duties with honour” is instilled via case studies and fireside chats that highlight integrity, professionalism, and moral courage. Experiential learning activities, cross-departmental group work, and reflective discussions mirror these values in practice. Collectively, the course aims to strengthen HT officers’ value system, which in turn engenders public trust in HT officers and the Home Team, reinforcing the foundation upon which our mission success depends.

The HTFSC piloted two successful runs for seasoned supervisors, earning excellent reviews and demonstrating HTA’s capability in designing transformative learning experiences, and successful implementation with the collective support of Home Team departments. Based on the positive feedback received, the course deepened cross-departmental understanding, strengthened networks, and reinforced shared Home Team values. Although the course has been recently introduced, the strengthened working relations and trust among the participants have led to the successful intervention of a serious crime. This affirmed that the learning outcomes were met, and that the course enhanced appreciation for working together as one Home Team, aptly summed up by participants who said, “We came together as individuals, but left the course as one Home Team,” and “The course underscored the importance of cultural awareness and mutual understanding in fostering effective collaboration. Learning about other agencies’ values, practices, and challenges was particularly insightful and undoubtedly help build stronger, more cohesive partnerships.”

Beyond the HTFSC, HTA continues to reinforce Home Team shared values, ethics, principles and culture through a series of milestone leadership training programmes. These programmes are designed to prepare Home Team civilian and uniformed officers for increasing leadership responsibilities as they progress in their careers. Importantly, these are touchpoints for Home Team officers beyond their early years and the HTFC. The suite of leadership programmes includes:

- Home Team Leadership Programme (HTLP)
- Home Team Advanced Leadership Programme (HTALP)
- Home Team Senior Leadership Programme (HTSLP, formerly known as the Home Team Senior Command and Staff Course)
- Phoenix Programme

Among these, the **Home Team Leadership Programme (HTLP)** serves as a key example of how HTA develops future-ready, collaborative Home Team leaders. Tailored for Home Team uniformed and civilian officers in Grade 12 (Assistant Superintendents in the uniformed service or senior executives), HTLP covers developmental domains such as personal leadership and effectiveness, policy and governance, safety and security contemporary issues, and preparing the organisation for the future. A cornerstone of this programme is the Values and Ethics module, which builds upon the principles introduced in the Home Team Culture Guide. This module nurtures leaders who are deeply grounded in shared values and equipped to navigate ethical challenges in their roles.

The Values and Ethics module employs practical learning approaches, incorporating case studies of Home Team Code of Conduct contraventions. These cases illustrate potential ethical breaches, such as conflict of interest and misuse of authority, along with their consequences. Participants have to analyse these scenarios to reinforce Home Team core values and develop strategies for addressing ethical dilemmas in their day-to-day work. They are also allocated time to discuss potential ethical dilemmas that may arise in day-to-day work or within teams. By facilitating cross-departmental learning and dialogue, the HTLP not only reinforces the Home Team culture but also develops leaders capable of guiding team members and leading teams in

alignment with this shared ethos.

In addition to the leadership programmes that develop senior officers across the Home Team, HTA recognises the need for specialised development of civilian officers at all levels. The Civilian Milestone Programmes (CMP) complement the leadership tracks by providing tailored development for civilian officers throughout their careers in the Home Team agencies. The suite of CMP includes:

- Civilian Support Officer (CSO) Foundation Course
- Step-In
- Step-Up
- Step-Beyond

As of FY2024, a total of 2,004 civilian officers have attended the CMP courses since their inception in 2018. Incorporated into these programmes is the Values, Principles and Culture module, which strengthens civilian Home Team officers' understanding of their roles and the importance of working collaboratively with their counterparts in the Home Team. It helps officers situate the current operating environment in a volatile, unpredictable, complex, and ambiguous (VUCA) world, raising awareness of the evolving threats Singapore faces and their roles within the Home Team. Participants work through collaborative activities in teams that encapsulate the intricate connections between their individual identity, HT driving forces, guiding principles and the key dimensions of the HT Culture Guide. Through the CMP, civilian officers are empowered to collaborate seamlessly with their uniformed counterparts to realise the Home Team's mission.

PRIDE IN A SHARED HOME TEAM HERITAGE AND IDENTITY

To complement the academy's integrated milestone training programmes, the **Home Team Gallery** serves as a key training platform to reinforce the inculcation of shared values and a 'One Home Team' mindset in officers. After a year-long revamp in 2021, the gallery was reopened in May 2022, highlighting the significance of the Home Team concept and showcasing the Home Team's shared history and heritage. It uses artefacts, storytelling, oral history interviews, interactive auditory and tactile elements, and post-visit reflection sessions to foster a strong sense of pride and commitment to the Home Team's operational success.

Visits to the Gallery are integrated into several of the milestone training programmes — the HTFC, HTFSC, HTLP, CSO Foundation Course, and Step-Beyond. With its curated exhibits and overall 'One Home Team' narrative, the Gallery is designed to help Home Team officers internalise Home Team shared values, develop a deeper emotional connection, and cultivate a sense of belonging to the Home Team. As part of the Gallery's programming, officers also engage in game-based learning on platforms like Padlet and Kahoot, to further enhance their impressions and action points on the evolution of the Home Team concept and importance of fostering a strong Home Team identity and culture.

Since its reopening, the gallery has also welcomed visitors on many occasions, such as for HTA's and other Home Team Departments' training programmes, Home Team Day, Home Affairs Senior Executive (HASE) Symposium, Home Team Cadet Corp programmes, and visits curated for strategic partners and foreign dignitaries. As of July 2025, the gallery has received over 22,000 visitors, predominantly Home Team officers and trainees, Home Team volunteers, and school students.

SHARED EXPERIENCES AND FIRESIDE CHATS

HTA's integrated milestone training programmes curate **shared experiences** that help to develop closer and deeper working relationships within the Home.

In the HTFC, senior officers (uniformed services and civilian officers who have completed their basic training and have 1-2 years of service) are offered insights into the work of their counterparts in other departments. Inculcation of Home Team ethos, seeding of a 'One Home Team' mindset starts early in their career with the Home Team. During this 10-day residential programme, participants collectively attend learning journeys to the Home Team agencies and engage in activities that promote **experiential learning and teamwork**. These activities include experience what different Home Team departments face in their work at the frontline, including donning SCDF bunker gear, and participating with their peers as a team in simulated live ground deployments at the Home Team Simulation Centre. Through these experiences, Home Team officers learn to appreciate the operational capabilities and challenges of each

Home Team agency while fostering camaraderie across the Home Team.

Dedicated time is also allocated for participants from various Home Team agencies to exchange ideas openly, optimising learning and inter-departmental collaboration, and fostering a 'One Home Team' mindset. In addition to classroom discussions, this is achieved through **fireside chats and dialogues** held during the integrated milestone training programmes.

In the milestone programmes tailored to new-entrant senior officers and leaders in managerial roles, senior MHA leaders are invited to discuss and share insights into critical social and security trends and challenges pertinent to daily Home Team operations. They are also asked to draw upon their experiences to share their personal leadership challenges and successes, reinforcing the understanding of challenges faced at different levels across the Home Team.

To refine the leadership skills of more experienced Home Team leaders, political office holders and senior MHA leaders participate in dialogue sessions in HTA's milestone leadership training programmes and share their experiences and insights.

These interactions and shared experiences are designed to allow Home Team officers to gain knowledge of the practical realities of their operating landscape and learn how to operate optimally as one team across departments. Home Team leaders are also encouraged to acquire crucial skills to effectively lead and develop teams grounded in Home Team shared values and mission. More experienced Home Team leaders learn to become sensitised to the interconnectedness of government agencies, understanding cross-departmental challenges and how to balance security imperatives with other requirements.

By facilitating a conducive learning environment for the open exchange of ideas and shared experiences, HTA's integrated milestone training programmes help Home Team officers and leaders from various departments foster understanding and trust in one another. This provides them with a stepping stone to form closer and deeper working relationships, enhancing synergy and embodying the 'One Home Team' mindset across the entire Home Team.

While shared experiences within the Home Team are best brought out through inter-agency joint operations, HTA seeks to enhance sharing through joint training, and increasingly with the conduct of joint simulation exercises that leverage technological innovations.

INVESTING IN TRAINERS & SIMULATION LABS

HTA actively invests in its training capabilities to prepare future-ready Home Team officers and to enhance operational synergy between the Home Team agencies. Established in 2017, **Home Team Trainers' Day** is an annual networking event organised by HTA to facilitate training collaborations across all Home Team agencies and help trainers strengthen their engagement. The event features a Community of Practice platform where trainers explore the latest trends in Training and Adult Education (TAE) and share best practices. Distinguished speakers from Institutes of Higher Learning and industry experts are invited to discuss current TAE developments, while award-winning Home Team trainers share key findings from their experiences at international teaching and learning conferences. Through these initiatives, HTA aims to sustain the continuous efforts of exemplary trainers that collaborate inter-departmentally to enhance their engagement with Home Team officers.

Trainers are also encouraged to adopt technological tools. As part of Home Team Transformation 2025, HTA employs advanced simulation technology to improve joint operations training within the Home Team and at a national level, collaboration with other Whole of Government agencies to ensure Singapore's safety and security.

The **Home Team Simulation System** (HTS2), developed as part of the academy's training capabilities, recreates immersive 3D scenarios and environments modelled after actual terrains. It provides realistic training for Home Team officers in incident management, particularly in sense-making and decision-making within a mock command post setting, preparing them for future challenges. Examples of key training exercises using HTS2 include:

- A joint command post training between SPF and SCDF officers to prepare for deployments at the annual International Institute for Strategic Studies (IISS) Shangri La Dialogue.
- A large-scale exercise involving 100 officers from

the Home Team — SPF and ICA — and the Singapore Armed Forces (SAF) to prepare management teams for scenarios faced by Joint Patrol Teams patrolling Orchard Road to deter terrorist activities.

These joint operations training sessions allow pre-empting of possible security incidents and coordination of collaborative efforts between Home Team agencies, building cross-departmental skills for future operations at sectoral and at a national level.

CRYSTALLISATION OF THE HOME TEAM CONCEPT

As the Home Team's corporate university, HTA strives for excellence in nurturing a strong Home Team culture, and ensuring its programmes are effective in achieving their stated goals. While surveys suggest its Key Performance Indicators (KPI) are being met – between FY2021 and FY2023, more than 90% of milestone course participants said that the courses made them appreciate the importance of working together as one Home Team – HTA continues to conduct regular reviews to improve its training curriculum, adopting new modules, activities and methodologies, and removing outdated ones. This ensures the relevance and efficacy of the integrated milestone training programmes in equipping Home Team officers with the knowledge and skills necessary to work as a Home Team in tackling future challenges.

Additionally, HTA's efforts to enhance its training capabilities through advanced simulation technology has yielded positive results in operational synergy and officer preparedness. For instance, following a joint training exercise between the Home Team agencies and the SAF in 2024, a senior police officer, Superintendent Ryan Koh, noted: "The simulation training at the Home Team Simulation Centre is an excellent platform for units to conduct training in a safe environment before ground operations or major exercises as it optimises training deliverables while saving us valuable time and resources." Other Home Team officers have also acknowledged that joint training and exercises play a role in helping them achieve mission success.

EMBRACING CHALLENGES OF THE FUTURE

Home Team Transformation 2030 envisions a future-oriented, trusted Home Team with a

focus on strengthening Heartware (Culture), upgrading Software (People), and advancing Hardware (Technology).

Under this transformation, HTA is advancing its technology adoption. As part of the development plans for a Next Generation Home Team Simulation System (Next Gen HTS2), HTA has embarked on a proof-of-concept on the creation of artificial intelligence (AI) avatars to train officers in handling typical incidents, such as snatch theft (Sun, 2024). Reducing the need for role players in a simulation exercise, these AI avatars are designed to meet various training requirements in responding to trainees’ questions and decisions, and are adapted

to the Home Team’s context. In line with Home Team Transformation 2030, HTA is exploring ways to enhance these avatars, creating a more immersive training experience.

In Singapore’s complex security landscape, HTA’s role in shaping a unified, skilled, and technologically adept Home Team is increasingly critical. By cultivating shared values, a ‘One Home Team’ mindset, and harnessing technologies, HTA lays the groundwork for a responsive and adaptable Home Team. This effort in creating a cohesive and resilient force stands as a cornerstone of Singapore’s continued safety and security, preparing the Home Team to meet the challenges of 2030 and beyond.



Figure 3. Key Directions for Home Team Transformation 2030

ABOUT THE AUTHORS



Goh Tze En is a Home Affairs Senior officer with the Centre for Home Team Integration at the Home Team Academy. Her primary job role is related to heritage research and values inculcation through training for the Home Team.



Kittybond Koo is a Home Affairs Senior officer who heads the Centre for Home Team Integration at the Home Team Academy. The team is responsible for seeding and strengthening a One Home Team mindset and culture, values inculcation and emerging skills through curating and developing training programmes.

ACKNOWLEDGEMENTS

The authors would like to express their appreciation to officers from the following centres and division who contributed to the article:

- Centre for Home Team Integration, HTA
- Centre for Home Team Simulation, HTA
- Centre for Learning Systems, HTA
- Home Team Centre for Leadership, HTA
- Organisation Development, Human Resource Division, MHA

REFERENCES

Drennan, D. (1992). *Transforming Company Culture*. Maidenhead, UK: McGraw-Hill.

Groysberg, B, Lee, J, Price, J, & Cheng, a. J-J. (2018, January-February). The Leader's Guide to Corporate Culture. *Harvard Business Review*. Retrieved from <https://hbr.org/2018/01/the-leaders-guide-to-corporate-culture>

Kotter, JP and Heskett, JL. (1992). *Corporate Culture and Performance*. New York, NY: Free Press.

Ministry of Home Affairs. (2024, February 6). *Mental Health Support for Home Team Officers and Fostering Values That Respect Diversity at Workplace* [Press release]. Retrieved from <https://www.mha.gov.sg/mediaroom/parliamentary/mental-health-support-for-home-team-officers-and-fostering-values-that-respect-diversity-at-workplace-2024/>

Saffold, GS. (1988). Culture Traits, Strength, And Organizational Performance: Moving Beyond "Strong" Culture. *Academy of Management Review* 13(4), 546–558.

Shanmugam, K. (2025, February 24). *Home Team Day 2025 Ceremony*. Ministry of Home Affairs. Retrieved from <https://www.mha.gov.sg/mediaroom/speeches/home-team-day-2025-ceremony/>

Shanmugam, K. (2024, February 24). *Home Team Day Launch 2024*. Ministry of Home Affairs. Retrieved from <https://www.mha.gov.sg/mediaroom/speeches/launch-of-home-team-day-2024>

Schneider, B. (1988). Notes on climate and culture. In Lovelock, C., *Managing Services*. Englewood Cliffs, NJ: Prentice Hall.

Schein, EH. (1991). *Organisational Culture and Leadership* 2nd ed. San Francisco, CA: Jossey-Bass.

Sun, David. (2024, April 24). Home Team Academy exploring use of AI to train officers by 2025. *The Straits Times*. Retrieved from <https://www.straitstimes.com/singapore/home-team-academy-exploring-use-of-ai-to-train-officers-by-2025>

Tagiuri, R and Litwin, GH. (Eds). (1968). *Organisational Climate: Exploration of a Concept*. Boston, MA: Harvard University Press.

Tan, Yong Soon. (2025). *Public Service Leadership: Lead Better to Achieve Success and Happiness*. Singapore: World Scientific Publishing.

Van Maanen, J. (1979). The fact of fiction in organisational ethnography. *Administrative Science Quarterly* Vol. 24, pp. 539-50.

Wong, Kan Seng. (1997). Speech by Minister for Home Affairs, at the *Home Team Launching Workshop*. Retrieved from <https://www.nas.gov.sg/archivesonline/data/pdfdoc/1997022404.htm>

THE UNSEEN FORCE BEHIND SINGAPORE'S HOMEFRONT SAFETY & SECURITY: THIRTY-FIVE YEARS OF HOME TEAM PSYCHOLOGY

Majeed Khader, PhD
Chief Psychologist, Ministry of Home Affairs

An Evening Crisis at Beauty World

It was 4 PM when the call came in. A man had barricaded himself inside an apartment with a long samurai sword to his own throat. He was wearing a Japanese bandana scarf on his forehead and attire that made him look like a Japanese warrior. His house was filled with oriental and mainly Japanese paraphernalia. He felt that he should kill himself as a matter of honour because his spouse had betrayed him. The negotiation team was deployed. A police psychologist was part of the team. Working closely with the main negotiator, the psychologist's aim was to profile the person quickly and then build rapport-based engagement through conversation strategies. The subject was not just irrational — he was emotionally overwhelmed and it was crucial to find points of engagement which would calm him down and bring him back to reality. The goal? To save a life. Hours later, the man 'came out' (tip: never use the term 'surrender'). No shots were fired. No lives were lost. The real heroes were the negotiators, but psychology helped win the night. It was the Unseen Force.

This incident is just one example of the unseen world of Home Team psychologists, where psychology intersects with the frontlines of security, often in high-risk, high-stakes situations—some involving life-or-death decisions.

Beyond crisis negotiations which involve police psychologists, prison psychologists play a vital role in managing and rehabilitating high-risk offenders, including those convicted of violent and sexual crimes. They apply psychological expertise to assess and reduce the risk of violence, shape rehabilitation strategies, and support reintegration efforts. Similarly, psychologists advise in cases involving drug

offenders, providing insights that strengthen enforcement, intervention, and rehabilitation, and also counsel violent extremists and help develop strategies to prevent radicalisation of youths and other at-risk individuals.

Other examples of psychology in action: Deploying to a cold disaster zone at a moment's notice as part of Operation Lionheart to offer psychological support in extreme conditions. Assisting operational officers in detecting deception and behavioural patterns of illicit travellers, particularly those faking marriages to gain entry into Singapore.

This is not conventional psychology; it is tailored for security, safety, crisis management, and enforcement. It focuses on anticipating threats, guiding frontline responders, and shaping interventions that protect lives and safeguard national security. Psychologists may not be in the spotlight, but they are the unseen force behind the frontline — empowering officers, strengthening leadership, and ensuring that those who protect others are mentally and emotionally prepared and operationally sharp.

Home Team Psychology is not theoretical but a frontline reality in operations and organisations. This specialised work distinguishes Home Team psychologists from those in other vocations like clinical psychologists who work in hospitals or business consultants. Many Home Team psychologists have operated in high-time pressure environments, enduring long hours during prolonged national operations, intensive operations, and tight deadlines for court reports. These high-pressure challenges may not be daily occurrences, but they define the resilience, adaptability, and special expertise required to be a Home Team psychologist.

Beyond operational and forensic psychology, psychological expertise is also applied to personnel and leadership selection and employee resilience support, ensuring that officers are resilient, well-equipped, and psychologically prepared for their demanding roles. Psychology is essential in developing high-performing operational teams, including elite special operations units, where mental resilience and team cohesion are crucial. Psychologists have been involved in special operations team selection and development since the nineties.

Not everyone stays in the Home Team psychologist role for the long term; some move on to different opportunities. Home Team Psychology is not a role for everyone. It has been said that you do not choose the job; the job chooses you and shapes you over the years. However, those who do remain appreciate the complexities of supporting security work and the sensitivities it involves. This is the process of organisational socialisation.

THE 'MIND GUARDIANS' OF SINGAPORE'S SAFETY AND SECURITY

Home Team uniformed officers serve as guardians of Singapore. Home Team psychologists are the mind guardians. Since the Home Team fundamentally depends on interactions and engagements with the public — whether an offender, victim, or service user — the work centres around primary human interaction. This is where the psychologist plays a crucial role. Their involvement is valuable not only for understanding Home Team officers and enhancing their effectiveness but also for understanding our citizens, including offenders and victims, thus allowing the Home Team to better appreciate the “clients”.

Where are Home Team psychologists deployed? They operate across almost every major security function in MHA.

Singapore Police Force (SPF): The work involves psychological selection of officers and leaders, resilience training for well-being, crime prevention and public education, crime support and analysis, deception detection, victim support psychology, leadership psychology, and crisis negotiation (Khader et al., 2011).

Singapore Civil Defence Force (SCDF): Psychologists provide resilience training for firefighters and paramedics, and also support operations, including Ops Lionheart (Ministry of Home Affairs, 2023).

Central Narcotics Bureau (CNB): The work here involves psychological assessments for some drug offenders and recommendations for interventions, including rehabilitation. Psychologists also train and supervise CNB officers in engaging with drug abusers placed under supervision.

Immigration & Checkpoints Authority (ICA): Psychologists are operational resilience, support, and pre-entry officers, as well as offer screening, and crime and deception detection support (Lee et al., 2019; and Chia et al., 2021).

Internal Security Department (ISD): Psychologists develop, implement and review rehabilitation programmes as well as develop and undertake research studies of direct application to the field of security-related studies in addition to conducting psychological assessments and providing counselling.

Singapore Prison Service (SPS): To assist in the management of high-risk inmates, psychologists undertake correctional research, programme development and evaluation, offender assessment and rehabilitation. They also train and support the Captains of Lives to perform rehabilitative roles (Cheng & Ong, 2023).

Home Team Psychological Division (HTPD), Ministry of Home Affairs HQ. First set up as the Home Team Behavioural Sciences Centre in 2007, HTPD promotes the integration of research science and evidence-based practices to enhance the effectiveness of Home Team operations and policy development by providing leadership and research in cross-cutting areas such as talent and leadership psychology, crime and extremism psychology, and drug and substance addiction and recovery. It also develops frameworks for professional standards, governance, and community capabilities for psychologists working across the Home Team.

Beyond frontline deployment, Home Team psychologists are also shaping future generations through academia. Alongside their frontline duties, several senior-level psychologists teach evening courses at universities, serving as professors in criminal behaviour, forensic psychology, addictions, trauma psychology, and correctional psychology modules. They are shaping Singapore's next generation of forensic and law enforcement psychologists and Home Team officers.

A number of Home Team psychologists have also been seconded to the Ministry of Social and Family Development, Attorney Generals Chamber, Ministry of Defence, Customs Departments and the Civil Service College.

FROM COUNSELLING TO COMMAND

The Evolution of Home Team Psychology

About 35 years ago, the field of Home Team Psychology started with just three areas: stress management, employee selection psychology, and counselling services. Today its services are more deeply integrated into operations and organisational endeavours. To illustrate, these psychological services have supported several significant operations over the past three decades. These include:

Terrorism Psychology: Post-911, Home Team psychological services and research to analyse radicalisation and extremism patterns resulted in useful publications and preventive advisories.

Crime and Investigative Psychology: Within the Singapore Police Force, psychologists pioneered the use of psychological autopsies for investigations and supported serious crime profiling operations. (See, for instance, my interview with the National University of Singapore (NUS) Criminal Justice Club, 2021.)

Major Incident support: Psychologists conducted behavioural analysis of those who participated in the Little India Riots in 2013, and were deployed to support the officers involved in the 2004 Tsunami Operations, and at times to support grieving families.

Major Operations support: Psychologists have been critical in the development of training and advisories for crowd behaviour psychology to aid officers involved in major operations.

COVID-related support operations: During the COVID-19 pandemic, psychologists in each Home Team Department played a major role in morale operations, fatigue operations, and overseeing the well-being of officers.

Rehabilitative, Risk Assessment and Desistance Psychology. Through risk assessments and research into desistance, psychologists have played a major role in developing rehabilitation operations in the Singapore prison system.

In the late 1980s and early 1990s, few could have predicted the profound integration of psychology and the behavioural sciences with law enforcement, safety, and security. The turning point came following the appointment of then Police Inspector David Chan, one of the first graduates of the then fledgling NUS Psychology Programme, as Chief Administrator of the Police Assessment Centre in 1991. Soon after, forward-thinking senior police leaders such as Heng Swee Keat (now Deputy Prime Minister), Leo Yip (Head of Civil Service), and Benny Lim (former Permanent Secretary, Home Affairs) began laying the early foundations for what has since become an essential pillar of the Home Team.

The Singapore Police Force was the first Home Team department to introduce formal psychological services in 1993 with the recruitment of a small group of psychologists to provide stress management training and personnel assessment of police officers. The team became the **Police Psychological Unit** three years later, providing counselling and specialised assessment services. By 2004, the unit had expanded into the Police Psychological Services Division, providing leadership assessment and development, victim support, and organisation measurement and development (Ng, 2023). More recently PPSD has been reorganised to become a department.

In the years that followed, other departments SCDF, ICA, CNB, ISD also set up their psychological units.

A pivotal whole of Home Team level development occurred in 2006, when the **Home Team Behavioural Sciences Centre (HTBSC)** was set up to provide a behavioural sciences perspective in support of Home Team operational work. To complement ground operations with research and evidence-based practices, HTBSC focussed on four main areas:

- Crime, Investigative and Forensic Psychology
- Operations and Leadership Psychology
- Resilience, Safety and Security Psychology
- Operations and Corporate Support

HTBSC was located at the Home Team Academy (HTA) so that research and training elements could be incorporated across cross-cutting areas within the learning eco-system. This also allowed for close collaborations between the research and training fraternities across other departments co-located in HTA that enabled quick enhancements to training programmes on the ground.

In 2017, the **Office of Chief Psychologist (OCP)** was established to drive the professional development of Home Team psychologists and align the efforts of the various Home Team psychology units to MHA's strategic priorities, especially the SG SECURE program. OCP thus had three main specialist groups:

- **Clinical, Counselling and Crisis Psychology** to focus on counselling and peer support, crisis psychology and resilience, risk assessments, intervention and rehabilitation.
- **Operations, Investigative and Forensic Psychology** to look at investigative psychology, crime profiling, crisis negotiation, morale management, and operations psychology.
- **Industrial, Organisational and Personnel Psychology** to oversee matters relating to leadership selection and development, organisational health psychology, personnel assessment and selection, optimal performance psychology and training.

Four years later, the **Centre for Advanced Psychological Sciences (CAPS)** was formed to develop a small group of psychologists who would conduct deep dive and cross-cutting research, and provide psychological expertise to support Home Team operations and policy development. These

areas included psychology of crime; drug and substance addiction and recovery; and trauma, crisis and emergency psychology.

To further sharpen the focus of psychological services within the Home Team and create greater impact with deep expert areas, under the leadership of Permanent Secretary (Home Affairs) Pang Kin Keong, psychology was given its own higher HQ mandate with the merger of HTBSC, OCP and CAPS to form the **Home Team Psychology Division (HTPD)** within Ministry Headquarters on 1 Feb 2023.

THE GROWTH OF THE FOUR O'S OF PSYCHOLOGY IN THE HOME TEAM

How does the work of the Home Team psychologist look like today? It is organised into four key domains, collectively called the 4 O's of Home Team Psychology. This framework encapsulates the organisation's fundamental functions of psychological expertise, ensuring that research, assessment, and intervention efforts are strategically aligned with operational needs.

The 4 O's provide a structured approach to Home Team Psychology, addressing law enforcement and public safety's diverse and complex psychological demands. These domains define the scope and impact of psychological contributions across the Home Team, reinforcing its critical role in strengthening national safety and security, crime prevention, officer well-being, and operational effectiveness.

Psychology for Operations Support. Encompassing Forensics, Criminal, Investigative, Correctional Rehabilitation, and Disaster/Emergency Psychology, this support is pivotal in enhancing high-stakes operations. By harnessing the power of psychology, we escalate our effectiveness in criminal profiling, intelligence support, and forensic assessments. This domain is crucial in fortifying investigations, emergency response, offender rehabilitation, and crisis management. Through the application of behavioural insights, risk assessments, and psychological expertise, Home Team psychologists significantly elevate decision-making, refine tactical operations, and improve engagement with offenders and



high-risk individuals, ultimately ensuring safer communities and more effective responses to critical situations. For a useful read about how psychologists assisted in the development of rehabilitation in prisons, readers are encouraged to read Cheng and Ong (2023).

Psychology for Organisational Support. No top-performing security organisation thrives without strong leadership, structured systems, and well-developed personnel. This pillar ensures that the Home Team is built on evidence-based leadership training, psychometric assessments, and workplace psychology insights. It is about identifying and developing talent, optimising command effectiveness during crises, and creating resilient organisational structures that drive mission success. Some of the published work on the psychology of crisis leadership can be found in Khader et. al. (2013).

Psychology for Officer Support and Resilience. Resilience isn't optional; it's mission-critical. This area focuses on mental fitness, trauma recovery, and crisis resilience for officers. Structured programmes provide psychological debriefs

after critical incidents, support for overseas deployments, and peer support systems. The goal is clear: keep officers mentally strong, emotionally steady, and always ready for operational demands. Readers may obtain further insight into some of this support work from Pang and Sng (2022)'s interview with an ICA psychologist.

Psychology for Our Community and Policy Support. Beyond supporting officers, psychology plays a critical role in shaping public safety and national resilience through policy and national interventions. This scientific pillar drives disaster psychology, anti-drug campaigns, crisis communications, and policy development. Whether it is public response during emergencies, mental health initiatives, or national crime prevention strategies, psychology is leveraged as a force multiplier to enhance community safety and strategic policymaking.

Together, these 4 O's ensure the Home Team remains prepared, and operationally ready—building a safer and more secure Singapore. Table 1 illustrates the various areas of work under the 4Os. The list is not exhaustive.

Table 1. The 4 O's of Home Team Psychology

PSYCHOLOGY FOR OPERATION SUPPORT (OPERATIONS, FORENSIC, CRIMINAL, INVESTIGATIVE AND CORRECTIONAL PSYCH)	PSYCHOLOGY FOR ORGANIZATIONAL SUPPORT	PSYCHOLOGY FOR OFFICER SUPPORT	PSYCHOLOGY FOR (OUR) COMMUNITY AND POLICY SUPPORT
<p>Major operations and investigations support:</p> <ul style="list-style-type: none"> • Morale assessment and management, • Psychological autopsy to support major investigations, • Crowd psychology for major crowd events • Intelligence Training Support 	<ul style="list-style-type: none"> • Leadership Psychology and Behavioral Effectiveness – • Leadership assessment, development and • Behavioural effectiveness training (e.g. Command and Staff, Senior Leadership courses) 	<ul style="list-style-type: none"> • Resilience psychology training • Trauma support and crisis support for officers –, near miss, accidents • Line of Duty Death support • Psych Support for officers on overseas deployments 	<ul style="list-style-type: none"> • National HEART teams deployment for terror incidents (activations during national crises) • National coordination with major national mental health agencies
<ul style="list-style-type: none"> • Correctional rehabilitation psychology (Behavior change assessment) • Risk assessment of inmates and drug offenders, • Data Analytics-psy analysis for offending • Rapport and engagement in correctional settings 	<p>Talent and Scholarship Psychology –assessment centers, tests development</p>	<ul style="list-style-type: none"> • Development of peer support and counselling systems • Support for close 600 peer supporters in the Home Team 	<ul style="list-style-type: none"> • Supporting MHQ departments - Development of plans for public behavior in emergencies, disaster psych
<ul style="list-style-type: none"> • Rehabilitation psychology • Management and assessment of Sex, Violent and High-Risk offenders • Drug Offender Risk Assessment Psychology • Psych applied to enhance programs for Community Supervision 	<ul style="list-style-type: none"> • Special group psychometric assessment • Psychometrics for high stakes deployment and operations (e.g. special tactics) 	<ul style="list-style-type: none"> • Counselling for specialized and sensitive units – e.g. intelligence outfits, 	<ul style="list-style-type: none"> • National-level initiative - Partnering with Community agencies on drug abuse
<ul style="list-style-type: none"> • Criminal and crime profiling (immigration offenders, Scammers, Cyber Crimes, Selected high risk cases) • Profiling applied to immigration offenders 	<ul style="list-style-type: none"> • Entry level and specialized groups psychometric testing 	<ul style="list-style-type: none"> • Disaster psy Ops Lionheart morale and engagement support • PsyPREP for major investigation support – DVI support • Psych support for challenging investigations support 	<ul style="list-style-type: none"> • Psychological aspects of Risk Communications psych and applications during crises

<ul style="list-style-type: none"> • Development and application of criminal psychology, • Psychology of extremism 	<ul style="list-style-type: none"> • Organizational psychology and behavioral sciences consultation (e.g. shift work and behavioral effectiveness) 	<ul style="list-style-type: none"> • Line of duty death deployments and assistance 	<ul style="list-style-type: none"> • Supporting HQ policies and communications for major crime prevention efforts - Scams prevention
<ul style="list-style-type: none"> • Deployment in disasters and disaster psych, shelter management. Deployment in overseas missions (Ops Lionheart) 	<ul style="list-style-type: none"> • Mental fitness and wellbeing in security settings 	<ul style="list-style-type: none"> • Resilience training for all Home Team officers 	<ul style="list-style-type: none"> • Psych policy support for Drugs harm prevention (international advocacy and local community capability building)
<ul style="list-style-type: none"> • Psychologist deployment during Hostage and Crisis Negotiations 	<ul style="list-style-type: none"> • Research on workplace health psychology 	<ul style="list-style-type: none"> • Research on crisis stress and well being in the Home Team 	<ul style="list-style-type: none"> • Prevention of Youth Sex Offending – community capability building
<p>Disclaimer: Many of the details of the programs described above have been intentionally kept broad and vague due to the sensitivities and confidentiality involved.</p>			

PSYCHOLOGY FOR POLICY AND COMMUNITY CAPABILITY BUILDING

THE ROLE OF HTPD AT MINISTRY HQ

While many front-line psychologists primarily support their Home Team department’s missions, the psychologists at Ministry HQ undertake different roles. These are policy support, strategy formulation, and governance. There are two significant areas. The first is supporting departments within the Ministry of Home Affairs HQ (MHQ). The second is to support the psychology profession within the Home Team.

Supporting MHQ. The first main area of work involves supporting legislation and parliamentary submissions through psychological research. This ensures that evidence-based psychological insights inform policy decisions and legal frameworks. While we play a supporting role here, psychological insights from research are increasingly being requested for major operations such as the SG SECURE programme and the anti-Scam initiatives at a Whole-of-Government level. HTPD supports policy initiatives and collaborates closely with various MHQ departments, such as the Joint Operations Group, Policy Development Division, Research and Strategy Division, Home Team Medical Services Division and Human Resources Department. For example, psychologists contribute to shaping national policy positions on drug harm prevention policies by providing research-based recommendations.

Another example is the collaboration with the Joint Operations Department, where psychological research on human behaviour during national crises is shared to enhance emergency response strategies. Furthermore, HTPD plays a crucial role in supporting the Human Resources Department by assisting with top talent and scholarship selections and the professional development of Home Team officers. At the national level, the department spearheads national mental well-being and resilience governance initiatives. This involves developing national crisis and trauma support plans in collaboration with Singapore’s national-level professional organisations to ensure a coordinated and effective response to national incidents.

Strategic development for the psychology community. The second key area of work focuses on ensuring the professional development of the psychologist community within Home Team agencies. This includes the following:

- Chief Psychologist’s engagement with ground psychologists (“Chief’s Kopi sessions)
- Steering community-building initiatives such as townhalls, retreats, gatherings
- Career development initiatives, e.g. setting up a posting framework, setting up the career development board for the development of psychologists
- Administration of training and development initiatives for the long term development of psychologists in the Home Team

- Scholarship assessments of psychologist candidates
- Management of strategy and transformation work teams
- Establishing professional standards and ethical guidelines for psychologists
- Organising of critical meetings with senior management (e.g. the Home Team Psychological Services Steering Committee; the Home Team Psychological Research Forum) and other ad hoc meetings.

THE FUTURE: PSYCHOLOGY AS THE FORCE MULTIPLIER

Leveraging 'PsyTech' (Psychology-Technology)

Similar to 'OpsTech', 'PsyTech' refers to the seamless integration of technology into psychological tools, programmes, and processes, enhancing precision, efficiency, and impact. This is needed because the next era of Home Team Psychology must adapt and evolve to confront an unprecedented threat landscape—one dominated by AI-driven crime, cyber fraud, and digital deception. Criminals exploit technology in unprecedented ways, and staying ahead demands innovation, agility, and foresight. We are already seeing the impact of transnational scams on our population and, more recently, the impact of deepfake pornography at the Singapore Sports School. To out-think and outmanoeuvre emerging threats, Home Team Psychology needs to leverage cutting-edge technology, predictive analytics, and behavioural science. AI and advanced data analytics will redefine crime prevention, allowing law enforcement to detect, anticipate, and neutralise criminal activity more efficiently—shifting the paradigm from reactive enforcement to strategic disruption.

Virtual Reality (VR) simulations will revolutionise Home Team officer training, immersing personnel in hyper-realistic crisis scenarios that sharpen decision-making, enhance psychological resilience, and fortify operational readiness. However, how do psychologists insert 'psychological fidelity' into VR simulations to achieve the goldilocks balance between vivid emotional impact and not overdoing it to cause traumatic reactions?

The next battleground is digital, and those who master its complexities will lead the future of security. The Home Team must integrate cutting-edge psychological capabilities with emerging technologies, ensuring Singapore's security forces remain relentless, adaptive, and one step ahead. This means psychologists' training and competencies must be able to meet the departments' new requirements. Psychologist teams will require technical experts and technically proficient psychologists. Psychology schools play a part, too, and they must pivot to teach PsyTech and digital literacy. Future training plans for psychologists must incorporate PsyTech.

Optimising: Strategic Work Assessment Teams (SWAT)

To ensure that Home Team psychologists focus on high-impact, mission-critical work, Strategic Work Assessment Teams (SWAT) are key to workload optimisation. These teams will review and assess existing workstreams to determine what should be right sited, streamlined, or optimised and cut away entirely. There is a need to identify areas where processes can be simplified or automated and outsource non-core functions where feasible, freeing up psychologists to focus on areas that demand specialised expertise. The Home Team will maximise its psychological impact by systematically reducing inefficiencies, ensuring that psychologists remain at the forefront of law enforcement, safety, and security. Several SWAT teams have already started this work and will make their recommendations to senior management.

Sharpening: Deepening Expertise in CRID

(Crisis, Rehabilitation, Investigation and Crime, Drug Psychology)

As threats become more complex and unpredictable, the demand for deep domain specialisation in psychological expertise is no longer optional but critical. To navigate this evolving landscape, Home Team Psychology must advance in four key domains collectively known as *CRID: Crisis Psychology, Rehabilitation Psychology, Investigation Psychology, and Drug Psychology*.

Each domain represents a high-stakes environment where decisions can make the difference between prevention and escalation, rehabilitation and recidivism, deception and truth.

Amongst its many roles, the Ministry of Home Affairs has to manage crises. **Crisis Psychology** is the foundation of resilience, equipping first responders with the ability to withstand disasters, terrorist incidents, and mass casualty events. However, there is a second role: to put into place measures to mitigate acute crisis stress within our population when a national crisis strikes. Because Home Team psychologists cannot do this alone, they work with national mental health associations such as the Singapore Psychological Society, the Singapore Psychiatric Association, the Singapore Association of Counselling, the Singapore Association of Social Workers, and the National Care Management System. The role of the Crisis Psychology Expert Team is thus to advance the science and application of crisis management, crisis leadership, resilience, and trauma psychology, driving cutting-edge research and developing state-of-the-art interventions.

Effective rehabilitation results in good crime prevention and Singapore prides itself on being one of the safest places in the world. Hence **Rehabilitation Psychology** is vital. It strengthens offender reintegration by addressing recidivism at its psychological core. By understanding criminal mindsets, behavioural risk factors, and rehabilitation pathways, specialists in this domain craft targeted intervention strategies that support long-term reintegration. Their expertise helps break cycles of reoffending, ensuring that rehabilitation efforts are evidence-based, impactful, and sustainable.

Investigation and Crime Psychology provides the cognitive edge in solving complex crimes by refining deception detection, investigative interviewing, and criminal profiling. Experts in this domain sharpen suspect assessment techniques, enhancing the ability to identify behavioural inconsistencies, improve intelligence-gathering, and strengthen case-building strategies. Their contributions ensure that law enforcement remains one step ahead of evolving criminal tactics.

Drug Psychology plays a crucial role in reinforcing Singapore's strong anti-drug stance by providing critical insights into addiction, relapse prevention, and intervention strategies. With Singapore maintaining a zero-tolerance approach to drugs, psychologists in this field are instrumental in both preventing substance abuse and supporting rehabilitation programmes that help former offenders reintegrate into society. By understanding the psychology of addiction, specialists develop effective intervention programmes, refine anti-drug messaging, and support law enforcement in disrupting drug networks. Their expertise ensures that Singapore's drug-free vision remains firmly rooted in both enforcement and rehabilitation efforts, fostering a holistic and comprehensive approach to drug-related challenges.

Home Team Psychology moves beyond theoretical frameworks into applied psychological mastery by honing expertise in these four expert domains. Specialisation is not just about acquiring knowledge; it is about developing the ability to anticipate problems before they arise, act decisively under pressure, and refine judgment through experience. As psychologists sharpen their expertise in CRID, Home Team Psychology will enhance national resilience, fortify security operations, and drive high-impact psychological interventions in the years ahead.

CONCLUDING THOUGHTS

Singapore remains one of the safest countries in the world, but this safety is not accidental. It is built on good leadership and significant operational and strategic initiatives. Behind every successful policy and operation is the understanding of human psychology: understanding our officers, stakeholders, citizens and clientele. Home Team psychologists are the mind warriors, the unseen force behind Singapore's safety and security.

There is a reason that top political officeholders, policymakers, and heads of Home Team Departments – both past and present – believe in the potential of psychology. They have seen the future and anticipated its arrival. Security will increasingly be contested on the psychological front, and Home Team Psychology is central to this strategic shift.

ABOUT THE AUTHOR



Majeed Khader

is the Chief Psychologist of the Ministry of Home Affairs, and leads the Home Team Psychology Division. A trained forensic-criminal psychologist, he is also a crisis negotiator. He is Associate Professor (Adjunct) at both the National University of Singapore and the Nanyang Technological University. He has published widely and is the author of *Crime and Behaviour*, and co-editor of several books, including *Crisis Leadership: A Guide for Leaders*, *Introduction to Cyber Forensic Psychology*, *Prepared for Evolving Threats: The Role of the Behavioural Sciences*, and *Combatting Violent Extremism in the Digital Era*. He plays a key role in leading, directing, and guiding practice, research, training, and operational support domains.

REFERENCES

- Cheng, X. L., & Ong, G. (Eds.). (2023). *Correctional rehabilitation & psychological interventions in Singapore: Practitioners' experiences in Singapore Prison Service*. World Scientific Publishing
- Chia, Y.S.D., Heng, W.C., Goh, L.Y. et al. Job Competencies of Border Security Officers in Singapore. *Journal of Police and Criminal Psychology* 36, 132–144 (2021).
- Khader, M., Ang, J., Maan, D.S. et al. (2012). Police Psychology in Singapore: The Red Dot Experience. *Journal of Police and Criminal Psychology* 27, 24–32 (2012).
- Khader, M., Tan, E., & Toh, B. (Eds.). (2023). *Crisis leadership: A guide for leaders*. World Scientific Publishing.
- Lee, Vivien & Ang, Jansen & Neo, Andrew & Goh, Lan & Liew, Naomi. (2019). Operational Vigilance in Border Security: the Singapore Experience. *Journal of Police and Criminal Psychology* 34.
- Ministry of Home Affairs. (2023, 15 February). Written reply to Parliamentary Question on takeaways on techniques and technology from Operation Lionheart mission in Türkiye for future deployments. Ministry of Home Affairs, Singapore. <https://www.mha.gov.sg/mediaroom/parliamentary/written-reply-to-pq-on-takeaways-on-techniques-and-technology-from-operation-lionheart-mission-in-turkiye-for-future-deployments/>.
- Ng, Y.S. (2023, 15 December). Integrating Psychology onto Policing: Celebrating 30 Years of Police Psychological Services. *Police Life*. <https://www.police.gov.sg/Media-Room/Police-Life/2023/12/Integrating-Psychology-into-Policing-Celebrating-30-Years-of-Police-Psychological-Services>
- NUS Criminal Justice Club. (2021, February 10). Interview with Dr Majeed Khader: Insights into forensic psychology & criminal profiling. *Investigative Psychology Issue 2*. Faculty of Law, National University of Singapore. <https://nuscriminaljustice.com/an-insight-into-forensic-psychology-criminal-profiling/>
- Pang, A., and Sng, K. (2022, March 8). *Conversation with Heng Wei Chen*. Advisory.sg. <https://advisory.sg/2022/03/08/conversations-with-heng-wei-chen/>

MAKING THE HOME TEAM OPERATIONS CENTRE A REALITY: TRANSFORMATION OF THE SINGAPORE POLICE FORCE'S OPERATIONS CENTRES TO SUPPORT THE HOME TEAM

Nini Chow & Jeffrey Sim
Singapore Police Force

ABSTRACT

In February 2024, Minister for Home Affairs K Shanmugam announced that Singapore will, in a few years, have a central operations centre, housing officers from the various law enforcement and emergency services, so they can respond to incidents more quickly and comprehensively. At the proposed Home Team Operations Centre (HTOC), each agency will continue to retain command & control of its respective routine incidents, but joint incident responses will see better coordination with the sharing of sensors, data, and a common situational picture. This article discusses how the transformation of operations centres in the Singapore Police Force from a decentralised to a centralised model has set the stage for the creation of the HTOC. Since 2018, in conjunction with the setting up of the Real-time Intelligence Centre and the Investigation Operations Coordination Centre, liaison officers from three Home Team Departments – the Singapore Civil Defence Force, Central Narcotics Bureau and Immigration & Checkpoints Authority – have been deployed with the Police Operations Command Centre (POCC)'s Single Watch Floor. This means the other Home Team Departments also benefit from the enhanced capabilities of the POCC such as the Unified Dashboard System, which brings all SPF-owned cameras into a single access platform, integrated with Video Analytics technology and its sensemaking capabilities.

FROM OPS ROOMS TO A CENTRALISED COMMAND CENTRE

For many decades the Singapore Police Force (SPF) employed a decentralised model for its operations rooms. Emergency calls were centrally received at the Combined Operations Room, after which incident reports were routed to and managed by the Division Operations Rooms. The Division Ops Rooms were tasked with dispatching Ground Response Forces (GRFs) within their command and control to attend to incidents within their areas of jurisdiction and taking instructions from their respective divisional chain-of-command. The Combined Ops Room COR maintained oversight of incidents across the Land Divisions through entries in the Full Information Reports, which were input either by the respective Division Ops Room or directly by the ground responders GRFs. In cases requiring SPF strategic resources, such as the Special Operations Command Troop, K9 dogs

or Gurkha Contingent Trackers, the Division Ops Room would contact the Combined Ops Room COR via telephone.

The Little India Riot, which occurred in December 2013 at the boundary between Central and Tanglin Divisions, exposed the shortcomings of having two physically separated Division Ops Rooms managing different aspects of the same incident. This separation resulted in each Division Ops Room getting updates from their own officers, forming their own picture of the situation and not being fully aware of developments and actions of adjacent forces, thus highlighting the limitations of the decentralised model.

With lessons learnt from the Little India Riot – a key recommendation of the Committee of Inquiry convened by the Ministry of Home Affairs (MHA) to look into the riot was to improve the police's communications, command and control

capabilities (MHA, 2014) – the 2014/2015 review of SPF's operations room concept proposed the adoption of a centralised model: A single and integrated command and control hierarchy whereby all Ground Response Forces across the Land Divisions are under the command and control of the centralised operations centre. It would encompass an Integrated Command Centre serving as a nerve centre for SPF operations, providing real-time situational awareness and enabling swift decision making for all incidents across Singapore. By co-locating at the same operations centre, the Watch Officers for all Land Divisions would immediately be aware of incidents-of-interest reported in other Divisions. They would have a Common Situation Picture and be able to quickly share new developments in ongoing incidents. New sensemaking capabilities could also be developed centrally and shared across all Land Divisions.

Once the concept was approved and construction began on the Police Operations Command Centre (POCC) in New Phoenix Park, adjunct to Ministry of Home Affairs and Police Headquarters, the six Division Ops Rooms were relocated and integrated into the POCC as soon as space became available. By 2018, this transition was completed, creating a single watch floor comprising POCC and the then six existing Division Ops Rooms, collectively known as the POCC Watch Floor.

The post of Watch Commander POCC was also created. The Watch Commander is responsible for overseeing and coordinating police operations in response to live incidents, including sensemaking to support the frontline response. It is also the Watch Commander's job to maintain an oversight of Police operations in the nerve centre, including resource allocation, maintaining situation awareness on ongoing incidents, making decisions on SPF's initial responses and liaising with other emergency services and government agencies. The Watch Commander's work is the most crucial during the golden hour, the first hour of a major incident, to ensure adequate and appropriate resources are dispatched quickly, relevant agencies informed and responses are well coordinated.

Additionally, in 2018, when Protective Security Command was inaugurated as a new unit in

SPF responsible for protecting key installations island-wide, its operations room was also situated within POCC.

The following year, manpower from the six Division Ops Rooms were absorbed into POCC, leading to POCC's inauguration as a distinct unit within SPF in May 2019. In November 2019, Woodlands Division was established as SPF's seventh Land Division. A group of Senior Watch Officers and Watch Officers within POCC were reassigned to manage the dispatches and incident management of this new division.

Following the absorption of Division Ops Rooms into POCC, the Watch Floor was restructured into three functional groups:

- the Emergency Communications Group to focus on answering '999' calls and receiving text-based reports;
- the Incident Watch Group to focus on dispatches and incident management; and
- the Sensemaking Group to focus on sensemaking to support incident management.

Additionally, liaison officers from the Singapore Civil Defence Force (SCDF), Central Narcotics Bureau (CNB) and Immigration & Checkpoints Authority (ICA), as well as specialised SPF units such as the Special Operations Command and Gurkha Contingent were deployed at the Watch floor.

As the nerve centre with access to an extensive network of SPF cameras and video analytics capabilities, POCC is designed to excel in conducting sensemaking for crime-in-progress incidents. In POCC's context, sensemaking refers to the process of gathering, analysing, and interpreting information to create a coherent understanding of a complex situation or to determine the identity and whereabouts of a person suspected of committing the crime being reported. POCC uses tools such as the wide network of SPF cameras, video analytics, screenings on various databases, information from '999' calls, updates from Ground Response Forces and information from the Real-time Intelligence Centre and the Investigation Operations Coordination Centre in the conduct of sensemaking, fusing all the information to build the situation picture that is shared across the POCC Watch Floor and with the ground forces.

The Real-time Intelligence Centre serves as a vital component within the POCC's operational framework, functioning as a centralised command centre manned by officers from the Police Intelligence Department. Its primary role is to collect, analyse, sense-make, and disseminate real-time information to support POCC in decision-making, situational awareness, and effective response to various situations. Working in conjunction with POCC's sensemaking capabilities, the Real-time Intelligence Centre provides enriched intelligence that becomes part of the comprehensive information gathering network. This intelligence feeds into POCC's sensemaking process to build a cohesive situation picture. Through this integrated approach, the Real-time Intelligence Centre enhances POCC's ability to quickly dispatch or direct ground forces to the scene and make informed operational decisions based on real-time intelligence and analysis.

The Investigation Operations Coordination Centre, managed by officers from the Criminal Investigation Department, plays a crucial role in supporting POCC's operational effectiveness by coordinating responses to crimes and providing vital support to investigation officers. This Coordination Centre's primary function is to support investigations and ensure proper case management while coordinating responses in criminal investigations. Working in tandem with POCC's sensemaking capabilities, the Coordination Centre contributes to the comprehensive information gathering network that enables POCC to build a complete situation picture. Through this integration, POCC can effectively coordinate its Ground Response Forces and quickly dispatch ground forces to follow up on the case. The Investigation Operations Coordination Centre's involvement helps create a seamless link between immediate operational response and subsequent investigative actions, ensuring that critical information is properly managed and investigated from the onset of an incident.

With the support from Real-time Intelligence Centre and Investigation Operations Coordination Centre and its command and control of all Ground Response Forces across the seven Land Divisions, POCC has the ability to quickly dispatch or direct responders to new locations to follow up on new detections.

GAME CHANGERS IN CRIME FIGHTING

The Police Camera (POLCAM) project was a game-changer for SPF's crime-fighting capabilities. In 2012, Singapore Police Force embarked on the island-wide implementation of POLCAM. The POLCAM project aimed to enhance public safety and security through the installation of cameras in public areas. About 90,000 cameras have since been installed at the ingress and egress to HDB blocks, multi-storey car parks, town/neighbourhood centres and food centres.

In 2020, POCC's capabilities were further enhanced with the launch of the Unified Dashboard System (UDS). This system integrated all SPF-owned cameras into a single access platform and incorporated Video Analytics capabilities. Police Cameras have helped officers solve about 7,500 crimes since they were first installed across the country in 2012 and reduced the time spent on investigations (Tang, 2023). Work is on-going to install POLCAMS at areas not previously covered, bringing the total number of POLCAMS to about 200,000.

Upgrading Sensemaking Capabilities

In 2022, POCC's sensemaking capabilities were significantly upgraded with the creation of a new Officer-in-Charge Sensemaking Group (OC SMG) post at the POCC Watch Floor, across all four duty teams. This change centralises sensemaking under the OC SMG, rather than having individual Senior Watch Officers perform sensemaking for incidents under their charge. The OC SMG, and by extension the entire SMG, supports all the seven Senior Watch Officers in sensemaking activities.

Incident sensemaking in POCC is an iterative process utilising all tools available to the POCC Watch Floor. This includes live access to POLCAMS, videos from '999' callers via the Emergency Video System, various screenings, enriched information from the Real-time Intelligence Centre, and information from ground response forces obtained through interviews with victims and witnesses on the ground. New discoveries or information from any of these sources are shared with all parties involved, becoming new leads for further probing. For instance, the Emergency

Video System launched in March 2023 allows POCC and SCDF Ops Centre to initiate live video streaming from the mobile phones of members of public who call '999' or '995' to report an on-going incident. Information and reports from various sources are fused to form the Situation Picture.

The full suite of activities in sensemaking have been formalised into a comprehensive training package to enhance the skill sets and capabilities of the POCC officers performing OC SMG duties. POCC conducts a 3-day OC SMG course twice a year to train POCC's new OC SMGs as well as officers from units across SPF. By ensuring consistent deployment of the same group of officers as OC SMG, POCC will be able to harmonise and elevate the quality of sensemaking across all four teams.

Through the years, new capabilities have been added to SPF's frontline response and access made available to POCC to enhance sensemaking. For instance, when the situation warrants it, POCC is able to turn on live streaming from an officer's Body Worn Camera to be viewed in POCC. HomeTeam Unmanned Aerial Vehicles are also available for activation by POCC to provide aerial video footage to support ground forces in their missions.

Automation and Use of AI in the Operations Centre

The POCC currently uses the Cubicon2 system for its daily work in receiving calls, performing dispatches, information sharing and incident monitoring. But many tasks are still performed manually using the system. A significant number of these tasks can be automated to reduce the number of repetitions or clicks, and dashboards can be built to help POCC operators monitor various status updates, such as mass dispatches and their arrivals, to reduce the cognitive load on officers. There are thus plans to incorporate Artificial Intelligence (AI) capabilities into the system to reduce the cognitive load on POCC Watch Officers whilst making them more effective in the performance of their daily tasks. Speech-to-text transcription for answering '999' calls and an AI Co-Pilot to guide call-takers are examples of such capabilities under development.

DEVELOPING THE FUTURE HOME TEAM OPERATIONS CENTRE

Looking towards the future, POCC is set to undergo another transformation, evolving into the Home Team Operations Centre (HTOC). The MHA Joint Operations Masterplan Review of 2017 proposed further extending the SPF centralised operations centre model to the Home Team level. This new facility will bring together the operations centres of the SPF, SCDF, ICA, and CNB, operating under one roof, sharing a common situation picture to enhance joint response to incidents. Announcing this development at the first Home Team Day in 2024, Minister for Home Affairs K Shanmugam said: "From receiving 999 or 995 calls, to dispatching of resources, and managing of incidents, the HTOC will allow us to respond more quickly, more comprehensively, regardless of the type of incident." The HTOC represents one of the forward-leaning ways "to continue to work better as One Home Team", he added (Shanmugam, 2024).

The HTOC Watch Floor will be responsible for managing all incidents reported to the SPF and SCDF 24/7, whether routine or escalating into major incidents. The co-location enables an integrated, incident-centric emergency response by the Home Team, thereby achieving effective response to multi-faceted safety and security incidents that require a joint multi-agency approach. The initial response to a major incident, termed the 'golden hour', is often crucial to the containment and mitigation of the incident, nipping the problem in the bud and minimising the escalation of damage to properties, loss of lives, and disruption of essential services.

A key component of the HTOC will be the Home Team Incident Command Post (HTICP) that will be set up to take over incident management of any situation that has escalated into a major incident, such as an on-going gun or knife attack in a public place, a large scale riot or a mass casualty incident. Equipped with the same system capabilities as the HTOC Watch Floor and staffed by officers from the Operations Departments of the SPF and/or SCDF, the HTICP will focus on

managing the major incident, coordinating across the Home Team Departments and with relevant government agencies, while the HTOC Watch Floor will re-focus to manage all other on-going routine incidents.

Also part of the HTOC will be the Home Team Crisis Centre that will house the whole-of-government crisis group meetings, such as the Crisis Management Group (Safety and Security) and the Homefront Crisis Executive Group, both chaired by Permanent Secretary (Home Affairs), and the Homefront Crisis Ministerial Committee chaired by Minister for Home Affairs, in the event of their activation. Camera feeds and situation pictures put up by the HTOC Watch Floor or the HTICP can be shared at the Home Team Crisis Centre.

CONCLUDING NOTE

The Singapore Police's operations command and control system has come a long way since the days of the Combined Ops Room, transforming

through the adoption of new technologies and adaptation of Watch Floor processes to make full use of these innovations. The formalised sensemaking process and the Situation Picture are two prime examples. The result is better situation awareness for SPF's frontline forces and in many cases of manhunt operations, the POCC has played a central role in quick establishment of the identity and location of the perpetrators and directing the closest ground response forces to locate and detain them.

Although the POCC has made significant strides, its transformation is still a work-in-progress. Dashboards, process automation, and integration of AI capabilities are envisaged for the new command and control system that will serve both the SPF and SCDF and the Home Team in general. This development aligns with the creation of the HTOC, which will bring all operations centres together to achieve an integrated, incident-centric emergency response, enabling effective handling of multi-faceted security and safety incidents.

ABOUT THE AUTHORS



Nini Chow

is currently Watch Commander (Special Duties) with 29 years of experience in Police frontline operations. As Watch Commander at the Police Operations Command Centre (POCC) from 2015 to 2024, she made significant contributions to its transformation from the Combined Operations Room to the POCC's Single Watch Floor and development of new sensemaking capabilities. She was previously an Operations Officer at Ang Mo Kio North Neighbourhood Police Centre (NPC) and a Team Leader at Hougang NPC at Ang Mo Kio Division.



Jeffrey Sim

is a former Watch Commander and currently the Assistant Director for Capability Transformation at the Home Team Operations Centre Implementation Office. His role is to oversee the infrastructure development aspect of the Home Team Operations Centre by working with the stakeholders and the Project Management Teams. His previous posts include OC Senior Officers' Company at the SPF Training Command, where he was in charge of trainee Senior Officers. He also served as Operations Officer at Choa Chu Kang Neighbourhood Police Centre (NPC), overseeing all operational matters, Team Leader at Rochor NPC, and Investigating Officer at Tanglin Division.

REFERENCES

- Ministry of Home Affairs. (2014, June 27). *Report of the Committee of Inquiry into the Little India Riot on 8 December 2013*.
- Shanmugam, K. (2024, February 24). *Launch of Home Team Day 2024 – Speech by Mr K Shanmugam, Minister for Home Affairs and Minister for Law*. Ministry of Home Affairs.
- Tang, L. (2023, October 30). Tender launched to double number of police cameras in Singapore to over 200,000 by mid-2030s. *CNA*. <https://www.channelnewsasia.com/singapore/police-cameras-tender-launched-double-number-200000-mid-2030s-3882691>
- Wong, S. (2024, February 25). MHA building new operations centre by 2032 for quicker incident response: Shanmugam. *The Straits Times*.

THE EVOLUTION OF COMMAND AND CONTROL AT SINGAPORE'S CHECKPOINTS

Chong Cheng Jin Euroy, Fadhilah Mohamed Faizan, Ganesh Nithyaseelan,
Lim Teng Hoon Candice, Neo Zan Sheng Novyn
Immigration & Checkpoints Authority, Singapore

ABSTRACT

The Immigration & Checkpoints Authority (ICA) commemorated its 20th anniversary in 2023, marking a significant milestone in its journey of safeguarding Singapore's borders. The formation of ICA on 1 April 2003, through the merger of the former Singapore Immigration & Registration and former Customs & Excise Department, heralded the beginning of a unified structure advancing into a highly integrated border force whereby a single line of authority oversees border security and incident management at the checkpoints. This article examines the evolution of the chain of command and the interoperability of border control operations at Singapore's checkpoints – a transformation embodying the Home Team concept of One Home, One Team.

REDEFINING BORDER SECURITY POST 9/11

Singapore's enforcement of immigration control commenced in 1919, following the introduction of the Passengers Restriction Ordinance to control the arrival of newcomers not born in Singapore and Malaysia. In 1933, an Immigration Department was established after quotas were placed to restrict newcomers and alien workers into Singapore under the Aliens Ordinance (Asad, 2017). In contrast, customs control in Singapore began earlier, in 1910, with the establishment of the Government Monopolies Department following the imposition of import duties on opium, hard liquors, and spirits. The Government Monopolies Department was subsequently renamed Excise Department in 1935 and then in 1938 to the Department of Customs and Excise due to the reliance on duty revenue (Singapore Customs, n.d.). Right through to the end of the 20th century, immigration, customs and policing functions at Singapore's checkpoints were performed by three different agencies, each with its own mission and line of reporting. This changed following the September 11, 2001, terrorist attacks in the United States.

In the aftermath of 9/11, several countries moved to merge the screening processes at

their borders, integrating immigration, customs and contraband inspections into a single entity, instead of separate ones. On 1 March 2003, the United States, as part of a comprehensive approach to safeguard its homeland security, merged its customs, immigration, border patrol, and agricultural protection functions into a unified border entity, that is, the US Customs and Border Protection (www.cbp.gov/about).

The United Kingdom unified its border security functions initially under the UK Border Agency in 2008, and then the UK Border Force in 2012 (May, 2012). Similarly, in 2015, Australia established the Australian Border Force with the merger of the former Australian Customs and Border Protection Service with the Department of Immigration and Border Protection (www.homeaffairs.gov.au).

Closer to home, the Malaysia Border Control and Protection Agency Bill 2024 was tabled in the Malaysian Parliament with the aim of establishing a new agency, the Malaysia Border Control and Protection Agency, to perform all border inspections and enforcement at the country's entry points. In his speech, Malaysian Deputy Home Minister Datuk Seri Dr Shamsul Anuar Nasarah said "the creation of the agency

is expected to facilitate travel in and out of the country, as well as import and export processes in Malaysia” and that “this agency is essential for both public safety and the country’s economy and biosecurity” (Bernama, 2024).

GUARDIANS OF SINGAPORE’S BORDERS

In Singapore, the 9/11 attacks and the arrests of Jemaah Islamiyah members by the Internal Security Department at the end of 2001 led the government to form an integrated Immigration & Checkpoints Authority (ICA) by merging the Singapore Immigration and Registration (SIR), which was under the Ministry of Home Affairs (MHA), and the border control functions of the Customs & Excise Department (CED), which was under the Ministry of Finance. Explaining ICA’s launch on 1 April 2003, then Minister for Home Affairs Wong Kan Seng said:

“The Home Team agencies, including Police and SIR, as well as the CED have done well in safeguarding the security of our borders so far. However, we must continue to seek improvements and see how we can be better organised. We cannot afford any weaknesses or inefficiency in our border control systems” (Wong, 2003).

This merger marked the beginning of an integrated border force responsible for the security of Singapore’s borders against the infiltration of undesirable people, goods and conveyances across the land, air and sea checkpoints. A total of 2,400 immigration officers from the former SIR and approximately 1,000 customs officers from the former CED were inducted into the newly established ICA (ICA, 2003).

ICA is, however, not the only Home Team department manning the checkpoints; other Home Team agencies that currently deploy staff at Singapore’s borders include the Singapore Police Force (SPF), Central Narcotics Bureau (CNB), Home Team Science and Technology Agency (HTX) and the Singapore Civil Defence Force (SCDF). With a workforce of about 6,000 as at end 2024, ICA has the biggest presence at each checkpoint.

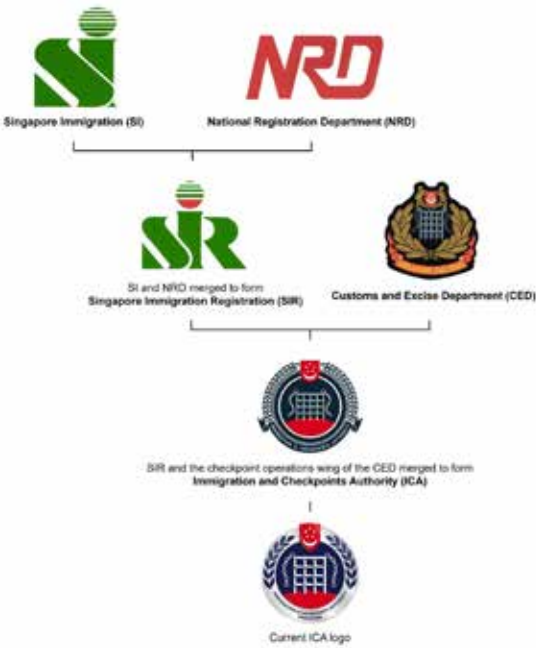


Figure 1. Formation of ICA in 2003

For over a decade after its formation, ICA’s core mission at the checkpoints focused on efficient and effective security clearance of people, goods and conveyances, broadly known as clearance security functions. The SPF continued to oversee the installation protection and responding to public order and security incidents, that is, protective security functions.

Given the different functional responsibilities, each Home Team Department maintained its own command and control (C2) and distinct line of reporting. ICA officers reported to the ICA Checkpoint Commander, whilst SPF officers deployed at checkpoints reported directly to the Police Division Commander in whose precinct the checkpoint is located. Despite the ICA Commander being the highest-ranking officer, they did not have direct C2 over other Home Team resources at the checkpoints. Nonetheless, to enhance the Home Team’s mission of safeguarding Singapore, ICA’s checkpoint organisation structure was reorganised to extend beyond focusing solely on ICA’s own clearance security functions to also prioritise effective coordination with other

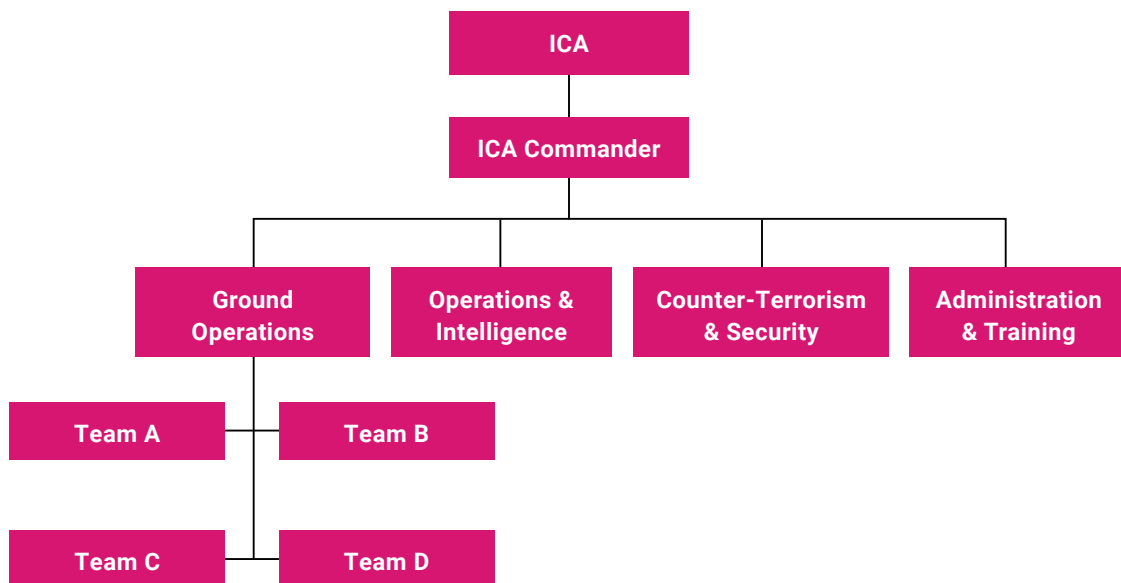


Figure 2. ICA's organisation reporting structure at the checkpoints in 2003

Home Team departments for joint enforcement operations, counter-terrorism efforts and protective security matters. Daily operations and incidents were managed through jointly approved Standard Operating Procedures (SOPs) without crossing into individual Home Team department's authority, responsibility, and accountability.

As illustrated in Fig. 2, the ICA Checkpoint Command structure in 2003 comprised four sub-units, each headed by a Deputy Commander reporting directly to the ICA Commander. In essence, Ground Operations oversaw all aspects of clearance security functions. Operations and Intelligence was responsible for the coordination of intelligence-led and joint checkpoint operations with Home Team departments and other controlling agencies such as Singapore Customs. Counter-Terrorism & Security coordinated with SPF on matters pertaining to protective security and implemented counter-terrorism measures such as Physical Currency and Bearer Negotiable declarations at the checkpoints. Administration and Training managed the human resources matters, training of ICA officers, and other administrative functions of the checkpoints.

CREATING AN INTEGRATED CHECKPOINTS COMMAND

Although each Home Team department deployed at the checkpoints had its own distinct functional roles and responsibilities, they all made concerted efforts to work together to safeguard Singapore's borders whilst facilitating bona fide trade and travel. For all intents and purposes, such a consensus-based approach worked well for over a decade. However, one underlying issue remained – clarity of ownership. While it did not seem apparent, the absence of clear C2 and ownership led to consequential oversights by ICA and SPF ground commanders when two security breach incidents occurred at Woodlands Checkpoint in early 2014.

On 17 January 2014, a Malaysian woman successfully evaded clearance at Woodlands Checkpoint without being stopped by ICA. Despite an island-wide alert, she was not intercepted until three days later when she drove her car and intruded into the Ministry of Foreign Affairs premises (Aziz, 2014). Not long after, a second security breach incident occurred on 8 March 2014 when ICA again

failed to stop a Singapore registered Mercedes Benz that evaded security checks at the Woodlands Checkpoint because of a malfunctioning security barrier. These security lapses underscored the lack of urgency, coordination and ownership at the checkpoints in handling major incidents. Speaking in Parliament a month after the first incident, then Deputy Prime Minister and Minister of Home Affairs Teo Chee Hean described the breach as “unacceptable”, noting:

“The ICA and Police Ground Commanders made serious error of judgement in deciding to treat this intrusion as a less serious immigration offence, instead of a serious breach of border security as required in the protocol” (Aziz, 2014).

As a result of the security breaches, a comprehensive review was undertaken and one of the key recommendations was for ICA to take charge of both protective and clearance security functions at the checkpoints. Putting all Home Team resources under one command would enable their swift mobilisation, it was argued. Additionally,

an integrated command would provide not only clearer C2 and lines of responsibility to enable a more coordinated response at the checkpoints, but also interoperability between ICA and other Home Team departments.

With the introduction of the new Integrated Checkpoints Command (ICC) in 2015, all checkpoints are now clustered into three domains, namely, the Air, Land and Sea Domain. Each Domain operates under an integrated C2 structure helmed by a Domain Commander, who has direct oversight of all Home Team operations at the checkpoints in their domain (ICA, 2015).

The key success factors of ICC thus hinges on (1) a clearly defined and well understood command and control relationship; and (2) levelling up the training and competency of ICA in areas of protective security, incident response and incident management since border inspections and protective security functions at the checkpoints are now organic to ICA and performed by ICA officers.

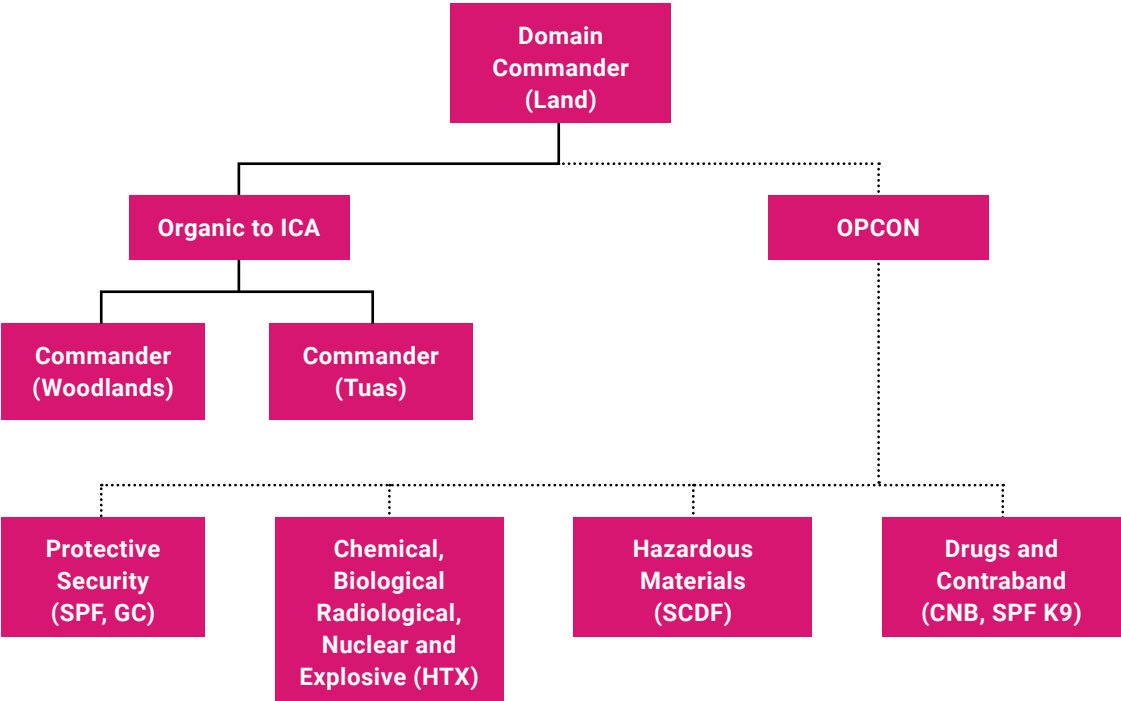


Figure 3. Reporting structure of Home Team officers under the ICC concept at the Land Domain, where all Home Team officers come under the Command and Control of the Land Domain Commander

The ICC concept centres around the idea that while each Home Team department at the checkpoint continues to perform their specific agency role, all will support ICA in tackling homeland safety and security in an integrated manner. While the Home Team agencies based at the checkpoints continue to maintain their line of reporting to their respective HQ, they are also under the operational control (OPCON) of the ICA Commander to accomplish mission success in safeguarding Singapore's borders. The ICA Ground Commander thus has the authority to direct and assign tasks to all Home Team officers based at the checkpoints. Such C2 relationship is pivotal for the ICA Ground Commander who oversees Singapore's border security operations and takes charge of immediate security responses at the checkpoints. Besides clearer lines of C2 and accountability, ICC has also brought about new capability development in areas of protective security and tactical response for ICA, thereby allowing swift and tighter response to any public order and security incidents.

A MORE INTEROPERABLE HOME TEAM

The ICC is a manifestation of the Home Team concept that emphasises the common mission of each Home Team department in keeping Singapore safe and secure. Apart from managing clearance operations, ICA officers are the first responders in public order and security incidents at the land and sea checkpoints, having taken over the protective security roles from SPF. The integrated C2 also has enhanced and allowed more seamless coordination and interoperability across Home Team forces. On the whole, ICC is designed to leverage each Home Team department's strength, maximising the use of available resources, and, from ICA's perspective, this has helped achieve better operational effectiveness and efficiency in the safeguarding of Singapore's borders (ICA, 2023).

The Immigration Act was amended in 2018 to empower ICA officers to exercise selected police powers within and near the checkpoints. The amendments covered powers related to security screening, search and seizure, examination, and arrest (ICA, 2019). In the past, ICA officers were only authorised to conduct searches within limited areas and had to depend on SPF officers

to respond to security incidents such as dealing with individuals in possession of weapons. The amendments provided ICA officers with the necessary legal powers to contain a situation more effectively and swiftly, instead of having to wait for other supporting forces before responding (ICA, 2021).

As part of ICA's protective security role, some checkpoints are also equipped with Unmanned Aerial System (UAS) with monitoring and interdiction capabilities. These are part of a robust approach to mitigate the use of UAS in contraband smuggling, or attacks which pose threats to national security and safety. Under the Air Navigation Act, ICA First Response Team Officers are authorised to direct persons operating unmanned aircrafts to land them, and interdict these aircrafts.



Figure 4. K9 supporting ICA operations for cargo checks



Figure 5. ICA First Response Team and SPF officers responding to a gunman attack during a multi-agency exercise at Tuas Checkpoint



Figure 6. ICA First Response Team officers conducting a drill on UAS interdiction

ICA has also furthered its collaboration with CNB to secure Singapore against the threat of drugs, through the sharing of intelligence, coordination of efforts, and leveraging each other's expertise. Since January 2023, saliva test kits have been rolled out at border checkpoints to detect drug abusers, with the intention of deterring Singaporeans and permanent residents from consuming drugs overseas (Tang, 2023). Today, at the land checkpoints, a select group of ICA officers, who are highly proficient in profiling and targeting, have been trained to conduct checks and administer saliva tests promptly, on behalf of CNB, on selected travellers entering Singapore who may be suspected of drug consumption. Travellers who test positive for drugs are immediately secured and referred to CNB, allowing for swifter action to be taken. This enhanced operational model between CNB and ICA offers a more coordinated way to detect drug abusers and foil any potential drug trafficking attempts.

Furthermore, under amendments to the Road Traffic Act initiated by MHA and passed by Parliament in January 2025, immigration officers are now empowered to administer breath tests at the checkpoints and their vicinity, to detect and take prompt action against errant drink drivers driving into Singapore checkpoints. These legal powers further enable ICA to more holistically discharge their protective security functions at the land and sea checkpoints (MHA, 2025).

All these initiatives highlight the interoperability between the Home Team departments, enhancing the efficiency, responsiveness, and deterrence capabilities of the checkpoints, and consequently contributing to a stronger united front in safeguarding Singapore.

EMBRACING TECHNOLOGY AND DATA

Apart from the structural organisational changes, ICC also leverages technology to strengthen C2 capabilities at the checkpoints, enabling Home Team forces to better manage checkpoint operations and protective security incidents.

Today, the Integrated Operations Centres at the land checkpoints in Woodlands and Tuas are equipped with enhanced, tactical, sense-making and decision-support tools. In contrast to the past where officers at the Operations Centre had to manually retrieve information such as CCTV footage and deployment information from disparate sources, ICA officers now operate an Integrated C2 System – the Integrated Checkpoint Operating Nexus (ICON) – which has the capability to amalgamate relevant data from multiple systems and sensors. This has allowed for enhanced situational appreciation and has better equipped Ground Commanders to better make timely and well-informed decisions for day-to-day operations and during security incidents. ICA has also begun examining the utilisation of Artificial Intelligence and Data Analytics to improve the decision-making capabilities of checkpoint Commanders.

Officers at the land checkpoints are also equipped with ICON mobile devices and body-worn cameras. These devices have enabled officers to provide instant situational updates via texts, images, and videos, and allowed for the live streaming of footage to the integrated ops centres. With real-time appreciation of the ground situation, Ground Commanders at the ops centres would be able to track ground forces simultaneously, deploy the nearest resources to the incident site for a swifter response and make dynamic decisions as the situation evolves. Currently, via the ICON C2 System, the ICA Headquarters Ops Centre is able to monitor and be kept updated on the progress of incidents at the land checkpoints, reducing the reliance on other channels of communications.

To further enhance communication and coordination amongst Home Team officers, ICA officers have been onboarded onto the same MHA Communications Network 2 as SPF and SCDF officers. This provides a common, pre-identified communication channel for all Home Team

responders to tune in to and relay information in real time during security incidents and joint operations at the checkpoints. This significantly enhances communication and coordination, which are vital in major public security incidents where officers from multiple agencies and units must work together to neutralise a threat. Additionally, ICA's ICON C2 System is linked to the SPF CUBICON II system. This has allowed security incident reports lodged under ICON C2 System at the checkpoints to be shared instantaneously with SPF. Video feeds from surveillance cameras at the checkpoints are also shared with the Police Operations Command Centre, allowing the Police Incident Commander to have a clear and aligned ground situational picture of any security incidents occurring at the checkpoints for the provision of support.

Technology has also been crucial to operationalise ICA's latest significant milestone – the New Clearance Concept. At the new automated gates, iris patterns and facial features have replaced fingerprints as the primary biometric identifiers for immigration clearance, providing a robust and reliable means of authenticating travellers' identities (ICA, 2021). The implementation of the Singapore Arrival Card (SGAC) for arriving travellers has also replaced the conventional paper-based declarations, streamlining and increasing the accuracy of data collection. In March 2020, the Singapore Arrival Card was enhanced within a month to include electronic health declarations for COVID-19 symptoms and leveraged yet again during the recent Mpox outbreak. These episodes demonstrate the evolution of border security beyond security threats and highlight the importance of collaboration between not just Home Team departments, but with other agencies such as the Ministry of Health.

Another key enabler for the New Clearance Concept was the development of ICA's Integrated Targeting Centre, which centralises advance passenger information and intelligence from various agencies and uses data analytics to conduct data-centric assessments of travellers' risk profiles. By operating 24/7, the targeting centre has enhanced information-sharing and shortened response time between agency requests, to the targeting of entities of interest, and the eventual interception of these entities at the checkpoints. The shift from on-arrival to pre-arrival risk assessment,

and subsequent profiling and targeting of entities has enabled a more unified, comprehensive and focused approach to safeguard the borders while providing faster clearance for bona fide travellers entering Singapore.

A case in point is the arrest of a Chinese national at Changi Airport Terminal 4 who was suspected of involvement in a series of burglary cases at four landed properties in Pasir Ris on 1 September 2023. Prompt investigations of leads and time-critical sharing of intelligence between SPF and ICA enabled the successful arrest of the subject in the transit area at Changi Airport, just shortly prior to his departure flight from Singapore (Wong, 2024).

To further strengthen the Home Team's response to incidents, a Home Team Operations Centre (HTOC) will be built and is slated to be completed by 2032. It aims to integrate operations across various domains where respective Home Team departments operate. The HTOC will centralise officers from the SPF, SCDF, ICA and CNB to enable a more rapid and comprehensive response to incidents (Wong, 2024). This is yet another example of the increasing importance of the interagency coordination required to protect Singapore.

EVOLVING TO STAY AHEAD

Singapore's survival hinges on staying open and connected (Huang, 2024). In 2023, 192.8 million travellers cleared Singapore's checkpoints, with a further increase in 2024 to 230.4 million people, surpassing the pre-COVID-19 travel volume (ICA, 2024). To cope with the rising travel demands, Singapore embarked on projects such as the Johor Bahru-Singapore Rapid Transit System and Woodlands Checkpoint Redevelopment to build and expand the checkpoints.

Against the backdrop of intensifying immigration demands, Singapore also has to stay vigilant against external threats such as the COVID-19 pandemic and the spillover effects of conflicts in the Middle East and elsewhere. The need for an integrated and coordinated approach to securing Singapore's borders is greater than ever. By collaborating and leveraging each Home Team department's strength, C2 at the checkpoints must continue to evolve to achieve the synergy and unified response required to safeguard Singapore's borders.

ABOUT THE AUTHORS



Chong Cheng Jin, Euroy

is a Manager in the Land Domain Security & Compliance unit in ICA. His job scope includes monitoring and enforcing checkpoint compliance requirements along with implementing and reviewing strategies related to physical and protective security of the Land Checkpoints.



Fadhillah Mohamed Faizan

is a Manager in the Contingency Operations & Security Branch in the Operations Division of ICA. Her job scope includes contingency planning and crisis preparedness.



Ganesh Nithyaseelan

is a Senior Manager in the Sea Domain Security & Compliance unit in ICA. He is responsible for supporting all audits involving Sea Domain and to ensure that workplace, health and safety measures and risk management practices are implemented and upheld.



Lim Teng Hoon, Candice

is a Manager in the Organisation Development Branch within the Planning & Review Division of ICA. She is responsible for conducting and analysing regular employee engagement surveys that strive to improve and foster a healthy organisational culture within ICA.



Neo Zan Sheng, Novyn

is a Manager in Ground Operations at Airport Command. His primary responsibility is to oversee the execution of daily operations and implementation of the latest border control measures at the checkpoint.

REFERENCES

Australia Department of Home Affairs. *Our History*. <https://www.homeaffairs.gov.au/about-us/who-we-are/our-history>

Aziz, I. S. (2014, February 17). Woodlands checkpoint security breach 'unacceptable': Teo Chee Hean. *TODAY*. <https://www.todayonline.com/singapore/woodlands-checkpoint-security-breach-unacceptable-teo-chee-hean>

Bernama. (2024, July 15). Single agency ensures efficient border control, enforcement - Home Ministry. *The Sun*. <https://thesun.my/malaysia-news/single-agency-ensures-efficient-border-control-enforcement-home-ministry-DG12727051>

Huang, C. (2024, November 22). Singapore's success hinges on staying open and relevant to the world: DPM Heng. *The Straits Times*. <https://www.straitstimes.com/business/singapore-s-success-hinges-on-staying-open-and-relevant-to-the-world-dpm-heng-swee-keat>

Immigration & Checkpoints Authority. (2003, October 1). *ICA officers geared to inspire confidence in all*. <https://www.ica.gov.sg/news-and-publications/newsroom/media-release/1026>

Immigration & Checkpoints Authority (2015-2023). *ICA Annual* for 2015, 2018, 2020, 2022, 2023. https://www.ica.gov.sg/docs/default-source/ica/ica-annuals/ica_annual_2018.pdf?sfvrsn=dde40b4a_6

Immigration & Checkpoints Authority. (2024). *ICA ANNUAL STATISTICS 2023*. https://www.ica.gov.sg/docs/default-source/ica/stats/annual-stats-report/ica-annual-statistics-2023.pdf?sfvrsn=4a6d74aa_6

Latif, A. (2017). *Policing*. Singapore Straits Times Press.

May, T. (2012, February 20). *Home Secretary's statement on border security*. GOV.UK. <https://www.gov.uk/government/speeches/home-secretarys-statement-on-border-security>

Ministry of Home Affairs. (2025). *Second Reading of the Road Traffic (Miscellaneous Amendments) Bill - Opening Speech by Assoc Prof Muhammad Faishal Ibrahim, Minister of State, Ministry of Home Affairs & Ministry of National Development*. <https://www.mha.gov.sg/mediaroom/parliamentary/second-reading-of-the-road-traffic-miscellaneous-amendments-bill/>

Singapore Customs website. <https://www.customs.gov.sg/about-us/overview/>

Tang, L. (2023, February 27). Saliva testing rolled out at Singapore roadblocks, checkpoints to nab drug users. *CNA*. <https://www.channelnewsasia.com/singapore/saliva-test-drugs-roadblocks-land-checkpoints-changi-airport-3303071>

US Customs And Border Protection. *Timeline*. <https://www.cbp.gov/about/history/timeline-static-view>

Wong, KS. (2003, Mar 31). *Speech by Mr Wong Kan Seng, Minister for Home Affairs, at the Immigration & Checkpoints Authority (ICA) Inauguration Ceremony*, on Monday 31 Mar 2003, 3.30pm at the Woodlands Checkpoint. Singapore Government Press Release. <https://www.nas.gov.sg/archivesonline/data/pdffdoc/2003033101.htm>

Wong, S. (2024, February 25). MHA building new operations centre by 2032 for quicker incident response: Shanmugam. *The Straits Times*. <https://www.straitstimes.com/singapore/mha-building-new-operations-centre-by-2032-for-quicker-incident-response-shanmugam>

Wong, S. (2024, November 14). Man linked to Pasir Ris burglary and theft of \$1,500 on Polling Day charged. *The Straits Times*. <https://www.straitstimes.com/singapore/man-linked-to-pasir-ris-burglary-and-theft-of-1500-on-polling-day-charged>

EYES IN THE SKY: THE HOME TEAM UNMANNED AERIAL VEHICLES COMMAND

Seah Yew Keng and Joel Leng
Singapore Police Force

ABSTRACT

Unmanned Aerial Vehicles (UAVs), commonly known as drones, are often referred to as “eyes in the sky”, playing a pivotal role in providing comprehensive aerial monitoring and inspection capabilities. UAVs provide unparalleled visual perspectives, usually from above, to enhance real-time situational awareness and support various operational missions. First established as a unit within the Singapore Police Force (SPF) in 2018, the Home Team UAV Command is dedicated to harnessing and deploying UAV capabilities as a tactical response in support of the Home Team’s mission. This article shares insights into how UAVs serve as a force multiplier and a key transformative tool in enhancing the Home Team’s operational effectiveness and readiness. It will also discuss the ongoing collaboration between Home Team Departments and the Home Team Science and Technology Agency to exploit cutting-edge technological advancements in the field of Beyond Visual Line of Sight drone operations, the development of organic UAV training and assessment capabilities in the SPF, and the adoption of a Whole-of-Government partnership with the Civil Aviation Authority of Singapore, Republic of Singapore Air Force and various other agencies to iteratively push the boundaries of UAV operations. Success stories are highlighted to showcase how the Home Team UAV Command lends its expertise and drives innovative solutions to meet novel challenges.

THE HOME TEAM’S USE OF DRONES

Unmanned Aerial Vehicles (UAVs), commonly known as drones, have emerged as a transformative technology in law enforcement and public safety operations. In Singapore, the integration of UAVs into the Home Team’s arsenal has marked a significant leap in operational capabilities, particularly for the Singapore Police Force (SPF) and the Singapore Civil Defence Force (SCDF).

The SPF’s journey into UAV technology began in 2014 when the Police took its first exploratory steps, recognising the potential of drones to enhance policing operations. This initial phase was characterised by careful evaluation and assessment of UAV applications in various law enforcement contexts, with a view to integrating them into the SPF and potential Home Team operations.

Building on these early efforts, the Home Team UAV Unit was formally established in October 2018. This dedicated unit was tasked with spearheading the development and operationalisation of drone capabilities for the SPF and the broader Home Team mission, signifying a concerted effort to leverage UAV technology for the advancement of safety and security efforts in Singapore.

As the potential of UAVs in law enforcement became increasingly apparent, and in response to evolving security challenges, the Home Team UAV Unit was expanded and reorganised into the Home Team UAV Command. This transition reflected a more comprehensive approach to both leveraging UAV capabilities and addressing potential threats posed by malicious use of drones. Remaining under the ambit of SPF Operations Department, the Home Team UAV Command continues to drive the development and operationalisation of drone capabilities across the Home Team, with

additional resources to focus on developing and operationalising counter drone capabilities to safeguard Singapore.

The integration of UAVs into Home Team operations has been wide-ranging and transformative. In the SPF, UAVs are now routinely deployed for aerial monitoring during anti-crime operations, providing a valuable bird's-eye view that enhances situational awareness and projects high visibility police presence. They have proven particularly effective in crowd monitoring at large-scale events, offering real-time insights that aid in resource allocation, public safety and crowd control management.

Search and rescue missions have also been significantly enhanced by UAV capabilities. The aerial perspective of UAVs, equipped with advanced sensors, has allowed for highly efficient and effective searches in challenging terrains. UAVs have also proven beneficial for pre-empt security sweeps, allowing security teams to conduct aerial inspections with fewer manpower, particularly in hard-to-reach or inaccessible areas. In incident response scenarios, whether by SPF or SCDF, UAVs are an invaluable tool, offering real-time aerial reconnaissance capabilities that improve tactical decision-making and optimising resource deployment while providing safety cover for officers from both SPF and SCDF.

Such integration of UAV technology has been a game-changer for Home Team Departments in approaching operations, leading to more agile and effective responses to incidents. By providing unique and real-time aerial perspectives, UAVs enable officers to make informed decisions quickly, allocate resources more efficiently, and respond to evolving situations with greater precision.

Home Team UAV Command also serves as an intermediary with the Civil Aviation Authority of Singapore, facilitating discussions and streamlining the integration of UAV operations within regulatory frameworks. Working together as One Home Team, Home Team UAV Command continues to pioneer advancements in UAV integration for public safety and security operations, driving a culture of collaborative excellence amongst Home Team practitioners.

The ART of Flying Drones

With the increased demands on the use of UAVs to support police operations, Home Team UAV Command formalised the SPF Aerial Response Team (ART) in 2021. Comprising skilled UAV pilots, the ART is a specialised team of SPF officers on 24/7 standby to provide crucial support for police operations upon activation. These UAV pilots undergo rigorous training and are certified by CAAS to ensure their proficiency in operating UAVs within the regulatory framework.

The stringent certification process requires ART pilots to pass a theory test administered by CAAS and undergo a practical assessment to obtain the Unmanned Aircraft Pilot License. To attain full certification, ART pilots must be well-versed in theoretical concepts and principles of aerodynamic flight, human factors, aviation regulations etc., and also be highly proficient in the actual flying of UAVs across the various operational domains and mission requirements.

To maintain and enhance the competency of ART pilots, Home Team UAV Command has implemented comprehensive, self-sustaining training and assessment capabilities. The training curriculum, developed in-house, covers both theoretical knowledge and practical skills which are continually updated to reflect the latest UAV advancements and operational requirements. By being self-sufficient in its training capability, with resources, skillset and manpower drawn entirely in-house, the Command is able to customise and adapt its training curriculum and programmes to meet SPF's evolving operational needs without depending on external training providers.

As part of this training programme, ART pilots participate in a series of structured refresher sessions conducted by certified instructors from within the Home Team. These sessions take place in dedicated Home Team establishments using flight simulators and actual UAVs, allowing pilots to hone their skills and stay current with evolving techniques and technologies in UAV operations.

In developing these capabilities, Home Team UAV Command benchmarks its approach against international standards, aligning with global best

practices in the field. This multifaceted approach to training and assessment underscores the dedication required of every ART pilot to uphold the highest standards of performance and preparedness. By cultivating these in-house capabilities, Home Team UAV Command has also enhanced its self-sufficiency in training while tailoring the programme to the Home Team's unique operational needs, thereby improving overall readiness in leveraging UAV technology across various scenarios.

OPERATIONAL INTEGRATION AND SUCCESSES

Crowd Management at Major Events

At major events like the National Day Parade and Marina Bay Singapore Countdown celebrations, police UAVs have become a familiar presence in the Singapore sky. These airborne force multipliers complement ground operations by transmitting real-time aerial feeds of crowd movements, enabling SPF to effectively regulate crowd size. The UAVs are equipped with customised racks fitted to their hulls, allowing for versatile payload attachments. Spotlights enhance visibility in low-light conditions, while speakers broadcast crucial alerts, warnings, and safety advisories to the crowds below. During public patrols, the UAVs' distinctive red-and-blue police blinkers serve as a visible deterrent to potential wrongdoers. This combination of advanced crowd monitoring capabilities and visible police presence significantly enhances safety and security measures at large public gatherings, allowing attendees to enjoy the festivities with peace of mind.

Search and Rescue

In March 2021, the then-Home Team UAV Unit deployed a UAV to assist in a search and rescue operation at Clementi Forest. The operation was launched after a report was received of a group of lost hikers in the dense vegetation. Leveraging on its aerial vantage point, operators managed to swiftly locate the hikers in the challenging terrain and used the UAV to guide ground officers to their position. The success of this mission validated the effectiveness of UAVs in complementing ground resources and highlighted the potential for UAVs to be integrated as a first responder option.



Figure 1. Aerial view from a UAV deployed to guide officers to lost hikers in search and rescue operation at Clementi Forest

Anti-crime operations

The SPF has also utilised the versatility of UAVs to deploy them in different modes – to provide discreet surveillance and intelligence on criminal activity, and to project a highly visible police presence to deter crime.

In August 2020, UAVs were deployed during an enforcement operation against contraband cigarette peddlers in Tuas. Hovering discreetly above the area, the UAVs conducted aerial reconnaissance flights unnoticed by those on the ground. The high-quality footage provided officers with actionable intelligence, allowing the team to identify suspicious individuals and vehicles. Armed with this information, ground officers strategically coordinated their approach, moving in to make arrests with precision and effectiveness.

During another operation in March 2021, UAVs played a pivotal role in aiding ground officers to capture a fugitive who had fled into the dense forest near Jalan Bahar in Jurong. Equipped with high-resolution cameras and advanced sensors, the UAV systematically swept the area from above, eventually detecting the fugitive's possible hiding spot. The information was communicated to ground officers, who swiftly moved in with pinpoint accuracy to apprehend the suspect.

In June 2024, amidst a spate of housebreaking cases linked to international crime syndicates, UAVs were strategically deployed at key locations at private residential estates to detect suspicious activities and support rapid response in cases of suspected housebreaking or reports of suspicious individuals. The aerial UAV patrols were equipped with flashing red-and-blue police blinkers, high-

resolution cameras, and sensors to complement ground patrols, providing a highly visible deterrent to would-be perpetrators (Figure 2).



Figure 2. High visibility UAVs to project police presence

This integration of aerial patrols with traditional ground-based policing received positive feedback from residents on the increased sense of security in their neighbourhoods. Moreover, this innovative approach helped alleviate the manpower demands on land divisions performing extensive ground patrols, allowing for more targeted allocation of police resources.

Drone mapping of World War II bomb relic detonation site

In September 2023, SPF responded to the discovery of a World War II-era bomb at a construction site along Upper Bukit Timah Road. Given the unpredictable nature of an explosive relic, the authorities decided to evacuate nearby residents to ensure public safety during the planned controlled detonation. To obtain the latest aerial view of the bomb site, the Home Team UAV Command employed advanced drone mapping technology to create a 2D rendering of the area which was then overlaid onto existing street satellite imagery. The highly accurate and up-to-

date aerial representation enabled SPF officers to examine terrain features of the construction site and identify suitable points of entry and exit for affected residents and personnel. Leveraging this cutting-edge technology has significantly enhanced operational planning and minimised potential risks to on-site personnel in line with the SPF's commitment to adopt innovative solutions to tackle emerging challenges.

SCDF's Maritime Search and Rescue Operations

In October 2023, SCDF demonstrated the effectiveness of UAV technology in maritime search and rescue operations near Sentosa. Responding to a water mishap involving a capsized kayaker, SCDF deployed UAVs which provided an aerial perspective of the vast marine environment, rapidly covering large areas and detecting heat signatures in water, enhancing search efforts. This deployment underscored the substantial value that UAV technology brings to search and rescue capabilities in complex marine environments, and highlighted the potential for UAVs to augment existing resources across a range of lifesaving missions.

BEYOND VISUAL LINE OF SIGHT DRONE OPERATIONS

Beyond Visual Line of Sight (BVLOS) UAV operations represent the next frontier to harness robotics and automation technology as a force multiplier for the Home Team. With advancement of BVLOS systems, the ability to launch UAVs autonomously beyond the operator's visual range opens up new opportunities to augment Home Team capabilities to enhance aerial patrols, rapid response, and more efficient resource allocation. Home Team UAV Command has been working closely with Home Team Science and Technology Agency (HTX) to develop and



Figure 3. UAVs deployed for drone mapping operation at Upper Bukit Timah Road following the discovery of a World War II bomb

refine BVLOS capabilities that can benefit Home Team Departments. This collaboration exemplifies the synergy between operational expertise and technological innovation within the Home Team.

During the Covid-19 circuit breaker period, Home Team UAV Command collaborated with HTX to trial BVLOS UAVs to support SPF's ground operations. Launching autonomously from a drone box (Figure 4), these BVLOS flights were operated as aerial patrols around industrial areas at Tuas South to survey the perimeters and common areas, and track anomalies such as large gatherings and congregation points. Live footage from the flights were streamed back to terminals at backend command posts, augmenting SPF's operational resource and capability in ensuring continued safety and security even during the circuit breaker period. Building on this success, the collaboration between Home Team UAV Command and HTX was expanded to address the needs of other Home Team Departments, for instance by adding customised payloads and other unique capabilities that support SCDF's operational requirements.



Figure 4. Drone box System

Looking ahead, the future deployment of BVLOS UAVs by the SPF and the Home Team envisage a wide range of scenarios, including aerial patrols and security operations over locations of interest, incident and emergency response, HAZMAT detection, fire scene monitoring, and delivery of essential supplies such as Automated External Defibrillators (AED) for life-saving scenarios. The successful implementation of BVLOS technology is expected to be a key milestone where UAVs are deployed as one of the first Home Team responders that can provide aerial situational picture on scene for initial sensemaking, thus leading to improved and better coordinated

response during an incident.

REGULATORY LANDSCAPE FOR SAFE AND EFFICIENT OPERATIONS

In Singapore, the management and control of unmanned aircraft operations are overseen by the Civil Aviation Authority of Singapore (CAAS) and the Republic of Singapore Air Force (RSAF). CAAS regulates and sets guidelines for the safe and responsible operation of drones, ensuring compliance with aviation regulations and safeguarding public safety. The RSAF is responsible for the overall management and control of the airspace in Singapore, working in coordination with CAAS to facilitate the integration of unmanned aircraft into the existing airspace while ensuring the safety and efficiency of both military and civilian aviation activities.

From a security perspective, SPF ensures that the security implications linked to UAV operations are effectively managed. This involves mitigating the potential risks of unauthorised overflight, breaches of sensitive areas, and the misuse of UAVs for illicit activities. To achieve this, Home Team UAV Command and the Security and Counter Terrorism Division in SPF Operations Department work closely with agencies under the Ministry of Transport and Ministry of Defence to prevent unauthorised or malicious use of UAVs.

A whole-of-government perspective is critical for the successful management of UAVs in Singapore. By collaborating across various government agencies, a comprehensive and coordinated effort can be made to address the diverse aspects of UAV regulation. This approach allows for the integration of expertise from different agencies, ensuring that UAV operations are effectively regulated in terms of safety, security, and airspace management. Additionally, collaboration among agencies enables a holistic response to emerging challenges and threats related to UAV activities, ultimately contributing to the safe and responsible use of UAVs within Singapore.

COUNTERING THE UAS THREAT

On the flip side, UAVs have also emerged as a significant challenge to traditional security paradigms, as evidenced in several high-profile incidents overseas where drones have been used



Figure 5. Counter-drone system and handheld jamming equipment

as weapons. In the hands of malicious operators, these devices can potentially circumvent conventional security measures, posing a threat to public safety and protected areas. Recognising this evolving risk, SPF has operationalised a counter-drone system to address these threats. This system suite comprises both detection sensors and handheld drone jamming equipment (Figure 5). Officers are trained to ascertain the nature of a threat and undertake a specific course of actions, such as locating the pilot to stop the flight or neutralising the UAV before it poses a danger.

CONCLUSION

The successful integration of UAV technology across the Home Team represents a significant advancement in operational capabilities of the law enforcement, safety and security community in Singapore. As a pioneering force, the Home Team UAV Command adopted a collaborative approach.

This spirit of cooperation has fostered innovation and knowledge sharing among departments, enabling Home Team Departments to overcome challenges and tailor UAV capabilities to their specific needs. As the role of UAVs in the Home Team continues to expand, ongoing collaboration, training, and refinement of capabilities will be crucial in addressing future challenges and potential threats. This proactive stance ensures that the Home Team remains well-equipped to keep Singapore safe and secure, particularly in the face of an increasingly complex urban landscape. The continued development and implementation of UAV technologies such as autonomous delivery systems for commercial and military use underscore the importance of the Home Team remaining alert to the potential, as well as the risks, of emerging technologies so that the Home Team is in prime position to shape the future of security efforts in Singapore and deliver on its mission to keep Singapore safe and secure.

ABOUT THE AUTHORS



Seah Yew Keng

has headed the Home Team UAV Command as its Commanding Officer since its inception in October 2018, overseeing strategic technological advancement and policy development in the use of unmanned aircraft system. He previously served as Senior Assistant Director with the National Security Coordination Secretariat under the Prime Minister's Office and as Commanding Officer of Nanyang Neighbourhood Police Centre under Jurong Police Division. An engineer by training, he is an advocate of using technology to enhance Home Team operations. As Commanding Officer, he works closely with his team of passionate officers to shape UAV-related policies and drive long-term capability development projects for the benefit of the Home Team. His expertise spans operational technology integration, change management and innovation management, with particular focus on emerging technologies such as unmanned systems and artificial intelligence for policing, which he believes will revolutionise the future of Home Team operations.

**Joel Leng**

is the Policy and Permits Officer at Home Team UAV Command. He develops policies to enhance the Home Team UAV Command's deployment capabilities whilst collaborating with stakeholders on regulatory compliance. He streamlines permit processes and establishes robust frameworks to ensure safe and effective UAV operations across the Home Team. His role involves staying ahead of technological advancements and regulatory developments to ensure the Home Team's UAV capabilities remain at the forefront. An aviation enthusiast, he has deepened his technical knowledge through drone building workshops and maintains an active interest in drone flying. With the rapid advancement of drone technology and its growing applications, he looks forward to the transformative role UAVs will play in shaping the future of public safety and beyond.

ADVANCING HOME TEAM PSYCHOLOGY: HARNESSING TECHNOLOGY FOR DEEPER PSYCHOLOGICAL INSIGHTS

Sandra Lee, Leung Chi Ching, Ken Chen, Lee Yu Jing, Cherie Goh*
Home Team Psychology Division, *Singapore Civil Defence Force

ABSTRACT

The use of Artificial Intelligence (AI) tools has become invaluable to Home Team psychologists, particularly in the mining of psychological data. Multimodal analytics, which involves analysing voice, images, or videos with the aid of AI tools, streamlines data extraction and analysis. For instance, voice analysis can detect stress, while image analysis provides insights into the psychological appeal of propaganda. Furthermore, Machine Learning models can be trained using collected data to predict behaviours or classify data, thereby enriching the behavioural insights derived from the data. The benefits that AI tools bring to the field of psychology are not only limited to research but also include the application of psychological theories in areas like the training of first responders. For example, virtual reality can be used for resilience training and stress management for first responders. This article aims to demonstrate how AI tools and technology are integrated into work done in the Home Team and how external research projects can inform future research directions for the Home Team.

INTRODUCTION

In an era defined by rapid technological advancement, it is crucial to understand the contemporary uses of technology and keep up with ongoing developments. Some of these developments have significantly impacted our daily activities. For instance, the swift progress of artificial intelligence (AI) has enabled the quick removal of unwanted background items in photos, while tools like ChatGPT assist with writing tasks. By examining cases where technology has enhanced efficiency and produced cutting-edge methods for psychological and behavioural research within the Home Team, this article highlights how technological advancements can complement research to improve outcomes and foster deeper insights into human behaviour.

CASE STUDY 1 USE OF GENERATIVE AI IN PSYCHOLOGICAL RESEARCH

Generative AI is a system that can create new content such as text, images, music or codes by learning from vast amounts of data. Unlike traditional AI,

generative AI employs complex neural networks to understand and mimic human-like creativity instead of following predefined rules. Specifically, large language models (LLM) are trained on text data to understand and generate language. One such example is ChatGPT, which is now popularly used to assist writing, content creating and data analysis.

A. Bridging the Evidence to Implementation Gap with Generative AI

One of the key stages in research is reviewing scientific literature on the topic. This helps researchers make well-informed decisions and implement evidence-based practices through the identification of known knowledge and current research gaps. This can be in the form of rapid, scoping or systematic reviews, depending on the scope of the research and resources available. Whatever the parameters, the literature review is a time-consuming and labour-intensive process (e.g., systematic reviews require on average one to one and a half years to complete). Thus, there is an impetus towards embracing innovative approaches to literature review by incorporating generative AI technologies, particularly in the realm of systematic reviews.

In the Home Team Psychology Division (HTPD), AI has been used in multiple projects to aid in literature reviews. For example, Tan et al.'s study (2024) focused on accelerating the systematic analysis of occupational burnout literature through a novel hybrid approach, combining traditional systematic review processes with AI technologies, specifically ChatGPT. This methodology aimed to identify antecedents and potential protective factors against occupational burnout among law enforcement, healthcare professionals, and emergency personnel. Using AI, researchers identified several antecedents (demands) contributing to burnout, categorised into individual and organisational factors. Individual factors included lower job satisfaction, while organisational factors primarily centred on higher job demands, job strain, low job control, and trauma exposure. Conversely, they also identified resources serving as protective factors against burnout. These included individual factors such as resilience, self-efficacy, and emotional regulation, as well as social factors, particularly social support.

In another project, HTPD psychologists also used AI to assist in conducting a comprehensive exploration of best practices in culturally informed Psychological First Aid (PFA) (Banu et al., 2024). This

capability allowed the researchers to gain insights into cultural adaptations of PFA across various countries and contexts, including the Philippines, Sierra Leone, India, Greece, Canada, New Zealand, the United States, and China. The AI-assisted review in the PFA study identified six descriptive themes: (1) effectiveness of culturally adapted PFA, (2) reasons for flexibility and adaptability of PFA, (3) adaptations of PFA across countries, (4) role of peers in effective PFA, (5) enhancements of skills and preparedness via PFA training, and (6) importance of community engagement and collaboration. These themes provide valuable guidance for practitioners and policymakers in implementing culturally sensitive PFA interventions (Banu et al., 2024).

Both studies adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, ensuring a structured and transparent review process (Banu et al., 2024; Tan et al., 2024). The AI-assisted approach was particularly beneficial in the screening and data extraction stages of the systematic reviews (see Figure 1). The researchers utilised OpenAI (GPT-3.5-turbo) to screen titles and abstracts based on predefined inclusion criteria, significantly reducing the workload associated with initial screening by humans and allowing the research teams to focus on more complex analytical tasks.

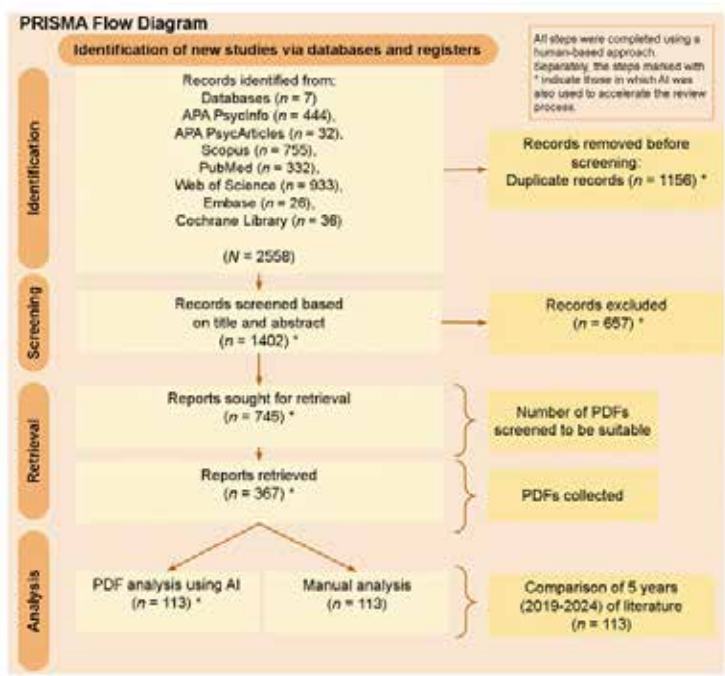


Figure 1. Example of how AI can speed up literature review at various parts of the process (Tan et al. 2024)

Table 1. Comparison of Human and AI outputs in systematic reviews of burnout in Tan et al., 2024

Tasks	Answer Similarity Score	Answer Correctness Score
Identifying Variables	0.850	0.366
Identifying Outcomes measured	0.856	0.348
Identifying Significant findings	0.888	0.509
Identifying Mediating/moderating variables	0.871	0.336

Evaluation of the Role of AI in Literature Reviews

The efficiency gains reported were substantial. For instance, Banu et al. (2024) noted a twelve-fold decrease in the abstract and full-text review workload, equating to approximately 664 full days of human effort saved. Tan et al. (2024) made a detailed comparison of human versus AI outputs using Answer Semantic Similarity Scores and Answer Correctness Scores (James et al., 2023), providing quantitative measures of the AI's performance (see Table 1).

These scores provide insights into the current capabilities and limitations of AI in systematic reviews. The relatively high semantic similarity scores suggest that AI can identify relevant information and produce outputs that are semantically like those of human researchers. However, the lower correctness scores indicate that AI still struggles with precision, particularly in capturing the exact terminology and constructs used in the context of burnout research. Tan et al. (2024) interpreted these results as indicating that while AI can assist in making complex issues like burnout more accessible to a lay audience and quickly synthesise an overview of the evidence, it still has limitations. Thus, the role of psychologists remains critical in evaluating and using scientific evidence to develop a deeper understanding of psychological research. This observation underscores the continued importance of human oversight and expertise in the systematic review process (Banu et al., 2024; Tan et al., 2024). The success of these projects paves the way for further integration of AI technologies in psychological research, potentially revolutionising how evidence is gathered, analysed, and applied in psychological practice for the Home Team.

B. Using AI in Data Collection and Analysis

In another HTPD project, Lee et al. (2024) used AI in the form of Natural Language Processing Techniques to analyse social media content from January 2023 to December 2023. The aim was to quantitatively uncover online sentiments in the form of themes related to areas of potential social tension using the lens of the Integrated Threat Theory (Stephan et al., 1999). Through analysing the data acquired, the results demonstrated that trust in public authorities is a key indicator of psychosocial resilience. Diminution of trust can have spillover effects onto other issues surrounding geopolitics and erosion of national identity. As such, maintaining public trust is crucial in ensuring social resilience and public safety, especially in an online environment where misinformation and polarised opinions are common.

Use of Generative AI to Extract and Generate Data

For this exercise, data from two social media platforms were filtered for posts related to public safety. The dataset comprised 2,150 posts—both text and images—and 31,874 comments. Given the volume, ChatGPT 3.5 was employed to automate the filtering process by identifying which posts were relevant to public safety domains. The input for this process was an Excel sheet containing all the posts or comments, with each row representing a single entry. The output included predictions on the relevance of each post ("Yes," "No," "Unsure") along with justifications for each prediction. On average, ChatGPT 3.5 processed 500 rows in five to seven minutes, which is significantly faster than manually reviewing each post or comment.

Subsequently, a trained classifier model¹ was needed to classify data into different categories of psychosocial indicators. However, there was a lack of data collected to train and test the model. As such, the original dataset was split into two: one half was used to generate synthetic data for model training, while the other half was reserved to test the model's predictive accuracy. ChatGPT 3.5 was prompted to generate large amounts of synthetic data, ensuring sufficient variation in content while maintaining a tone and vocabulary consistent with Singaporean social media posts or comments. Using ChatGPT 3.5 allowed for quick synthetic data generation, reducing the time and resources needed to manually curate training data while still maintaining relevance to the target context.

Lastly, text data was extracted from social media images to infer the indicators present in the images. While the classifier model was designed to assign indicators to each post, it was limited to processing textual data. Therefore, it was necessary to convert the content of images into text before classification could occur. ChatGPT 4.0 was prompted to infer the implications of the image's contents in relation to a specified public safety domain and generate a text description. This process enabled the extraction of information from at least 300 images at once, with an average processing time of three to five minutes per image. A key advantage of using ChatGPT 4.0 was its ability to systematically generate both descriptions and implications for each image, following pre-defined criteria for consistent outputs. Furthermore, additional context can be provided by directing ChatGPT 4.0 to an image's corresponding caption through a modification of the python code.

Collaborative Effort between Researchers and Tech Tools

Although technology played a significant role in these processes, the expertise of the team remained crucial. Researchers were responsible for reviewing the generated output, having to engineer prompts that ensured concise and consistent results. Extracting information required close attention to detail, particularly for

images lacking embedded captions or text. Yet, this often led to overly lengthy outputs, increasing the cost of analysis. To address this, prompts had to balance cost efficiency with accuracy and specificity. For example, the prompt used was:

Analyse this image in extreme detail, focusing on key, unique visual elements, such as symbols. Elaborate on these elements, including (if applicable): (a) description, (b) implications for [public safety domain] in Singapore, (c) potential risks or adverse outcomes, (d) reasoning for your analysis. If the image is primarily text, describe the text and explain its implications for public safety, identifying any risks or adverse outcomes. Limit your response to 480-500 tokens.

Ultimately, these processes represented a collaborative effort between the research team and technological tools.

The automation of various tasks allowed team members to focus on screening and analysing voluminous amounts of data for psychosocial indicators. Certain methods like leveraging on generative AI to filter large datasets and generating synthetic data have helped to significantly reduce the manpower needed to train AI models as well as to systematically screen content for indicators of interest.

CASE STUDY 2 APPLICATION OF VOCAL ANALYTICS TO MONITOR DRUG SUPERVISEES IN THE COMMUNITY

One important goal of drug abuse treatment is abstinence. However, the reality is that recovery from drug abuse, especially in the community, is challenging, and often an uphill task. Temptations and stressors are frequently present, requiring one to counter all these while trying to rebuild one's life at the same time.

In Singapore, for drug abusers who have completed their rehabilitation in the Drug Rehabilitation Centre, numerous support and supervision avenues like Community Based Programmes (CBP) are provided (Singapore Prison Service, 2024). CBP can be in the form of Home Detention or Residential Scheme where

¹ A SingBERT-large model was fine-tuned on the synthetic data and tested on the real data

drug supervisees can stay at home under specific conditions with electronic monitoring; Day Release Scheme where supervisees can undergo work, studies or skills training in the community in the day while returning to a step down facility managed by the Singapore Prison Service in the evening; or Halfway Houses which provide transitional support and case management services to facilitate their reintegration back into the community. The current structure provides important scaffolding to engender successful reintegration back into the community (Central Narcotics Bureau, 2022; Singapore Prison Service, 2024).

Research has shown that drug relapse does not happen overnight. In fact, according to Melemis (2015), drug relapse happens in stages. It starts with emotional relapse as the first stage with signs such as bottling up feelings; isolating oneself as well as poor self-care such as poor eating and sleeping habits. Denial is also common during the emotional relapse stage. The second stage is mental relapse where one starts to rationalise with oneself about drug taking. Common signs for this stage are craving for the substance; thinking about people, places and things associated with past use; minimising consequences of past use as well as looking for relapse opportunities and planning a relapse. The third and final stage is physical relapse which is a return to the previous drug habit. It has also been found that most physical relapses are opportunistic such as during occasions where one feels they would not be caught (Melemis, 2015).

Therefore, despite a supervision structure that provides scaffolding for drug abusers in supervision, it may still be difficult for supervisors to catch or spot such opportunistic occasions as these occasions do not always co-occur with the regular supervision sessions. Increasing supervision sessions is also not a viable solution, as over-supervision may backfire (Ganapathy & Loo, 2023) and is not an optimal use of resources and manpower. Instead, can the Home Team tap on technology to complement current supervision processes? The technology will have to allow for greater insight into drug supervisees' challenges without adding to the manpower burden. The technology employed should also enable supervisors to catch indicators of early relapse in the emotional and mental relapse

stages, so that crucial support can be provided at an earlier time, thus reducing the possibility of physical drug relapse.

Partnering with a Tech Start-up to Validate the Software

One of the technologies the Home Team has been exploring is the use of emotional AI tools to identify and analyse human behaviour and emotions. Can vocal pattern data and vocal analytics predict for known risk indicators of drug relapse, such as anxiety and emotional well-being? To obtain a Proof of Concept (POC) study, the Home Team Psychological Division (HTPD) and the Singapore Prison Service worked with the Home Team Science and Technology Agency (HTX) to identify the appropriate technology and company through the HATCH Dimension X Open Innovation Challenge, a platform created by HTX to accelerate and validate technologies with dual-use potential in public safety and security.

Apart from establishing the validity of vocal pattern data to predict for drug relapse, a joint HTPD and SPS research team also determined that another requirement would be to assess the compatibility of the technology with existing processes and whether it can provide useful information over and above what is captured by current supervision practices.

In accordance with the HATCH process, HTPD and SPS teamed up with Voicesense, an Israeli Machine Learning or AI company specialising in vocal analytics for this POC. Machine Learning, a subset of AI, can develop algorithms that enable systems to learn by identifying patterns in data to make decisions or predictions without explicit prompting or programming. Voicesense generates personality, behavioural and mental health assessments, which include personalised "behavioural markers". The patented technology works in real time, analysing vocal patterns which are then linked to behavioural outcomes. This technology collects only vocal pattern data without content which helps to ensure the privacy and integrity of the drug supervisees. More importantly for the Singapore environment, where drug supervisees speak a myriad of languages, their technology is language agnostic, mitigating issues relative to language, accents and content.

A key component of the POC was to assess and flag risk indicators for drug supervisee's potential relapse and/or lack of improvement from supervision. These risk indicators can be linked to items such as an individual's inherent personality traits, current emotional and mental health states, and engagement in the rehabilitation program – all of which the Voicesense system assesses and gives predictive, percentage-based scores which in turn can be used by the supervisors to help optimise their process and attend to the individuals' risk and needs.

The POC process was simple. Tapping on the existing supervision structure where calls are made with drug supervisees on a regular basis, the POC study, over a period of four months, captured vocal patterns during calls made using a custom made “dialer” app developed by Voicesense. Drug supervisees also completed a series of standardised questionnaires designed to capture personality traits and emotional well-being, and answered questions in relation to their cravings for illicit drugs. The questionnaires served as validation against the vocal pattern data while responses on cravings served as a proxy indicator for relapse.

Whilst actual relapse data will best serve the study, the POC duration of four months was too short for useful and meaningful physical relapse data to be generated. The initial results of the POC did, however, generate valuable data for the supervisors with the Voicesense mental health assessments of supervisees indicating that those in the supervision programme were responding well to the treatment. They were highly engaged and, over time, had improving emotional states. The results generated by the system also demonstrated significant correlations between the self-reported standardised assessments and the Voicesense results.

The high correlation of the results to standardised questionnaires gives greater confidence in the viability of incorporating vocal analytics technology into the current processes. By doing so, gaining the ability to identify shifts in risk levels instantly while optimising resources can ensure that each individual receives the best supervision tailored to their risk level and changing needs.

Overall, the POC showed promising results where the benefits of vocal analytics are the ease in which the technology can be integrated behind the scenes into the current supervision structure, with minimal impact on the current process, while generating insights into the emotional and mental wellbeing states of the drug supervisees. It gives hope that leveraging on AI technology can aid in improving processes by providing a higher level of sensitivity to risk predictions while minimising the need for additional manpower.

CASE STUDY 3

USE OF VIRTUAL REALITY WITH BIOFEEDBACK IN PSYCHOLOGICAL RESILIENCE TRAINING

Virtual reality (VR) is a computer-generated environment that allows users to experience and interact with a simulated world. VR technology has emerged as a promising tool in various domains, including healthcare, education, and psychological services (Freeman et al., 2017; Macey et al., 2022; Opris et al., 2012). Using headsets and motion-tracking devices, users can immerse themselves in a fully digital space that feels realistic, often mimicking scenarios encountered in daily life or even extreme stress environments. VR has the capacity to create controlled, repeatable, and customised environments, making it a flexible tool for psychological interventions. It can also create immersive environments where individuals can practise coping strategies without the consequences of real-life failures.

Biofeedback, on the other hand, involves monitoring physiological signals such as heart rate, skin conductivity, breathing patterns, and muscle tension. These signals are used to provide real-time feedback to the individual, helping them become aware of their physiological states and learn to regulate responses to stress. Such a process accelerates learning and helps individuals gain better control over their emotional and physiological states. In therapy, biofeedback is often used to improve emotional regulation, reduce anxiety, and treat conditions like phobias or chronic pain by helping individuals recognise when their body is experiencing stress and training them to alter the responses (Alneyadi et al., 2021).

When combined, VR and biofeedback provide a highly interactive and adaptive platform for mental health interventions, giving individuals the opportunity to practise stress management techniques in a safe and controlled virtual environment, while receiving real-time feedback on their body's physiological responses. VR with biofeedback has also shown potential in addressing mental health issues, improving emotional regulation, and fostering resilience (Maarsingh et al., 2019; Shah et al., 2015; Szczepanska-Gieracha et al., 2021).

A Case for Resilience Training

Resilience – the ability to bounce back from adversity, manage stress, and maintain emotional stability in the face of challenges – is critical for mental health and performance in both personal and professional settings. Resilience training aims to strengthen an individual's capacity to handle stress, remain calm under pressure, and recover from setbacks more quickly. VR, integrated with biofeedback, has emerged as a cutting-edge method for enhancing resilience through experiential learning and real-time physiological monitoring.

Traditional stress management training often involves role-playing or cognitive exercises, which may not fully replicate real-world stressors. VR, however, can simulate high-pressure situations, such as challenging work presentations, crisis scenarios, or interpersonal conflicts. This technology allows individuals to confront stressful situations in a safe, controlled environment, mitigating the anxiety associated with failure and facilitating greater exploration of coping strategies (Rizzo & Koenig, 2017). In virtual environments, participants can hone their ability to maintain composure, apply coping strategies, and regulate their emotional responses. Biofeedback devices, such as heart rate monitors and galvanic skin response sensors, track physiological reactions to these virtual stressors, providing real-time feedback on how well the participant is managing stress. This objective data can be monitored over time, enabling both individuals and trainers to measure progress (Peake et al., 2018). Such a data-driven approach helps assess the effectiveness of resilience

training and guides necessary adjustments for continuous improvement.

The power of VR with biofeedback in resilience training lies in its ability to facilitate repeated exposure to virtual stressors, allowing users to develop and refine effective stress management techniques. The experiential learning approach enhances the retention and application of skills in real-life situations. This is supported by Riva and colleagues (2016) who postulate that technology can be used to influence the affective quality, engagement and connectedness of individual experience, and promote adaptive behaviours and positive functioning.

VR and biofeedback are also being integrated into corporate employee wellness programmes to improve workplace resilience and stress management. Staff can practise handling high-stress work scenarios, such as presentations or deadline pressures, in a virtual setting. A study by Adhyaru and Kemp (2022) involving clinicians from the United Kingdom National Health Service who participated in a VR intervention has demonstrated that VR can be effective in promoting relaxation and reduction of stress in the workplace. A more recent Singapore study using a VR game-based intervention also showed promising results in improving emotional resilience.

Improving Stress-is-Enhancing Mindset and Performance among Singapore Fire-fighting Trainees

A recent study conducted by the National University of Singapore and the Singapore Civil Defence Force (SCDF) exemplifies the practical application of VR with biofeedback in enhancing stress mindset and training performance among fire-fighting trainees (Imran et al., 2024). The intervention group participated in a VR game called Kana VR (previously known as Stressjam), where their physiological responses were monitored through a heart rate chest sensor. Trainees were exposed to various tasks on a virtual island, requiring them to modulate their heart rate variability (HRV) to progress through the stages. This approach allowed trainees to become more adept at recognising physiological stress signals

and adapting to situational demands, thereby improving their emotional resilience.

The study's findings were promising, with trainees who received the intervention reporting lower perceived stress and an increased 'stress-is-enhancing' mindset. Physiological stress markers, including cortisol levels and HRV, were also positively influenced. Interestingly, while improved stress management did not directly correlate with better overall training outcomes, the VR game with biofeedback showed a positive impact on performance in more complex tasks, such as those undertaken by duty officers. These results align with existing literature on the nuanced relationship between stress management and performance outcomes.

The integration of virtual reality with biofeedback offers an innovative and highly effective approach to psychological services and resilience training. By immersing individuals in realistic stress scenarios and providing real-time feedback on their physiological responses, this approach enables experiential learning and enhances emotional regulation skills. As demonstrated by the study with SCDF, the applications of VR and biofeedback in resilience training extend beyond corporate settings to high-stress professions such as the emergency services. This technology offers a promising avenue for enhancing stress management skills and potentially improving performance in complex, high-pressure situations across various fields.

USE OF AI OUTSIDE THE HOME TEAM

As AI technologies continue to evolve, Home Team psychologists have been positioning themselves to use such advancements to modernise psychological interventions and practices in the Home Team. That said, research outside of the Home Team that are equally cutting-edge can shed a light on areas for future studies.

Recognising Emotions in Online Counselling Sessions

In lieu of safe distancing measures due to the Coronavirus, the Temasek Foundation partnered with Lions Befrienders to implement the Facial

Analysis Correlation of Emotions (F.A.C.E.) programme. The technology developed by Opsis Emotion AI uses proprietary computer vision algorithms and Machine Learning techniques to interpret facial expressions. The software is used to map expressions to emotions, enabling a more precise capture of seniors' emotional states. F.A.C.E. can be integrated into online counselling sessions to offer counsellors more detailed insights into the real-time emotions of seniors, thereby enhancing session outcomes (Temasek Foundation, 2022).

Mobility can be a problem for older clients seeking mental health services. For the aged in Singapore who live alone and have trouble commuting, F.A.C.E. extends the outreach of counselling services and the efficacy of online counselling sessions as it enables a more precise capture of expressions that counsellors may miss in online sessions. Furthermore, F.A.C.E. has been proven to be particularly useful with reserved and emotionally less expressive seniors. In overseas trials in healthcare settings, F.A.C.E. achieved more than 93 percent accuracy when benchmarked against similar technologies (Temasek Foundation, 2022), showing promise in revolutionising counselling in the 21st Century.

Prediction and Detection of Aggression Using AI

AI-Assisted Psychiatric Risk Assessments

Violence when poorly managed, could have adverse psychological and physical effects on service providers, clients and the public.

Therefore, there is a need for accurate and professional risk assessments in the mental health sector. To address this concern, the Electronic Hamilton Anatomy of Risk Management (eHARM) platform was created.

The basis of the platform is an approach to risk assessment that was team-based, and structured, providing professional judgement for forensic psychiatry, general psychiatry and youth mental health. This approach was then subjected to a ML model to strengthen and improve predictions. The models created through ML have been stated to be comparable to gold-

standard risk assessment tools in the industry. Its validity has also been verified, demonstrating its usefulness in predicting presence of violence, escalation, desistance and change in type of aggression across differing settings (e.g., inpatient, outpatient or group visits) (Chaimowitz et al., 2021).

Moreover, the four versions of eHARM can combine historic, static and changeable factors to predict short-term risks while other traditional risk assessment tools only rely on historical or static factors (Chaimowitz et al., 2021). The ability to consider dynamic factors helps to provide a continuous and updated risk assessment along with management strategies for targeted individuals makes eHARM a comprehensive risk assessment tool that could be used in evaluation of rehabilitation outcomes for aggressive offenders.

Immediate Detection of Violence Using AI to Facilitate Response

Lastly, AI can also detect aggression to aid in the immediate and prompt response of law enforcement when needed. Sirix Monitoring, known for its surveillance technology, has combined AI with surveillance to create its own violence detection AI. The technology developed can recognise a potentially violent incident in three to five seconds from up to 15 meters away and can be integrated into existing closed-circuit television (CCTV) networks. The system uses a specialised model trained on large amounts of real-world CCTV footage to identify violent incidents (Sirix Monitoring, n.d.).

In line with a recent increase in violent incidents reported on social media, such a technology could be integrated into our existing CCTV networks in hotspots for aggression like school compounds (in the case of bullying) for immediate identification of violent incidents to facilitate faster response to violent incidents and quicker policing. In addition, for acts of aggression amongst youths, the behaviour is often a result of build up from smaller acts of aggression before escalating to violence (Saifudeen, 2022). The implementation of such a system in schools might aid in early detection of minor aggression towards and bullying of an individual before it

fully escalates into physical violence, thereby effectively policing and reducing cases of bullying in schools.

CONCLUSION

The examples of technology in psychological and behavioural research cited in this article show the practical benefits these tools offer. These technologies can simplify research tasks, increase the types of data collected and provide deeper insights into human behaviour. By automating time-consuming processes, technology helps save time and resources, allowing researchers to focus on analysis and interpretation. The usage of wearable devices, mobile apps, or online platforms to gather a broader range of data types, including real-time, behavioural, and biological data, enhances the scope and depth of the research, with technology being able to analyse such data quickly and provide richer insights into human behaviour.

Yet, relying solely on technology has its drawbacks. When using AI in research, potential biases in algorithms could be perpetuated in training, resulting in discriminatory outcomes. For instance, computer-aided diagnosis systems have been found to be less accurate for black patients as compared to white patients. A hiring algorithm formerly used by Amazon ceased its operations after it was found to favour applicants who used words like “executed” and “captured” (words more commonly used by men) in their resumes (IBM, n.d.). Such incidents show that there is a need for human intervention to make sure that the data used to train models are not skewed as they might result in unfair outcomes. Moreover, with every study that collects data from individuals, there is a need for data privacy. Hence, proper consent and safety measures must be in place to make sure that sensitive information collected from participants is not exploited or exposed. These limitations can be mitigated through human intervention, with psychologists playing a critical role in data interpretation, maintaining ethical standards, and making nuanced judgments that technology alone cannot replicate. Ultimately, a balanced partnership between human expertise and technological tools is vital in maximising the benefits of technology in research.

ACKNOWLEDGEMENTS

The authors would like to thank Dr Majeed Khader, Diong Siew Maan, Jasmine Tan and Halitha Banu of the Home Team Psychological Division for their inputs on the various projects.

ABOUT THE AUTHORS



Sandra Lee

is a Research Analyst in the Home Team Psychology Division at the Ministry of Home Affairs, Singapore. She graduated from Nanyang Technological University with a Bachelor's degree in Social Science (Psychology). She currently supports research in the areas of offender, rehabilitation and communication psychology.



Leung Chi Ching

is a Lead Psychologist with the Home Team Psychology Division at the Ministry of Home Affairs, Singapore. She graduated from the Singapore Management University and obtained her doctorate in psychology from the National University of Singapore. She manages the drug portfolio within the division, looking into understanding drug abuse and addiction from the psychological perspective. Her research interest lies in the application of positive psychology to criminology and addiction.



Ken Chen

was a Senior Research Analyst in the Home Team Psychology Division, of the Ministry of Home Affairs, Singapore. He has a Masters in Information Studies from Nanyang Technological University. Some of his publications pertain to psychological vulnerability to misinformation, as well as leveraging AI to analyse different kinds of social issues. He was an editor of *How to Prepare for the Next Pandemic: Behavioural Sciences Insights for Practitioners and Policymakers* (2021). His research interests include societal polarisations, online misinformation, information operations, strategic communications, and natural language processing. Currently, he is an Assistant Director at the National Security Coordination Secretariat and is also pursuing a PhD at the Nanyang Technological University, researching the use of AI in misinformation detection.



Lee Yu Jing

is a psychologist with the Home Team Psychology Division, Ministry of Home Affairs, Singapore. She graduated with a Bachelor of Social Sciences from Nanyang Technological University. Currently, she supports research in the areas of offender and rehabilitation psychology, communication psychology, and resilience psychology.



Cherie Goh

is a psychologist with the Emergency Psychological Sciences Department, Singapore Civil Defence Force. She graduated with a Bachelor of Social Sciences in Psychology from National University of Singapore and is currently pursuing her Masters in Occupational Psychology at University of Leicester. As a psychologist in SCDF, she oversees the assessment and organisational psychology branch, looking into assessment services and management of organisational surveys. She also provides counselling, critical incident debriefing and conducts applied research with frontline personnel. Some of her publications pertain to psychological assessment, psychological distress and use of serious games for psychological training.

REFERENCES

- Adhyaru, J. S., & Kemp, C. (2022). Virtual reality as a tool to promote wellbeing in the workplace. *Digital Health*, 8, 20552076221084473.
- Alneyadi, M., Drissi, N., Almeqbaali, M., & Ouhbi, S. (2021). Biofeedback-based connected mental health interventions for anxiety: systematic literature review. *JMIR mHealth and uHealth*, 9(4), e26038.
- Banu, H., Tan, T. S. F., Chen, X. K., (2024, September 25-28). *Exploring Culturally-Informed Psychological First Aid (PFA): A Systematic Review and Recommendations for Law Enforcement and PFA-Providers*. [Paper Presentation]. Society for Police and Criminal Psychology 2024. Louisville, Kentucky, United States of America.
- Central Narcotics Bureau. (2022, December 08). *CNB Explains: Where do adult drug abusers go when caught?* <https://www.cnb.gov.sg/CNBExplains/explainer-article/where-do-adult-drug-abusers-go-when-caught>
- Chaimowitz, G., Mamak, M., & Moulden, H. (2021). Using Artificial Intelligence to improve prediction and prevention of violence. *Research Outreach*, 124.
- Freeman, D., Reeve, S., Robinson, A., Ehlers, A., Clark, D., Spanlang, B., & Slater, M. (2017). Virtual reality in the assessment, understanding, and treatment of mental health disorders. *Psychological Medicine*, 47(14), 2393–2400.
- Ganapathy, N., & Too, J. H. L. (2023). Neither an offender nor a ‘free’ person: Drug supervision and desistance in Singapore. *Sociology Compass*, 17(12), e13132.
- IBM. (n.d.). Shedding light on AI bias with real world examples. <https://www.ibm.com/think/topics/shedding-light-on-ai-bias-with-real-world-examples>
- Imran, M. A. D. B., Goh, C. S. Y., V, N., Shanmugham, M., Kuddoos, H., Leo, C. H., & Rai, B. A Virtual Reality Game-Based Intervention to Enhance Stress Mindset and Performance among Firefighting Trainees from the Singapore Civil Defence Force (SCDF). In *Virtual Worlds*, 3(3), 256-269.
- Lee, Y. J, Lee, S., Chen, X. K., & Banu, H. (2024, September 18). *AI-assisted assessment of online indicators of psychosocial resilience: Exploratory analysis of discourse in Singapore's online communities on public safety topics*. Poster presented at Home Team Psychological Research Seminar, Singapore.
- Maarsingh, B. M., Bos, J., Van Tuijn, C. F., & Renard, S. B. (2019). Changing stress mindset through Stressjam: a virtual reality game using biofeedback. *Games for health journal*, 8(5), 326-331.
- Macey, A. L., Macey, J., & Hamari, J. (2022). Virtual reality in emotion regulation: a scoping review. In *International GamiFIN Conference*, pp. 64-74.
- Melemis S. M. (2015). Relapse Prevention and the Five Rules of Recovery. *The Yale journal of biology and medicine*, 88(3), 325–332.
- Opris, D., Pinte, S., García-Palacios, A., Botella, C., Szamosközi, S., & David, D. (2012). Virtual reality exposure therapy in anxiety disorders: a quantitative meta-analysis. *Depression and anxiety*, 29(2), 85-93.
- Peake, J. M., Kerr, G., & Sullivan, J. P. (2018). A critical review of consumer wearables, mobile applications, and equipment for providing biofeedback, monitoring stress, and sleep in physically active populations. *Frontiers in physiology*, 9, 743.
- Riva, G., Mantovani, F., Wiederhold, B. K., & Gaggioli, A. (2016). Positive technology: Using interactive technologies to promote positive functioning. *Cyberpsychology, Behavior, and Social Networking*, 19(2), 69–77.
- Rizzo, A. A., & Koenig, S. T. (2017). Is clinical virtual reality ready for primetime? *Neuropsychology*, 31(8), 877–899.

Saifudeen, O. A., (2022, February 01). Commentary: What's behind young people's violent behaviour? *Channel News Asia*. <https://www.channelnewsasia.com/commentary/school-children-bullying-violence-students-parents-2465921>

Shah, L. B. I., Torres, S., Kannusamy, P., Chng, C. M. L., He, H. G., & Klainin-Yobas, P. (2015). Efficacy of the virtual reality-based stress management program on stress-related variables in people with mood disorders: the feasibility study. *Archives of psychiatric nursing*, 29(1), 6-13.

Singapore Prison Service. (2024). *Community Based Programmes*. <https://www.sps.gov.sg/learn-about-corrections/community-transition/cbp/>

Sirix Monitoring. (n.d.). *Violence Detection AI*. <https://sirixmonitoring.com/violence-detection-ai/>

Stephan, W. G., Stephan, C. W., & Gudykunst, W. B. (1999). Anxiety in intergroup relations: A comparison of anxiety/uncertainty management theory and integrated threat theory. *International Journal of Intercultural Relations*, 23(4), 613-628.

Szczepanska-Gieracha, J., Cieslik, B., Serweta, A., & Klajs, K. (2021). Virtual therapeutic garden: a promising method supporting the treatment of depressive symptoms in late-life: a randomized pilot study. *Journal of Clinical Medicine*, 10(9), 1942.

Tan, J., Chan, K. J., Chen, X. K., & Lim, M. Y. (2024, September 18). *Accelerating Systematic Analysis on Occupational Burnout: A Comparison of AI and Human Analysis of Burnout Literature*. Poster presented at Home Team Psychological Research Seminar, Singapore.

Temasek Foundation. (2022, February 24). *Facial Analysis Correlation of Emotions (F.A.C.E) programme*. <https://www.temasekfoundation.org.sg/work/facial-analysis-correlation-of-emotions-f-a-c-e-programme>

THE THREE ERAS OF SINGAPORE'S NATIONAL SECURITY

Shashi Jayakumar
Executive Director
SJK Geostrategic Advisory

ABSTRACT

The concept of national security in Singapore has evolved through three phases: post-independence survival, resilience building, and now, adapting to emerging challenges. For the Home Team in particular, national security in the post 9/11 era was for some time viewed primarily through the countering of violent extremism, for example interdicting terrorist cells, as seen through the arrests of local Jemaah Islamiyah members from 2001. But the paradigm is changing. Firstly, the threat of organised extremist cells has been eclipsed by that posed by self-radicalised individuals – a threat that has persisted even after the strategic defeat of the Islamic State (ISIS) on the battlefield. Secondly, a new type of security challenge has gained increasing prominence and mindshare: cyber attacks, and threats to cohesion posed by disinformation and hostile information campaigns. These challenges must be dealt with through an evolving security architecture that sees stakeholders working in a synergistic manner. Even as approaches continue to be refined, agencies need to be continually mindful of the critical importance of instilling resilience and sensitising the public to the challenges that lie ahead.¹

THE FIRST ERA: SECURING SINGAPORE'S SURVIVAL

Following Singapore's separation from Malaysia in 1965, one of the first acts of Lee Kuan Yew's premiership was to write to the leaders of other countries, seeking help in building up the nascent armed forces of the city-state (Lee, 2000, pp. 30-31). From the point of view of the first-generation leadership, Singapore could only take charge of its destiny if it built – and *demonstrated* – a credible armed deterrent. The deterrent was not of an offensive character, but one analogous to the poisoned shrimp – strong enough to make potential adversaries understand that armed force was not a palatable option when dealing with Singapore. Other core planks of our deterrent capability such as National Service were quickly added, not least on account of the acceleration of the timeline for the withdrawal of British forces from Singapore by 1971.

Singapore had to be responsible for its own security – a conviction which was only strengthened by developments in the 1970s (the fall of South Vietnam in 1975, followed by the Vietnamese invasion of Cambodia in 1979), which seemed to portend, for a time, communist expansion in Southeast Asia.

Our leaders recognised of course from the outset that there was far more to national security than a military buildup. As Prime Minister Lee Kuan Yew observed in 1966:

There is purely physical security... There are other aspects of security which are equally pertinent in the long run: your economic viability, the capacity of your political structure to withstand pressures of a social, cultural or whatever nature. It is a multi-coloured question (Lee, 1966).

¹ The author is grateful to Ng Song Yee and Muzainy Shahiefisally for research assistance and is responsible for any errors which remain.

Diplomacy also played a key role in ensuring Singapore's security. As a small but sovereign state, in order to be relevant, Singapore had to make friends with a maximum number of countries, not least the major powers.

Although never absent in the minds of policymakers, the perception of state-driven existential threats to Singapore's survival receded somewhat over the years. Concomitantly, the concept of national security began to evolve. Some of this had to do with another kind of vulnerability coming to the fore from the 1970s – subversion and ideological infiltration. The government shut down two newspapers in the 1971 after they had been found to be receiving foreign funds. The Singapore Herald pushed an anti-Government line and also published articles against national service. It took money from overseas sources, including a Malaysian politician. Another newspaper, The Eastern Sun, was shut down after it was found to have worked with a news agency of communist China and received funds from it (Ong & Lim, 2021).

The unveiling of Singapore's overarching defence strategy, "Total Defence" on 22 January 1984 was arguably, in part at least, a recognition of this shift – that security threats went beyond military dimensions and encompassed civil, economic, social and psychological fronts as well.²

THE SECOND ERA: RESILIENCE AND STRATEGIC SURPRISE

Total Defence was cast in very stark terms: it was observed that the real target of Singapore's adversaries was not just the SAF, but the economic, financial, psychological, and social resources of the people (Chew et al., 1984). But as then-Minister for Defence Ng Eng Hen was later to observe, "there wasn't much going on" in 1984. ... that's the best time to introduce a concept, when you least need it" (Ng, 2022). The move to introduce Total Defence did prove prescient. As Singapore from the 1970s onwards began to enmesh itself within an increasingly

interconnected world, it became ever more reliant on international flows of capital and goods, and more exposed to external headwinds of various types (Heng, 2013). Indeed, from the mid-to-late 1990s on, the nation was hit by economic shocks, pandemics and terrorism.

Global terrorism began rearing its head from 2001 in the shape of the 9/11 attacks and subsequent acts of terror by al-Qaeda. The key al-Qaeda affiliate in Southeast Asia, the Jemaah Islamiyah (JI), carried out several attacks in the region – the Bali bombings in October 2002 (which killed over 200 individuals and injured hundreds) being an example. The Singapore JI cell planned attacks on various targets within the country. Disaster was narrowly averted in Singapore on account of the good work done by Singapore's security agencies (Ministry of Home Affairs, 2003).

Seen with hindsight, the period of strategic surprise that encompassed the 9/11 attacks and the discovery of the JI cell could in fact be said to have begun before 2001, taking in other strands which went beyond terrorism. There was the 1997/8 Asian Financial Crisis, and the fall of Suharto in Indonesia (itself not unlinked to the Financial Crisis). This seemed for a time to portend a period of serious instability in one of Singapore's largest neighbours and arguably the pre-eminent power in ASEAN. The period 2000-2001 also saw the bursting of the dot-com bubble. Following this, Singapore was hit by the Severe Acute Respiratory Syndrome (SARS) in 2003.

Diplomacy and deterrence still remained cornerstones of Singapore's national security and defence policy. But clearly, the exigencies of fresh security challenges meant that fresh thinking and revitalised structures were needed. We needed new ways of thinking about the ability to withstand shocks (including, but not limited to, terrorist attacks), and of detecting nascent trends (or even indistinct signs) far afield that might in time come to affect Singapore. This was not simply a good-to-have: this was existential to Singapore's survival.

² Total Defence Day is commemorated on 15 February annually, the day colonial Singapore surrendered to Japan in 1942 during World War II. For the fifth pillar, digital defence, added in 2019, see below.

An analysis of relevant speeches by key officials from the early 2000s seems to evidence a coalescence of thinking: various security challenges were increasingly fused with economic and social challenges – and even public health ones. These could not be separated, and had to be tackled in a holistic manner (Tan, 2005). This, in turn, would only be possible if agencies adopted a networked approach which saw them working in a collaborative fashion. As then-DPM and Coordinating Minister for Security and Defence Tony Tan observed in 2005:

Today Singapore faces a wide spectrum of threats ranging from the possibility of all-out war to single episodes of terrorism. Challenges to our national security can emerge quickly from unexpected directions, taking unimagined forms, leading to unforeseen consequences. The possible permutations are countless. The traditional, hierarchical model of government with its rigid and fixed boundaries that compartmentalised agencies into distinct areas of responsibilities simply cannot cope with this kind of complexity (Tan, 2005).

Some themes stand out when it comes to how policymakers and agencies took up the challenges of dealing with an increasingly diffuse threat picture.

Networks & Security Architecture

Terrorism had assumed such a central place in the minds of planners that the 2004 publication by the National Security Coordination Centre titled *The Fight Against Terror* was subtitled “Singapore’s National Security Strategy”. But as then-DPM and Coordinating Minister for Security and Defence Tony Tan made clear in his foreword, at its core, the national security strategy has the overarching aim of enhancing coordination among the different ministries and national security agencies in Singapore (*The Fight Against Terror*, 2004). This idea of breaking down agency silos and the need to tackle information stovepipes went beyond the counterterrorism sphere. From the early 2000s, policymakers began to focus on the issue of enhanced coordination, with agencies working synergistically and collaboratively in a networked manner.

This thinking bore fruit with the creation of the National Security Coordination Secretariat (NSCS) in 2004. Tasked with over-the-horizon national security planning, NSCS has gone through several evolutions over the years, but in its original incarnation, it comprised the National Security Coordination Centre, which dealt with risk assessments and horizon scanning, and the Joint Counter-Terrorism Centre (JCTC), which provided a platform for the strategic analysis of terrorism threats based on assessments by the intelligence agencies (Loo, 2004).

Foresight and Weak Signals

The ability to detect nascent signals in an ever-expanding pool of data, information, and intelligence was of course an important asset in thwarting terrorist attacks. But more broadly, what was needed was a horizon scanning capability and to anticipate “unknown unknowns” that might potentially be helpful for security planners’ understanding of an entire range of security challenges (Tan, 2005). NSCS crucially incubated the Risk Assessment and Horizon Scanning (RAHS) programme, launched in 2004. The RAHS programme used technological tools that complement scenario planning in anticipating strategic issues, and eventually became a suite of big data tools “designed to help analysts detect, investigate and better anticipate emerging strategic threats and opportunities” (Ho, 2016). RAHS was developed in collaboration with the Defence Science Organisation, with foreign consultants also playing a role – in an implicit, and important acknowledgement that crucial knowhow could be brought to the table by trusted friends.

These developments complemented agencies’ lines of effort in futures thinking that had either been in existence for some time, or which were just coming into being. The government had in 1995 set up the Scenario Planning Office in the Prime Minister’s Office to develop scenarios from a whole-of-government perspective. Partly in recognition of how foresight work was being mainstreamed and had a direct role in strategy formulation, this was renamed the Strategic Policy Office (SPO) in 2003 (Centre for Strategic Futures, 2025). Viewing futures specifically through a national security lens had been a part of the defence architecture for some time. Singapore

had in fact begun its future planning efforts as an experiment in Mindef in the late 1980s, even before SPO came into being. Later, in 2003, Mindef formed the Future Systems Directorate (FSD) in recognition of emergent challenges and changes in the strategic environment.

National Resilience

The third observable strand was the concept of “resilience”, which in the post 9/11 era began to increasingly feature in Singapore’s planning and public discourse. This had, broadly, to do with the ability to cohere and bounce back in the face of terrorist attacks; it was no longer practicable to be able to expect to thwart each and every attack. Some threats might eventuate – the issue was not seeking complete prevention, but how society could absorb the initial shock and attempt to cohere and recover (Ng, 2011). For example, on 18 July 2005, then DPM Tony Tan, in the course of delivering in Parliament an important speech on enhancing Singapore’s national security in the wake of the 7 July 2005 attacks in London, emphasised the importance of national resilience, social cohesion and tolerance, drawing positive lessons from the unyielding response to the attacks on the part of the people of London (Tan, 2005).

Singapore was well served with this model. For example, because of community engagement measures, and institutions such as the Religious Rehabilitation Group (RRG) and the Inter- Agency Aftercare Group (ACG), agencies were not caught unprepared when self-radicalised extremist cases began to surface from 2007 onwards, and from 2014, radicalised individuals who identified with ISIS.

None of the extremist individuals above succeeded in carrying out an attack within Singapore, although several had conceived of attack plans. Resilience discourse began to evolve, with policymakers being increasingly prepared to say that it (“it” being a successful attack causing damage and loss of life) was not a matter of “if” but “when”. The key was, as Law and Home Affairs Minister K Shanmugam noted in 2023, “if an attack happens, to be able to cope with it psychologically, and as a community, and to recover from the attack.”

In order to set the groundwork for a response to a damaging attack (which in some scenarios could see not just loss of life, but harm done to overall cohesion and harmony, particularly if one ethnic group were to be implicated in an attack), the people needed to be brought into the national security conversation in a much more concerted way. With this in mind, major initiatives and societal mechanisms evolved with the aim of raising awareness of the terrorist threat, improving resilience, and preserving common multicultural spaces. Inter-Racial Confidence Circles (IRCCs), first set up in 2002 following the 9/11 attacks in the United States, acted as local platforms for interfaith and interethnic dialogue and interaction. IRCCs were renamed in 2007 “Inter-Racial & Religious Confidence Circles” and then in 2022 to “Racial & Religious Harmony Circles” (Tong, 2022).

Efforts to enhance cohesion and to ensure society could bounce back from attack did not end there. The Community Engagement Programme (CEP) was launched in 2006 following the London bombings the previous year. The main aims of the CEP (to bring different communities together to strengthen inter-communal bonds) have been integrated into SgSecure (2016), which also has a broad focus on counter-terrorism and community resilience (SGSecure, 2024). SgSecure also builds on CEP’s work by involving communities in specific actions such as preparedness, and emergency response.

Efforts to sensitise the people and inculcate the need for continued vigilance in the face of the evolving nature of the terrorist threat can be seen through a relatively new development – the ISD Terrorism Threat assessment reports. Six have been released to date, with the latest being in 2024. Plain language targeted at the non-specialist reader is used to show how the threat picture continues to evolve. Besides the fact that the average age of individuals in recent radicalisation cases in Singapore has been getting younger, new forms of radicalisation have been detected. Some recent cases here have involved individuals who subscribed to right-wing ideology, for example (Internal Security Department, 2024).

THIRD ERA: SLOW-BURN THREATS

A trickle of radicalised individuals espousing pro-ISIS ideology continue to be detected even after the strategic defeat of ISIS on the battlefields of Syria and Iraq (Ministry of Home Affairs, 2024a). In addition, the ongoing conflict in Gaza has been the key factor in the radicalisation trajectory of a small number of individuals in Singapore – some were developing attack plans, or planned to travel to Gaza to join the armed wing of Hamas (CNA, 2025). Separately, as noted above, security agencies have begun to encounter radicalised ideologies that are *not* Islamist, but right-wing in nature. In one case, a Singaporean Protestant of Indian ethnicity was detained in December 2020 after planning to attack two mosques and kill worshippers there, in an attempted imitation of the attacks carried out by Brenton Tarrant in Christ Church, New Zealand, in 2019 (Ministry of Home Affairs, 2021a).

Even as the extremist threat continues to pose a clear and present danger, other security challenges have surfaced in recent years that agencies have increasingly had to devote resources and attention to. These include cyber threats, escalating geopolitical tensions, wars and conflict in Ukraine and the Middle East, tensions in the South China Sea, global pandemics, technological advances (which can be used by both malicious actors and those playing defence), and the concomitant rise in hybrid warfare and hostile information campaigns. The impact of other non-traditional security challenges such as climate change has also been felt in Singapore.

What follows is a brief survey of some of the most pressing security challenges, with some discussion of what agencies have done to meet these challenges. Consideration is also given as to whether emergent challenges necessitate a revisitation of the security policies and frameworks that have served Singapore well over recent decades.

Geopolitics

Singapore, a price-taker in global affairs, benefitted considerably in the post-cold war era (particularly in the twenty years or so following the fall of the Berlin Wall) when there were

generally accepted norms of state behaviour and relative stability in the international order. Now, however, some of these norms are fraying, and the troubled relationship between the United States and China is likely to be the dominant geopolitical issue of our time. Even if outright military conflict is avoided, tensions and an inherent lack of underlying trust between the two nations increasingly affect the rest of the world, including Southeast Asia.

National security considerations are increasingly impinging on what used to be considered distinct issues – trade and technology. In the struggle to occupy the commanding heights of technology, the United States and China are imposing restrictions on the export of semiconductors and items that might help to speed development in artificial intelligence and quantum technologies. The full scope of how countries might be pressured to choose sides is still playing out, but it is noteworthy that Singapore Prime Minister Lawrence Wong has himself acknowledged that “more and more economic activities around the world are being viewed through a security lens”, observing that restrictions are spilling over to an ever increasing number of areas (Wong, 2024). PM Wong’s remarks reflect not just a troubled world order, but one fissured with tensions arising from bifurcated supply chains and the contention for technological supremacy.

Like all other Southeast Asian countries, Singapore wants to avoid taking sides (Tham, 2021). But as tensions further escalate, Singapore may increasingly come under pressure to align more closely with one side. This is especially evident in areas such as trade and technology, where both China and the US compete for influence and apply restrictive measures on the other (and those seen to be aligned with them). Successfully threading the needle in attempting to preserve our strategic autonomy may in itself risk strained relations with one power, or even potentially both.

Hybrid Threats, Influence, and Interference

The ramping up of big power rivalry and the concomitant increase in geopolitical tensions in recent years has seen nations (not just the United States and China) employing various tactics to achieve their own objectives. One of

these tactics, seen with increasing frequency, is the subversion of other populations through propaganda and other means, often utilising combinatory approaches. Hybrid operations are coordinated actions that blend conventional and unconventional tactics and leverage multiple domains (examples might include cyber, economic, and information warfare, to achieve strategic objectives), to undermine a target state's stability or decision-making. The means employed are coercive – in the sense that the basic aim is to force other nations to bend to their will. But from the point of view of the state actor employing these means, waging such a campaign is simply part of the maximisation of national self-interest, using whatever means are necessary and effective.

It should be recognised that a great deal of this activity can be cloaked under a veneer of plausible deniability, and here, the burgeoning fields of study of influence, interference, and hybrid operations mesh. Many states have the capability to wage disinformation campaigns at scale, but some of its adjunct activity might be classed as “influence”. In this realm, if the state was forced to explain its actions, it might use the excuse of legitimate activity (including diplomatic activity). Or it might simply say its actions are the legitimate exercise of soft power or cultivation that might be calculated to further states interests and objectives.

“Influence” at the state to state level is a game which has existed since the dawn of diplomacy. But there are new modes enabled by technology, including hostile information campaigns at scale, that were not technically feasible until recent years. From the defending side's point of view, a great deal of this activity could be seen as malign, but even where attribution is possible, the unmasking of a campaign is rarely in itself a trigger for like-for-like retaliation, and still less a *casus belli*. This is particularly the case for small nations which, as Singapore leaders have stressed, are price-takers on the international stage.

The key waypoints in Singapore's attempts to grapple with disinformation and hybrid threats are clear. The beginnings are the Parliamentary Select Committee on Deliberate Online Falsehoods (2018) which saw submissions, witness testimony, a

comprehensive final report (Parliament of Singapore, 2018), the promulgation of The Protection from Online Falsehoods and Manipulation Act (2019), subsequent discussion, and Parliamentary debate concerning hostile information campaigns, and the passage of the Foreign Interference (Countermeasures) Act (2021).

Some of the overarching themes over the course of this journey:

- Both Singapore and ASEAN are known sites for disinformation campaigns.
- Singapore's size, openness to the world, and multi-ethnic/multi-religious society make it particularly vulnerable to disinformation and subversion mediated through online means (Shanmugam, 2021, para. 33).
- Well-resourced adversaries would quite often have extensive toolkits at their disposal, from which various modalities might be employed against the target state. Besides disinformation and hostile information campaigns, these might include cyberattacks, espionage, the use of proxy actors, and appeals to civilisational or cultural affinities. These modes might be used on its own or synergistically for maximum effect (“hybrid threats”).
- When it comes to fighting hostile information campaigns and well-thought out disinformation campaigns, the defending side, however competent its organisation and whatever technological resources it has, often finds itself playing catch up. Threat actors have many vectors at their disposal which facilitate rapid dissemination of falsehoods, smears and conspiracies. This state of affairs is unlikely to change in the near to medium term.

Influence campaigns that use AI will become more common. [One such campaign uncovered by researchers (involving a pro-Beijing slant) saw a synthetic actor and content produced using a commercial AI video generation platform. Quality was low, but this is in time likely to improve (Graphika, 2023). Recent cyber landscape reports by the Cyber Security Agency point to how threat actors are leveraging Generative Artificial Intelligence (Gen AI) to power their cyber and misinformation/disinformation campaigns]

Cyber Attacks

Cyber breaches have occurred with troubling frequency, with 4,100 phishing attempts, 70,200 infected systems, and 132 ransomware cases recorded in Singapore in 2023 alone (Cyber Security Agency of Singapore, 2024).

Some past incidents have represented major cyber breaches. The SingHealth cyber-attack, disclosed in July 2018, was a major data breach affecting Singapore's largest healthcare group. Hackers accessed the personal data of 1.5 million patients, including outpatient records of Singapore's Prime Minister. The attack was attributed to sophisticated state-sponsored actors (Committee of Inquiry, 2019). Separately, a cyber-attack on Singapore's Ministry of Foreign Affairs (MFA) in 2014 involved sophisticated hackers breaching its IT system (Tan, 2015). More recently, in July 2025, an ongoing attack against our critical infrastructure by a state-linked Advanced Persistent Threat (APT) group, known as UNC3886, was disclosed by officials (Devaraj, 2025).

In recognition of the growing cyber threat, the Cyber Security Agency (CSA) was established in 2015, part of the Prime Minister's Office, and managed by the then Ministry of Communications and Information (MCI), as the central agency to oversee Singapore's cybersecurity. It subsumed MHA's Singapore Infocomm Technology Security Authority and IDA's Singapore Computer Emergency Response Team.

Threats evolve quickly in a fast moving cyber landscape, with Advanced Persistent Threat groups linked to states as well as criminal syndicates expanding their targets and operations, and demonstrating increased sophistication in their tactics and techniques. Malicious actors are increasingly adept at targeting software supply chains; in addition, polished, and coherent AI-assisted phishing and scam messages have also begun to surface locally (Cyber Security Agency of Singapore, 2024).

Critical infrastructure

Malware can damage or even potentially take control of industrial control systems. It is increasingly clear

that in a networked, SMART Nation, within which cyber-physical systems will play an increasing role, critical infrastructure and critical information infrastructure (closely tied to Critical Infrastructure, being a computer or a computer system located in Singapore, necessary for the continuous delivery of an essential service) will need to be better protected against both physical and digital threats, as a successful attack can have serious (and knock-on) consequences. These sectors include Energy, Water, Banking & Finance, Healthcare, Transport (which includes Land, Maritime, and Aviation), Government, Infocomm, Media, and Security & Emergency Services. Several steps have already been taken to protect them. For example, the Infrastructure Protection Act was enacted in 2018 to safeguard critical infrastructures against security risks. The Act mandates that certain areas and premises implement measures to protect against physical and digital threats. Separately, in May 2024, the Cybersecurity Act was amended to strengthen the protection of Critical Information Infrastructure (CII) against cyber-attacks. The amendments aim to enhance the resilience of essential services by improving regulatory frameworks and ensuring that CII owners adopt robust cybersecurity measures.

Certain elements of critical infrastructure such as submarine cables or undersea gas pipelines have been thrown more sharply into focus in recent years, partly on account of ongoing geopolitical tensions and conflicts. State actors may engage in grey zone operations which might see cables or pipelines "accidentally" severed or damaged. Submarine cables (which cover 99 per cent of Singapore's international telecommunications traffic) and undersea gas pipelines, which are critical for connectivity and supplying energy needs, have been in the spotlight in Singapore in recent years as their vulnerability has become more apparent. The subject of protecting submarine cables landing in Singapore as well as pipeline protection is now increasingly studied and discussed (Beckman et al., 2024), with ministers acknowledging the possibility that these can be sabotaged (Ng, 2024).

Economic Security

Closely tied to protection of critical infrastructure is increased emphasis in recent years by some states on scrutiny over Foreign Direct Investment

(FDI) in critical sectors, with several nations worldwide either legislating on the issue or beefing up existing laws. One concern is that a preponderance of ownership or investment in a specific sector could be weaponised, and used to control key companies that supply essential or strategic services. This is an area that Singapore policymakers have tracked and taken action on. While it had existing specific sectoral regimes (covering, for example, telecommunications, banking and utilities), Singapore did not have an overall FDI screening law until January 2024, when Parliament passed the Significant Investments Review Bill. The Strategic Investments Review Act (SIRA) complements existing sectoral legislation by regulating entities which are not adequately covered by existing laws, but which are considered essential to national security. Under SIRA, “Designated entities” will need to seek approval for change in ownership and control. Prospective buyers will have to notify the authorities after taking a 5 per cent stake in a critical entity. The Bill also provides the government with targeted powers over any entity which acts against national security interests. Entities not designated can have its ownership or control transactions reviewed if it has acted against Singapore’s national security interests (Oh, 2023). The government has undertaken to use the law in a measured and calibrated manner – this is necessary, given that Singapore’s extraordinary openness to trade and investment has been critical to its success.

Technological advances and Artificial Intelligence (AI)

The sheer pace at which technology has advanced in recent years presents both opportunity and risk. Singapore, as a SMART Nation, needs to harness technology and stay abreast of latest developments in order to preserve its place in the first rank of global nations. At the societal level, technology and AI can be used to enhance urban planning and enhance the delivery of public services. In the security domain, technology and AI can be used to secure the built environment and give the Home Team and SAF a cutting edge – for example when it comes to processing vast amounts of big data, target identification/classification (particularly for the SAF), and horizon scanning and intelligence.

There is a flip side. Various actors ranging from criminal syndicates and hacktivists to states can exploit technology and AI tools for a range of nefarious purposes, from automating bot farms to turbocharging disinformation campaigns. Generative AI was for example used in disinformation campaigns in the 2024 US Presidential election (Trauthig & Woolley, 2024); in 2024, OpenAI detected a group ChatGPT with users linked to an Iranian disinformation campaign (OpenAI, 2024).

In the near future, as technology and generative AI tools become further democratised at low cost, there will likely be a proliferation of scenarios where actors, even at the level of the individual lacking domain expertise, might have at their fingertips the means to create influence and disinformation campaigns. Researchers have demonstrated, for example, how it is possible to task a model like GPT-4 to come up with a customised roadmap for a disinformation campaign (Bubeck et al., 2023, pp. 83-84). Nations and agencies on the defending end need to prepare for the malicious deployment at scale of AI tools potentially affecting democratic systems (including elections), and over time weakening trust in the institutions of state.

Climate change

Then-Senior Minister and Coordinating Minister for National Security, Teo Chee Hean, stated in March 2021 that “climate change is the defining crisis of our time” and described it as an “existential threat” to Singapore (Teo, 2021). Sea levels are projected to rise by up to about 1m by 2100, compared with the baseline period of 1980 to 2009 (Ministry of Environment and Water Resources & Ministry of National Development, 2016, p. 5). Agencies have in recent years been making plans and adjustments with a view to bolstering resilience to climate change and to mitigate future risk. Some of the most striking moves are in built infrastructure, whether ongoing or planned. For example, Changi Airport’s upcoming Terminal 5, is being built 5.5m above mean sea level and with an extensive drainage network to minimise flooding. In 2011, the minimum land reclamation level in Singapore was raised from 3m to 4m above the mean sea level.

Climate change also poses threats to our health. Weather and temperature changes can lead to vector-

borne diseases such as dengue proliferating rapidly (Ministry of Environment and Water Resources & Ministry of National Development, 2016, p. 24). But there are also health risks over the horizon which can only be dimly glimpsed at present. As the National Centre for Infectious Diseases has observed (with regard to recent scientific thinking), climate change will increase spillover events involving novel or unknown infectious diseases, especially those with a zoonotic origin (Vasoo, 2024).

Even as Singapore attempts to gird itself, attempting to accurately forecast all that climate change will bring to the wider region and how these developments will impact us is a fool's errand, given the myriad possibilities, many of which are still beginning to play out. While preliminary research can point the way, there are simply too many "unknown unknowns". It seems almost certain that at the global level climate change will increasingly lead to tensions over resources, particularly water, and that declining rice yields are likely to impact food security in the region (Caballero-Anthony et al., 2023, p. vi). But it is difficult to precisely calculate spillover effects into Singapore. We do not know when the region will start to see its first transnational climate change refugees (internal climate-related migration is already occurring) (Caballero-Anthony et al., 2023, p. 58). Nor do we know whether extreme weather events in areas which are already conflict prone (Myanmar and the Southern Philippines come to mind) could possibly act as an accelerant for conflict and extremism.

Some of these possibilities might seem, at present, far-off (or even far-fetched), but agencies in Singapore will need to prepare for many scenarios. The SAF, for example, may need in time to bolster its humanitarian assistance and disaster relief (HADR) capability (within the limitations of what its longer-term planning allows) if the increased frequency of extreme weather events leads to more regional natural disasters. And, improbable as it might seem, agencies might even have to ponder whether climate change and the increasing incidence of heat stress could lead to fissures in social cohesion.

"Divided, we stand no chance": threats to cohesion

Many of the challenges above have been aired publicly by Singapore's leaders, who clearly have in mind the need to sensitise the public to the

fact that the world is on many levels becoming an increasingly troubled place. At the same time, however, even as our leaders highlight the likely negative impact of external challenges and efforts being made to mitigate them, there has been a discernible shift, with increased emphasis placed on challenges to internal cohesion and the dangers of a polarised society. As then-PM Lee said in April 2023 during the Parliamentary Debate on the President's Address, "Singaporeans need to realise the gravity of the external situation. We are facing not just one storm, but several In this new troubled world, it is all the more important for us to close ranks. Divided, we stand no chance" (Lee, 2023). PM Wong has also on several occasions spoken on the same theme, noting how one of his key tasks will be to "keep our society together, to keep Singapore strong and united, amidst powerful forces that will seek to divide us" (Chin, 2024).

Fissures in society and the body politic may be caused by state actors mounting disinformation or influence campaigns targeting Singapore (or particular groups within Singapore). It should be recognised, however, that a great deal of the polarised echo-chambers being formed in the real and online worlds need not necessarily have a hostile information campaign as the originating factor.

To be sure, differing points of view or taking strong or extreme positions over external developments can lead to social divisions, affecting cohesion. There are signs for example that wars and conflicts in Gaza and Ukraine have polarised opinion in Singapore. Social media is both a cause and an accelerant of what I would call "organic polarisation". It feeds a process where increasingly, individuals read content algorithmically tailored to their own interests, pushing them down ever narrowing pathways inhabited by likeminded individuals. Some individuals may not venture far down these paths; but others may be deeply immersed in various rabbit holes that might involve extreme thoughts of various hues, racism, xenophobia, conspiracism, misogyny, vaccine denial, or a mélange of all these and more. Within this mix, individuals convinced of their own beliefs, or the rightness of their cause may become increasingly incapable of accepting facts, and unable to have meaningful, rational debates with others who feel differently. Even groups of individuals who are

convinced that they are on the side of fairness and social justice can be infected. When addressing the issue of “wokeness”, then-PM Lee said in May 2024 that this “could lead to very extreme attitudes and social norms”, and that “it does not make us a more resilient, cohesive society with a strong sense of solidarity. We must be more robust” (Lam, 2024).

The erosion of civil and civic discourse is by no means as far advanced as it is in other nations, but if left unchecked, it will lead to a further hollowing out of what hitherto has been a broad, tolerant middle ground. Without a strong middle ground, Singapore might become increasingly polarised along racial or religious lines, or along cleavages of class or political orientation. This could in turn negatively impact the levels of trust in government and the institutions of state. These possibilities might seem far off at present, given that surveys have shown low levels of political polarisation in Singapore (Ong, 2021), but the issues urgently require further study by experts, researchers, and policymakers. For the present, the possibility of longer-term damage to the social compact is clearly being taken seriously by government agencies. Initiatives such as Forward Singapore have been unveiled, which, as observers have noted, have the twin aims of citizen engagement and strengthening the broad middle ground (Tan, 2023).

CONNECTING THREADS

The list of issues presented above is of course non-exhaustive, but it may be possible, when assessing these together, to arrive at some sense of how variegated and challenging the security landscape has become over recent years. It what follows, I attempt to sketch out some key aspects of agency and Whole-of-Government thinking when it comes to grappling with these challenges.

Legal Approaches / International Norms

As a small nation, Singapore has since independence been a steadfast advocate for a rules-based international order, highlighting the dangers of might-over-right approaches. It is striking how our leaders have been keen to emphasise this – the critical role of international laws and norms in maintaining global security – in recent years (Tan,

2025). This commitment was also evident in the strong stance against Russia’s illegal invasion of Ukraine - a blatant violation of sovereignty and territorial integrity.

The fraying of the international order means that sovereignty can be challenged by other, non-military means. Hostile information campaigns are a coercive instrument deployed through the digital realm that can undermine the stability of a nation. The defending state cannot expect that other nations which pay lip service to accepted international norms of state behaviour (which are in any case being ignored) will somehow come to Singapore’s aid; nor that the main conduit, social media and other online platforms, can be trusted to self-regulate and expunge all malicious content. We have to take control over our own security.

The proliferation of threats and harms in the online space has necessitated a raft of legislation (and legislative updates or amendments) in recent years. When it comes to dealing with online falsehoods that could harm the body politic or affect cohesion, we now have the Protection from Online Falsehoods and Manipulation Act (2019). Hostile information campaigns can also harm society. The Foreign Interference (Countermeasures) Act (2021) provides for countermeasures that allow agencies to act to prevent, detect and disrupt foreign interference in our domestic politics. It is also worth noting that key aspects of updates to the Maintenance of Religious Harmony Act (2019) as well as the Maintenance of Racial Harmony Act, which became law in March 2025, have to do with (respectively) enabling the Ministry of Home Affairs and agencies to act when cases of foreign influence are detected in religious organisations (Ministry of Home Affairs, 2025) and putting in place safeguards against foreign influence through race-based organisations. The latter Act also introduces an offence for urging violence against other groups or their members on the grounds of race (Ministry of Home Affairs, 2025a).

More broadly, there has been legislation aimed at illicit and malicious activity within the online space. The Online Safety (Miscellaneous Amendments) Act, which took effect in 2023, allows an order to be directed to social media platforms to take down some types of egregious content, like posts advocating suicide, self-harm, child sex exploitation,

and terrorism (Ministry of Digital Development and Information, 2023). In addition, the Online Criminal Harms Act (OCHA) was passed in Parliament in February 2024. The Act enables the authorities to compel individuals, Internet service providers, and app stores to remove or block access to content it suspects is being used to commit crimes (including scams) (Ministry of Home Affairs, 2024).

Public Messaging

In recent years, Singapore's leaders have sharpened their public messaging on national security issues, the implications of geopolitical tensions, and the need for cohesion. They are also more prepared to make it known that influence campaigns can affect society. Then-PM Lee observed in April 2023 that "tensions between China and the US will expose our population to emotional pulls, commercial pressures, and influence campaigns, from one side or the other, to take their point of view and support their cause" (Lee, 2023a). One calculation appears to be that social cohesion would be seriously damaged if one racial group were to fall under the sway of ethnic appeals from overseas (Yong, 2021). This may explain the increased emphasis on what makes people "Singaporean", and why cultural identity and national identity are two different matters (Sim, 2023).

Overall, leaders have also been at pains to explain (including to the young) Singapore's approach in constructing its foreign policy (Lim, 2019): it is *principles* that drive Singapore's foreign policy, and not the quest to be neutral or to be balanced in all matters (Goh, 2024). This, in turn, may be the result of reactions from the ground following the illegal full-scale invasion of Ukraine by Russia in July 2022, which saw Singapore take a strong stand against Russia (which included imposing some sanctions) given its violation of international law. While some surveys showed that many Singaporeans supported the government's position, there was also the suggestion that some felt that Singapore, by taking action against Russia, had gone too far and was inviting retaliation, and that it should have remained neutral in the matter (Ong, 2022).

Learning from others

Ukraine's experience has brought with it several lessons, which (available evidence suggests)

have left an imprint on Singapore's national security psyche. A Ukraine fact-checking NGO, StopFake, provided key in-person testimony at the 2018 Parliamentary Select Committee on Deliberate Online Falsehoods (GovSG, 2018). There are also important learning points in terms of civic cohesion and national resilience (not least, the ability to carry on and achieve a degree of "normalcy" in the midst of crisis, as well as the work which goes on behind the scenes to achieve this) which have been remarked on by Singapore's leaders (Ng, 2022) and think-thanks here (Ong, 2024).

There are implications too for Total Defence. In 2019, Singapore added Digital Defence as the sixth pillar of Total Defence (with the existing pillars being Military, Civil, Social, Economic, and Psychological Defence) (MINDEF Singapore, 2019). Other nations, located closer to areas of conflict, have realized that their own total defence concepts need to be revisited with a fresh lens, especially when it comes to psychological defence or resisting hybrid and cyber threats. Sweden, which refreshed its total defence concept from 2014, is an example (Baltic Monitor, 2018). Swedish experts and officials (including from its Psychological Defence Agency) have been known to visit Singapore in order to share best practices when it comes to dealing with disinformation – especially the type that can disrupt cohesion and the policymaking process (Yeo, 2024). In the present writer's experience, having interacted and exchanged views with many of these experts, a common learning point in many nations' experience is not simply governmental reorganisation, but taking the citizenry into confidence in a mature way, with the forces that might undermine cohesion clearly explained (Jayakumar, 2024, p. 421), and building a "reservoir of trust" that will be useful when crisis hits (Yeo, 2024).

For different reasons, Singapore has also drawn lessons, it appears, from quite a different quarter and from a country which, on the surface, it shares very few similarities with. In 2017, Saudi Arabia, the United Arab Emirates (UAE), Bahrain and Egypt imposed an air, land, and sea blockade on their near neighbour Qatar. A full discussion on the blockade, which lasted until 2021 and had complex reasons behind it, cannot be attempted here for reasons of space. Qatar, a relatively small

country, was able to survive the encirclement relatively unscathed (rather than caving in to several demands that would have led to a diminishment of its sovereignty). It did so through responding rapidly on several fronts – opening new economic lifelines, diversifying its supply chain, improving food security, and engaging in an agile fashion with other nations, including those prepared to be sympathetic to its cause (Ulrichsen, 2020). Singapore leaders and officials have taken note (Fu, 2023), besides the clear lessons that smaller states should not simply accept being dictated to by ostensibly more powerful ones. In 2023, then-PM Lee observed when hosting the PM of Qatar, His Excellency Sheikh Mohammed Bin Abdulrahman Bin Jassim Al Thani, that both Qatar and Singapore recognise “the importance of a rules-based international order that respects the sovereignty, independence, and territorial integrity of all states” (Lee, 2023b).

Supply chain resilience

The experience of the COVID-19 pandemic has led many nations to reconsider the lens with which they have formerly viewed reliability of their own supply chains for food, medical essentials, and other necessities. Securing these supply chains is no longer primarily an economic imperative: it is an existential one tied to national security. During the COVID-19 pandemic, agencies such as Ministry of Trade and Industry and Economic Development Board worked with the private sector to ensure that supplies of food and other essentials (including masks) continued to flow into Singapore.

Agencies are already preparing for the next crisis; officials have been at pains to stress the importance of supply chain resilience and what will be done to strengthen supply chain connectivity. The Food Safety and Security Act, passed in 2025 and to be implemented in phases by 2028, will enable Singapore’s stockpiling measures to be expanded (Begum, 2025). This can, to some degree, ameliorate the impact of supply chain disruptions for food staples (a potentially existential issue for a nation that imports nearly 90% of its food) (Ng, 2022). But beyond this, enhanced risk management in an increasingly troubled world, as well as redundancies in networks and logistics, will need to be baked in (Shanmugaratnam, 2020).

Whole of Government (WOG) / multiagency approaches

In 2016, Peter Ho, who spent much of his public service career in Singapore’s national security domains before retiring as Head of the Civil Service in 2010 (while continuing to advise the Centre for Strategic Futures), made this observation:

Strong leadership and constant oversight is required; otherwise the agencies will lapse into normal patterns. The holy grail of whole-of-government approach must be ministries and agencies, even individuals, working together in a strategic and coordinated way, spontaneously, without the need for compulsion or a crisis (Ho, 2016, p. 292).

Covid-19 reaffirmed the relevance of the whole-of-government approach in a crisis. At the governmental level, the Homefront Crisis Executive Group (HCEG) chaired by PS (Home Affairs) was stood up for two and a half years during the outbreak, supporting the Multi-Ministry Task Force, with the Ministry of Home Affairs’ Joint Operations Group supporting HCEG as secretariat (Pang, 2024, p. 5). There are clear signs which signal the government’s determination to refine further mechanisms for crisis and incident management. Part of an unreleased internal review (Ang, 2023) on Singapore’s COVID-19 response by former Head of Civil Service Peter Ho focused on lessons for Singapore on crisis management, and includes observations on the internal workings of the government and crisis management structures (Ang, 2023).

At the agency level, after-action reviews were also conducted. It is possible to glimpse some developments arising from these reviews. In 2023, the Home Team Academy (HTA) set up the Crisis Management Training Steering Committee (CMTSC), which comprises 10 ministries, to coordinate and strengthen crisis management training across the Public Service. The CMTSC has developed a WOG Crisis Management Capability Development Framework (based in part on international crises management standards) (Sun, 2024).

Pandemics aside, agencies have increasingly recognised that speedier, more integrated

responses are needed to combat crises. MHA is building a new operations centre, the Home Team Operations Centre (HTOC), to house officers from various law enforcement agencies so they can respond to incidents more quickly and comprehensively. Due to be completed by 2032, HTOC will bring together officers from the police, Singapore Civil Defence Force, Immigration and Checkpoints Authority (ICA) and Central Narcotics Bureau (CNB) (Wong, 2024a).

Enhanced integration in multiagency approaches to other security challenges is in evidence in other spheres too. In 2022 for example, the Interagency Counter Ransomware Task Force (CRTF) was established. The CRTF comprises senior officials from CSA, GovTech, Infocomm Media Development Authority (IMDA), Ministry of Digital Development and Information (MDDI), Mindef, MHA, Monetary Authority of Singapore (MAS) and Singapore Police Force (SPF), with support from Attorney-General's Chambers (AGC) (Cyber Security Agency of Singapore, 2022).

It might be observed at this juncture that it can be useful to give all agencies "skin" in the game when it comes to efforts to thwart security challenges. A case in point is the challenge in countering hostile information campaigns, disinformation, and hybrid threats. Policymakers have placed considerable emphasis in recent years on the challenges that these pose for Singapore and its internal cohesion. But there has been no sign – nor any public announcement – that any one agency has been designated to lead the overall response; nor does Singapore appear to have gone down the path of creating a new, standalone agency (which in any case would necessarily have to pool resources and collaborate with existing bodies) in the face of the challenge. An observer could reasonably surmise therefore that it has been decided that a multiagency effort is needed. In this writer's view, this is the correct approach, not least because there would certainly already be agencies which are already examining various facets of the threat and response (technical attribution, the cyber aspect of hybrid threats, resisting hostile information campaigns through cohesion, and factchecking, to name a few). The key lies therefore not in creating new bodies, but in refining existing processes in a manner that allows agencies to collaborate more effectively.

Drills, Preparedness, and the Community

Agencies are working closely together preparing to deal with security threats across various domains. The scenarios and simulations are increasingly realistic, helping to hone the skills of security professionals and refine cross-agency working mechanisms. In November 2024, for example, CSA and Mindef's Digital Intelligence Service (DIS) co-organized the Critical Infrastructure Defence Exercise (CIDEX). Simulating attacks by both ransomware and nation-state cyber attackers (played by red teams) on key infrastructure, CIDEX involved 200 front-line cyber defenders from over twenty other national agencies (MINDEF Singapore, 2024). Defending critical sectors is also the focus of Exercise Cyber Star, now into its fifth edition, a nationwide cyber crisis management exercise run by CSA. The 2024 run, the most realistic yet, tested over 450 responders from 30 private and public sector organisations on various complex cyber-attack scenarios, including cyber-physical threats, and aimed to improve coordination and proactive defence mechanisms across various sectors (Chia, 2024).

Exercises aimed at strengthening resilience against large-scale disruptions also have (increasingly) the goal of prompting Singaporeans to prepare for future challenges and enhance their readiness for potential disruptions. A case in point was Exercise SG Ready in February 2025, a key event of SG60 and part of Total Defence Day activities, which involved over 800 organisations, schools, and units across various sectors. The exercise, co-led by Mindef and the Energy Market Authority, saw participants experience simulated power outages and phishing attacks from 15-28 February, encouraging them to develop and test their contingency plans (Qing, 2025).

The changing security landscape and the need to respond adaptively can also be seen in the evolution of Exercise Northstar, Singapore's main national-level emergency response exercise designed to test and enhance the readiness of various agencies in managing major crises. Over the years, the exercise has evolved in scope, complexity, and the range of scenarios simulated to address emerging security challenges. Recent iterations, besides incorporating more complex scenarios, have additionally seen an increasing

emphasis on inter-agency coordination, involving not just security forces but also private sector stakeholders and community volunteers.

In this writer's view, it is this point above – volunteerism in the field of national security – that will assume increasing importance in time to come. Some individuals and volunteer organisations (as observed above) already play a role in fact-checking, and it is possible that these collaborations and initiatives can be ramped up to play a wider role in combatting hybrid threats (particularly disinformation). This should not solely be the preserve of the authorities. In the West, some of the best anti-disinformation websites and portals are run by citizens, journalists, or a coalition of both. In many instances, these are placed to act quickly and in innovative ways to combat disinformation (Awashima & Namiki, 2024). But beyond this, individuals and organisations from the grassroots can be trusted third party partners and advocates in other fields. Already, there are in Singapore an increasing number of NGOs and ground-up initiatives run by committed individuals who are keen to make a difference in areas ranging from countering polarisation, to interfaith and interracial dialogue (Hash.peace, 2025; Roses of Peace, 2025). These efforts should be encouraged and facilitated by government agencies, even if differences in approach or viewpoints arise from time to time.

Leveraging Technology

Researchers, law enforcement officials and security agencies are warning that advancements in technology and Generative AI will enhance threat actors' ability to develop malware and use social engineering tactics in their operations and malign influence activities (Department of Homeland Security, 2024). Equally, though, technology and AI can be used in this field to buttress the infrastructure of fact. MDDI and the Agency for Science, Technology and Research (A*STAR) have launched the Centre for Advanced Technologies in Online Safety (CATOS), which will develop tools and measures to detect malicious content, including deepfakes (Teo, 2024). Volunteerism is also being harnessed. CheckMate, a service launched in 2023 staffed by volunteer factcheckers, plans in 2025 to use generative AI in its WhatsApp chatbot to automate the detection of misinformation and

scams, with the service to be rolled out by the 2025 general election (Chia, 2024a).

These moves – especially those which tap on the spirit of volunteerism – are very positive developments, and will assume greater importance in time to come. This is given that the moderation tools (using automated and human systems) by the major social media platforms routinely fail to detect deepfake attacks, and given the moves by platforms such as META to discontinue the use of third-party factcheckers and adjust its automated systems that scan for violations of its content policies (Duffy, 2025).

But leveraging technology for national security should not be confined to the realm of fighting disinformation and online harms. Here, significant strides have been taken by the Home Team. With capabilities developed by the Home Team Science and Technology Agency (HTX), Home Team enforcement officers leverage in-house AI tools to keep abreast of the latest trends in scams, and detect as well as provide intelligence on cybercrime activities (Teo, 2023). Separately, MHA now has a Home Team Unmanned Aerial Vehicle Command led by the police (with the resources being shared across the entire Home Team). The challenge of managing drones from different Home Team units, with some even deployed in Beyond-Visual-Line-of-Sight (BVLOS) situations, has been addressed through HTX's solution for the integration of these different systems into a single dashboard, MDOS (Multi Drone Operating System). MDOS enables officers to manage an array of drones for a variety of uses, including emergency situations (Home Team Science and Technology Agency, n.d.). For example, when responding to emergencies, the drones can do sense-making during anti-crime operations, and monitor crowd levels at major events (Wong, 2024).

CONCLUSION

In October 1984, BG Lee Hsien Loong, then Political Secretary (Defence), delivered a speech where he dealt with aspects of national security. Lee observed that there were four sets of strategies that small states should apply to assure their security. The first three – diplomacy, deterrence, and defence – were in some ways obvious. The fourth was "development", which Lee defined

as “the strengthening of the nation internally, by building up a stable and cohesive society, establishing social bonds, encouraging economic growth, and strengthening political institutions” (Lee, 1984).

The lenses of the past, shaped by historical understandings of security and survival, remain useful as we navigate an age of polycrisis and a VUCA (volatile, uncertain, complex, ambiguous) world. But these lenses cannot remain immovable. How prepared are we as a nation to adapt to emergent challenges? As cyber specialists are wont to observe, a key approach is to “assume breach”,

with the attendant recognition that it is unrealistic to defeat all threats at the outer perimeter. All concerned (policymakers, security practitioners, and the citizenry as a whole) will have to accept the realities of an increasingly compromised world. In this situation, vigilance and harnessing synergies within is required to detect and respond to potential threats (informational, structural, or societal) already present. This mindset not only enhances resilience. It also goes some considerable way to ensuring that, even amidst pervasive uncertainty, we can continue to go about our daily lives in a society that still preserves the bedrock of normalcy, tolerance, and other values we hold dear.

ABOUT THE AUTHOR



Dr Shashi Jayakumar

is the Founder and Executive Director of SJK Geostrategic Advisory Pte Ltd, a geopolitical risk consultancy. He previously worked in the Administrative Service of Singapore's government for several years. Most of his government experience was in the security sector in the Ministry of Defence. He was then posted to think tanks, first, as a secondee from government at the Lee Kuan Yew School of Public Policy, and then as a Senior Fellow at the S Rajaratnam School of International Studies (RSIS) (2014-2023). At RSIS he held the appointment of Head of the Centre of Excellence for National Security and Executive Coordinator, Future Issues and Technology. He held these positions until Jul 2023. His work in government, think tanks and now in the private sector has encompassed a range of issues: geopolitics (and issues concerning the interplay between geopolitics and technology), extremism, disinformation, polarisation, cyber, and the politics and history of Southeast Asia.

REFERENCES

- Ang, Hwee Min. (2023, March 21). COVID-19 White Paper goes beyond original report: Lawrence Wong. *CNA*. Retrieved from <https://www.channelnewsasia.com/singapore/covid-19-white-paper-goes-beyond-original-report-lawrence-wong-3362731>
- Awashima, Kento, & Namiki, Ryo. (2024, January 1). Taiwan civic groups lead fight against disinformation as election nears. *Nikkei Asia*. Retrieved from <https://asia.nikkei.com/Politics/Taiwan-elections/Taiwan-civic-groups-lead-fight-against-disinformation-as-election-nears>
- Baltic Monitor. (2018, June 15). The Swedish “Total Defence”. *Warsaw Institute*. Retrieved from <https://warsawinstitute.org/swedish-total-defence/>
- Beckman, Robert; Hemrajani, Asha; Davenport, Tara; & Tan, Sean. (2024, May). *Enhancing the Security of Singapore's Submarine Cables: Strengths, Challenges, and Opportunities* [Policy Report]. S Rajaratnam School of International Studies. Retrieved from https://www.rsis.edu.sg/wp-content/uploads/2024/05/PR240521_Enhancing-the-Security-of-Singapores-Submarining-Cables.pdf
- Begum, Shabana. (2025, January 9). New law to bolster S'pore's food safety, security passed, with powers to increase food stockpiles. *The Straits Times*. Retrieved from <https://www.straitstimes.com/singapore/politics/new-law-to-bolster-s-pore-s-food-safety-security-passed-with-powers-to-increase-food-stockpiles>

Bubeck, Sébastien; Chandrasekaran, Varun; Eldan, Ronen; Gehrke, Johannes; Horvitz, Eric; Kamar, Ece; Lee, Peter; Lee, Yin Tat; Li, Yuanzhi; Lundberg, Scott; Nori, Harsha; Palangi, Hamid; Ribeiro, Marco Tulio; & Zhang, Yi. (2023). Sparks of Artificial General Intelligence: Early experiments with GPT-4. *arXiv*. Retrieved from <https://arxiv.org/abs/2303.12712>

Caballero-Anthony, Mely; Trajano, Julius Cesar Imperial; Cook, Alistair DB; Nanthini, S; Montesclaros, Jose Ma; Luis P; Landicho, Keith Paolo Catibog; & Goh, Danielle Lynn. (2024). *Climate Change and Its Impact on Peace and Security in Southeast Asia* [Policy Report]. S Rajaratnam School of International Studies. Retrieved from <https://www.rsis.edu.sg/staff-publication/climate-change-and-its-impact-on-peace-and-security-in-southeast-asia/>

Chew, Lilian; Jacob, Paul; & Wai, Ronnie. (1984, January 22). Total Defence. *The Straits Times*. Retrieved from <https://eresources.nlb.gov.sg/newspapers/digitised/article/straitstimes19840122-1.2.43>

Chia, Osmond. (2024, November 14). Govt agencies, critical service providers tackle cyber attacks in 5th run of simulated exercise. *The Straits Times*. Retrieved from <https://www.straitstimes.com/tech/govt-agencies-critical-service-providers-tackle-cyber-attacks-in-5th-run-of-simulated-exercise>

Chia, Osmond. (2024a, December 8). Fact-checkers plan to enlist AI to verify fake news ahead of GE2025, boost volunteer pool. *The Straits Times*. Retrieved from <https://www.straitstimes.com/tech/fact-checkers-to-enlist-ai-to-verify-fake-news-ahead-of-ge2025-plans-to-double-volunteer-network>

Chin, Soo Fang. (2024, November 8). Trust between communities hard-earned, needs constant tending: DPM Lawrence Wong. *The Straits Times*. Retrieved from <https://www.straitstimes.com/singapore/trust-between-communities-hard-earned-needs-constant-tending-lawrence-wong>

Committee of Inquiry. (2019, January 10). *Public Report of the Committee of Inquiry Into the Cyber Attack on Singapore Health Services Private Limited's Patient Database on or Around 27 June 2018* [Report]. Retrieved from <https://file.go.gov.sg/singhealthcoi.pdf>

Cyber Security Agency of Singapore. (2022, October 19). *Inter-agency Task Force to Counter Ransomware Threats* [Press Release]. Retrieved from <https://www.csa.gov.sg/news-events/press-releases/inter-agency-task-force-to-counter-ransomware-threats>

Cyber Security Agency of Singapore. (2024, July 30). *Singapore Cyber Landscape 2023* [Report]. Retrieved from <https://www.csa.gov.sg/resources/publications/singapore-cyber-landscape-2023>

Department of Homeland Security. (2024, October 2). *Homeland Threat Assessment 2025* [Report]. Retrieved from https://www.dhs.gov/sites/default/files/2024-10/24_0930_ia_24-320-ia-publication-2025-hta-final-30sep24-508.pdf

Devaraj, Samuel. (2025, July 18). What is UNC3886, the group that attacked Singapore's critical information infrastructure? *The Straits Times*. Retrieved from <https://www.straitstimes.com/singapore/who-is-unc3886-the-group-that-attacked-spores-critical-information-infrastructure>

Duffy, Clare. (2025, January 7). Meta is getting rid of fact checkers. Zuckerberg acknowledged more harmful content will appear on the platforms now. *CNNBusiness*. Retrieved from <https://edition.cnn.com/2025/01/07/tech/meta-censorship-moderation/index.html>

Fu, Grace. (2023, June 23). *Delighted that Qatar's Ministry of Municipality and Singapore Food Agency (SFA) signed a MOU on #FoodSecurity earlier this week* [Post]. Facebook. Retrieved from <https://www.facebook.com/gracefu.hy/posts/delighted-that-qatars-ministry-of-municipality-and-singapore-food-agency-sfa-sig/835652137920523/>

Graphika. (2023, February). *Deepfake It Till You Make It: Pro-Chinese Actors Promote AI-Generated Video Footage of Fictitious People in Online Influence Operation* [Report]. Retrieved from <https://public-assets.graphika.com/reports/graphika-report-deepfake-it-till-you-make-it.pdf>

GovSG. (2018, March 15). *Fighting online falsehoods in Ukraine* [Video transcript]. YouTube. Retrieved from https://www.youtube.com/watch?v=yVHtpI1xLo&list=PLH2CR4s1lqygTiZqGHpuLxXfeVq_hPR-d&index=21

Goh, Yan Han. (2024, November 22). Singapore's foreign policy driven by principles, not a balancing act, says Sim Ann. *The Straits Times*. Retrieved from <https://www.straitstimes.com/singapore/politics/singapore-s-foreign-policy-driven-by-principles-not-a-balancing-act-says-sim-ann>

Hash.peace. (2025) *Home* [Webpage]. Retrieved from <https://www.hashpeace.com/>

Heng, Yee-Kuang. (2013). A Global City in an Age of Global Risks: Singapore's Evolving Discourse on Vulnerability. *Contemporary Southeast Asia*, 25(3), 423-446.

Ho, Peter. (2016). Organising for National Security — The Singapore Experience. In Barry Desker & Cheng Guan Ang (Eds.), *Perspectives on the Security of Singapore* (pp. 285-294). Singapore: World Scientific.

Home Team Science and Technology Agency. (n.d.). *Unity in Flight: Transforming Drone Control Through MDOS* [Featured News]. Retrieved from <https://www.htx.gov.sg/news/featured-news-unity-in-flight-transforming-drone-control-through-mdos>

Internal Security Department. (2024). *Singapore Terrorism Threat Assessment Report 2024* [Report]. Retrieved from <https://www.mha.gov.sg/docs/default-source/default-document-library/sttar-2024.pdf>.

Jayakumar, Shashi. (2024). Disinformation, influence, and hybrid threats: thoughts from Singapore. *Oxford Review of Economic Policy*, 40(2), 405-425.

Lam, Nicole. (2024, May 10). 'I envy young men and women': PM Lee believes youths today start from a better position than past generations. CNA. Retrieved from <https://www.channelnewsasia.com/singapore/pm-lee-hsien-loong-youths-better-position-today-past-generations-4324076>

Lee, Hsien Loong. (1984, November 6). Security options for small states. *The Straits Times*. Retrieved from <https://eresources.nlb.gov.sg/newspapers/digitised/article/straitstimes19841106-1.2.35.2>

Lee, Hsien Loong. (2023, April 19). *Debate on President's Address* [Parliamentary Debates]. Parliament of Singapore. Retrieved from <https://sprs.parl.gov.sg/search/#/fullreport?sittingdate=19-4-2023>

Lee, Hsien Loong. (2023a, April 19). *Transcript of speech by Prime Minister Lee Hsien Loong at the Debate on the Motion of Thanks to the President on 19 April 2023* [Speech Transcript]. Prime Minister's Office. Retrieved from <https://www.pmo.gov.sg/Newsroom/PM-Lee-Hsien-Loong-at-the-Debate-on-the-Motion-of-Thanks-to-the-President>

Lee, Hsien Loong. (2023b, August 24). *PM Lee Hsien Loong at the official lunch hosted in honour of Qatari PM Sheikh Mohammed* [Video Transcript]. YouTube. Retrieved from <https://www.youtube.com/watch?v=NXNWvpFWdr4>

Lee, Kuan Yew. (1966, September 3). *Transcript of a press conference by the prime minister, Mr Lee Kuan Yew, Hyderabad House, New Delhi, September, 3, 1966* [Speech Transcript]. National Archives of Singapore. Retrieved from <https://www.nas.gov.sg/archivesonline/speeches/record-details/7403d383-115d-11e3-83d5-0050568939ad>

Lee, Kuan Yew. (2000). *From Third World to First: The Singapore Story*. Singapore: Straits Times Press.

Leo, Lakeisha. (2022, April 29). Singapore takes a 'whole-of-society' approach to combat misinformation: Tan Kiat How. CNA. Retrieved from <https://www.channelnewsasia.com/singapore/tan-kiat-how-approach-combat-misinformation-local-news-2656731>

Lim, Adrian. (2019, March 1). Parliament: MFA stepping up outreach to explain foreign policy, counter disinformation. *The Straits Times*. Retrieved from <https://www.straitstimes.com/politics/parliament-mfa-stepping-up-outreach-to-explain-foreign-policy-counter-disinformation>

Loo, Bernard Fook Weng. (2004). Assessing the Structure of the New National Security Strategy. *IDSS Commentaries*, 36.

MINDEF Singapore. (2019, February 15). *Total Defence Strengthened with Addition of Digital Defence as the Sixth Pillar* [Press Release]. Retrieved from https://www.mindef.gov.sg/news-and-events/latest-releases/15feb19_nr

MINDEF Singapore. (2024, November 15). *Over 200 Participants Tackle Cyber Threats at Critical Infrastructure Defence Exercise 2024; First National Cyber Defence Exercise to Include Cloud Testbed for Cyber Defender Training* [Press Release]. Retrieved from https://www.mindef.gov.sg/news-and-events/latest-releases/15nov24_nr

Ministry of Digital Development and Information. (2023, January 31). *Online Safety (Miscellaneous Amendments) Act Takes Effect on 1 February 2023* [Press Release]. Retrieved from <https://www.mddi.gov.sg/media-centre/press-releases/online-safety-act-takes-effect-on-1-february-2023/>

Ministry of Environment and Water Resources & Ministry of National Development. (2016). *Singapore's Climate Action Plan: A Climate-Resilient Singapore, For a Sustainable Future* [Report]. Retrieved from <https://www.nccs.gov.sg/files/docs/default-source/publications/a-climate-resilient-singapore-for-a-sustainable-future.pdf>

Ministry of Home Affairs. (2003). *White Paper on the Jemaah Islamiyah Arrests and the Threat of Terrorism* [White Paper]. Singapore Parliament. Retrieved from https://www.nas.gov.sg/archivesonline/government_records/record-details/983afe9e-39b1-11e7-98bd-0050568939ad

Ministry of Home Affairs. (2021). *Summary Factsheet on the Foreign Interferences (Countermeasures) Act* [Press Release]. Retrieved from <https://www.mha.gov.sg/docs/default-source/default-document-library/summary-factsheet-on-fica.pdf>

Ministry of Home Affairs. (2021a, January 27). *Detention of Singaporean Youth Who Intended to Attack Muslims on the Anniversary of Christchurch Attacks in New Zealand* [Press Release]. Retrieved from <https://www.mha.gov.sg/mediaroom/press-releases/detention-of-singaporean-youth-who-intended-to-attack-muslims-on-the-anniversary-of-christchurch-attacks-in-new-zealand/>

Ministry of Home Affairs. (2024, January 30). *Commencement of the Online Criminal Harms Act (OCHA) on 1 February 2024* [Press Release]. Retrieved from <https://www.mha.gov.sg/mediaroom/press-releases/commencement-of-the-online-criminal-harms-act-ocha-on-1-february-2024/>

Ministry of Home Affairs. (2024a, October 18). *Transcript of Media Doorstop on the Detention of a Self-Radicalised 17-Year-Old Youth With Mr K Shanmugam, Minister for Home Affairs and Minister for Law* [Press Release]. Retrieved from <https://www.mha.gov.sg/mediaroom/speeches/transcript-of-media-doorstop-on-the-detention-of-a-self-radicalised-17-year-old-youth-with-mr-k-shanmugam-minister-for-home-affairs-and-minister-for-law/>

Ministry of Home Affairs. (2025, January 6). *Maintaining Racial and Religious Harmony* [Press Release]. Retrieved from <https://www.mha.gov.sg/what-we-do/managing-security-threats/maintaining-racial-and-religious-harmony>

Ministry of Home Affairs. (2025a, January, 7). *First Reading of the Maintenance of Racial Harmony Bill and Constitution of the Republic of Singapore (Amendment) Bill* [Press Release]. Retrieved from <https://www.mha.gov.sg/mediaroom/press-releases/first-reading-of-the-maintenance-of-racial-harmony-bill-and-constitution-of-the-republic-of-singapore-amendment-bill>

Ng, Charles. (2011). National Resilience: Developing a Whole-of-Society Response. *Ethos*, 10. Retrieved from <https://knowledge.csc.gov.sg/ethos-issue-10/national-resilience-developing-a-whole-of-society-response/>

Ng, Eng Hen. (2022, November 10). *Speech by Minister For Defence Dr Ng Eng Hen at The Total Defence Awards Ceremony at Fairmont Hotel on 10 November 2022* [Speech Transcript]. MINDEF Singapore. Retrieved from https://www.mindef.gov.sg/news-and-events/latest-releases/10nov22_speech

Ng, Eng Hen. (2024, February 28). *Speech by Minister for Defence, Dr Ng Eng Hen, at The Committee of Supply Debates 2024* [Speech Transcript]. MINDEF Singapore. Retrieved from https://www.mindef.gov.sg/news-and-events/latest-releases/28feb24_speech

Oh, Tessa. (2023, November 3). Singapore to table new law reviewing 'significant investments' in critical entities. *The Business Times*. Retrieved from <https://www.businesstimes.com.sg/singapore/singapore-table-new-law-reviewing-significant-investments-critical-entities>

Ong, Justin. (2021, January 19). Singapore Perspectives conference: S'pore not beset by political polarisation, but class, culture divides a concern: Panellists. *The Straits Times*. Retrieved from <https://www.straitstimes.com/singapore/politics/singapore-perspectives-conference-spore-not-beset-by-political-polarisation-but>

Ong, Justin; & Lim, Min Zhang. (2021, September 25). A history of foreign interference in Singapore. *The Straits Times*. Retrieved from <https://www.straitstimes.com/singapore/a-history-of-foreign-interference-in-singapore>

Ong, Justin. (2022, March 18). Singaporeans support Ukraine and back government sanctions on Russia: Poll. *The Straits Times*. Retrieved from <https://www.straitstimes.com/singapore/politics/singaporeans-support-ukraine-and-back-government-sanctions-on-russia-poll>

Ong, Weichong. (2024, September 9). National Resilience in Ukraine's War: Insights for Singapore. *S Rajaratnam School of International Studies Commentary*, 131. Retrieved from https://www.rsis.edu.sg/rsis-publication/rsis/national-resilience-in-ukraines-war-insights-for-singapore/?doing_wp_cron=1737376048.3257400989532470703125

OpenAI. (2024, August 16). *Disrupting a covert Iranian influence operation* [Press Release]. Retrieved from <https://openai.com/index/disrupting-a-covert-iranian-influence-operation/>

Pang, Kin Keong. (2024). The Leadership Interview with Permanent Secretary, Ministry of Home Affairs and Chairman, Homefront Crisis Executive Group, Pang Kin Keong [Interview Transcript]. *Home Team Journal*, (13). Retrieved from https://www.mha.gov.sg/docs/hta_libraries/default-document-library/home-team-journal-issue-13.pdf

Parliament of Singapore. (2018, September 19). *Report of the Select Committee on Deliberate Online Falsehoods—Causes, Consequences and Countermeasures* [Select Committee Report]. Retrieved from <https://sprs.parl.gov.sg/selectcommittee/selectcommittee/download?id=1&type=subReport>

Parliament of Singapore. (2020, December 2). *Singapore Parliamentarians Participate in the Fourth Meeting of the International Grand Committee on Disinformation* [Press Release]. Retrieved from <https://www.parliament.gov.sg/newsroom/events/Details/singapore-parliamentarians-participate-in-the-fourth-meeting-of-the-international-grand-committee-on-disinformation#>

Qing, Tang Yi. (2025, January 24). Schools, buildings to undergo simulated phishing attack, power outages for Total Defence exercise. *The Straits Times*. Retrieved from <https://www.straitstimes.com/singapore/schools-buildings-to-undergo-simulated-phishing-attack-power-outages-for-total-defence-exercise>

Roses of Peace [@rosesofpeace]. (n.d.). *Posts* [Instagram Profile]. Instagram. Retrieved 28 January 2025 from <https://www.instagram.com/rosesofpeace/?hl=en>

SGSecure. (2024). *Home* [Webpage]. Retrieved from <https://www.sgsecure.gov.sg/>

Shanmugam, K. (2021, October 4). *Second Reading of Foreign Interference (Countermeasures) Bill – Speech by Mr K Shanmugam, Minister for Home Affairs and Minister for Law* [Speech Transcript]. Ministry of Home Affairs. Retrieved from <https://www.mha.gov.sg/mediaroom/parliamentary/second-reading-of-foreign-interference-countermeasures-bill-speech-by-mr-k-shanmugam/>

Shanmugaratnam, Tharman. (2020, September 14). *Dialogue with SM Tharman Shanmugaratnam on “Anticipating A New World” at the Singapore Summit 2020 Virtual Conference* [Speech Transcript]. Prime Minister's Office. Retrieved from <https://www.pmo.gov.sg/Newsroom/Dialogue-with-SM-Tharman-Shanmugaratnam-on-Anticipating-A-New-World>

Sim, Ann. (2023, April 19). *Speech by Senior Minister of State (Foreign Affairs) (National Development) Sim Ann at the Debate on the Motion of Thanks to the President, 19 April 2023* [Speech Transcript]. Ministry of Foreign Affairs. Retrieved from <https://www.mfa.gov.sg/Newsroom/Press-Statements-Transcripts-and-Photos/2023/04/SMS190423>

Sun, Xueling. (2024, April 23). *Home Team Academy Workplan Seminar 2024 – Speech by Ms Sun Xueling, Minister of State, Ministry of Home Affairs and Ministry of Social and Family Development* [Speech Transcript]. Ministry of Home Affairs. Retrieved from <https://www.mha.gov.sg/mediaroom/speeches/home-team-academy-workplan-seminar-2024/>

Tan, Eugene KB. (2023, November 3). Singapore's biggest challenge ahead is keeping the middle ground intact. *The Straits Times*. Retrieved from <https://www.straitstimes.com/opinion/singapore-s-biggest-challenge-ahead-is-keeping-the-middle-ground-intact>

Tan, Tony. (2005, January 13). *Speech by Dr Tony Tan, Deputy Prime Minister and Co-ordinating Minister for Security and Defence, at the IDSS National Security Conference* [Speech Transcript]. National Archives. Retrieved from <https://www.nas.gov.sg/archivesonline/data/pdfdoc/2005011399.htm>

Tan, Weizhen. (2015, May 12). MFA's IT system was breached last year, reveals Yaacob. *Today*. Retrieved from <https://www.todayonline.com/singapore/immediate-steps-precautionary-measures-taken-against-govt-system-breaches-csa>

Tan, Tam Mei. (2025, January 9). International law crucial in times of geopolitical divisions: Vivian Balakrishnan. *The Straits Times*. Retrieved from <https://www.straitstimes.com/singapore/international-law-essential-in-times-of-geopolitical-divisions-singapore-foreign-minister>

Teo, Chee Hean. (2021, March 4). *Speech by Senior Minister Teo Chee Hean: A Considered, Committed and Collective Approach to the Global Climate Crisis* [Speech Transcript]. Singapore Green Plan. Retrieved from <https://www.greenplan.gov.sg/news/speeches/2021-03-04-pmo/>

Teo, Josephine. (2023, May 2). *Home Team Academy Workplan Seminar 2023 – Speech by Mrs Josephine Teo, Minister for Communications and Information & Second Minister for Home Affairs* [Speech Transcript]. Ministry of Home Affairs. Retrieved from <https://www.mha.gov.sg/mediaroom/speeches/home-team-academy-workplan-seminar-2023/>

Teo, Josephine. (2024, March 1). *COS Debate 2024 (Speech by Minister Josephine Teo)* [Speech Transcript]. SmartNation Singapore. Retrieved from <https://www.smartnation.gov.sg/media-hub/parliament/cos2024a/>

Tham, Yuen-C. (2021, March 14). Not possible for S'pore, many countries, to choose between US and China, PM Lee tells BBC. *The Straits Times*. Retrieved from <https://www.straitstimes.com/singapore/not-possible-for-spore-many-countries-to-choose-between-us-and-china-pm-lee-tells-bbc>

The Fight Against Terror: Singapore's National Security Strategy. (2004). National Security Coordination Centre. Retrieved from <https://www.files.ethz.ch/isn/156810/Singapore-2004.pdf>

Three men detained under ISA after radicalisation triggered, accelerated by Israel-Hamas conflict. (2025, January 9). CNA. Retrieved from <https://www.channelnewsasia.com/singapore/isa-three-men-detained-radicalisation-triggered-accelerated-israel-hamas-conflict-isd-4847081>

Tong, Edwin. (2022, July 30). *Refreshing our Inter-Racial and Religious Confidence Circles (IRCCs)* [Speech Transcript]. Ministry for Culture, Community and Youth. Retrieved from <https://www.mccy.gov.sg/about-us/news-and-resources/speeches/2022/aug/refreshing-our-inter-racial-and-religious-confidence-circles-irccs>

Trauthig, Inga Kristina; & Woolley, Samuel C. (2024, October 3). Generative Artificial Intelligence and Elections. *University of Texas at Austin Center for Media Engagement*. Retrieved from <https://mediaengagement.org/research/generative-artificial-intelligence-and-elections/>

Ulrichsen, Kristian Coates. (2020, October 19). The Blockade of Qatar and Lessons for Small States. *Middle East Institute Singapore*. Retrieved from https://mei.nus.edu.sg/think_in/the-blockade-of-qatar-and-lessons-for-small-states/

Vasoo, Shawn. (2024, February 6). Climate Change and Infectious Diseases. *National Centre for Infectious Diseases*. Retrieved from <https://www.ncid.sg/Health-Professionals/Articles/Pages/Climate-Change-and-Infectious-Diseases.aspx>

Who We Are. (2025) *Centre for Strategic Futures*. Retrieved from <https://www.csf.gov.sg/who-we-are/>

Wong, Lawrence. (2024, September 23). *Speech by Prime Minister and Minister for Finance Lawrence Wong at Temasek's 50th Anniversary Dinner on 23 September 2024* [Speech Transcript]. Prime Minister's Office. Retrieved from <https://www.pmo.gov.sg/Newsroom/PM-Wong-at-Temasek-50th-Anniversary-Dinner#:~:text=That%20is%20why%20more%20and,to%20more%20and%20more%20areas>

Wong, Shiyong. (2024a, February 25). MHA building new operations centre by 2032 for quicker incident response: Shanmugam. *The Straits Times*. Retrieved from <https://www.straitstimes.com/singapore/mha-building-new-operations-centre-by-2032-for-quicker-incident-response-shanmugam>

Yeo, Mark. (2024, April 26). Total Defence must adapt to today's threats and challenges: Zaqy. *The Straits Times*. Retrieved from <https://www.straitstimes.com/singapore/total-defence-must-adapt-to-today-s-threats-and-challenges-minister>

Yong, Charissa. (2021, June 30). Global views of China remain negative but Singapore an exception. *The Straits Time*. Retrieved from <https://www.straitstimes.com/world/united-states/global-views-of-china-remain-negative-but-singapore-an-exception>

CAN THE HOME TEAM MODEL BE REPLICATED ELSEWHERE?

LET'S START WITH THE HOME TEAM ACADEMY

Russell D. Howard

Member, Home Team Academy Advisory Board (2007-12)

My five-year tenure on the inaugural Advisory Board of the Home Team Academy (HTA), informed by my counterterrorism education and training expertise at the West Point Military Academy, solidified my belief in the power of an inter-agency approach to homeland security. What best practices might Singapore's conceptualisation and implementation of the Home Team model offer the United States and other countries considering options for similar needs and challenges?

When I was curating essays for a second edition of *Homeland Security and Terrorism: Readings and Interpretations*, I asked a former Singapore Home Team officer to write an article on Singapore's inclusive approach to protecting the homeland, including how the Ministry of Home Affairs educates its security professionals to achieve smooth inter-agency cooperation and operations during times of crisis (Sim, 2014). My co-editors and I wanted readers to consider "the possibility of a US Homeland Security Academy that might achieve similar results" (Forest, Howard and Moore, 2014).

A recent visit to Singapore has convinced me even more of HTA's potential for global impact. I had been asked to be on the HTA Advisory Board 18 years ago because of my experience as the originator and first Director of the Combating Terrorism Center at West Point (Cruickshank, 2023). HTA, launched several years after the discovery of a regional terrorist network with active cells in Singapore, was in its initial years focused on counterterrorism. On my recent visit to HTA, I discovered that it now includes interagency collaboration as a topic of study, a crucial element often lacking in developing nations grappling with security challenges.

This essay argues that replicating the HTA model in developing countries, particularly in the Sahel and Maghreb regions of Africa, can significantly enhance those countries' capacity to address terrorism and other security threats.

The Singapore Home Team Academy: A Model for Success

The HTA, as a premier training and education institution for Singapore's security agencies, exemplifies a holistic approach to national security. The *raison d'être* of the HTA is interagency collaboration. By bringing together police, civil defense, immigration, prison, border security and other agencies in an academic environment, the HTA cultivates a culture of cooperation and shared understanding. This fosters seamless information sharing and coordinated responses to emerging threats. The HTA curriculum is holistic. It extends beyond tactical skills to also encompass leadership development, critical thinking, and ethical decision-making. This ensures well-rounded patriotic professionals capable of navigating complex security challenges (Ministry of Home Affairs, 2021).

Technological integration is an important part of HTA's curriculum. The HTA leverages advanced technologies and simulations to enhance training realism and effectiveness, preparing officers for real-world manmade and natural disaster scenarios. The HTA encourages and provides a forum for continuous learning. Singapore's security professionals can participate in three levels – entry, mid, and senior – of integrated HTA training. That training emphasises continuous professional development that ensures officers remain adaptable and responsive to evolving threats.

The HTA integrated formula has contributed to Singapore's impressive security record, demonstrating the value of a responsive comprehensive and collaborative security apparatus.

Adapting the HTA Model to the Developing World

The escalating threat of terrorism, particularly in the Sahel and Maghreb regions of Africa, underscores the urgent need for integrated security services capabilities in developing countries. The Sahel and Maghreb regions face a surge in terrorist activity, fueled by factors such as weak institutions, poverty, insecure borders, climate change, and the proliferation of small arms (Center for Preventive Action, 2024). My experiences in 17 different African countries inform me that many security agencies in these regions, including the police, military, and civil defence agencies, suffer from inadequate training, corruption, and a lack of interagency coordination. Political instability, including frequent coups, further exacerbates security challenges and hinders effective governance (Demuyne and Böhm, 2023).

Adapting the HTA model to specific regional and national contexts is crucial. HTA style integrated training programs should address the unique security challenges faced by each country. In addition to terrorism, transnational organised crime, cyber threats, and natural disasters are threats better addressed by cooperative and coordinated security service action. HTA's integrated training approach would build local expertise through local knowledge transfer and training of local instructors. This would ensure long-term sustainability and ownership of the training programmes that would instill integrated security services coordination and cooperation. Developing countries could take a lesson from the HTA playbook by leveraging technology to enhance training delivery, facilitate information sharing, and improve operational effectiveness.

Benefits for Developing Countries

Implementing HTA-inspired academies in developing countries offers several benefits. Four come to mind:

1. Enhanced security and the improved capacity to prevent, detect, and respond to security threats, protecting citizens and critical infrastructure.
2. Adapting an HTA model could lead to improved governance by supporting stronger, more effective security institutions that are accountable, transparent, and responsive to the needs of the population. Adopting the HTA's core values – learn, serve, and excel – could be a model for other institutions in many countries, not just the security services.
3. A more secure environment would encourage economic development and attract foreign direct investment.
4. Strengthening regional stability worldwide to counter terrorism and other threats (McBain, 2023).

Implementation and Considerations: Who Pays?

I encourage Singapore to lead an international effort to underwrite and explore innovative funding methods, including international cooperation, regional partnerships, and public-private partnerships, to support the establishment and operation of HTA type academies. Funding HTA type organisations will be instrumental in securing political commitment and buy-in from governments in developing countries for such training initiatives. Most importantly, adopting the HTA model will ensure that security forces are trained to respect human rights and operate within the rule of law.

Conclusion

The Singapore Home Team Academy provides a valuable model for enhancing security capabilities in developing countries. By fostering interagency collaboration, promoting holistic training, and embracing technological advancements, this model can empower developing nations to effectively address the multifaceted security challenges they face. Investing in these initiatives is not only a matter of humanitarian concern but also a strategic imperative for global security and stability.

ABOUT THE AUTHOR



BG (Retd) Russell Howard

served as the director of the Combating Terrorism Center at West Point between 2003 and 2005. He also served as the Head of the Department of Social Sciences at West Point. He later served as the director of the Jebson Center for Counter Terrorism Studies at the Fletcher School at Tufts University and directed the terrorism research programme of the Middlebury Institute of International Studies at Monterey. He is currently the President of Howard Consulting Services and a distinguished senior fellow at the US Joint Special Operations University.

REFERENCES

Center for Preventive Action. (2024, October 23). *Violent Extremism in the Sahel*. Council on Foreign Relations. <https://www.cfr.org/global-conflict-tracker/conflict/violent-extremism-sahel>

Cruikshank, Paul. (2023, February). The Combating Terrorism Center Turns 20: Reflections from Its Directors. *CTC Sentinel* 16(2).

Demuynck, Méryl, and Mathis Böhm. (2023, August 4). Unravelling the Niger Coup and Its Implications for Violent Extremism in the Sahel." *ICCT*. <https://icct.nl/publication/unravelling-niger-coup-and-its-implications-violent-extremism-sahel>

Forest, James, Russell Howard, and Joanne Moore (Eds.) (2014). *Homeland Security and Terrorism: Readings and Interpretations (2nd Edition)*, McGraw-Hill.

Ministry of Home Affairs. (2021, July 22). *Home Team Academy*. Government of Singapore website: <https://www.mha.gov.sg/hta>

McBain, Will. (2023, July 31). Singapore's Africa push begins to bear fruit, *African Business*. <https://african.business/2023/07/trade-investment/singapores-africa-push-begins-to-bear-fruit>

Sim, Susan. (2014). Lessons from the Singapore Home Team Approach to Homefront Security. In James Forest, Russell Howard, Joanne Moore (Eds.) *Homeland Security and Terrorism: Readings and Interpretations (2nd Edition)*, McGraw-Hill, 2014, pp. 550 - 568

RECENT PUBLICATIONS BY HOME TEAM STAFF

BOOKS

Illicit Drugs: Patterns of Use, Dependence, and Contribution to Disease Burden in Developed Countries

By Teo Kah Shun, Leung Chi Ching, Joey Tan Yang Yi & Salina Samion
Published by World Scientific, May 2023, 244 pages

In International Encyclopedia of Public Health, Third Edition
Editor-in-Chief: Stella R Quah
Published by Elsevier, 2024, 4300 pages

This chapter documents the global pattern of illicit drug use and its impact on the health burden in developed countries. Globally, it is estimated that 296 million adults have used drugs (with cannabis being the most common drug) at least once in 2021. However, varying methods used by different countries and the absence of a single method to derive at the prevalence of drug use has led to challenges in obtaining accurate estimates. Nonetheless, illicit drug use remains a global concern as the physical, psychological, and social harms pose a significant impact to these countries. This article provides an overview of the multiple harms of the use of illicit drugs such as cannabis, opioids, and methamphetamines. It also posits the importance of considering the sociopolitical and cultural context of the country in the development of policies or approaches against illicit drugs.

Teo Kah Shun is a Psychologist with the Central Narcotics Bureau; Leung Chi Ching is a Lead Psychologist with the Home Team Psychology Division; Joey Tan was previously Assistant Director with the Research & Statistics Division and currently with the Central Narcotics Bureau; and Salina Samion is a Senior Principal Psychologist with the Singapore Prison Service.



Investigative interviews of crime suspects in Singapore

By Jeffery Chin & Majeed Khader

In Routledge International Handbook of Investigative Interviewing and Interrogation

Editors: Ray Bull, Dave Walsh, Igor Areh

Published by Routledge, 2024, 542 pages

Known to be one of the safest countries in the world, Singapore is a small, highly urbanised city-state with a multicultural population. The primary law enforcement agency tasked with maintaining law and order in the city-state, the Singapore Police Force, an approximately 44,000-officer strong police force reputed for its efficiency and impartiality, has a strong focus on innovation and has sought out best practices internationally over the years to enhance its capabilities to fight crime. In the domain of interviews with crime suspects, one outcome of this focus was the development and implementation of the FAIR investigative interviewing model in 2011 that guides Singapore police investigators in their interviewing approach and practice. Another outcome was the implementation of video-recorded interviews with crime suspects in 2018. This chapter provides an overview of police interviews in Singapore with a specific focus on interviews with crime suspects. It seeks to provide insights into the relevant legislation governing the conduct of police interviews in Singapore, the police force's interviewing approach and practices, and video-recorded interviews of crime suspects. The extant research (albeit limited) on police interviewing in Singapore is also be discussed.

Jeffery Chin is the Deputy Director of the Singapore Police Force's Scam Public Education Office and Dr Majeed Khader is the Chief Psychologist at the Ministry of Home Affairs/Home Team Psychology Division.



Battle of Three Mindsets

By Majeed Khader

In Serving With A Heart: Securing The Future

Editors: Abdul Halim Kader, Jolene Jerard

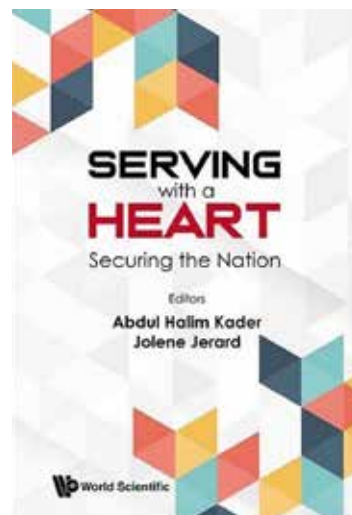
Published by World Scientific, 2025, 348 pages

This chapter argues that while extremism often leads to bloodshed, at a deeper cognitive level, it is essentially a battle for people's minds. Ganor spoke about this concept in the early 2000s. However, this is worth repeating, especially in this milieu of social media and heavy Internet penetration worldwide, especially in Singapore. We may need to think about mindsets as competing and battling with one another. And because the creation of terror in someone's mind is a psychological phenomenon, it is essential to analyse this as a "psychological war of minds". As a practising psychologist who has interviewed extremists, author Majeed Khader is of the view that there are at least three psychological mindsets in this battle theatre:

- the psychological mindset of the extremist,
- the mind of the counter-terrorism law enforcer, and
- the mind of the public.

This chapter argues that we need to understand all three frames of mind when it comes to appreciating and managing extremist thinking in our societies. These mindsets constantly challenge one another in a bid for superiority and acceptance in a dynamic, evolving global landscape. Policymakers and rehabilitation and operational specialists need to appreciate these tensions to be more effective.

Dr Majeed Khader is the Chief Psychologist at the Ministry of Home Affairs/Home Team Psychology Division.



Building a Nation of Lifesavers

By How Hwa Teong & Xuan En Constance Ng

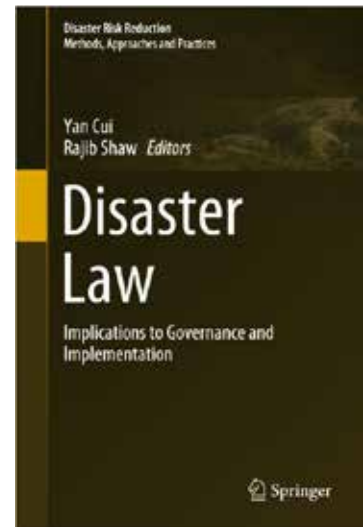
In Disaster law: Implications to governance and implementation

Editors: Yan Cui & Rajib Shaw

Published by Springer Singapore, 2025, 326 pages

In an era marked by unprecedented natural and human induced disasters, the need for robust legal frameworks to manage such events has never been more than critical. This article provides insights into the disaster management framework in Singapore. The Singapore Civil Defence Force plays a crucial role as the national focal point for disaster management coordinating with multiple stakeholders and partners to implement a comprehensive Whole-of-Society and Whole-of-Government response strategy. SCDF's bold vision to cultivate "A Nation of Lifesavers" is also a fundamental part of building the nation's overall resilience an emergency preparedness.

Teong How Hwa is the Deputy Commissioner (Strategy & Corporate Services) with the Singapore Civil Defence Force (SCDF) while Constance Ng was an intern with the SCDF Planning & Organisation Department.



A preliminary evaluation of the effects of aquatic environments on the recovery of fingerprints on porous substrates

By Amanda A. Frick, Lim Yi Liang Ian, Paola A. Magni

In Forensic Science International Reports Volume 10
Elsevier December 2024

Latent fingerprint detection can become increasingly difficult in the weeks following deposition, due to chemical and physical changes influenced by environment. There has been increased research interest into ageing mechanisms of fingerprint residue, however these studies have typically been conducted in dry, indoor conditions. Less information is available regarding degradation processes that may occur in scenarios involving water and the potential longevity of porous substrates under such conditions. A pilot study was conducted to investigate the performances of Oil Red O (ORO) and physical developer (PD) on samples submerged in different aquatic environments in a laboratory setting. Charged fingerprints from three donors were deposited on copy paper and immersed in either salt water or freshwater; still or with water flow. Samples were treated at multiple intervals (1, 12, 20 and 40 days) after submersion. Results showed that high quality of development could be achieved up to 40 days after immersion. The overall performances of ORO and PD were generally unaffected in the early stages of the study. Physical and chemical degradation of both latent residue and substrate were observed, which were increased by salt and water movement. While PD appeared to be less affected by potential chemical changes, it was less effective than ORO due to substrate degradation in moving salt water. These results present the first steps towards better understanding the practical effects of degradation processes specific to fingerprints on porous substrates underwater.

Lim Yi Liang Ian is a Drug Forensic Specialist with the Home Team Science and Technology Agency, forward deployed to Central Narcotics Bureau



The nexus of scam and fake news: An exploratory study of cases of fake news-scams in Singapore

By Xingyu Ken Chen, Siew Maan Diong, Bethany Leong,
Rong Hui Tan, Shannon Su Yan Ng, Stephanie Chan

In Criminology & Criminal Justice, September 30, 2024
Published by Sage Publications

The increasing prevalence of fake news as well as scams has been a cause for concern for authorities in Singapore in recent years. In particular, the concurrent rise in fake news and online scams has shown signs of convergence in the form of fake news-scams, where false information is manipulated and employed in scams. However, literature examining this emerging phenomenon is scarce. This study thus aims to deepen our understanding of this novel issue by exploring how scammers employ fake news in terms of type, channels of transmission, and persuasion techniques. Drawing from local case studies (n = 90) collected from 2016 to 2021, it was found that authority appeals were the most common theme employed in fake news-scams, and persuasion cues of authority were the most prevalent. In addition, Facebook was identified as the most common channel of transmission in the spread of fake news-scams. These findings serve to inform anti-scam prevention measures by local authorities and suggestions are made as to how various stakeholders (e.g. authorities, companies, and individuals) can be involved in dealing with fake news-scams.

Xingyu Ken Chen, Siew Maan Diong and Stephanie Chan are with the Home Team Psychology Division.



A Virtual Reality Game-Based Intervention to Enhance Stress Mindset and Performance among Firefighting Trainees from the Singapore Civil Defence Force (SCDF)

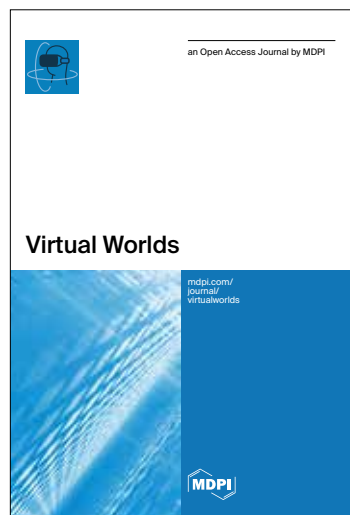
By Muhammad Akid Durrani Bin Imran, Cherie Shu Yun Goh, Nisha V, Meyammai Shanmugham, Hasan Kuddoos, Chen Huei Leo & Bina Rai

In *Virtual Worlds* 3(3) September 2024

Published by MDPI (Basel, Switzerland)

This research paper investigates the effectiveness of a virtual reality (VR) game-based intervention using real-time biofeedback for stress management and performance among fire-fighting trainees from the Singapore Civil Defence Force (SCDF). Forty-seven trainees were enrolled in this study and randomly assigned into three groups: control, placebo, and intervention. The participants' physiological responses, psychological responses, and training performances were evaluated during specific times over the standard 22-week training regimen. Participants from the control and placebo groups showed a similar overall perceived stress profile, with an initial increase in the early stages that was subsequently maintained over the remaining training period. Participants from the intervention group had a significantly lower level of perceived stress compared to the control and placebo groups, and their stress-is-enhancing mindset was significantly increased before the game in week 12 compared to week 3. Cortisol levels remained comparable between pre-game and post-game for the placebo group at week 12, but there was a significant reduction in cortisol levels post-game in comparison to pre-game for the intervention group. The biofeedback data as a measurement of root mean square of successive differences (RMSSD) during the gameplay were also significantly increased at week 12 when compared to week 3. Notably, the intervention group had a significant improvement in the final exercise assessment when compared to the control based on the participants' role as duty officers. In conclusion, a VR game-based intervention with real-time biofeedback shows promise as an engaging and effective way of training firefighting trainees to enhance their stress mindset and reduce their perceived stress, which may enable them to perform better in the daily emergencies that they respond to.

This research study was a collaboration with National University of Singapore and Singapore University of Technology and Design. The research study team included Cherie Goh, Hasan Kuddoos and V Nisha from the Singapore Civil Defence Force.





THE HOME TEAM COMPRISES 11 AGENCIES:

Ministry of Home Affairs Headquarters • Singapore Police Force • Internal Security Department • Singapore Civil Defence Force • Immigration & Checkpoints Authority • Singapore Prison Service • Central Narcotics Bureau • Home Team Academy • Home Team Science and Technology Agency • Gambling Regulatory Authority • Yellow Ribbon Singapore

All Home Team departments and agencies work together as one, in close partnership with the community, to keep Singapore safe and secure.



The Home Team Academy's mission is to empower learning and growth, and enable a united and successful Home Team. It aspires to be a leading corporate university in homefront safety and security.

www.mha.gov.sg/hta

ISSN: 2010-0617