HOME TEAM JOURNAL

Issue no. 13
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by Practitioners, for Practitioners

on Crisis Leadership

Home Team Chief Psychologist Majeed Khader on the 5Rs of Crisis Leadership

Bridging the Gap between Theory and Practice

Dealing with the Complexity of Decision-making

Policing in the Polycrisis Era

Enhancing Whole-of-Government Training in Singapore

THE LEADERSHIP INTERVIEW

"In any operation, let alone a crisis operation, some things are bound to go wrong, that's par for the course. We are not living in some movie or novel where everything goes swimmingly. Doesn't happen in real life. The first and foremost lesson for the leader of a crisis is to understand that some things are bound to go wrong."

PANG KIN KEONG
Chairman of Homefront Crisis Executive Group, Singapore

Leveraging Technology for Crisis Leadership Development:
The US and Australian Experiences

The BSC Brief
Intergroup Tensions: Analysing Online Discourse Using Machine-Learning

HOME TEAM
JOURNAL

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FOREWORD

Welcome to this special edition of the *Home Team Journal*. We dedicate this issue to the study of crisis leadership, a topic both timeless yet timely especially in today's interconnected world.

The term "polycrisis" has emerged as an apt descriptor of the complex, interwoven challenges that have come to define the modern landscape of homefront security. Gone are the days when crises were more clearly defined under specific domains. Today, the networked nature of the world forces our leaders to confront a constellation of interconnected issues, each demanding urgent attention and often exacerbating one another. Whether it is cyber threats, terrorism, pandemics, conflict or climate change, these crises have the potential, like a distant butterfly flapping its wings, to foment into a formidable storm that tests the resilience of nations and societies alike. This was what the Ministry of Home Affairs anticipated when its leaders came up with the Home Team concept almost 30 years ago today.

As Permanent Secretary (PS) of the Ministry of Home Affairs (MHA), Pang Kin Keong, notes in The Leadership Interview: "It's the ability to come together, as a government, as an organisation, for everyone to be able to step up and work together as a whole of government. That would be how you deal with polycrises. It's about being able to rally the rest of society and the people of Singapore so that they understand why you have to deal with it a certain way."

It is no longer sufficient to deal with each crisis in isolation. True leadership demands a holistic sense-making of the complex web of challenges and the ability to formulate comprehensive strategies that address the underlying issues driving these crises while managing risks by planning for consequence mitigation. Soft skills are also required to rally teams, and for national crises, the population at large. Such an approach requires leaders to transcend traditional boundaries and embrace interdisciplinary thinking. Equipping leaders with the necessary skills becomes all the more important.

Since its inception in 2006, the Home Team Academy has been doing that for the Home Team. Today, the corporate university of the Home Team has gone beyond serving Home Team departments to providing the whole public service with crisis leadership training. Drawing from the Singapore Government's experience in handling the COVID-19 pandemic, PS MHA has tasked HTA to identify the necessary skills that public sector leaders must have to navigate future crises and to chart a roadmap for training interventions. HTA's plans are previewed in this special issue of the *Journal* by Tay Kai Ying and Hazel Chan of the Home Team Centre for Leadership in their article on "Enhancing Whole-Of-Government Crisis Management Training in Post-Pandemic Singapore".

The Home Team Psychology Division has also been doing much research into crisis leadership behaviour, and importantly, sharing their insights. In May 2023, Home Team Chief Psychologist Majeed Khader led his colleagues in producing a volume titled *Crisis Leadership: A Guide for Leaders*. Majeed has now adapted his chapter in the book into an article for the *Journal*, where he has distilled

30 years of experience in applied psychology work into a model he calls the 5Rs of effective crisis leadership. Recognising the importance of providing hope and retaining trust during a crisis, fellow psychologists Tew Weicong and Diong Siew Maan take a practical lens to the question of authentic leadership while their colleagues from the Singapore Police Psychological Services Department discuss the importance of building a culture of psychological safety.

For this special issue, we have also sought contributions from scholars, practitioners, and thought leaders in homefront security, as well as our strategic partners in training. I will not attempt to summarise their work, but instead take the opportunity to thank these individuals for their friendship and contributions to the *Journal*: Sandra Andraszewicz, Stuart Bartels, Alan Bersin, Amanda Davies, Mike Hardy, Victoria Herrington, Christoph Hölscher, Jason Kuykendall, John Latham, and David McIlhatton.

As we embark on this journey, let us remember the words of former US President John F. Kennedy who once said: "The one unchangeable certainty is that nothing is certain or unchangeable."[1] In the age of the polycrisis, this sentiment rings ever true. The leaders we seek today must embody this understanding, harnessing both tenacity and agility to chart a path forward. Let this special issue serve as a beacon and a source of inspiration and understanding, as we navigate these uncharted territories.

Dive into our carefully curated issue on crisis leadership and allow it to enlighten, inspire and guide you through these complex times. Welcome on board.

ANWAR ABDULLAH
Chief Executive
Home Team Academy

[1] Kennedy, John F. (1962, January 11). State of the Union Address.

THE LEADERSHIP INTERVIEW

with **Pang Kin Keong**

Permanent Secretary, Ministry of Home Affairs & Chairman, Homefront Crisis Executive Group

"What motivated me? I would say it's the sense of accountability... to our team and to the mission, that keeps all of us as leaders going. Even if we are tired, emotionally, mentally, physically tired, we just keep on going because of that sense of responsibility. I am expected to lead the Homefront Crisis Executive Group, and I will do it for as long as it takes to resolve this crisis."

Much can go wrong during a crisis, but leaders often cannot afford to wait for all the information to be gathered before acting. "Poor leaders freeze," Permanent Secretary (PS) of MHA Pang Kin Keong told the *Home Team Journal* when he kicked off **The Leadership Interview series** back in 2019.

It is a crisis leadership philosophy he embraces, having overseen several challenging operations as the Director of the Internal Security Department, PS of the Ministry of Transport, and Chairman of the Homefront Crisis Executive Group (HCEG). Activated for national crises, the HCEG brings together Public Sector agencies to guide and coordinate a whole-of-Government response. The PS of MHA is the chairman of HCEG and the Joint Operations Group (JOG) in MHA supports HCEG as the secretariat.

For the COVID-19 pandemic, the HCEG was stood up for an unprecedented two and a half years, supporting the Multi-Ministry Task Force co-chaired by Deputy Prime Minister Lawrence Wong, Health Minister Ong Ye Kung, and Trade and Industry Minister Gan Kim Yong.

With the national crisis officially declared over and the after-action reviews completed, PS Pang sat down with the MHA COVID-19 Oral History team in September 2023 to discuss some of the leadership lessons.

He emphasised, among others, the importance of handling and treating right, the people who are in the trenches with us, in particular, not demoralising them when things go wrong, as some things will inevitably go wrong in a crisis. Also, a crisis leader cannot afford to get bogged

down by every detail, and in a crisis that lasts as long as COVID-19, must be able to sustain himself mentally and emotionally for the distance by taking breaks every now and then.

The interview was conducted by Lin Zhenqiang of the Singapore Police Force and Tay San Mei of the Singapore Prison Service. An edited excerpt is reproduced here.

Upon being informed of this novel coronavirus disease, how did you prepare yourself for what was to come?

The first indication I had that something might be wrong was when I was flying home to Singapore after a skiing holiday in Japan. I must have downloaded The Straits Times or some other newspaper. While on the plane, I read an article that said the Chinese had found a virus similar to SARS [Severe Acute Respiratory Syndrome]. And that caused me to worry. After I landed, I sent an email to JOG, to ask them to quickly check with Ministry of Health [MOH] colleagues whether we ought to be worried, and if we were, what did we need to do.

I must say that at that point, it didn't quite cross my mind that we would have to gear up the entire government machinery or the HCEG machinery the way we eventually did.

Was there a point in time where you felt that the situation had changed and that you needed to do something about it?

In the first few days, there was a reassuring message that came back from MOH, along the lines that they were aware of the situation and looking into it. So I let it be.

But I recall that a week or two after that, I started seeing more reports about cases spreading very widely and quickly in China. We started getting more worried. I started steeling myself mentally that we might have to activate HCEG.

Then around the same time or just before the Multi-Ministry Task Force, the MTF, was officially set up, there were discussions that we might have to activate HCEG and the Homefront Crisis Management System[1]. The MTF was eventually set up on 22 January 2020 and HCEG convened on the same day.

You have previously managed crises such as the nationwide MRT breakdown in 2015. What were some learning lessons or guiding principles from past crises that you managed, which you applied in the COVID-19 situation?

There are some similarities, but there are also differences because of the nature of the crises. In any operation, let alone a crisis operation, some things are bound to go wrong, that's par for the course. We are not living in some movie or novel where everything goes swimmingly. Doesn't happen in real life. The first and foremost lesson for the leader of a crisis is to understand that some things are bound to go wrong.

The question is, what do we do when things go wrong, in the middle of a crisis operation? Do we, as some leaders do, lash out, berate our men and start an inquisition in the middle of the crisis operation, why certain things were done or not done? If we do, we will demoralise our men, and two, we are being unrealistic.

I think it is extremely important that we don't unnecessarily demoralise our team in a crisis, when events and developments are unfolding fast, when we are making decisions on the fly and without the full picture, without all the data that we would have liked to have, or with information for which we cannot confirm the accuracy. When we are operating under such conditions, something is bound to go wrong.

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[1] The Homefront Crisis Management System is activated during national crises. It comprises the HCEG, Crisis Management Groups and Incident Managers, that report to the Homefront Crisis Ministerial Committee.

So my attitude has always been, things are bound to go wrong. And when things go wrong, the measure of my team is simply whether they are alert enough to know that something has gone wrong and whether they have a remedial plan. That's all I ask of them. If the team can let me know and tell me, "Yes, this is what we did. However, these were the outcomes, it didn't go the way we wanted and this is our plan B to get things right again," I would say that's a top performing crisis team.

Your point about incomplete information – generally, what would you say are some of the key considerations behind making critical decisions in a crisis when there's not enough information available?

You have to make a judgement call as to how soon, how fast do I need to make that decision? How fast do I need to implement a particular measure? If we assess that we have a few days, maybe weeks even, then we can take more time in order to try to get as much data as we can, ascertain the veracity of the data as best as we can, before we make a decision.

But for the COVID-19 pandemic, we didn't have days, you know. We didn't have weeks, we barely had hours. That was how fast the virus was spreading. In that kind of condition, we have to make a decision immediately, because like it or not, we had better do something quickly.

And when the timeframe in which we have to make decisions is a matter of hours, we just have to take whatever data is on the table, and use our gut feel, our intuition and sense of how it's likely to develop, and our judgement in terms of what is the best way of dealing with it, even if imperfect.

In those situations, another key lesson is that it is better to make a decision which is not so good than to make no decision at all. Where it's time critical, if we dilly-dally and we refuse to take a decision and our team doesn't know what to do, the outcome is worse. So I always say, based on whatever we have, decide. Argue, debate for a while, and then make a call and move. After moving, the team ought to monitor. Did the measures that we put in place achieve the outcome that we wanted? Then in the next few days, adjust, if necessary.

Are there any structures and processes that were, and will be put in place for HCEG in the future, given that this is the first time we actually handled such a long, drawn-out pandemic?

If I have to pick just one, I would say that it is the set-up of a unit within the HCEG structure that would not have any day-to-day responsibilities in managing the crisis, but whose job is simply to watch from the side and focus on scenario planning for the crisis. Because all of us would typically be just focusing on the day-to-day, the next day, and that is about all we have bandwidth for.

So to have a unit of officers who are not operationally dealing with the day-to-day, but just observing and thinking many, many steps ahead, that could be helpful. Then they could at least do some of the forward planning, telling us how the crisis could evolve, the kinds of risks that we may encounter further down the road and what should be factored into the operational plans that we come out with.

That's one key takeaway. We did some of it. For example, we did look ahead in terms of the end of the circuit breaker: how do we get out of it, how do we transit down, when there was a lockdown, how do we get out of it if the virus should creep up again. So, we did plan it out with the different step-down phases. But the officers working on it were the same ones who were dealing with the day-to-day. It took a toll on them, and I suspect that it meant that they were not able to focus as much on the longer term as we would have liked them to.

"... it is better to make a decision which is not so good than to make no decision at all... Argue, debate for a while, and then make a call and move. After moving, the team ought to monitor. Did the measures that we put in place achieve the outcome that we wanted? Then in the next few days, adjust, if necessary."

The World Economic Forum report on Global Risks presented at Davos in 2023 popularised the term "polycrisis" to refer to a cluster of related global risks, the compounding effects that result in the overall impact exceeding the sum of each part. The report also noted that in a polycrisis, leaders have to prepare for a long road ahead. How can Singapore and our leaders be better prepared to manage future polycrises?

I don't think it's very different from how we had managed this one. It's the ability to come together, as a government, as an organisation, for everyone to step up and work together.

It's also about being able to rally the rest of society, the people of Singapore, so that they understand why we have to deal with it a certain way. So we have to have the trust of the people, and not just at that particular point in time because trust is not built on the basis of one crisis. It can be built up only over time. By keeping the trust of the people generally in the government, when it comes to a crisis, the people will more likely believe in the government, have confidence and therefore support what the government wants them to do. This ability of the whole of society, the whole of government to come together, act as one, be coordinated, be on the same page, make decisions together, rally the people around us, that's how we should deal with crises.

What are some of the leadership qualities specific to crisis management that we must develop?

Ability and willingness and understanding that sometimes in a crisis, we have to make decisions on the fly. We have to make decisions with imperfect information. We have to make decisions without knowing whether the information is accurate or not. In short, even with an imperfect appreciation of the situation, we have to make a decision. That's one quality that is required.

Some leaders could be so uncomfortable with the lack of information or the imprecision of the information, that they keep on asking for more and more data points, before they make a decision. In certain scenarios, like if it's a slow boiling one, it's okay. But if it's a crisis where we've got to make a decision within hours or a day, then no matter how little you have, just make a decision and move.

I would say also that in a protracted and prolonged crisis, it is important to be able to keep our men with us, keep their morale up, have them continue to believe in us throughout the crisis. If we lose them, whether it's because they don't believe in us or they are demoralised or they are so fatigued that they just can't sustain the pace anymore, then I think we've got a problem.

No different from peacetime really, but acutely more so in a crisis, being able to sustain the morale and the trust of our team, for us to be able to execute the plans well. And focus on what's important at our level. Don't go down to the ground and try to settle every little detail ourselves. And as long as we largely win the war, I think that's good enough. We don't have to win every battle. Trust your team to be able to run on their own. Overall, it's an ecosystem that we are leading, we should be trying to optimise all the resources, the limited resources and bandwidth the system has, rather than trying to be able to deal and understand exactly at every level of detail what's going on.

Communication is important too when leading a crisis. Clarity in communicating to our own people, to our own team, why we are doing something, what we expect them to do. Communication to the public is important too, so that they understand and believe in the government and will support our plans.

How did you balance demands of work and your personal life over the course of this long crisis?

Whenever there were opportunities, I tried to cycle and walk around my neighbourhood. I did a lot of

reading. And I don't mean reading COVID stuff, but I read storybooks, fiction. It was really just about getting the mind off the crisis itself. Because if we don't, then we are going to be stewing on the crisis over and over, day in, night in, and we are going to get mentally very exhausted.

We need downtime for ourselves. Physically certainly, in terms of rest, but mentally too, in being able to find those pockets to be able to do something that's outside of that crisis that we are handling. It's important to give the mind some rest. Then we are better able to sustain ourselves over a long crisis.

What kept you motivated or hopeful during this period?

There was a part of me, particularly at the beginning, that felt COVID-19 couldn't possibly last that long. But after one year, then one and a half years, my own optimism about it finishing as a crisis grew dimmer and dimmer!

But I think people adapt, so after a while, we got used to it. And we developed a new pattern of coping and it became the norm.

What motivated me? I would say it's the sense of accountability and I believe that it's no different for all leaders.

If I put you in charge, if we are in charge, we have accountability, we have a responsibility for our team. And whether we like it or not, we are going to have to perform, we are going to have to lead our team and not let them down. And I think that sense of responsibility for our team will keep us going, because if we don't do our job well as a leader, then the team will suffer. Then the mission gets compromised. So it's that feeling of accountability to our team and to the mission, that keeps all of us as leaders going. Even if we are tired, emotionally, mentally, physically tired, we just keep on going because of that sense of responsibility. I am expected to lead the HCEG, and I will do it for as long as it takes to resolve this crisis. There was never any question that I would throw up my hands in the air and say that's it, I've had enough.

We have come to the last question. What would be your words of advice to leaders managing an unprecedented crisis like COVID-19 where no playbook exists?

Don't assume that you know everything. Don't assume that you are expected to know everything. Have a good group of people around you who are willing to give you the data, their expertise and their different perspectives of how it ought to be handled. That's your greatest asset.

Then after that, it's your burden to be able to synthesise everything that's put before you, weigh the pros and cons and the different considerations, to figure out the best way forward. So lean a lot on your people, make sure you have a team that's willing to run with you, give you ideas. That's extremely important, particularly in a crisis for which there's no playbook and you had not anticipated before.

When you are able to put together such a team, when you are able to put in place a culture which encourages people to contribute and speak up, even if it differs from your point of view, then you have got the fundamentals to be able to deal with the crisis well.

LEADING AND LEARNING DURING A CRISIS: CLOSING THE GAP BETWEEN THEORY AND REALITY

John Latham, Mike Hardy & David McIlhatton
Coventry University, United Kingdom

ABSTRACT

Strong and effective leadership is fundamental during times of crisis; leaders must operate, think and behave in ways that they are not used to in order to minimise loss, disruption, reputational damage, and challenges to their overall resilience. They cannot simply play out pre-rehearsed plans, as many crises are not uniform or linear. Instead, their decisions are intertwined with unfamiliarity, uncertainty and complexity and require input from many different stakeholders. As a result, responses to such events are often improvised with leadership behaviours and attitudes, coupled with organisational culture, being fundamental for getting organisations through such times. In this article, we discuss a series of simple considerations and questions for re-thinking what constitutes good leaders and leadership during a crisis, drawing where relevant from previous crises such as the Manchester Arena terrorist attack in 2017.

WHY DO CRISES STILL SURPRISE US?

We are living in challenging times. On a daily basis, our news reminds us of the difficulties being experienced in many parts of the world and how they play out throughout all of society. Indeed, we have all just lived through a global health crisis that has had no modern-day comparison – a crisis that completely re-shaped how the world functioned at that time and, to an extent, is continuing to do so. From a learning perspective, the entire traditional academic model of learning had to evolve from traditional in-person teaching to virtual learning. Some universities were ready, and Coventry University was lauded as one of those in the UK, but the majority were not.

Fast-forward three years, and while the pandemic is largely over, we are experiencing new and complex challenges that are bringing new threats, risks, and impacts. Recently, many global organisations were impacted by the MOVEit hack that compromised the personal data of millions around the globe and demonstrated the fundamental significance of supply chain security for global organisations and, indeed, those whose data has been compromised. This hack highlighted that even the most security-minded organisations are vulnerable and when such events do happen, both leaders and leadership are fundamental to their survival.

Despite the regularity of crises in recent times, many organisations are still surprised when they happen or are not prepared. There are many examples throughout history where resilience has been challenged due to the shortcomings in preparedness. The Manchester Arena Enquiry in the UK, established in response to the terrorist attack at the Manchester Arena on 22 May 2017 that killed 22 people and injured over 1,000, highlighted the need for strong leaders and leadership in the preparedness, response and recovery of critical incidents. While the Enquiry made many recommendations, there were some general themes that emerged: First, it was identified that there was a need for more effective

cooperation between the different stakeholders that responded to the incident at the local and national level. Secondly, there was a requirement for much greater multi-agency preparedness and interoperability during crises through joint testing and exercising at regular intervals. And there was a much greater need to ensure that everybody knew what their role was during times of crisis.

While all crises are different, there are similar challenges in the context of leadership that impact on resilience. Some of these include:

Won't happen to us mentality	Research undertaken by McIlhatton et al. (2020) shows that many organisations do not adopt protective security measures in relation to countering terrorism because they believe that the risk of something happening to them is too low and if something does happen, it is unlikely to happen to them.
Stagnation in planning	Organisations develop and pre-rehearse plans based on predefined scenarios which are repeated routinely. However, these scenarios are highly unlikely to happen in the way that they have been developed and people have been trained and, as a result, organisations don't respond as effectively as they could.
Communicating during crisis	As most crises are fast-paced, constantly evolving with impacts on many different parts of a system, they cannot be addressed effectively by any one person or organisation due to the complexity involved. In the UK, the Joint Emergency Services Interoperability Programme (JESIP) provides a mechanism for police, fire and ambulance to work more effectively together during incidents. However, Sir John Saunders, Chair of the Manchester Arena Enquiry, concluded that JESIP failed while the 2017 incident was unfolding and that it wasn't the first time that had happened. One area of failure was the lack of communication between emergency services (Power, 2022).
Understanding of roles	A common challenge during a crisis is understanding the role that people play when something goes wrong. If people do not understand who does what (and why) then there are likely to be issues when something does happen.
Not learning from previous crises	We always say that lessons should be learned in the aftermath of incidents, but often fail to make sure that these learnings are captured and reflected through planning. There is an important benefit from systematically using hindsight to define insights and develop foresight.

LEADERSHIP THROUGH CRISES

Crisis has consequence for leadership; it changes the role and responsibility of leaders and tests the process of leadership in organisations in very new terrain. When in normal times we expect to see public leadership focused on innovation and on delivering positive and improved outcomes, enhancing well-being, more secure communities, and trust-based relationships; in times of crisis, the rules and expectations change. The same leadership refocuses on restriction, on cost-control, on financial sustainability and on shorter time horizons. This transition is neither easy, nor straightforward, and

for educators and coaches, it creates huge debates about whether we truly understand the development needs for a fit-for-purpose leadership.

This paper looks, firstly, at the current thinking on preparing and responding to crisis as it informs leader and leadership development. It then raises significant questions about whether these approaches address the challenges presented by 21st century contexts. It concludes by suggesting a new set of development priorities and expectations of an effective leadership that is more able to navigate crisis. The analysis, it is argued, applies equally to individual and "contained" crisis, such as a terrorist attack, cyber-attack on IT systems, a catastrophic natural disaster or a health pandemic, as it does to the crisis-context that characterises the complex adaptive systems of global society. In both contexts, leadership understands that crisis itself is changing in nature and complexity. We are moving rapidly from crisis as an event or moment in time, to a context where stumbling from crisis to crisis, or crisis becoming a continuous and unpredictable process, defines a permanent situation, creating very new challenges for leaders and leadership.

"In times of crisis, the rules and expectations change. The same leadership refocuses on restriction, on cost-control, on financial sustainability and on shorter time horizons.

The main working model in both the academy and in practice is to explore leadership in the three phases of crisis management: preparing, responding and recovering, hence focusing on leadership qualities at different stages within this crisis-journey. Leadership development follows by looking at how best to prepare, respond and recover, but this all tends to work best, if at all, when the crisis is defined as a technical problem (with a solution) or one with clear definition. More likely in the 21st century are crises without clear start and endpoints, that are characterised by complexity and uncertainty. Such crises cannot be treated as problems-to-be-solved. Instead, leadership is required to respond to challenges with no known solutions. This is a new paradigm with significant implications for both leaders and for leadership generally.

Research at Harvard Business School reports on recent observations of leadership when thrust into crisis. They argue that supportive leadership development should reinforce a clear set of behaviours. That leadership must be confident to act with speed over precision, confident to be bold and radical when required to adapt to changed conditions, and confident to apply priorities that may be unpopular. In addition, leaders must be able to engage deeply with their teams. Leaders should remember that moments of crisis can tell you a great deal about the overall leadership. For learning and assessment about how roles will change in the post-crisis world, and for leadership to be well positioned for success, clear judgements must be made about whom you want in the frontline during the crisis and in the hoped-for post-crisis recovery.

Nicols et al. (2020) argue that the best leaders process available information quickly and prioritise firmly. Speed is of the essence mostly because of uncertainty, and leaders must set out a clear agenda including (1) defining priorities, (2) making smart trade-offs, (3) being clear about the distribution of roles, and (4) allowing mistakes. This is a context where bold adaptations are necessary and where effective leadership becomes influential in changing circumstances. They seek input and information from diverse sources, are not afraid to admit what they do not know and bring in outside expertise when needed. The best leadership adjusts quickly and innovates continuously.

Importantly, leadership within crisis must also value delivery and take accountability when things do not work out. In times of crisis, the prime responsibility, it is argued, is proximity within the leadership team. By being close and inclusive, leaders are more sensitive to their team's anxieties and distractions, and in turn, mutual reinforcement, strong interactions and communications become the norm.

The academy is still not confident about the leader versus leadership debate. This is important for crisis contexts. Contemporary contexts demand that we move towards a process of leadership rather than to the personality of a leader.

Margaret Wheatley and Debbie Frieze (2010) questions our obsession with the "leader":

> For too long, too many of us have been entranced by heroes. Perhaps it's our desire to be saved, to not have to do the hard work, to rely on someone else to figure things out. Constantly, we are barraged by politicians presenting themselves as heroes, the ones who will fix everything and make our problems go away. It's a seductive image, an enticing promise.

Wheatley makes it clear that when we try to lead as *heroes*, we perpetuate all these problematic norms and assumptions that keep many of us passive and disengaged. The alternative is to lead as host. Wheatley explains that leaders-as-hosts deploy meaningful dialogue across many parts of the system as the most productive way to provoke new insights and possibilities for action. Hosts trust that colleagues are willing to contribute, and that most people aspire to clarify and recognise meaning and possibilities in their work. More importantly, these leaders, she asserts, know that "hosting" others is the only way to confront complex and intractable challenges.

Finally, in this brief review of leadership thinking, we must acknowledge Ron Heifetz's work on adaptive leadership, and understand the difference between technical and adaptive challenges. Without question, the crises we see all around us represent fiendishly wicked adaptive challenges. Since there are no "experts" with the technical expertise to solve any of these problems, the best we can do is show up with curiosity. Heifetz and others believe that wicked problems cannot be permanently solved and that the work must be with those who have the problem. The solution will be one of "sufficiency" – essentially what sociologists see as "good enough for now". It also aligns powerfully with the idea of leading as hosts rather than heroes and suggests a working design that invests deeply in the work of creating and holding space and then inviting questions rather than answers.

As engaged and concerned citizens who care deeply about our communities, our countries, and our planet, we are alarmed by the current state of the world. All around us, we see multiple crises unfolding simultaneously, each of which represents a profound threat to human security and indeed civilisation. Some basic local, national and even global systems appear to be failing, in health, finance, and even in government. The climate crises, the political crisis, the lingering effects of the global COVID-19 pandemic, the crisis in the cohesion of our communities all represent truly wicked problems that are wildly complex and increasingly urgent.

As scholars and practitioners of leadership, we all hold the aspiration that our work serves to strengthen our individual and collective capacity to respond effectively to these pressing public problems. As the intensity and urgency of these global challenges have grown in recent years, we all hear a persistent question continuing at volume: Are we doing enough? Are we responding to this moment with all the courage, creativity, and commitment that we can summon? Are our efforts to intervene bold, innovative, and informed by the latest insights from the field of leadership and regarding how the world works and how change happens?

Over the years it seems that a gap has grown between the insights, findings, and concepts from the cutting edge of leadership theories and the reality of context. Research (Hardy, 2022) at Coventry University is exploring the challenges of leadership within a contemporary context of uncertainty, complexity and continuous change. This is a context of crisis, not of crisis as an event or a moment, but crisis as a continuum, defined by both the unknown and by rapid change. If crisis itself belies clear definition, then there are indeed new challenges for leadership. Academics and practitioners alike have spent years engaging with concepts like self organisation and emergence, wholeness, adaptive leadership, engaged followership, and more. Leadership development has focused on the qualities and traits of "leaders" and on the process of collective and collaborative actions. Work on identifying teams and supporting effective teamwork has brought new energy to multi-agency working in the public domain, and cross-departmental working within all sectors.

So, we do need to look afresh at leadership in these times through a set of questions reflective of the

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changes: Why do so many people in positions of authority fail to lead? How can authority get in the way of leadership? Can we see people who lead without authority? Can people lead from any position? How can authority systems and relationships be obstacles? We know, within crisis, that many look to leadership to help make sense of what is happening, as well as to help to deliver positive change, to make things "better". In this context, Heifetz and others emphasise how leadership is entirely practical, directly mobilising people to confront the challenges and accomplish what is a described as adaptive change.

Leadership can be effective with and without authority; it builds new and sometimes surprising capacities and capabilities in organisations and helps focus on thriving within a changing and challenging world. This is very different from "problem-solving".

LOOKING AFRESH AT LEADERSHIP

Our 21st century has become a complex and dysfunctional time; managing will belong to the ready and to those who understand the changed and changing world. The reality is that within crisis, some appear more comfortable and cope better than others. Being comfortable is a critical first step in taking and creating opportunity to make sense and make a positive difference. Three characteristics of contemporary context underline this: firstly, our communities are less secure, better informed but at the same time pervasively misinformed. Secondly, we are experiencing, at all levels, declining trust, and fewer trusted institutions. And thirdly, both globally and at local levels, it feels to many that we are more unequal and less fair with accompanying significant ethical dilemmas. These describe a highly complex context and leadership will need to draw on new understanding; it can no longer be reliant on traditional business school curricula.

New ideas for leadership in these contexts look at behaviours rather than structures; these ideas are framed by the need for leadership development work to be supportive of changing and adapting behaviours to the highly complex systems, with interdependencies and wicked problems. Adaptiveness in leadership requires inclusion and representation of all stakeholders; leadership that can listen, hear and respond to any conversation. It is above all a leadership defined by questions rather than answers. In this respect, a new set of requirements is emerging.

Our mixed experience of leading through the recent pandemic has provided helpful clarity. Dealing with crisis may require a completely new relationship between leaders and experts. Asking the right questions is the key to acquiring the right data. Similarly, can our leadership deal with complexity, and respond effectively within complex adaptive systems? Can leadership, and indeed our approach to leadership within different organisations, adapt with agility to rapidly changing conditions – be as dynamic as the context? Importantly, we need to place "trust" and "trust-building" at the heart of our work. Trust is formed and broken both horizontally, between individuals, and vertically within hierarchies and institutions; trust is an essential element of effective leadership within crisis.

Finally, leadership must prioritise the management of loss, and deal with all parts of any system, not simply accessible parts, or favoured domains. Change and adaptation in time of crisis brings rapid and sometimes unorthodox changes – and brings losers alongside winners. Sensitivity to loss and a commitment to relating to the *whole* may be critical components of a refreshed leadership approach.

These questions and new demands do require new thinking about leadership and new commitments to continuous learning, experimentation and the making of mistakes. Trial and error rarely feature strongly in

management texts, but will, it seems, be important in the new complexity. In the same way leaders and leaderships that make mistakes, and own up to error, will need to become more commonplace in the future.

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EFFECTIVE CRISIS LEADERSHIP: PRACTICAL SUGGESTIONS FROM THREE DECADES OF APPLIED PSYCHOLOGICAL WORK

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ABSTRACT

Drawing on his 30 years of applied experience as a practitioner teaching the behavioural performance aspects of crisis leadership, and as a researcher-scientist, the author, the Chief Psychologist of the Ministry of Home Affairs, argues that today's crises, being more complex, transnational, and sudden with elements of what experts have called "un-ness" (undefinable qualities), require organisations to take a broad approach and framework of crisis readiness response and capability, instead of trying to prepare for every crisis. To help leaders better understand the crises of the future and be better positioned to deal with them, he offers the 5Rs of effective crisis leadership: Recognising, (Being) Ready, Reacting, Reviewing and Relearning.[1]

THE CRISES OF TOMORROW

When we think of crises today, we must realise that they are transnational, occur rapidly, and snowball in magnitude and impact if they are not mitigated quickly. These transboundary crises challenge governance and operational response. Crisis leadership experts like Legadac (2009) have long argued that the crises of tomorrow will differ structurally from those of the past in seven intertwined dimensions:

- **Scale.** The 2004 Asian tsunami, the 2003 SARS crisis, and the COVID-19 pandemic have shown us we cannot expect crises to be clearly specific, isolated, and limited to the size of the systems affected.

- **The network factor**. Vital infrastructures are networked at the national and international levels, and a local breakdown can be magnified to unprecedented proportions. In August 2003, a small power fluctuation mishandled in Ohio resulted in a significant power blackout affecting millions in the northeastern US and Ontario, Canada.[2] In the COVID crisis, many supply chains were internationally affected.

- **Speed.** The SARS epidemic in 2003 "showed the need to think of our vulnerabilities in the context of highly compressed time units. The combination of the virus and the jet airliner changed the rules: in just a few hours, the virus jumped from Hong Kong to Toronto" (Legadec, 2009). Today, an electronic glitch could shut down our information systems worldwide within a minute (Cukier, 2005).

- **Ignorance**. Crisis experts believe that we are moving from uncertainty to ignorance. In August 2003, "in Europe, many officials thought it best to shrug their shoulders again over a bit of summer heat, until, over a period of 10 days, the toll mounted to a staggering 70,000 deaths" (Lagadec, 2004). This "European heatwave of 2003," which recorded high temperatures

[1] This article is adapted from a chapter by the author in *Crisis Leadership: A Guide for Leaders* edited by Majeed Khader, Eunice Tan, Brenda Toh, Siew-Maan Diong, and Sheryl Chua (Singapore: World Scientific, 2023).

[2] A task force established by the US and Canadian governments later established that "this blackout could have been prevented and that immediate actions must be taken in both the United States and Canada to ensure that our electric system is more reliable." See https://www3.epa.gov/region1/npdes/merrimackstation/pdfs/ar/AR-1165.pdf.

across Europe, raised concerns over global warming and Europe's readiness for climate change. According to reports, the heatwave affected the environment. Alpine glaciers shrank by 10% over the summer and thawing in the mountains contributed to rockslides. Forest fires raged as weakened trees fed the flames. Heat affected the fodder and grain production, elevating costs for livestock farmers. In addition, high water temperatures and low water levels shut down French nuclear power facilities just when electricity demand was rising (Britannica, n.d.).

- **Hyper complexity.** There are now no benchmarks for complexity; each extreme event overwhelms the last. For example, Hurricane Katrina on 29 August 2005 was no common hurricane, but in the words of the lead incident manager, Admiral Thad Allen, "a weapon of mass destruction without criminal dimension" (Allen, 2008). It caused "persistent flooding, a series of industrial disasters, critical evacuation challenges, widespread pollution, the destruction of 90% of the essential utility networks (energy, communications and water etc.), unprecedented public safety concerns, concern over the possible loss of the port area (which is essential to the continent's economy), even uncertainty as to whether portions of the city could be saved" (Legadec, 2009).

- **The inconceivable.** The unthinkable and the unconceivable are perhaps the most destablising. In 2001, "America was prepared for missiles, but it was hit with box cutters, and its own commercial planes, coming from US airports, (initially) under the helm of American pilots" (Legadec, 2009). We thought we had learned the lessons of the flu pandemic of 1918, but are we even as resilient today? Will our "lean" processes and "just-in-time" principles mean instead that minor breakdowns cascade almost instantly into a "domino-disaster"?

- **Category-5 media storms.** Every crisis leader understands the challenge in front of them today: media storms. As Lagadec (2009) asks, how are leaders to cope when "all tools of governance… are promptly outflanked by unbelievably powerful mass-media systems that are so adept at 'staging' events and have acquired their own 'situation rooms'"? Do we need new protocols to work with media professionals? Should we communicate differently today in our organisations?

In urging a radical shift in paradigm and practice almost 15 years ago, Legadec (2009) identified several new norms for tomorrow's crisis leaders by describing outdated thinking and organisational processes as "Tamed Risks and Crises", while what future crisis leaders

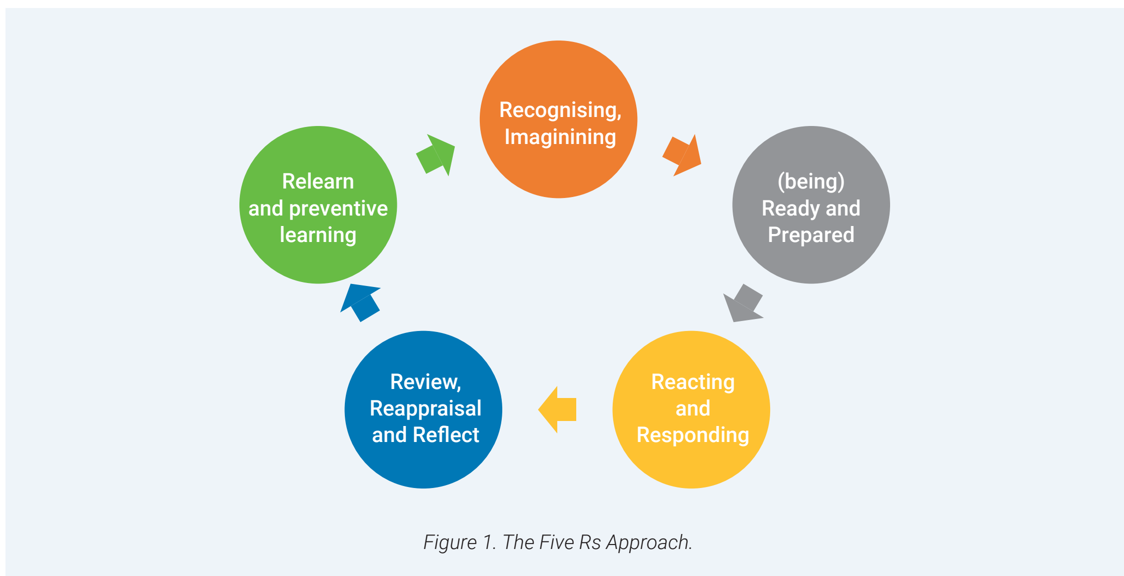

Figure 1. The Five Rs Approach.

need are in the "Wilderness of the Unknown". Although he would remind us to "be prepared to give up every preconceived notion", his ominous summary in Table 1(on the next page) is ever relevant today.

HOW DO WE RESPOND?

Based on three decades of applied psychology work, I propose the Five Rs approach to prevent crises and react effectively when they occur (see Figure 1).

Table 1. New Norms for Tomorrow's Crisis Leaders (Legadec, 2009)

Dimension	Tamed Risks and Crises	Wilderness of the Unknown
Context	A Stable World + Rare Disturbing Events	Unstable Foundations + Domino Events
Events	Specific, Known, Controlled	Global, Unknown, Beyond Control
Policy	Best Answers, Best Plans, Best Tools	Best Questions, Reinvent Trajectories
Mindset	Continuity, Average, Control	Discontinuity, Extreme, Chaotic
Training	Learning Best Fixed Answers	Learning to Be Surprised
Education	Math, Quantitative Tools, Top-Down Ready Managers	Facing the Unknown with Others (Multidisciplinary)
Psychology	Vitally Protected by Known Rules	Open to Terrae Incognitae (i.e. unknown territory: an unexplored place or field of knowledge)
Institutional Selection	Efficiency in Applying the Rules	Double Ability: Within and Beyond the Rules
Ultimate Institutional Responsibility	Known Events Management, through Existing Rules and Laws	Addressing Vital Issues, even if it means Reinventing the Rules
Danger	Maginot Line Mentality (this refers to a military moniker — a euphemism for any "defensive barrier or strategy that inspires a false sense of security.")	Irresponsible Actions

FIVE RS OF EFFECTIVE CRISIS LEADERSHIP

1. Recognise, Sense Make and Imagine

Recognition and sense-making are critical but hard in practice. One needs to be ready for surprise. Learning to be surprised through training exercises and simulations is a good way to develop this instinct.

Perhaps the first task of any crisis leader is to recognise an impending crisis and to try and prevent it. In a sense, this becomes a thankless task because averting a crisis means ensuring that a problem does not occur, and the leader has no glory of being a hero. But from a humanitarian angle, a crisis should be avoided to prevent the tragedy of death and loss of property. From an organisational angle, this means business continuity, less disruption, and good business or organisational effectiveness.

One valuable question to ask is a fundamental one – what is a crisis?

Some leaders have humorously told us that a crisis is whatever your boss thinks it is! Academics however argue that there are technical differences in definition between what might constitute a crisis, an accident, an incident, a disaster and an

emergency. These differences are beyond the scope of this discussion. However, according to the Harvard Business Press booklet *Managing Crises* (2008), some main questions we need to explore to determine whether the incident is, in fact, a crisis are as follows:

- Is there/could there be an injury/injuries to person/s?
- Is there/could there be a threat to the health and safety of any person/s?
- Is there/could there be a threat to the environment (e.g. oil leakages into the ocean)?
- Is there/could there be a breakdown in your organisation's ability to serve customers or a threat to your organisation's reputation or brand, especially in the social media space?
- Is there/could there be a serious threat to morale and well-being?
- Is there/could there be a loss of data or data breaches?
- Is there/could there be serious financial loss?
- Is there/could there be a concern about legal action against your company or an individual associated with it?
- Is there a loss in trust?

Managing Crises explains that if any of these questions are answered positively, there is probably an impending crisis. Early recognition has been essential in mitigating the major impact of a crisis. This is particularly important if the crisis may impact critical societal functions.

It is useful for the leadership to ask themselves this: what are the 10 worst things (crises) that could happen to the organisation? Imagination is important here, as what we are really thinking of is the unthinkable or "un-ness".

Another useful exercise is to generate crises that could occur in domains of the organisation. For example, a crisis of leadership succession, a finance crisis, a supply chain crisis, a building related crisis, criminal acts or terrorist acts, a media and brand crisis and so on. Do recall that the 911 terrorist attacks were called the "crisis of imagination". Hence, it is important to entertain even seemingly wild possibilities (for example, a natural disaster may hit a country that had never faced it before).

"Perhaps the first task of any crisis leader is to recognise an impending crisis and to try and prevent it.

But when running these exercises, do bear in mind some considerations. First, one concern is what psychologists call "optimism bias". This psychological process prevents and impedes good signal detection within organisations and teams. The illusion of invulnerability and "unrealistic optimism" can cause leaders to rule out some scenarios. Cherry (2002) explains that the optimism bias is essentially a mistaken belief that our chances of experiencing negative events are lower and our chances of experiencing positive events are higher than those of our peers. It is a human protective instinct to believe that we are less likely to suffer from a crisis or something bad and more likely to attain success than reality would suggest. She goes on to explain that "we believe that we will live longer than the average, that our children will be smarter than the average, and that we will be more successful in life than the average. But by definition, we can't all be above average" (Cherry, 2022). Whilst this bias can be useful for general living, it may not always be useful for crisis prediction or crisis management, especially when there are unexpected global crises that sweep the world, such as COVID-19. Optimism has its place if partnered with realism.

And this may be a genuine concern and probably one reason (amongst others) why two major countries – the United States and the United Kingdom – did not respond fast enough to the COVID-19 crisis. The UK saw its first reported cases at the end of January 2020, when the virus was already spreading worldwide. But it was not until mid-March that the UK "advised" people to avoid non-essential travel and socialising, and only went into lockdown on 23 March. The slow UK response received widespread criticism from public health experts. Commentators have noted that in the US, the administration and leaders downplayed the dangers of the disease. With a dire shortage of testing kits, the US government still does not know how many people have had the disease.

Yet another point to consider when thinking about crisis categories is to think of what some experts have labelled as "un-ness". Un-ness refers to the idea

that sometimes you cannot define a crisis clearly. It connotes issues such as feeling unprepared, unexpected, uneasy, unpredictable, unknown, unimaginable and other un-ness aspects. To quote from Rosenthal and Kouzmin (1997):

> Industrial society is susceptible to catastrophic events, including technological disasters and social and political crises. Risk, uncertainty, crisis, collective stress, and "normal accidents" now need to be incorporated into a broader understanding of how governments and decision-makers respond to the un-ness of crisis situations: unpleasantness in unexpected circumstances, representing unscheduled events, unprecedented in their implications and, by normal routine standards, almost unmanageable.

During the training courses on crisis leadership that the Home Team Psychology Division runs for various levels of commanders and leaders, we often ask participants to provide examples of "un-ness". One group listed out 30 different kinds of "un-ness"! These included terms like unprepared, uneasy, unnerving, unusual, unexpected, unreal, unaccustomed, and so on. The basic idea is that a crisis is predictable once defined, as it would not shock crisis leaders psychologically. From the angle of trying to prepare leaders, gathering them in a room and generating un-ness scenarios is beneficial.

Nonetheless, leaders should learn to be rudely surprised. As La Porte (2005) notes:

> In a sense, "crises management" is a contradiction in terms. Rude surprises are not managed; responses to them can be. From an institutional view, the challenges are not to be prepared, in advance, to do things one knows you will have to do, but to have capacities at the ready, so to say, that can be combined in unforeseen ways with other capabilities, perhaps from different domains of civil society, as the parameters of the new crisis unfolds.

How should organisations prepare for this? By building the internal capacity to shock the imagination of crisis leaders in training simulations, computer simulations, and training exercises. The idea is to train minds to be ready for unimaginable, unthinkable, unusual, unexpected, unnerving, uneasy crises.

2. Readiness and Preparedness

How can we ever be ready for a crisis? There are several macro-level aspects of readiness, ranging from the strategic readiness of political office holders, to operational readiness which includes the readiness of the emergency forces. In contrast, micro preparedness is cognitive readiness among individuals.

Political readiness may include elements of whether political office holders are alert and responsive to crisis elements. Are political officeholders involved in crisis exercises? Do they participate or merely play hosts and observers? The more they are involved, the more likely they can develop the skills needed during actual times of crisis. Some of these skills entail speaking well and good media communication. Jacinda Ardern, the former Prime Minister of New Zealand, is an excellent example of someone who manages the social media presence well during an emergency. Another good example would be Singapore Prime Minister Lee Hsien Loong, who strategically conducted many media briefings during the COVID-19 crisis in Singapore. Another valuable advantage of political office holders participating in exercises would be that they can also think through the various legal, societal and even financial considerations when there are incidents involving many persons dying (e.g., as seen during the 2004 Asian Tsunami and plane crash incidents). Crisis training practitioners should consider how to involve political office holders in their exercises, and if not in the entire activity, at least some parts of it.

Strategic and operational readiness may involve the entire ecosystem of crisis-ready operations, personnel, equipment processes, practices, and doctrines. It may be helpful to think about the following issues:

a. ***Interaction between different crisis typologies.*** In more advanced planning, operational leaders should attempt to consider more than one type of crisis co-occurring in an interactive "snowballing context". For example, when a chemical leak causes contamination in the water supply, that affects the company's branding and reputation. The value of this is that mentally playing out the domino effects of crisis disruption forces the decision maker to think about the opportunity costs of decisions. For example, should we go

with this decision at the price of that decision? What are the trade-offs? In the case of COVID-19, it would be to consider whether we should prioritise lives or livelihoods.

b. ***Black Swans.*** The black swan event is an event that comes as a surprise, has a significant effect, and is often inappropriately rationalised after the fact. Nassim Nicholas Taleb, who developed the concept, describes black swans as having: a) the disproportionate role of high-profile, hard-to-predict, and rare events that are beyond the realm of normal expectations in history, science, finance, and technology; b) the non-computability of the probability of consequential rare events using scientific methods (owing to the very nature of small probabilities); and c) the psychological biases that blind people, both individually and collectively, to uncertainty and rare events (Taleb, 2010). Various experts argue that Black Swan events bring about a situation where we do not know what will happen, how it will happen, and the impact. So, how do we deal with it? The answers are complex, but experts explain that one way is to heed the views of various diverse experts to help think through the issues and brainstorm possibilities. And secondly, learn to be "anti-fragile", to build resilience and adaptability in systems. During the COVID-19 pandemic, supply networks were affected; learning from this, can we build some excess networks so that if one supply is disrupted, the others remain? This is akin to having a spare tyre in the trunk when taking a long road trip!

c. ***Black Elephants.*** Peter Ho, a former head of the Singapore civil service, says "the black elephant is a problem that is visible to everyone, but no one wants to deal with it, and so they pretend it is not there. When it blows up as a problem, we all feign surprise and shock, behaving as if it were a black swan" (Henson, 2017). He gives the example of how the British establishment did not think that Brexit could happen and was caught by surprise when it did. What does Peter Ho recommend for dealing with Black Elephants? He suggests a whole-of-government approach for dealing with wicked problems but notes that it is not easily achieved. Like any large hierarchy, governments are organised into vertical silos, with most senior civil servants reporting to their Ministers. While some structures promote cross-ministry problem analysis, there is some concern that these are less important than the ministry's specific mission, set out by the ministry's top management and the minister in charge. Ho recommends that vertical silos be broken down so that information can flow horizontally to reach other agencies. Some good examples are supra-structure entities such as Singapore's National Security Coordination Secretariat and, more recently, the Smart Nation & Digital Government Group. In the same vein, should more structures for private-public partnerships also be encouraged? The Singapore White Paper on the response to COVID-19 recommends better private public partnerships as a way forward.

d. ***Studying what other organisations encountered.*** While it seems obvious, exploring what other countries and organisations encountered and how they dealt with their crises can be useful. Some examples of this could be learning lessons from the Black Lives Matter movement in the US and the Hong Kong protests in 2019. Singapore and MHA do really well in this respect because government agencies attempt to conduct case studies on crises which occur in other places and organise study visits where possible.

e. ***Low-level signals and creeping crises.*** In sense making, low-level signals are often missed. What low-level signals should we be paying attention to? Are there creeping crises? Should we also study other macro creeping concerns such as climate change and antibiotic resistance?

f. ***Team readiness.*** At the operational levels, it is useful to ask if team members are well-exercised and have the right equipment. During the Little India Riot Committee of Inquiry hearing, front line patrol officers who testified explained that they did not have the right equipment because the priorities were different in the post-911 years and there were more prepared for terror incidents than quelling a riot. Equipment apart, do they have the same mindsets and mental models about crisis management? Do the team members spend some time in their operational planning thinking about different crises and how they might respond? In international settings, I have heard that sometimes this even involved having hard conversations about caring for each other's families in the event of loss of life. While

hard, these conversations build team readiness and resilience.

g. ***Human resource readiness.*** In the event of a major crisis, you may need to know the important contact numbers of emergency personnel, including details of their next of kin emergency contact details, home addresses, important contact numbers, medical information, religious beliefs and so on. In a previous tragic instance of two officers who died in the line of duty, when their addresses were being retrieved from the database because the team wanted to break the bad news to their families, it was discovered that the contact information had not been updated. This can exacerbate a tragedy.

3. React and Respond

How do you manage a crisis management team? There is much technical material that has been written about Incident Management Teams (IMT) or Incident Command Teams (ICS). One good resource is *Sitting in the Hot Seat* by Professor Rhona Flin who has worked closely with many emergency personnel and undertaken many studies of incident commanders.

One example of an ICS could be the US Fire Administration which uses an All-Hazard Incident Management Team (AHIMT) as a comprehensive resource to either enhance ongoing operations through the provision of infrastructure support or, when requested, transition to an incident management function to include all components/functions of a Command and General Staff. An AHIMT has command and general staff members and support personnel, statutory authority and formal response requirements and responsibilities, pre-designated roles and responsibilities for members (who are identified and can be contacted for deployment), and is typically available 24/7/365.

During the COVID-19 crisis in Singapore, we used the Homefront Crisis Executive Group (HCEG) effectively as a strategic crisis management entity. The HCEG supports the Ministerial Task Force and coordinates the Whole of Government (WOG) response to the pandemic. It is supported by the Ministry of Home Affairs Crisis Preparedness Directorate, which performs secretariat functions, monitoring the implementation of directions from the HCEG, working with Homefront agencies to formulate strategies, and making drawer plans for scenarios related to the crisis [MHA, n.d.].

Apart from having structures, what else is needed? Many experts argue that the first thing you need is to create a crisis management plan, and it should ideally cover the following:

a. ***Crisis Systems Assessment: Consider the set-up of a crisis management committee, a room, or a command post.*** This set-up allows all elements of the crisis, including sense-making and situation awareness of the range of issues, to be collated, analysed and for appropriate decisions to be taken. Some of the key elements of this include the following:

- Which agencies should be included in this meeting or the command setup?
- Should important private sector and NGO input be factored in?
- How is the media updated on the progress of the crisis and crisis management? Is there a dedicated media briefing room?
- How are VIPs updated, and is there a set-up for a VIP briefing room?

b. ***Crisis Assessment: Information gathering.*** Relevant information on the following is needed:

- How many people are involved? Are there any vulnerable groups of concern? Would there be language, cultural, or religious concerns?
- How long is this likely to last? When and how could it end? How do we see it ending?
- How many end scenario outcomes should we anticipate, and what plans and resources do we need to put into place to prepare for the various results?
- Are any laws broken, or are any regulations affected? How do we navigate the laws when there could be situations when no human bodies are physically found (but presumed dead)?
- What costs are there (health, money, reputation), and how do we mitigate these?

c. ***Crisis Leaders Assessment:*** *Managing Crises* argues that an important element of good crisis leadership is self-reflection by leaders and their team members.

- What are the personalities, values and strengths of the main leaders and the leadership team?
- Does the main leader of the crisis team have a sounding board or an SA buddy (situation awareness buddy) who can inform them about their mental state at various times and stages of the crisis?
- Are there hot reactors and easily agitated personalities?
- Should the key leadership team balance strengths and abilities? For example, should task-oriented leaders be supported with a people-oriented one?
- Should the "detail-conscious" leaders support the "big-picture" leader?
- Should we have some leaders in the team who may be content experts? E.g., for a medical crisis, some of the leaders in the team could be medical experts.
- Do we have some leaders who may provide an alternate view so that groupthink can be avoided? (Some ground commanders playfully call this the 11th man rule: when 10 people agree on something, the role of the 11th is to provide an alternate and differing view.)
- Has the team discussed the role of personal and team values? A conflict of values may affect group decision-making and group dynamics. Hence it is helpful to think about this and discuss the agreed-upon team values before the crisis occurs or even mid-way during the crisis to avoid dysfunctional conflict (note that some natural constructive conflict could be a good thing in group dynamics).

d. ***Crisis Assessment: Outline the Objectives and Mission Intent.*** Determine the objectives of the crisis management. This is sometimes easy to determine, and most occasions involve vital elements such as saving lives and property, reducing the magnitude of the crisis. However, it may be helpful to recalibrate, refine, and outline the mission intent and objectives at various phases and stages of the crisis. Mitroff (2004) makes a broad point about mission objectives, which is a good reminder: that good crisis leadership (as opposed to good crisis management) includes not just managing the crisis but reducing its impact and preventing future occurrences of it.

e. ***Crisis Communications Plan.*** Experts have warned that a crisis is always bad news, and bad news travels fast. Warren Buffet is known to have said: "One's objective should be to get it right, get it quick, get it out and get it over. Your problem won't improve with age."

In this respect, some of the main considerations include: How do you as an organisation develop a communications plan? How often do we communicate the development of the crisis? And how do we use key leaders to communicate within various phases of this crisis?

i) ***Who needs to know?*** A vital element of the crisis management plan is to decide who needs to know about the crisis including internal stakeholders. In Singapore, we have often communicated in different languages and even dialects or communicated using humorous videos on mainstream television and social media.

ii) ***A communications update plan for VIPs.*** It is also useful to consider whether you need to have a unique communications update plan for VIPs and top-level leaders, including political leaders. Top-level leaders and political leaders can be instrumental in helping organisations convey the main development of the crisis and play the role of reassuring the public. It has often been said that if you lack a VIP communications or update strategy, the VIPs may mismanage you, telling you what to do and how to do it, which can often become a point of frustration and annoyance.

iii) ***Managing rumours.*** It is important to expect rumours, misinformation and fake news and be prepared to address them quickly. This is natural because people are often seeking and craving for information during times of crisis.

Managing Self

Managing tasks, stakeholders and your officers very much depends on how you psychologically manage yourself. Managing yourself well during a crisis is important if you want to react optimally. Reacting effectively is an essential element of crisis

leadership. Therefore, it is important that leaders not only manage the operational and technical aspects of a crisis but also connect with the human elements of a crisis. Managing personal stress and learning adaptive ways of coping with acute and prolonged stress may be necessary. Below are some suggestions, but it is advised that leaders and managers attend courses and programmes to build stress management and personal resilience. In particular, because stress management is such an individual matter and unique to each person, it is hard to dictate one solution that will work for all persons. Hence, leaders and managers must discover and develop their understanding of what works for them.

Readers who want a real-life account of a practitioner who discusses these issues should read *The Heat of the Moment* (2019) by Dr Sabrina Cohen-Hatton, a neuroscientist who worked as the Deputy Assistant Commissioner of the London Fire Brigade and is now Chief Fire Officer at West Sussex Fire and Rescue Service (at the time of writing). She is also an Honorary Research Fellow at Cardiff University studying behavioural neuroscience and decision making.

Culling some of the useful suggestions from various sources, here are some tested solutions.

- Develop a social network of fellow leaders or friends where frustrations can be shared in a safe and psychological space. This allows us a cathartic avenue to ventilate before briefing teams of rescuers or facing difficult public situations. Do you have a situation awareness buddy who can tell you to your face if you are not making sense or are making poor decisions?

- Talking to others to ventilate can be therapeutic and comforting so that you will not feel the sense of isolation and sensory feeling. If you are comfortable, talk to a professional who may appreciate your challenges, e.g., a counsellor, a psychologist, or a psychiatrist whom you trust. The important thing is to select a professional who understands your nature of work and the issues you face.

- Sleep is important. It is hard to know if you are sleeping well and our self-reports of sleep quality are highly inaccurate. Usually, partners and spouses are good sources of information on your sleep quality (usually because you may be keeping them awake with your snoring). Thus, it is important for leaders to also think about a regular sleep pattern or rest schedule. Sleep directly connects with vigilance because the mind needs to be rested before it can sense-make, make decisions under stressful situations, and cope with information overload. Consider the value of sleep pods, rest pods, or build rest patterns into your work schedules. If hours of sleep are deemed a luxury during busy early moments of a crisis, invite experts to talk about power naps or recovery moments, and as power naps are shorter – 10 mins to 30 mins – there is greater room to involve them in your work and operations schedules. If you are not sure how to do so, approach a trained professional to help you with this.

- It is important to get some movement and exercise regularly because the nature of stress can cause a rise in different kinds of stress chemicals within the body.

- Another important element is to avoid substances such as alcohol and smoking. This can be quite a temptation, especially in situations where there are remote deployments where supervisors are not present and substances are used to numb the senses. For example, witnesses reported that during the Asian Tsunami operations, which saw thousands of dead bodies that needed to be processed for identification and forensic evidence gathering, investigators and crisis leaders often used heavy smoking to mask the pungent stench of decomposing bodies. Whilst some use of this may be understandable in the short run, long-term use can lead to health issues.

4. Reappraisal and Review

Let us be honest: have you read the Singapore Government's White Paper on the COVID-19 response? Or the 911 Commission Report on the Terrorist Attacks Upon the United States? Or the report on the Committee of Inquiry into the Little India Riot? Most leaders have not. But learning from past incidents can carry useful lessons.

Every crisis carries with it the opportunity for learning from the experience and making positive changes. One aspect worth studying is why the crisis occurred in the first place. What signals were missed? Which systems failed? For example, experts on building design may study earthquakes and their impact on buildings to build more substantial buildings and roads. Experts who study medical crisis will be able to better understand the nature of virus mutation and physiological susceptibility with a view to designing public health programmes. It is essential to do a "post mortem" or post-crisis audit to understand why the crisis occurred. Equally important is to assess the various systems that may not have prevented or mitigated the crisis in the first place.

Swiss cheese has been propounded as a useful model for understanding the failure of system defences in precipitating a crisis. In 2000, Professor James Reason of the University of Manchester in the UK published a paper in the *British Medical Journal* in which he described what he called the "Swiss Cheese Model of System Accidents". He reasoned that crisis leaders should think beyond, from treating mistakes as individual errors by "bad" people to a systems approach that accepts that humans are fallible. Mistakes are to be expected within various systems. Rather than blaming individuals, crisis leaders should try to appreciate why the failure happened to prevent it from happening again. The idea behind the systems approach is to build layers of safeguards. Many organisations believe that their defensive layers are impenetrable. But in the real world, they are not, and Reason likened each organisational defence layer to a slice of Swiss cheese with holes, like Emmental cheese. Following this metaphor, a hole in one layer will not pose a big problem, but when there are holes in many layers and they line up, that is when a crisis or disaster occurs (Reason, 2000).

Hence, a good crisis review is about reviewing the layers, reviewing the holes and reviewing when they align. Some important questions worth asking are:

a. Did we have sound signal detection systems as a layer?
b. Could we have recognised the signs of the crisis earlier – is there such a layer of defence?
c. Did someone warn us about the signals, but we simply ignored them? (Recall what Peter Ho refers to as the black elephants.)
d. How do we repair those holes and do we need new layers of defence? As a result of this line of thinking, as a good practice, a true crisis ready organisation needs a dedicated team which does this review with honesty (because we can be too polite just to give a person 'face'), review other case studies in the same industry so learning lessons can be shared, and develop a database of such studies.

" ...crisis leaders should think beyond, from treating mistakes as individual errors by 'bad' people to a systems approach that accepts that humans are fallible. Mistakes are to be expected within various systems. Rather than blaming individuals, crisis leaders should try to appreciate why the failure happened to prevent it from happening again.

5. Re-Learning and Preventing Corporate Amnesia

Learning from a crisis and previous crises can be helpful. This happens best when it occurs at three levels. The first is at individual level learning. How do leaders learn about preparing and responding to crises? One helpful way is to hear from other leaders, which could be arranged through fireside chats, discussions, or sharing from other leaders. Learning from international meetings, conferences, or sharing sessions may also be helpful, especially since we can learn from international incidents. The challenge for organisations is that learning often leaves the door when crisis leaders leave or retire.

Another level is how teams learn, and organisations learn. Peter Senge (*The Fifth Discipline*, 1990, 2006) has written a lot on organisational learning using structures and processes. This work has been well documented in the discipline of organisational learning. It includes systems and processes relating to how organisations measure, capture and share understandings within teams and organisations.

A useful parallel concept is "corporate amnesia", which captures why organisations forget (Dalkir, 2011). Very often the experienced crisis leaders walk out of the door, retire or resign. And there is a failure to learn from previous leaders. According to Macovel (2016): "Organisational memory is the accumulated body of data, information and knowledge created in the course of an individual organisation's existence." Falling under the broader disciplinary umbrella of knowledge management, it has two repositories: an organisation's archives, including its electronic databases; and individuals' memories. Corporate amnesia is a phrase used to describe a situation in which businesses and other cooperative organisations lose their memory of how to do things. How do we tackle this issue? Here are some strategies Macovel (2016) recommends:

- Create databases for storing and finding knowledge (reports, etc.).
- Do an After-Action Review or Post-Mortem at the end of each incident and analyse the elements that were successful or unsuccessful.
- Foster a culture where people are encouraged to communicate and share their know-how and ideas.
- Nominate knowledge experts so recruits can easily find the go-to people for a given subject matter.
- Implement succession-planning tools, including knowledge preservation, exit interviews, and handover sessions.

Another vital consideration is international learning. The COVID-19 pandemic illustrates that even if we do not coordinate efforts internationally, we become affected by those who cannot contain or mitigate the virus (in this case). If crises are increasingly global, should there be international exchanges and learnings or assistance at the global level? Should global crisis leadership working group meetings be held to pass on knowledge shared? According to *UN News* (2021), the World Health Assembly meeting was convened to decide on the issue of a "pandemic treaty". WHO Director-General Tedros Adhanom Ghebreyesus said the world had not responded well, and vaccine inequity, among other challenges, has facilitated the appearance of new highly mutated variants such as Omicron, adding: "Omicron demonstrates why the world needs a new accord on pandemics: our current system disincentivises countries from alerting others to threats that will inevitably land on their shores."

CONCLUSION

In conclusion, I hope this article has at least made readers minimally worried. Crisis leaders should at least be concerned about the complexity, un-ness and new difficulties of managing today's crises. But the assurance is that we can use a framework of readiness, which could be the 5 Rs of Effective Crisis Leadership. These are Recognising, Readiness, Reacting, Review and Relearning.

There are several final reflections in concluding this paper.

First, the most difficult element of effective crisis management may be the organisation's and leader's ability to learn and distil good practices. This requires critical analysis of what happened, what worked and why. Therein lies the rub. There is a tendency by some leaders to dismiss events of the past as being outdated, which is dangerous. In Singapore, we can still learn lessons from the Maria Hertog incident, the Sentosa Cable Car incident, the Pulau Senang prison riot, the Prophet Mohamad riots, and the Hock Lee protests as much as we can learn from the recent COVID-19 pandemic. But "double loop learning" is needed. The first loop is learning about the incident, what worked, did not work and mitigation strategies and tactics; and then as a second loop asking what the meta learnings (on principles) are. For example, the meta learning about the Hertog incident could be about race and religious sensitivities and the power of the media (and in today's world, social media) – all of which still remain important for Singapore.

Second, we live in a Singaporean society that simply moves too fast. This impedes the ability to reflect and hone learning, which some may argue is a crisis in itself. True learning requires deep thinking and deep conversations. True learning also appreciates that there are two sides to each crisis: how it was judged well and how it was misunderstood. In our own training,

we sometimes bring in "the other side" just to let participants appreciate the complexities. To learn better, we need spaces that allow deep reflection and not just a packed curriculum of content.

Third, each crisis leaves a scar of pain and of resilience. In Singapore though, these scars are quietly removed. Does anyone remember the site of the Little India Riot? Where exactly is the memorial for the victims of the Silk Air MI185 crash? Yet these scars show the fortitude of a nation that recovers and heals itself from each crisis. Scars give hope. Should we have some aspects of these to remind our younger citizens that we are strong and have survived hard crises? How do we do it in land-scarce Singapore?

Finally, the Home Team has helped out in crises affecting our neighbours including the 2004 Asian Tsunami, 2008 Sichuan earthquake and more as far afield as the 2023 Turkish earthquake. The culture of learning means we are always learning, not just from textbooks but also from engaging with practitioners at home and abroad. I think we are doing this very well and should continue to study such engagements at the end of each crisis with a view to drawing out lessons for our readiness frameworks.

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A NEW PARADIGM FOR MANAGING HOMELAND SECURITY RISK AND DAMAGE MITIGATION: A REVIEW OF JULIETTE KAYYEM'S *THE DEVIL NEVER SLEEPS*

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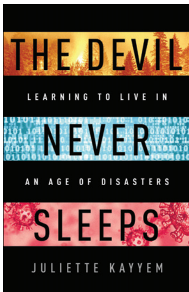
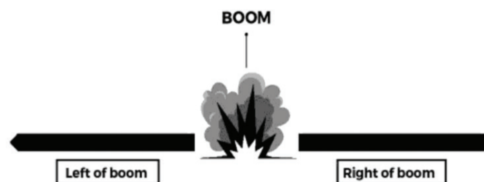


It is not often that an author challenges the paradigm in a field as well-tested as crisis management. Juliette Kayyem does just that in her book, ***The Devil Never Sleeps: Learning to Live in an Age of Disasters*** (New York: The Hachette Group, 2022).

Kayyem is a professor at the Harvard Kennedy School, director of the School's Homeland Security Program at its Belfer Center, former Assistant Secretary at the U.S. Department of Homeland Security, an acclaimed commentator on CNN, and a world-renowned expert on emergency preparedness, response and management. She is credited in the United States for, among other things, being one of the few and very first observers in March 2020 to fully grasp and declare publicly how COVID-19 would overwhelm the country and the world.

Kayyem proposes a sweeping change in the paradigm that has governed thinking in the field of crisis management over the past generation. Accordingly, the book – and the proposal it articulates – has received widespread attention in academic, policy and practitioner circles as well as among the public at large. This article summarises Kayyem's proposition, describes its implications for crisis and emergency management and explores its potential broader application to the homeland security enterprise in general.

Kayyem's thesis is straightforward: in our contemporary era of climate change, digital interdependence, and geographic compression, emergency has become the rule rather than an exception ("assume the boom"). Whether it is a "natural" disaster – a catastrophic weather event in the form of flood, earthquake and tsunami, wildfire, or drought – or a directly man-made one in the form of an extreme, penetrating cyber security breach, oil spill, mass shooting, or a pandemic of globally contagious disease, crisis has become commonplace in the sense of the Harvard Business School definition of the term: "a change, either sudden or evolving, that results in an urgent problem that must be addressed immediately." Whether these events of disaster are "black swans" (Nassim Taleb) or "grey rhinos" (Michele Wucker), their occurrence is predictable today in an age of polycrisis. Kayyem drives home the point, drawing on compelling case studies one after the other: Hurricane Katrina, the Boeing 737 MAX plane crashes, COVID-19, the Paradise (California) wildfire, British Petroleum's Deepwater Horizon, the cyber-hacks on Sony, Solar Winds and Colonial Pipeline, and so on and on. The devil never sleeps, and we/you are here



The two sides of a disaster framework.

Image taken from *The Devil Never Sleeps*

– waiting for him and the consequences he visits on individuals, families, communities and nations. This "now new normal" Kayyem describes in turn requires us to generate a revised paradigm to guide our thinking and then our action.

A paradigm, Thomas Kuhn told us more than 60 years ago in *The Structure of Scientific Revolutions* (1962), is a distinctive manner of viewing the world, shaped by the larger forces at work in any particular historic era. This "way of seeing" organises all of the data that is around us – all surrounding facts – into patterns that we can conceptualise, interpret, make sense of, theorise about and then operationalise. Epochal shifts in paradigms catalyse and embody enormous changes in how we problem solve and conduct business at any specific point in time.

Since it is now obvious that the devil never sleeps, Kayyem urges a paradigm shift in crisis management: "We can't wait anymore because the harm keeps coming, each new one unprecedented and therefore beyond our previously lived experience. We may not be able to stop them sooner than we can minimise their consequences… [h]arm will come when the devil returns, but he only wins if we don't do better next time."

Emergency management is traditionally centred principally on prediction, prevention and response – in other words, on efforts to avoid disasters and to prepare for them and respond as effectively as we can when they occur. These prevention and recovery measures focus – in now well-established doctrines and practices in the field – on the period preceding disaster or the so-called "left of boom." Kayyem does not denigrate the importance of these steps – such as standing up "incident command structures" (ICS) or issuing "situational awareness reports" (SITREPS) – to manage risk in terms of response. (Indeed, her own career has contributed materially to the development of this crucial capacity.) Nonetheless, in *The Devil Never Sleeps*, she counsels that we are advised in a time of recurrent crisis to devote much more attention – in our policies and practices – to the period "right of boom" when concrete consequences, frequently unanticipated, are confronted.

The key is to manage risk for mitigation ahead of time with a focus in preparedness planning

"… in our contemporary era of climate change, digital interdependence, and geographic compression, emergency has become the rule rather than an exception…

on *consequence minimisation*. Kayyem correctly distinguishes this focus from planning for either recovery or resilience. Both these laudable objectives could be facilitated by taking Kayyem's advice. Her chapter titles prescribe the requirements for minimising death, damage and loss when the devil appears and disaster strikes: *What's The Word* (spread situational awareness immediately and completely, with regular updates, and no sugar coating to operators and the public); *Unity of Effort* (bring everyone to the table and create a preparedness architecture and governance framework that does so); *Avoid the Last Line of Defence Trap* (build multiple fail-safe mechanisms into every key system); *Stop The Bleed* (recalibrate metrics of success and avoid cascading losses as far as practicable); *The Way We Were* (avoid preparing to fight the last war, stress test systems regularly through table top exercises and red teams, and build in continuous feedback loops, trying hard to think the unthinkable); *The Near Miss Fallacy* (pay close attention to near-misses, view them as red-siren warnings and take them as opportunities for worst-case scenario planning); and *Listen To The Dead* (focus on how people died in a disaster rather than only on the number of fatalities to avoid unnecessary indirect deaths when the devil returns in the future).

This catalogue summary of the elements of Kayyem's new paradigm does not do justice to the author's articulate exposition of its dimensions and the accessibility of her narrative to expert and layperson alike. The analysis is hard-headed and fact-based. She extracts the lessons from disaster experience reaching back in time (the tsunami of 1904 and the New Orleans hurricane of 1915 among others) as well as from still fresh memories (the Texas Power Outage and the Champlain Tower South Condominium collapse in Florida in 2021).

In each case, the "consequence minimisation principles" formulated artfully by Kayyem from these lessons of past tragedy deal with how we might have prepared to limit adverse outcomes and made them "less bad" than they proved to be at the time of boom. She presents examples of where this was not done (the Fukushima earthquake, tsunami and nuclear meltdown); and others where powerful lessons were heeded to prepare in advance and react quickly such that the injury and damage incurred were limited far more than otherwise would have been the case. One positive example: the US military's practice of on-scene medical care featuring tourniquet technique and material to limit soldier deaths after IED explosions in Afghanistan and Iraq was applied following the Boston Marathon terrorist attack in 2013, resulting in a similarly dramatic reduction in fatalities.

Kayyem finds additional positive examples in Chipotle's proactive and full court response to a food contamination event that struck the fast-food chain in 2018; and actions taken when a power outage shut down Super Bowl XLVII in 2013, that kept the stadium in New Orleans half-illuminated and prevented panic and injury. Less harm means more success at a cruel moment.

The Kayyem Paradigm has potential application to other facets of the homeland security enterprise, beyond crisis and emergency management and cyber security and critical infrastructure, which are explicitly addressed in ***The Devil Never Sleeps***. A number of other threat domains and response strategies central to homeland defence and security could also benefit from a sharper "right of boom" after-the-fact-of-harm analysis. These appear to include countering transnational organised crime, managing large scale irregular migration, securing international travel zones and the global supply chain, and containing the calamity of infectious disease such as COVID-19.

Consequences from these threats, including loss of life, bodily injury, damage to property, business interruption, and other harm to the homeland cannot be avoided by prevention and enforcement activities. Our experience bears this out year after year. Acknowledging the adverse impacts of these threats when they materialise in events, confronting their inevitability, and addressing the resulting consequences, beforehand and systematically – rather than wishing/hoping for their avoidance altogether – could yield valuable results in the form of reduced harm. Each homeland security mission – the United States Department of Homeland Security currently has six "enduring" missions (Counter Terrorism and Prevent Threats; Secure and Manage Our Borders; Administer the Nation's Immigration System; Secure Cyberspace and Critical Infrastructure; Build a Resilient Nation and Respond to Incidents; and Combat Crimes of Exploitation and Protect Victims) – and the sub-missions within them, would require separate analysis to determine the applicability and potential effectiveness of a "consequence minimisation" lens.

Applying the strategy of "damage mitigation" to transnational criminal organisations engaged in fentanyl trafficking, for example, would entail (a) on the supply side, a strategy of "disruption" (Bersin and Lawson, 2020 and 2021): focusing on the interdiction – seizure and destruction – of fentanyl/precursors, powder and pills, without regard to the rules of evidence necessary to convict criminal participants, and (b) on the demand side, focusing on a public health agenda to reduce consumption and deaths among users. Continuing assessment of the results of these strategies by homefront security practitioners and analysts would importantly influence budget allocations among the various activities designed to counter the underlying threat.

More broadly, little progress has been made by the West in the so-called "war on drugs" in the sixty-

"Acknowledging the adverse impacts of these threats when they materialise in events, confronting their inevitability, and addressing the resulting consequences... could yield valuable results in the form of reduced harm.

plus years that it has been waged. At some point downstream, authorities in North America, Europe and Oceania are going to have to accept this fact and reformulate a comprehensive alternative approach to narcotics that integrates enforcement with a public health dimension. In the interim, until this broader strategic change becomes politically viable, building "harm reduction" into the homeland security calculation regarding transnational crime appears to embody a sounder public policy approach than continuing to rely principally on law enforcement and criminal penalties.[1]

When the devil visits us in the form of an extreme weather event, a terrorist attack, or a crippling cyber intrusion, the emergency and the damage associated with it, are palpable, immediate and noticed. The absence of a discrete and discernible "boom" or crisis event in other threat scenarios should not keep us from heeding Professor Kayyem's advice to manage risk for mitigation there as well.

The harm generated by these homeland security challenges – such as organised crime or contagious disease – while less concentrated in their damage effect, may be even more debilitating to society over time. Keeping the devil at bay in this context may require a consequence minimisation strategy at the core of the mission. The prospect of less harm and an institutional commitment to "do better next time" unquestionably could contribute to a stronger, more resilient and more secure homeland. Kayyem's book furnishes an insightful blueprint to this end – that homeland security operators are advised to consider carefully and build as warranted and feasible, into their respective mission spaces.

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[1] In fact, this hybrid approach appears to be taking root in the United States in the form of wide distribution of naloxone (a medication to reverse drug overdoses); increased budgetary support for addiction treatment programmes; the decriminalisation of needle exchanges and fentanyl test strips in many state jurisdictions; and even supervised injection sites (Interlandi, 2023).

Before entering public service, Bersin was a senior partner in the law firm of Munger Tolles & Olson. He received his Bachelor of Arts in Government from Harvard College (magna cum laude), attended Balliol College at Oxford University as a Rhodes Scholar, and received his Juris Doctor from the Yale Law School. Bersin is a member of the Bars of California, Alaska, and District of Columbia.

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DEALING WITH THE COMPLEXITY OF DECISION-MAKING IN A CRISIS

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ABSTRACT

Crises occur cyclically[1] and can result in serious time-sensitive financial, social, psychological, political, infrastructure or health shocks. They are characterised by the perceived value of loss, probability of loss and perceived stress. This creates complex decision problems which many leaders worldwide must deal with. In this article, we describe five facets of complexity of decision making: 1) choice structure, 2) choice information, 3) dynamic change, 4) interconnectedness in a choice problem, and 5) choice environment. Identification of complexity facets helps to identify why a decision problem is complex and what decision strategies would be most useful to tackle it. We outline some well-established techniques for analysing and quantifying decision problems in behavioural sciences. We propose a three-step action plan that makes use of these techniques to facilitate reducing complexity of a decision problem. The goal of this article is to translate scientific knowledge and findings to practical applications of decision-making in the face of the complexity of modern crises. The insights presented here account for the fact that human nature generally remains constant, while the times and situation in which we live constantly evolve, making it difficult to respond to new crises in the same way as to past crises.

DRAWING LESSONS FROM PAST CRISES

Decisions taken during a crisis are often made under conditions of uncertainty, where limited information, unpredictable variables, and future uncertainties can make the decision-making appear as difficult, demanding or hard-to-solve. This decision-making process can be impacted by external factors such as social dynamics, cultural norms, and organisational constraints, adding more layers of complexity. The interplay of all these elements makes decision-making a challenging and multifaceted process. Additionally, human cognitive biases and emotions can play a significant role, as they can affect judgment of the situation at hand.

In this article, we postulate that understanding the nature of complexity of a decision problem can facilitate its simplification and a corresponding decision process. Towards this aim, we outline and explain five facets of complexity of a crisis using the framework proposed by Andraszewicz (2023). Next, based on the existing literature in the domain of judgment and decision making, psychology and behavioural economics, we propose a three-step action plan for leaders and practitioners that could help them take decisions during crises more efficiently, potentially leading to less biased and more structured decision outcomes.

Decision-making during crises is inherently complex because of five factors:

1. the available information necessary for decision may be presented in a random, unstructured, or non-optimal way;
2. the available information is scarce or incomplete,
3. the information, the situation and the available choice options change dynamically;
4. the aspects that need to be considered may be interconnected in a non-linear fashion; and

[1] Sornette and Ouillon (2012) have found in their research of various crises, shocks and extreme events (which they call "Dragon Kings") that crises are cyclical, but the exact timing of their outbreak and duration are difficult to predict.

5. the choice environment, both the physical environment and the decision context, can be confusing, disturbing or stressful.

Dealing with these aspects can be considered a transferable skill applicable in diverse critical situations. While the source of various crises differs, the crises themselves share numerous similarities.

Firstly, they occur suddenly, resulting in significant negative consequences for many people. Furthermore, they ultimately lead to a restructuring of social and/or legal systems during the recovery phase. Consequently, post-crisis societies tend to exercise greater caution and exhibit heightened awareness of potential risks (Malmandier and Nagel, 2011). However, each crisis possesses unique characteristics, introducing unforeseeable elements. For instance, the dotcom bubble crash resulted from the overvaluation of Internet technology and excessive spending by tech companies. In contrast, the COVID-19 crisis arose from a range of challenges faced by businesses amidst a pandemic, such as disruptions to the supply chain, travel restrictions, staff absences, and more. This also resulted in financial crash followed by a long-lasting financial crisis, which poses a useful example for studying global crises in a digitalised world.

When analysing such case studies, to what extent can we draw lessons from previous crises to improve our decision-making abilities going forward? How does the ever-evolving decision landscape, influenced by increasing globalisation and digitisation of society, influence our choices despite the unchanging aspects of human nature, such as a proclivity to panic in uncertain circumstances? Before answering this question, it is crucial to understand key characteristics of crises.

WHAT ARE CRISES AND HOW DO WE DEAL WITH THEM?

The dictionary definition of a crisis is a time-sensitive and volatile situation marked by a critical point that necessitates an urgent decision with irreversible consequences (Merriam-Webster Dictionary). It is characterised by unexpectedness, brief decision-making time, and the potential for significant value loss (Hermann and Brady, 1972). Identifying a problem as a crisis depends on one's perception of the issue. Billings, Milburn, and Schaalman (1980) propose a crisis perception model based on three factors: 1) the perceived value at stake, 2) the perceived likelihood of loss, and 3) the perceived time pressure. These factors influence whether a problem is perceived as a crisis and determine its severity.

This crisis perception model is closely connected to the framing of choice theories. Researchers studying decision-making, at the intersection of psychology and economics, often translate choice problems into mathematically defined simple gambles. These gambles encompass potential outcomes (values or prospects) and their corresponding probabilities. Certain decision-making theories, such as diffusion models, assume that there is limited time for deliberation, meaning that when time is constrained, a decision must be made even if the available evidence supporting a chosen option is limited.

Consider a scenario where a decision needs to be made regarding the implementation of a stringent, comprehensive lockdown by the government amidst the COVID-19 pandemic (see Figure 1 on the next page). The outcome of this decision is contingent upon the emergence of a highly transmissible virus variant. In this context, the government is confronted with the task of balancing the preservation of human lives and the preservation of the economy.

Decision scientists, along with their development of decision-aid tools, simplify decision problems by translating them into basic gambles also known as lotteries or prospects (refer to Figure 1). In the decision problem at hand, the lotteries depend on the likelihood of a new virus variant occurring. The decision problem at hand involves two key attributes: saved lives and saved businesses. Numeric values can be assigned to each attribute based on mathematical or economic estimations. For the purpose of this illustration, the specific numerical values are arbitrary.

If the government were to focus solely on one attribute of this decision problem, such as preventing loss of life, they would employ the "take-the-best" strategy. This strategy involves selecting the prospect that offers the highest outcome (+50) in terms of the "saved lives" attribute, regardless of the significant economic consequences. Accordingly, the government's decision would involve implementing a strict lockdown, irrespective of the potential negative impact on the economy, as the take-the-best strategy maximises the outcome of saving lives in both

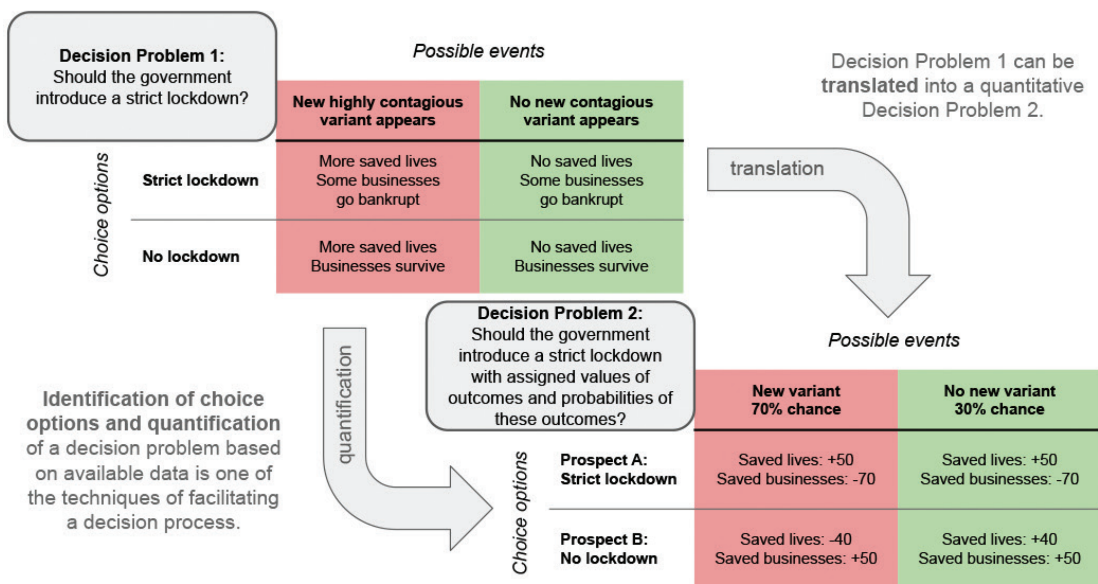

Figure 1. Translation and quantification of a decision problem into possible events and outcomes to facilitate a decision problem

scenarios – whether the new variant occurs or not. However, if the government were to adopt a strictly rational economic approach, their goal would be to maximise the expected value of their decision. In this scenario, prospect A yields a negative expected value of -20, while prospect B yields a positive expected value of 34. This indicates that choosing prospect B would be more advantageous from an economic standpoint.

It is crucial to note that real-world decision problems faced by governments require a more nuanced response, as demonstrated by the highly adaptive approach taken by Singapore's Multi-Ministry Taskforce. They continuously evaluate the public health, economic, and social consequences, recognising the need for a comprehensive perspective. This exemplifies how complex decision problems can be quantified to develop decision aids for policymakers, enabling them to move beyond impulsive and automatic responses and make timely, but deliberate and well-informed choices.

According to Nobel laureate Daniel Kahneman, the human brain operates through two systems: System 1, which involves fast, instinctive, and emotional decisions; and System 2, which is responsible for slow, deliberate, and rational decisions (Kahneman, 2011). System 1 often leads to immediate decisions without considering the full consequences, such as implementing a strict lockdown in response to a disease threat. On the other hand, System 2 is associated with thoughtful decision making, and individuals with higher cognitive skills can suppress their immediate responses and engage System 2 thinking to solve complex problems (Mechera-Ostrovsky et al., 2022). However, System 1 decisions can also be effective when time is limited or when information is incomplete. Cognitive psychologists have identified various decision processes, referred to as the adaptive toolbox, that are activated in different decision problems (Gigerenzer & Todd, 1999).

In contrast to static decision problems, where decision-makers face well-defined choices, dynamic decision theory (Edwards, 1961, 1662) presents decision-makers with a sequence of intermediate decisions occurring at different stages of a problem. This is known as a dynamic decision problem, where the outcome depends on the sequence of decisions and the gradual resolution of uncertainty at each stage (Murphy, Andraszewicz & Knaus, 2016).

When considering the decision to implement a lockdown as a dynamic decision problem, we can envision the government facing intermediate decisions every second day over a two-week period. If the number of infections exceeds a certain threshold, the government may introduce new restrictions or take no action. Conversely, if the

number of cases decreases, the government may loosen some restrictions or maintain the status quo. If the increasing infections indicate a serious threat, the government's restrictions may escalate to a complete lockdown. Conversely, as the number of infected individuals declines, indicating the end of a pandemic wave, the government may eventually ease all restrictions. However, if the government fails to incorporate infection information effectively, it may implement a lockdown when unnecessary, resulting in substantial economic losses. Poor decision-making could also lead to a failure to impose a lockdown when necessary, resulting in significant loss of life.

Murphy, Andraszewicz, and Knaus (2016) have formulated this problem as a simple game, where decision-makers face multiple investment decisions and the uncertainty surrounding their combined investments gradually resolves over time. They conducted two laboratory experiments involving university students in Singapore and found that most participants employed a suboptimal strategy of naïve diversification, investing intermediate values at each stage of the decision problem. A mathematical solution suggests that one should refrain from investing until the probability of success exceeds 50%, maximising the expected value of the complete sequence of decisions. Applying this logic, the government would impose no restrictions unless the probability of hospitals reaching capacity is at least 50%. If the likelihood of hospitals running out of beds and medical staff is 50% or higher, the government would opt for a complete lockdown.

However, most governments worldwide did not follow this simplified optimised approach. Instead, they introduced restrictions gradually, allowing citizens to adapt to the new circumstances and minimise the shock associated with sudden measures. In scientific terms, a strict lockdown can be considered a paradigm shift, and such shocks can lead to psychological problems in some individuals (Richardson, 2002). People cope with paradigm shifts like the COVID-19 pandemic differently (Rettie & Daniels, 2021), with varying levels of psychological resilience to crises.

Psychological resilience denotes an individual's capacity to easily adjust to a significant change in circumstances. Numerous definitions exist for psychological resilience, all centring on a person's aptitude to swiftly bounce back from a shock, an adverse occurrence, a trauma, or a challenging situation (Fletcher and Sarkar, 2013). However, the literature lacks a precise delineation of the intensity of an adverse event that would categorise it as a negative experience. This ambiguity arises from the subjective nature of gauging event negativity. In other words, relating to the crisis theory by Billings, Milburn and Schaalman (1980), whether a situation is perceived as a crisis or not, is subjective. Therefore, when leaders make decisions that affect their constituents, it would be prudent to consider the level of psychological resilience uniformity prevailing within society. That is why introducing measures step-by-step may account for the heterogeneity of people's psychological resilience, by taking care of the less psychologically resilient individuals who need more time to adjust to the new situation. While this approach may be more considerate of the well-being of the individuals in the society, it may not be economically most optimal.

Experiencing Uncertainty and Unknown Outcomes

An ability to efficiently deal with decisions in complex environments requires two core skills: 1) dealing with uncertainty and 2) dealing with failures and outcomes that are doomed to have no single "correct answer". Refugee crises, which we have witnessed in Europe and many other places worldwide, illustrate well a case with no single correct solution and evolving uncertainty. Not accepting war and famine refugees in one's country is a difficult solution but accepting too many people or not facilitating their integration in the local community could cause a chain of further problems and crises, such as overloaded social security system, shortage of housing, language teaching and education burdens for the newcomers, etc. Decision-makers dealing with such situations should accept that a win-win situation may be impossible to find, and that the public opinion may be dissatisfied with their decisions, independent of what that decision would be. In migration crises, it is uncertain how many people would arrive asking for refugee status, how long an immigration wave would take place and how many would return to their country of origin or migrate further.

In dynamic and evolving circumstances, decision-making relies on the process of sensemaking. Sensemaking involves interpreting collective experiences and knowledge to create meaning. It entails integrating fragments of information to form a

rational understanding of a problem (Weick, Sutcliffe & Obstfeld, 2005). In this context, government decision makers engage in sensemaking as they gradually acquire and utilise available information throughout the course of the pandemic. Nevertheless, sensemaking does not result in completely informed judgment and decision making. On the contrary, many people would colloquially describe it as their "gut feeling", while decision making researchers would refer to this as the intelligence of the unconscious (Giegerenzer, 2007). That is why decision makers operating in uncertain environments should be prepared that, despite their best efforts, their decision may turn out wrong. Preparedness for own and other people's decision failures should be an integral component of crisis decision-making.

However, being prepared for unknown outcomes is not an easy task. Individuals facing persistent uncertainty without a single correct solution use up much more metabolic (i.e., glucose) and cognitive resources. Cognitive resource can be conceived as the brain's attention directed to a particular task (Bernardi & Salzman, 2017). While working on a novel difficult task, you might have noticed that you crave foods high in glucose, such as sweets or pasta, while experiencing mental fatigue. This is how it feels to you when your brain uses more resources to deal with a complex task. A key reason for this is that in complex situations, the brain works towards conflicting goals (Hirsh, Mar & Peterson, 2012) such that directing energy to one goal (i.e. saving people's lives) may hinder working towards another goal (i.e. saving the economy). Research from cognitive psychology demonstrates that people show preference for visual and auditory stimuli with less noisy information and stronger core information (Andraszewicz, Yamagishi & King, 2010; Bruckert, Bestelmeyer, Latinus, Rouger, Charest, Rousselet, Kawahara & Belin, 2009; Valentine, Darling & Donnelly, 2004). The explanation for this phenomenon is that the brain uses less resource to process these less noisy stimuli.

Adapting to uncertainty indeed poses a serious cognitive challenge. The amount of uncertainty about a system is measured with entropy – a concept originating from thermodynamics that defines the amount of energy in the system that cannot be used to transform a system from one state to another. Hirsh, Mar and Peterson (2012) use physics theory to define psychological entropy as "the experience of conflicting perceptual and behavioural affordances". They identify two major domains of uncertainty: uncertainty about perception and uncertainty about action. These two domains clearly relate to the two skills that a successful decision-maker needs to possess – the ability to feel and endure uncertainty about the situation and ability to endure and deal with uncertain outcomes.

Enduring and dealing with uncertain situations with potentially negative events is an emotional experience. "Uncertainty is experienced subjectively as emotion of anxiety and is associated with activity in the anterior cingulate cortex and heightened noradrenaline release" (Hirsh, Mar & Peterson, 2012). Cognitive psychology research indicates that anxious persons interpret ambiguous situations as more negative and may perceive negative events to be more likely than positive events (Blanchette & Richards, 2010). A decision-maker should be aware that decisions may be driven by their own emotions and how they can best deal with these emotions.

Experiencing uncertainty is usually accompanied by higher production of cortisol – the so called "stress hormone". Cortisol is a hormone that suppresses our immune system in critical situations to reduce inflammatory response (Hassig, Wen-Hi & Stampfli, 1996). In other words, this hormone would prevent one's injured leg from swelling in a situation when one has to run away to seek shelter. However, our bodies also produce more cortisol in stressful decision situations, where chronic exposure to stress may result in elevated cortisol levels and chronically suppressed immune system leading to infections and physical (i.e., a flu or high blood pressure) and psychological (i.e., depression) diseases (Dorshkind & Horseman, 2001; Lob & Steptoe, 2019; Tafet et al., 2001).

Does this imply that all people taking decisions under an enormous stress (e.g., people working in the military) are chronically sick? This is clearly not the case. The Cognitive Load Theory assumes that humans have limited cognitive and working memory resources meaning that when these resources are heavily used, a person is unable to perform a task well or at all (Bannert, 2002). Cognitive load theory of effective leadership proposes that a decision-maker is likely to rely on their intelligence (i.e., rational analytic reasoning) in low-stress situations, while they switch to using their experience when facing a high-stress situation

(Fiedler & Garcia, 1987). This theory postulates that stress turns off a decision-maker's rational thinking. Consequently, they switch from using the switch from using the slow System 2 to fast System 1 and use heuristics (i.e., mental shortcuts) that are based on their experience with dealing with similar situations. In this logic, stress present during decision making in complex situations activates use of simple heuristics. Here, we propose that heuristics derived from more experiences similar to the problem at hand should result in less biased decisions (Giegerenzer & Todd, 1999).

Preparing for the Unknown: Techniques and Tools

"Experience has a crucial role in learning and forming judgments" (Hogarth & Soyer, 2015a, p.1801). Several studies show that simulated experience leads to more accurate probability judgments (e.g., Hogarth & Soyer, 2015a) and statistical information communication (e.g., Hogarth & Soyer, 2014; Hogarth & Soyer, 2015b). Simulated experience refers to having people experience possible outcomes of their decision through a simulation. In a more realistic setting, Bradbury, Hens and Zeisberger (2015), and Kaufmann, Weber and Haisley (2013) have demonstrated that exposing people to sequential sampling from the distribution of possible outcomes of assets and asking participants to make sequential decisions between allocating their resources in a risky asset or a risk-free asset, results in better decisions.

Kaufmann, Weber and Haisley (2013) have developed a risk tool to communicate risk-return ratios through a simulated experience. This line of research shows that people, even those reporting to be experienced in financial decisions, change their risk-taking after simulated experience. For example, in the study by Bradbury, Hens and Zeisberger (2015), 51.4% of participants changed their product choice after experiencing the simulation.

In situations when simulated experience is not available to a decision maker, imagining being in a particular situation can sufficiently induce the feeling of the situation. For example, imagining that there is an upcoming market crash can increase one's risk-aversion and affect the investment in risky assets (Cohn, Engelmann, Fehr & Maréchal, 2015). A simple exercise of imagining "how would it be if" could help decision makers anticipate potential outcomes. Following this coping strategy, one could imagine a number of possible paths that depend on different decisions. This strategy is like building decision trees, where each branch can further branch out in different directions. A decision maker could also try to assign estimate probabilities to each of these branches. This is usually done by quantification of one's forecast (Mellers et al., 2015; Tetlock & Scoblic, 2021).

Developing paths of potential events requires that a decision maker identifies potential consequences of their decisions, depending on different states of the world in the future. If a person decides whether to take an umbrella when going outside, the potential events could be heavy rain, light rain, and sun, while the potential consequences of the decision to take an umbrella would be staying dry and carrying an extra item in all cases. The potential consequences of not taking an umbrella would be getting completely soaked, getting slightly wet or staying dry while not carrying an extra item. Step-by-step, the decision maker could estimate the potential probabilities of each of these events happening. For example, if the sky is blue and the sun is shining, the probability that there will be rain within the next half an hour is less than 50%. However, if there are clouds in the sky, the probability of rain (heavy or light) may be more than 50%. If the clouds are dark, the wind is strong, the heavy rain may be more likely than light rain, indicating the probability of heavy rain may lay in the interval of 60-80%. One can further update this forecast after collecting evidence about the changing weather fifteen minutes later. This data would help estimate whether the probability of heavy rain is closer to 60% or closer to 80%.

In crises, developing such decision paths may require a more complex forecasting approach. Many countries globally are experiencing infrastructure crisis which refers to deterioration, malfunctioning or inefficiency of basic infrastructure including roads, railways, ports, water, and telecommunications (Mirza & Ali, 2017). On 14 August 2018, Morandi bridge close to Genoa, Italy, collapsed under heavy traffic following a torrential rainstorm. This event resulted in 43 deaths, 16 injuries, damage of an essential railroad connection and substantial damage of a warehouse. This disaster caused loss of life, further damage of basic infrastructure, financial losses due to damage and disruptions (Morgese, Ansari, Domaneschi, & Cimellaro, 2020). Was it possible to foresee the disaster and prevent it? Earlier and ongoing bridge maintenance works, the planned re-routing of the traffic to a newly built road indicated some degree

of predictability of the event. However, some factors, such as sudden extreme rainfall or delayed policymaking might have made the prediction of the time window of a potential collapse of the bridge more difficult if not impossible.

The Italian bridge is not a single case of infrastructure crisis. Developed economies, such as Germany, France, UK and the US, are facing 30-47% bridge deterioration or deficiency. The core contributing factors include ageing infrastructure, shifting extreme climate conditions, "living rivers" (i.e., changing water levels in rivers) and socio-economic impact (Michalis & Vitzileou, 2022). Designing sustainable and reliable infrastructure means planning for maintenance and changes in the natural environment and trends in the society, where each of these changes occur at a different pace. Can an engineer reliably plan for 50 years of various changes? Can a policymaker without sufficient engineering knowledge confidently decide on intermediate actions for maintenance and changes in the infrastructure? Science proposes various decision support tools to integrate the available data and forecasting models, and to communicate these outcomes to the decision-makers.

Quantification and organisation of evidence can be facilitated using various decision aid tools. For example, the fast-and-frugal trees (Hafenbrändl, Waeger, Marewski & Giegerenzer, 2016; Philips, Neth, Woike & Gaissmaier, 2017) are a good solution to translate a large amount of data into simple rule of thumbs that can be used when time is scarce. The fast-and-frugal-trees are decision trees which use machine learning to trim branches to the minimum. Each branch asks a yes/no question. If the answer is yes, the branch directs to the next node, otherwise, it exits the decision process.

Presentation of information about a decision problem can significantly influence one's decision. Therefore, the decision aid tools should utilise choice architecture that is either unbiased or create nudges that direct the decision makers to the most rational decisions. The term nudge has originally been coined by Richard Thaler (2018), who developed an idea that certain decision problems can be presented such that decision makers make choices in agreement with what the decision architects have in mind. These strategies have been massively used in marketing, to make customers prefer certain products over others. However, nudges could also be used to simplify complex decision problems, by, for example, amplifying the most important attributes, or helping to ignore less relevant information.

Also, adding or removing a single alternative can alter the choice environment. For instance, introducing an irrelevant choice option that is inferior to all other available options in most aspects but shares similarity in one attribute can draw the decision-maker's attention to that specific attribute, diminishing the importance of other alternatives. This phenomenon is known as the decoy effect and is just one of several context effects that alter the choice architecture.

Context effects are not limited to choice architectures but can also manifest in physical environments. For instance, user interfaces with a large number of elements, where only a subset is relevant to the decision at hand, create high-clutter environments. These environments are more complex compared to low-clutter ones (Ognjanovic et al., 2019). Similarly, a noisy room filled with various stimuli unrelated to decision-making, such as overhearing colleagues' phone calls in an open-space office, also contributes to a more complex environment.

WHAT IS DECISION COMPLEXITY?

In the domain of Judgment and Decision Making, the concept of choice complexity is a multifaced concept and it typically refers to either the number of available options or the number of attributes that a decision-maker needs to consider. The greater the number of options or attributes, the more intricate the decision task becomes (Payne, 1976; Payne et al., 2008). As the number of alternative choices increases, individuals tend to analyse fewer attributes for each option (Payne, 1976; Timmermans, 1993). Dijksterhuis et al. (2006) propose that in decision problems with numerous attributes or choices, it is advisable to rely on unconscious thinking (i.e., gut feeling) for attaining the most "optimal" solution. On the other hand, Payne et al. (2008) have conducted experiments demonstrating that conscious thought (i.e., explicit deliberation on a problem) can yield results that are at least as good, especially when the decision process is self-paced.

To better understand the nature of complexity of decision-making, Andraszewicz (2023) proposes a framework outlined in Figure 2, which defines complexity of a decision problem based on five

facets, four of which describe the nature of a decision problem and one determines the complexity of the decision environment. The term "choice environment" is used broadly by decision scientists, encompassing both the surrounding context and the presentation of a choice problem.

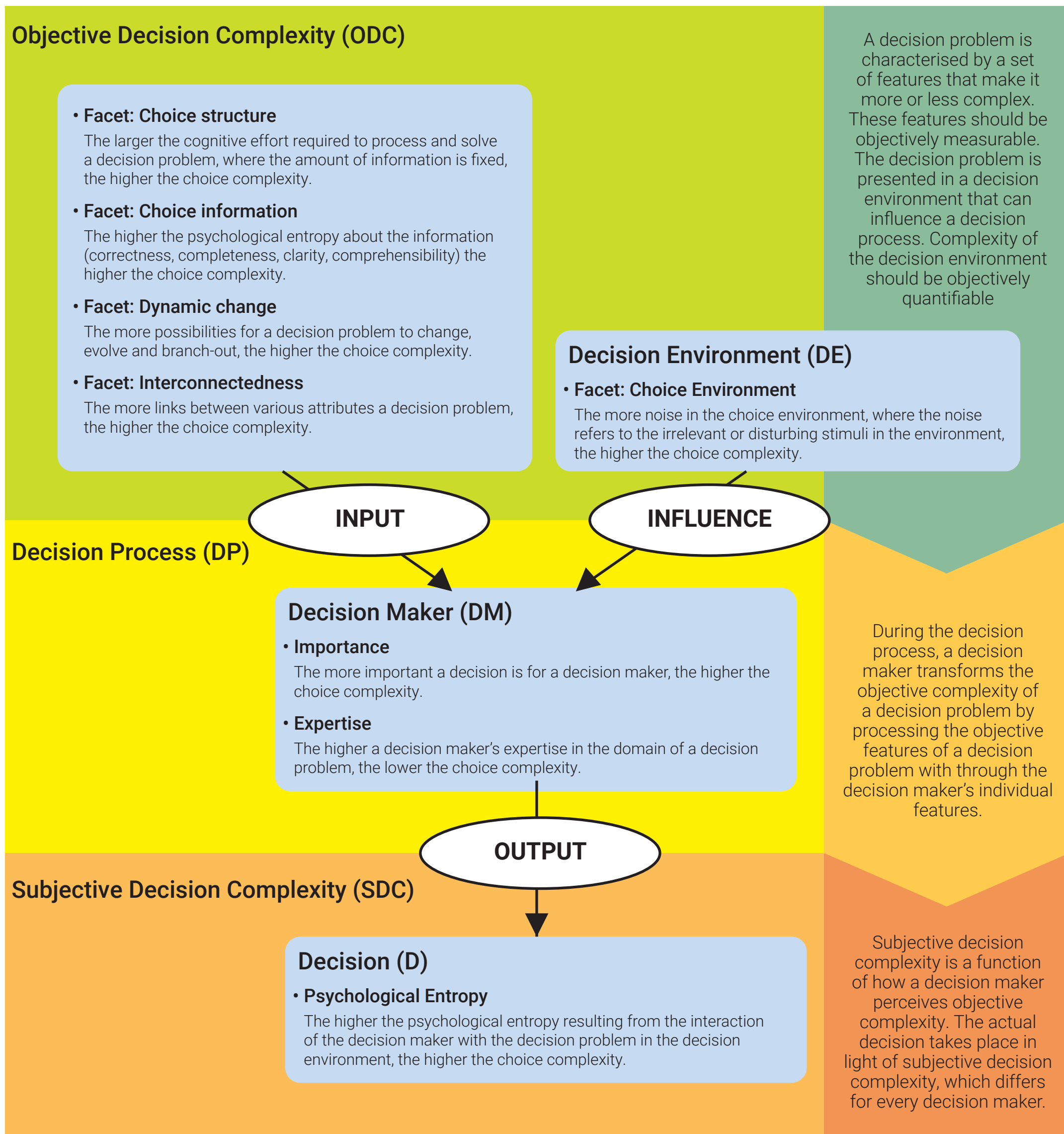

Figure 2. Framework of complexity of decision making adapted from Andraszewicz (2023)

The framework demonstrates that objective complexity of a decision problem is processed by a decision maker and results in subjective complexity depending on how the decision problem is perceived by the decision maker. Subjective decision complexity depends on the psychological entropy that the decision maker experiences while making a decision, while psychological entropy reflects the amount of uncertainty about the decision that the decision maker experiences.

According to this framework, a decision maker integrates the decision problem and is influenced by the decision environment. Then, they process the decision based on their expertise and their perceived importance and criticality of the decision problem. Finally, they take a decision which is related to a certain level of uncertainty about the correctness of this decision. This refers to the psychological entropy that results from solving the decision problem. This framework postulates that objective decision complexity is "processed" by decision makers, who differ in their expertise and perception of the criticality of the decision problem, and it results in subjective complexity of decision making. In simple words, an experienced decision maker may find the same decision problem less complex than a less experienced decision maker, while a person who finds a decision important would find it also more complex than a person who does not see the situation as critical. Different facets of complexity may vary in their impact on different decision-makers. Each decision-maker may use different coping strategies when dealing with their psychological entropy about their decision. Also, many crises involve more than one decision-maker, each with different decisive powers in different aspects of a decision problem. Therefore, it is crucial that a decision-maker is aware of their possible choice options, a phenomenon that is called the situation awareness (Salmon, Stanton & Jenkins, 2017).

REDUCING COMPLEXITY OF A DECISION PROBLEM

Simplification of a complex decision problem can take place at three levels:

1. the problem and the environment in which it is positioned (i.e., the objective decision complexity),
2. the individual traits of the decision maker (i.e., the decision process), and
3. the interaction between the decision problem and the decision maker (i.e., the subjective decision complexity).

At each of these levels, a decision-maker can take different actions, resulting in a three-step action plan:

Step 1

Initially, it is crucial to timely gather, structure, and evaluate pertinent information relating to the problem. This objective can be accomplished through the implementation of databases and algorithms capable of transforming the existing data into quantifiable characteristics and potential courses of action. It is important to identify which facets of complexity play crucial role in a decision problem at hand. This information can be promptly leveraged to guide the decision-making process.

Step 2

In the second step, a decision maker should consider their individual traits and states. To increase decision-making experience and mitigate stress and the influence of biased thinking patterns known as "bad heuristics," we suggest incorporating simulated experiences into the decision process. Simulated experience involves allowing individuals to envision the potential outcomes of their decisions through simulations. In situations where real experiences or exercises are not feasible, imagining potential events and the consequences of one's decisions can still shape the decision-making process.

Step 3

In the third step, a decision-maker must deal with the consequences of their decision. To be well-prepared for any potential novel situation, leaders should develop decision making plans and practice employing them in hypothetical scenarios. While crises may exhibit cyclical patterns, they are never identical to past occurrences. Thus, decision makers must bear in mind that the objectively "right" or "wrong" decisions are unknown. Instead, decision makers must make a series of intermediate decisions that can be adapted to a changing and evolving reality. The outcomes of this sequence of decisions can vary, leading to both better or worse results.

CONCLUDING REMARKS

Making complex decisions is a multifaceted task that requires careful consideration. It is crucial to recognise and understand the different aspects of complexity involved in decision making at any given moment. This allows us to address uncertainties by taking into account as many factors as possible. According to Gorzeń-Mitka and Okręglicka (2014), strategic decision-making in complex environments necessitates the

cultivation of meta-cognitive skills – skills that help individuals process information and self-reflect. These skills provide decision makers with a toolbox of decision-making options to utilise when facing unfamiliar situations. By navigating various outcomes, decision makers gain valuable insights and develop the necessary skills to handle future challenges effectively.

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POLICE LEADERSHIP IN THE POLYCRISIS: EXECUTIVE LEADERSHIP DEVELOPMENT FOR COMPLEXITY

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ABSTRACT

The World Economic Forum's (WEF) report on Global Risks presented at Davos in 2023 introduced the word "polycrisis" to refer to "a cluster of related global risks with compounding effects, such that the overall impact exceeds the sum of each part" (WEF, 2023). The WEF report and others, including the annual threat assessment of the US intelligence community, reveal that when it comes to crises, leaders are preparing for a long road ahead. In this paper we contend that to manage the polycrisis, leaders and the organisations they lead need a globally connected mindset, a systems outlook and orientation, and must invest in additional individual and collective capabilities that enable them to think about their contribution to safety and security innovatively. In this article, we focus on how as leadership educators, we can better prepare our police leaders for this era of polycrisis. We start by exploring the nature of the polycrisis and complex adaptive systems, before offering a framework for understanding organisational strengthening.

THE ERA OF CONVERGING COMPLEX CRISES

In early 2023, the World Economic Forum (WEF) sounded the alarm about the shifting nature of the crises that businesses, organisations, and societies will face:

> Leaders are facing multiple crises that are happening at the same time, so essentially a polycrisis. When we asked leaders what they're expecting to happen well over 80% said that we're looking at consistent ongoing crises that are compounding on each other on an increasingly volatile trajectory (WEF, 2023).

Policing is no stranger to dealing with emergency events. In many ways, responding to such crises is a strength that our profession can be rightly proud of. Policing has developed a swathe of effective mechanisms – often in the form of agreed and repeatable incident management structures – that allow each member of the response to understand role and function. Such crisis response structures are authority-based and are supported by established and repeatable practice, including briefing cycles, planning frameworks and real time incident management systems.

But leading in the era of polycrisis is – we believe – different. The polycrisis is not simply additive: a higher number of emergency events occurring sequentially or simultaneously. The polycrisis is characterised instead by complex adaptive systems, meaning that responding to the polycrisis is about how we undertake leadership in the context of a complex operating environment. When we think about the polycrisis then, existing crisis competencies are important, but insufficient. Leading in the polycrisis is more about executive leadership, rather than emergency command. As such, and with a focus on leadership development, this paper will set out what we mean by polycrisis, and then explore the requirements of leading in this complex arena. Following this, we present a conceptual framework to help organise our understanding of the requirements of police leaders and leadership, before offering some thoughts on how executive leadership development could assist.

The Apocalyptic Angst

The term "polycrisis" was coined at the end of the last century by French sociologist and philosopher Edgar Morin and co-author Anne Brigitte Kern to describe the "interwoven and overlapping crises" facing humanity (Morin and Kern, 1999). More recently, in 2022, the Canada-based Cascade Institute repopularised the term – especially apt post-pandemic – and set out how multiple crises were converging and coalescing, and creating a complex operating environment that was distinct from that described by established concepts such as a systemic risk. The authors argued that "when crises in multiple global systems become causally entangled in ways that significantly degrade humanity's prospects… producing harms greater than the sum of those the crises would produce in isolation", existing frameworks for making sense of the events were no longer sufficient (Lawrence et al., 2022).

We take this assertion as our jumping off point. One does not have to look too hard to see myriad examples of coalescing crises unfolding and manifesting as emergencies requiring a policing response. From the consequences of the Global Financial Crisis from 2007 to 2009, much of which we are still experiencing today (BBC Two, 2022), to the wholesale disruptive effect of the COVID-19 pandemic, every global crisis has affected the nature of policing. Not to mention the impact of Russia's war in Ukraine on food and energy systems, economic growth, geopolitical alliances, and cooperation – notably hindering already scant progress on climate action. The cascading effects have manifested as emergency events ranging from the pressures flowing from the movement of economic migrants and forcibly displaced refugees, protest and civil unrest stemming from rising inequality, as well as more frequent responses to catastrophic weather events (Lawrence et al., 2022).

Awareness of how things are connected can be overwhelming:

> …It's finally dawning on us how little we understand about the mess we're in. And we hate, hate, hate that feeling. This apocalyptic angst – we don't comprehend what's going on, but [feel] it'll end badly (Kluth, 2023).

This itself drives anxieties about safety and security, creating and inflaming existing concerns that often require police attention. Borrowing from the language of complex systems, this creates a feedback loop; wherein our anxieties demand greater safety and security, increasing calls for a policing response, reducing police capacity to deal with such demands, increasing anxiety about safety and security.

COMPLEX PROBLEMS AND SIMPLE ORGANISATIONS

In the face of this apocalyptic angst, there is a tendency to seek simple solutions. At the individual level, this can include reverting to what we believe has worked in the past; reaching for simple cause-effect explanations; and looking toward "people like us" for consolation – and distraction – from the feelings of anxiety and fear (Solomon et al., 2015). At a social level, we may hear politicians going "back to basics" or offering populist slogans that convey a degree of certainty that reassures us of our collective safety in a world that feels out of control.

This is partly because policy makers and politicians are also impacted by the sense of overwhelm that complexity brings and are themselves driven towards simplification. It is also partly the influence of contemporary media, which shapes and is shaped by political agendas and a business model that benefits from "click bait" and "othering" of "problematic" populations. A third reason for the drive towards simplification is because of the way we organise ourselves societally – at least in Western liberal democracies – where our institutions of government promote expertise in silos and, consequentially, a context of competitive tribalism where complex cross cutting problems can only be seen from one's own end of the telescope (Williams, 2015). This means that action in dealing with complex problems tends to be conducted through the prism of one's organisational key performance indicators. Policing and public safety professionals see only the aspect of the complex crises that impact their public safety mandate.

There is doubtless some sense in this. Let the experts in crime deal with crime; let the experts in the educational precursors of crime deal with that. But this encourages institutional colouring within the lines, and resistance to straying beyond. We inevitably work in service of our organisation's outcomes and are rewarded internally (with promotion and positive regard) for being successful at doing so. It is little surprise then that we are motivated to see the swirling mass of complexity captured by polycrisis only in terms of the single-factor solutions that we can lay our hands on within our institutional silos. And that we continue to work under the assumption that our individual institutional efforts will aggregate magically into positive outcomes for society.

This is important because such narratives shape the authorising environment of police organisations. Moore's strategic triangle (1995) (Figure 1) can be instructive here as we think about the impact a siloed mindset has on our organisational capabilities, as well as the extent to which our profession is able to create public value.

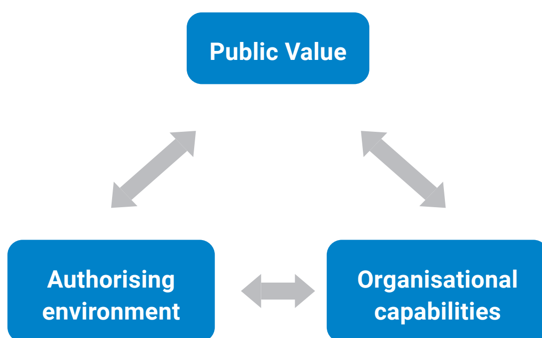


Figure 1. The Strategic Triangle, Moore (1995)

Moore contends that public sector organisations create public value in the same way that businesses create shareholder value. He also contends that their ability to do so is shaped by the authorising environment (what they are mandated to do) as well as their organisational capabilities (what they have capability and capacity to do). We suggest that public safety organisations risk finding themselves in a position where the authorising environment and the organisational capabilities they have mean they are not well suited to dealing with the polycrisis, and as such may be unable to maximise public value. This is because in the era of polycrisis, public value will be created by viewing problems as patterns emergent from connected complex systems and making progress on such problems will mean working across traditional organisational boundaries, and beyond traditional organisational capabilities. We can use Moore's strategic triangle in the inverse then, to underscore the role for police leaders to reshape the extant authorising environment, and build new organisational capabilities, that are better able to create public value in our contemporary polycrisis world. In the following sections we explore what those capabilities and mandate may be.

HARNESSING COMPLEXITY

Complexity scholars urge that we must harness the complexity of the polycrisis era instead of ignoring it or reverting to reductionist simplicity. To harness complexity, we must first understand its characteristics (Herrington and Sebire, 2021). Complex systems have four defining features: They contain agents, actors, or entities that are diverse, are interacting, are interdependent (behaviour of one affects the behaviour of another), and adaptive, e.g., they learn and change over time (Page, 2015). A good example of a complex system is the health care system (Pype et al., 2018). This system has:

- **Diverse entities:** patients, health care providers, insurance companies, administrators, pharmaceutical companies, buildings, and other infrastructure.
- **Interactions between entities:** patients, doctors and nurses interact with each other.
- **Interdependencies:** for instance, the number of patients impacts the workload of the health care providers.
- **Adaptive changes:** interactions between doctors, nurses and patients can shape new healthcare behaviour.

Complexity scholars argue that to harness such characteristics of complex systems, we can do four things:

1. Leverage diversity across the system;
2. Manage our connections with other parts of the system;
3. Leave space for exploring and not over-optimise; and
4. Steer system adaptation by understanding the mechanisms of incentives and rewards (Page, n.d.).

These are not independent conditions, but a mesh of connecting and interacting activities that together can harness complexity and position an organisation to respond effectively in complexity. We explore each in turn below before turning to our conceptual model of leadership for polycrisis.

1. Diversity of Thinking

Diversity of thinking is essential to avoid groupthink (Janis, 1972) and blind spots created by adherence to dominant logics. Complex systems are adapting all the time and require organisations to "dance" with the landscape as the operational demands around them change (Page, n.d.). Herein lies the value of diversity of thinking. The more perspectives we have contributing to our understanding of a problem and ways we might innovatively respond, the less likely we are to fall foul of errors borne of dominant logics (Page, n.d.). This is captured by Linus's Law (after Linus Torvolds, creator of the Linux kernel operating system) that "given enough eyeballs, all bugs are shallow". Eyeballs limit errors because eyeballs bring diversity. This is only the case, however, if those same eyeballs have a voice they feel able to use, and one that is heard. Increasing diversity of thinking by increasing diversity of people looking at a problem is only the first part of the equation. The second part relies on diversity of perspectives being offered and considered, lest the "bugs" continue to be buried beyond view.

There are two places to find diversity of thinking – inside and outside the organisation. Inside the organisation we can access this only if there is a diverse workforce, and a culture that encourages different ways of thinking. Traditionally, our conservative police organisations, with hard hierarchical structures and privileging experience over experimentation, do not value the voice of dissent. To access diversity of thinking inside, then, we need to do the cultural work to recruit and amplify these voices. To access diversity outside the organisation, we need a network that crosses boundaries, which we set out further below.

2. Manage Connections

When working with complex systems, scholars advocate for understanding synergies between oneself and the other players (agents); strengthening connections that enable cooperation, while severing connections that prevent or discourage innovation and change. This requires us to assess which new connections need to be made to access new knowledge or diverse perspectives, and then working to build bridges and links to understand and access them. Conversely, where connections are limiting the innovation and experimentation required to adapt, work needs to be done to sever these. Public-private partnerships are the shallow-end of non-traditional collaborations.

Another clear example of managing connections is where attachment to organisational business-as-usual (BAU) prevents innovation. Many organisations overcome this challenge by creating standalone innovation units (such as Google[x] which carves space for a multidisciplinary team to take ambitious concepts to reality). These standalone units are 'severed' from the usual limitations of BAU metrics, with an understanding that while such metrics help an organisation exploit their existing capabilities, they limit the ability to explore new possibilities. Once the connection is severed, the exploratory work of innovation can operate under different metrics. Once an innovation is deemed suitable for reintegration into the main business, it can be reincorporated into BAU. This is sometimes termed organisational ambidexterity, and reintegrating innovation is another leadership challenge, which is beyond the scope of this paper.

3. Leave Space for Inter-dependencies.

In complex systems, elements are inter-dependent, but when there are many, diverse, elements, cause and effect relationships can be opaque,

and the resulting dynamic of the system may feel unpredictable and illogical. An example provided by the Cascade Institute (2023) in the aftermath of the invasion of Ukraine is illustrative.

In their analysis, they determined that while one of the immediate impacts of the war was rising food and energy prices which inflamed existing inequality and social tensions, less clear was the impact this had on domestic civil tensions, and long-term investment in climate action. They mapped that higher prices were compounded by disruptions to supply chains and contributed to stagflation (high inflation and economic stagnation). Stagflation was compounded (and primed by) interruptions to production, trade, and travel following the COVID-19 pandemic lockdowns. Growing economic hardship following the 2009 Global Financial Crisis led also to a rise in the appeal of hyper-nationalist leaders, and an undermining of democratic institutions and international cooperation, which was further inflamed by economic conditions. This in turn contributed to worsening international cooperation on climate change, leading to more frequent and devastating weather events, placing further strains on the global food supply. Food shortages contributed to conflict and mass displacement, driving security spending, and taking further money away from climate action.

In a dynamic system there is danger in over engineering a response and becoming too focused on minor incremental gains in efficiency. As the above example evidences, cause and effect can sometimes be opaque, and the risk of being taken by surprise by an inter-dependency that was not clear, is high. Of course, as the cognitive demands of complexity become overwhelming, the human tendency is toward simplistic explanations.

4. Steer System Adaptation through Incentives and Rewards

The fourth opportunity to harness complexity comes from understanding how behaviour evolves in systems and using rewards and incentives to guide this. We are familiar with this idea in organisational change theory, with variations on the theme of "what gets counted gets done". In the context of the polycrisis, we must be careful how our goals are articulated, because this drives choices and behaviour, giving rise to perhaps unintended consequences. One example of this may be the unintended rise of litter and pollution created by disposable face masks encouraged during the COVID-19 pandemic. We selected for the behaviour of wearing face masks. We were less conscious of (or concerned with) the flow-on negative consequences of that for our environment. Systems evolve to select for the optimum behaviour given the articulated goal (Page, n.d.). Within policing we know that if the goal is to reduce crime, with no constraints on how, the system will encourage behaviour that may have significant negative social impacts. This means that in working with a complex system, we need to be careful how we set our goal and articulate our constraints. We also need to be mindful of how other actors are similarly operating, because when constraints are applied from myriad directions, the behaviour created may not be what we expect.

A CONCEPTUAL MODEL FOR POLICE LEADERSHIP IN THE POLYCRISIS

Taking what we know about harnessing complexity and our expertise in police executive leadership development, we offer the following conceptual framework for understanding the leadership work in the polycrisis (Figure 2). We argue that creating the individual and organisational capabilities to respond to the polycrisis requires both leader and leadership investment. We have conceptualised these facets as concentric circles. Consequently, our model has three layers: micro, meso and macro. The micro and meso layers refer to the individual leader, by which we mean the individual with rank authority (which can also be thought of as formal leaders). For this reason, they are coloured similarly. The macro layer refers to collective leadership capabilities, which characterises the organisational climate that is necessary for – and partly resultant from – the skills and activities of formal leaders. Individual leaders must have these capabilities to draw down on and must invest to create these collective capabilities as part of institutional strengthening in the first place. This outer layer is part of the preparedness work that a leader must engage in. This model therefore represents the dynamic relationship between individual leader skills, a leader's systemic tasks, and collective leadership. In the following section we explore each layer in turn.

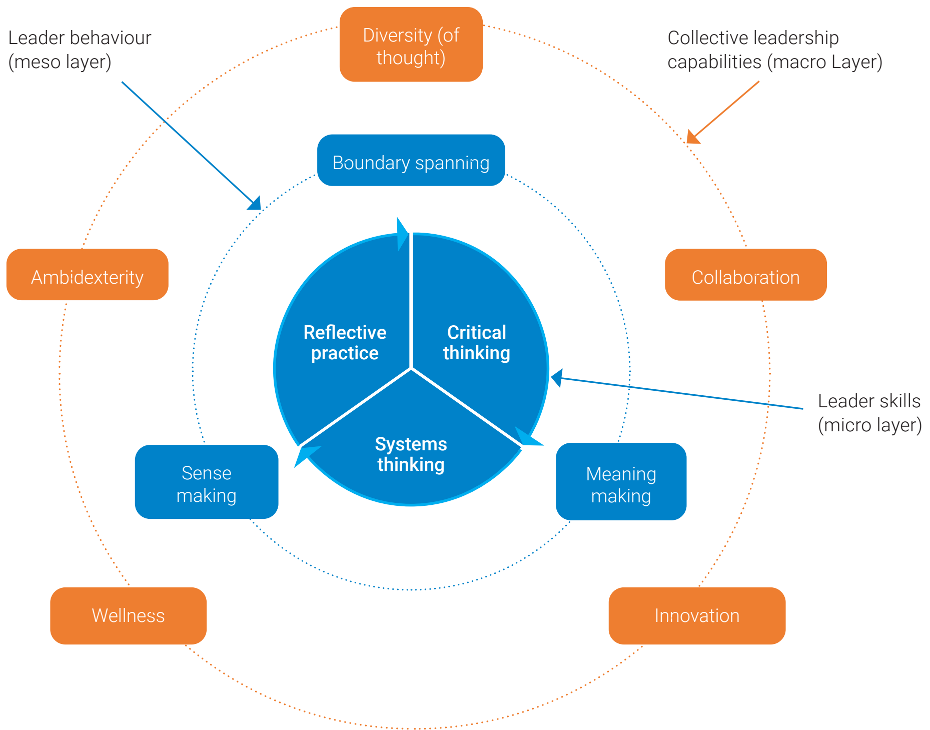
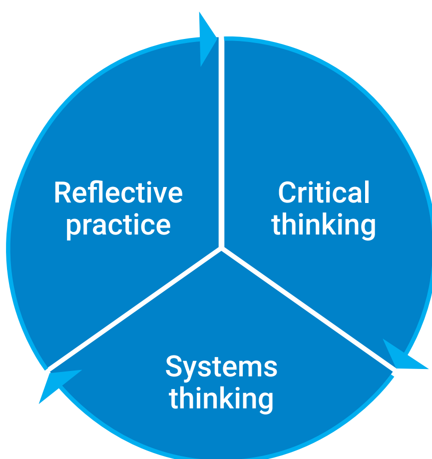


Figure 2. Individual and collective leadership capabilities for the polycrisis

Leader Skills (Micro Layer)

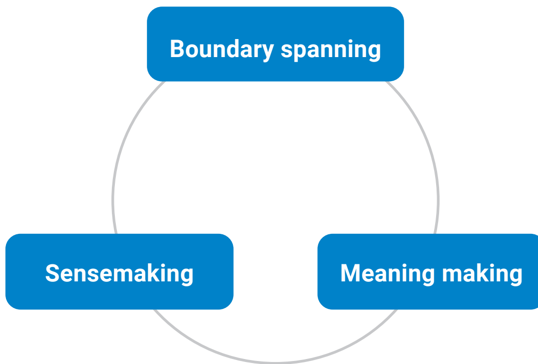
The core skills of critical thinking, reflective practice, and systems thinking are central characteristics of the polycrisis leader. These characteristics are essentially a leader's way of "being" and this "being" creates the preconditions for the "doing" captured by the meso layer (which in turn create the preconditions for the organisational capabilities that are represented in the outer layer.)



This core are all teachable skills. Reflective practice is a mechanism designed to help frame experiences as opportunities for learning, experimentation, and change. Drawing on the adult learning work of Kolb, reflection requires the identification of a concrete experience, reflective observation, abstract conceptualisation of what the experience means, and active experimentation with new ways of being (Kolb, 1984). Critical thinking too, is teachable, and captures the process of thinking creatively, expansively, and with due care for, and awareness of, the potential seduction of dominant logics, cognitive biases, and existing narratives. The third skill is systems thinking, including having a systems orientation when processing information. The nature of complexity means that leaders are responding to, and impacting, dynamic systems. Leaders need a systems orientation to recognise and leverage the dynamic properties of the polycrisis, including being able to diagnose the dynamics of the complexity, understanding vicious and virtuous feedback loops, and where their leadership work may be most effective.

Leader Behaviours (Meso Layer)

Micro-layer skills are important to drive the next layer in the conceptual model. The three behaviours of sensemaking, meaning making and boundary spanning are iterative, requiring the leader to sense shifts in the environment, make narrative meaning of these shifts for people inside and outside the organisation, and work with others in the wider system to create new dynamics and outcomes.



Sensemaking is about processing information from a range of sources, to try and determine what is emerging, and what is of significance in the environment. By contrast, meaning making can sometimes be regarded as sense-giving (Dixon et al., 2016), and is a leader's work in offering a narrative that is convincing, helpful and inspiring to galvanise responders effectively (Boin et al., 2017). Whereas sensemaking is the act of understanding, meaning making is the act of framing or reframing, with the intent of helping stakeholders appreciate the importance of a given direction or activity, and as such has much in common with notions of influence and persuasion. The third activity that we hold important in the polycrisis context is boundary spanning. Boundary spanning is the ability to create direction, alignment, and commitment across groups by working across different organisational cultures to exercise influence through formal and informal channels. Boundary spanners forge common ground through connecting and mobilising; and discover new frontiers by weaving and transforming work (Williams, 2015). Boundary spanning helps leaders build coalitions, where collaboration, and understanding others' needs and perspectives, ensures that the leaders can make shared progress on shared problems.

Collective Leadership Capabilities (Macro Layer)

The outer layer of the model represents the collective leadership capabilities that individual leaders need to draw on when navigating complexity, and simultaneously those capabilities that they need to invest in to create the climate in which their individual leadership work, and organisation, can have most impact. This interaction illustrates the dynamic interacting nature of leader skills, behaviours, and organisational capabilities. It underscores the link between leader (individual) and leadership (collective) work (Herrington and Colvin, 2016). It also reinforces the importance of investing in polycrisis capabilities, and a whole-of-organisational pivot away from the command-and-control comfort that has seen the policing profession ably contend with the crises of old. The five collective capabilities connect to the literature on harnessing complexity. To create these collective capabilities, leaders and their followers need to understand, value, and reward (incentivise) such behaviour.

Diversity of Thought means that leaders can mitigate the tendency toward dominant logics in complex environments and also identify new ways of acting. Diversity of thinking contributes to a leader's sensemaking and is a resource that rests on a leader's ability to engage in critical thinking. It is therefore connected to the micro and meso layers of our model.

Collaboration is the outcome of well-managed connections. Collaboration contributes to, and rests on, a leader's boundary spanning skills. Without boundary spanning, a leader cannot build the requisite connections to other parts of the system. And without boundary spanning a leader cannot engage in the collaboration needed to make sense of shifts in a complex system. Boundary spanning itself is dependent on a leader's orientation towards thinking in terms of systems, and an ability to think critically about courses of action. It is thus connected to the micro and meso layers too.

Innovation is connected to diversity of thinking, and to how the organisational climate supports experimentation and exploration. Innovation is critical in responding to dynamic complex systems. Leaders must try new things as part of probing the environment and must authorise others to do so too. An organisation's capacity to experiment with innovation and simultaneously exploit existing approaches is also captured under the capability of ambidexterity.

Wellness of people in the workforce is at the heart of building organisational capabilities. The complexity of the polycrisis requires every member to contribute their diverse thinking, engage in collaboration, and innovation, and to navigate the uncertainty of a swirling shifting landscape. To do this well, a resilient workforce is required. Psychological safety is required for individuals to offer creative ideas; diversity of thinking requires individuals to have the confidence to challenge dominant logics. None of this is possible if individuals' wellbeing is not nurtured and invested in as part of the collective capability. Importantly, there is a growing body of research that helps us understand how leaders can create cultures of wellbeing, which they can draw down on in responding to the polycrisis. At the Australian Institute of Police Management (AIPM), a recent leadership development for wellness strategy was proposed (Drew, Bartels and Herrington, 2023). This strategy drew on empirical research and a theoretical model of Health-Oriented Leadership to underscore the importance of leader self-care in creating the conditions to enable follower-care. This collective capability is therefore intimately connected to the individual leader at the core of our model.

Ambidexterity is the final organisational capability captured in our model. It can be simply defined within policing as the ability to hold the paradox of command and executive leadership concurrently (Herrington and Colvin, 2016). While crises have traditionally been the domain of command-and-control, with clear top-down processes and procedures, and a sense of certainty-as-comfort amidst an emergency event, the polycrisis is different. The polycrisis requires an appreciation and harnessing of complexity, and a tolerance of shifting sands and uncertainty, as well as the innovation and creativity of many. Organisations will need to know when to deploy their command-and-control systems, and when to deploy their polycrisis capabilities. Holding both and diagnosing which is best suited to the challenge at hand, requires an ambidexterity for leaders and their organisations, resting on critical thinking and sensemaking faculties at the micro and meso levels.

POLICE LEADERSHIP DEVELOPMENT

Having explored the complex nature of the polycrisis and having set out a model for conceptualising the skills, behaviours, and collective capabilities necessary to navigate this environment, we turn to considering how and when these skills, behaviours, and capabilities can be effectively developed. At AIPM, we have found that providing leaders with conceptual frameworks to help them make sense of their experiences, and offering avenues for exploration and experimentation has been productive. As such, the development of this conceptual model is a step toward advancing the conversation about what and how polycrisis leadership capabilities are developed.

Moreover, at the core of any AIPM programme are the skills of reflective practice, critical thinking, and systems thinking. Similarly, the behaviours and activities of sensemaking, meaning making, and boundary spanning are developed through peer-case consultations, mentorship, and syndicate project work on systems. Leaders leave AIPM programmes well equipped with the skills and behavioural toolkits to lead in the polycrisis, at least in theory. Similarly, in terms of collective leadership, AIPM's bespoke partnership work on capability development with organisations has shifted conversations around diversity, innovation, and

wellness, advancing the collective capabilities of organisations to adapt and respond to complexity. Organisations that are selecting for, rewarding and incentivising such collective capabilities are positioned well for operating in the polycrisis, although it is unclear how many organisations can be characterised as consciously doing so.

What may be harder for leaders and leadership development to achieve – and returning to Moore's strategic triangle – is shaping the authorising environment. If we agree with Moore that public value is impacted by the authorising environment and organisational capabilities, and we contend that public value in the era of polycrisis is about meaningfully addressing complex problems, rather than just deploying siloed expertise, then using the organisational capabilities we have suggested herein must be complemented by a (re)shaping of the authorising environment, to support policing's shifting role in addressing complexity. Depending on one's location in the world, the drift toward political populism, hyper-nationalism, and the associated narrowing and securitisation of policing's mandate may be more-or-less salient. The Apocalyptic angst impacts us all, and in the face of overwhelming complexity, there is little wonder that many are attracted to simple single-factor solutions. How police leaders add nuance to this tendency to enable them to operate effectively in the polycrisis depends on several factors, including the jurisdiction-specific legislative framework for policing, the overarching socio-political zeitgeist, as well as personal and political relations, and lines drawn around these. What is clear, however, is that to equip our organisations for leadership in the era of polycrisis we must advocate for an environment that recognises leadership capabilities that are both individual and collective, both immediate and long term, and that operate inside and beyond traditional organisational boundaries.

CONCLUDING THOUGHTS

In this paper we have explored the nature of the contemporary polycrisis environment and police readiness to deal with complexity. We have proposed a conceptual model to illustrate the blend of individual and collective skills, behaviours and capabilities required. This model, which is represented by three layers, illustrates how a leader's cognitive skills around critical thinking, systems thinking, and reflective practice, support their tasks in sensemaking, meaning making and boundary spanning. These tasks contribute to – and draw on – collective leadership capabilities to support organisational effectiveness in complex environments. These capabilities of diversity of thinking, collaboration, innovation, wellness, and ambidexterity, help leaders and their organisations harness complexity. We conclude this paper by reflecting on the utility of this model for leadership development purposes. We believe this model offers a means to reframe the role of leaders and leadership in the polycrisis.

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Stuart Bartels
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Drawing on an extensive policing career, Stuart champions and drives the connection between today's complex policing and public safety challenges and the role of leaders and leadership. A passionate advocate for people-centred leadership, Stuart views leadership development as an experiential process and is committed to creating a safe learning environment where leaders can reflect, challenge, observe, and grow.

Stuart views contemporary national and international policing and public safety context as central to leader development, and to that end continues to drive partnerships with organisations across the globe. The list of partner organisations is extensive and includes local and international universities, peak policing bodies, First Nations leaders, mental health advocates, and law enforcement bodies including the FBI, the US Federal Law Enforcement Training Centre (FLETC), Police Scotland, Netherlands Police, Singapore Police, Pacific Island Chiefs and many more. Within this list of organisations Stuart sits on a range of related committees and advisory boards.

Stuart's qualifications include a Master of Public Policy and Administration and a Bachelor of Science (Forensic Investigation). In addition, he is a proud graduate of the AIPM's own Police Leadership Strategy (PLS), a graduate of the FBI's National Executive Interchange program, and an IECL Certified Organisational Coach. Stuart has been awarded a Commissioners Commendation, the Commissioners Medal for Excellence and an Australian Police Medal.

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FOSTERING PSYCHOLOGICAL SAFETY IN POLICING DURING CRISES AND IN PEACETIME

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ABSTRACT

Psychological safety, where individuals feel safe enough to take interpersonal risks to voice out clarifications, concerns, or mistakes, is important as it helps to prevent mistakes, drive innovation, and push for organisational success. During times of crises, psychological safety is even more crucial to ensure an optimal operational environment for mission success. Recognising the influential role that psychological safety plays, the Singapore Police Force (SPF) emphasises the equipping of its leaders with the knowledge and skillsets to build a culture of psychological safety. This article details the development and application of the SPF G-E-L Psychological Safety Framework – Guidelines & Frameworks, Engagement & Platforms, and Leadership Development – for the creation of psychologically safe workplaces. Critique of and recommendations for implementing the framework in a law enforcement setting are also discussed.

EVERY POLICE OFFICER IS A LEADER

The Singapore Police Force (SPF) safeguards national interests by preventing, deterring, and detecting crime. Given the unique nature of SPF operations, the organisation firmly believes that every officer is a leader and should possess the knowledge and skillsets captured in the SPF Leadership Competency Framework. Within these competencies, the effective police leader must be able to build a culture of psychological safety for effective team functioning (SPF Leadership Competency Framework, 2023). In a psychologically safe climate, individuals are confident to take risks, open to seeking help, and primed to act even in dynamic and unfamiliar situations (Edmondson & Roloff, 2009; Devaraj et al., 2020). These are effective organisational behaviours in both peacetime and crises alike, thereby underscoring the need for SPF leaders to be competent in cultivating and maintaining psychological safety.

> **"The SPF firmly believes that every officer is a leader and should possess the knowledge and skillsets... to take risks, seek help and act even in dynamic and unfamiliar situations.**

Psychological safety is defined as the perception that sharing one's thoughts and feelings will not lead to negative social consequences, such as being shamed, punished, or having a negative impact on one's reputation and competence (Edmondson, 1999). It is challenging to take the interpersonal risks to voice out clarifications, concerns, or mistakes when the environment is not conducive, and individuals may choose to remain silent instead (Karaca, 2013). Notably, psychological safety cannot be instantly mobilised in a crisis. Even with the best leaders, it requires dedicated and deliberate effort to plant the seeds during peacetime. Being able to build psychologically safe teams is therefore a critical ability to ensure that team members can contribute effectively across situations.

Insights gleaned from engagement surveys show that SPF leaders recognise the value of psychological safety. It is equally important that

SPF leaders possess the ability to actively cultivate and maintain psychological safety in their units. A project team was thus formed to study how SPF leaders can maintain good psychological safety in their teams and to recommend a framework for building a culture of psychological safety. This article documents the development and application of the SPF G-E-L Psychological Safety Framework, standing for Guidelines & Frameworks, Engagement & Platforms, and Leadership Development.

IMPORTANCE OF PSYCHOLOGICAL SAFETY

Psychological safety is widely acknowledged as a crucial factor for organisational success (Edmondson, 2019; Catmull & Wallace, 2013). When individuals feel safe and can voice their opinions, they can overcome the pressure to conform and challenge the status quo without fear of negative social consequences (Edmondson, 1999). Within teams, members who feel psychologically safe are willing to take interpersonal risks. Members are confident as to how their team would respond and to take actions that may pose a risk to interpersonal relationships (Edmondson & Roloff, 2009). These voice behaviours include asking for help, admitting a mistake, suggesting improvements, sharing information, and taking the initiative to innovate (Kahn, 1990; Collins & Smith, 2006; Baer & Frese, 2003). These are valued and desired team attributes in both peacetime and during a crisis.

Without psychological safety, organisational silence may take hold, meaning that individuals are unable or unwilling to voice out problems in the workplace (Karaca, 2013). Voicing constructive criticism and challenging the status quo creates confrontation, conflict, and instability to social harmony, all of which tend to be uncomfortable for individuals to bear (Clark, 2020). Constructive feedback may not be provided and problems remain unidentified (Karaca, 2013). This limits development, change, and performance enhancement, which has long-term negative repercussions for any organisation (Morrison & Milliken, 2000).

Corporate companies such as Google have said that the attribute distinguishing their top-performing teams is having psychological safety as a team dynamic (Rozovsky, 2015). Similar findings have been noted in military and uniformed organisations (Brutsche & McDaniel, n.d.; Ministry of Defence, 2022). In military teams, psychological safety is positively correlated to team learning behaviour and team performance scores (Veestraeten et al., 2014; Ministry of Defence, 2022). Closer to home, the Civil Service College has affirmed the important role of psychological safety in ensuring that the Singapore Public Service successfully navigates its complex and dynamic operating environment. In particular, voice behaviours, organisational learning, and innovation are identified as elements of psychological safety that help preserve the adaptability of the Public Service (Watters, 2018).

In peacetime, a psychologically safe environment contributes positively to employee performance, organisational improvement, and manpower retention (Edmondson, 2019; Watters, 2018). In the time-sensitive and high-stakes situations that officers are often in, a psychologically safe environment further assures SPF leaders that officers will candidly surface necessary clarifications and provide operationally critical information, thereby safeguarding mission success.

Unique Factors Influencing Psychological Safety in the SPF

Compared to corporate organisations, the hierarchical organisational structure and niche nature of policing work form a unique backdrop for understanding psychological safety. It is important to account for these factors when appreciating police leaders' ability to cultivate and maintain psychological safety in their teams.

As with most police organisations, hierarchy and formal communication chains are made salient in the SPF through a hierarchical rank system and structures such as Standing Orders, Directives, Standard Operating Procedures, Working Instructions, and Guidelines. Taken together, these create the conditions for high power distance within the SPF. Power distance is defined as the extent to which the less powerful and low-ranking members in organisations accept that power is unequally distributed, and that authority is honoured, respected, and obeyed (Hofstede et al., 2005). With ranks as the clear symbol of authority,

leaders run the risk of relying solely on their power to instruct the attainment of certain goals and using motivation by fear to facilitate progress towards said goals. Subordinates are expected to simply respect and obey all commands. This perpetuates reluctance to take the interpersonal risk of speaking up for fear of losing a job or facing negative repercussions (Edmondson, 2019). This lack of psychological safety may stifle voice behaviours and effective crisis management.

In the policing context, it is the frontline officers, often subordinates lower on the chain of command, who are the first to respond to crises and who are involved in the rollout of most policies. Being closer to the ground, frontline officers are more familiar with citizenry sentiments and most impacted by any hiccups in policy implementation. Given the unique position and high impact value of their work, there is strong impetus to ensure that these officers feel psychologically safe to share their observations, feedback, and concerns relating to operational and safety matters. Such an environment would ensure that officers are sufficiently empowered to manage typical incidents, and allow leaders to better understand ground challenges and make the necessary enhancements to ensure operational effectiveness. In this manner, a climate of psychological safety contributes directly to mission success.

Secondly, the nature of policing work involves high stress, pressure, and risk (Gong & Zhang, 2015). The operational nature means that decisions often have a significant impact downstream, to the extent of implicating life and death. It is therefore crucial that SPF officers feel psychologically safe to point out operational loopholes and challenge contentious instructions, to support sound decision-making. Along a similar vein, psychological safety is especially important in workplaces where employee and customer safety are essential, leading to fewer injuries and accidents (Christian et al., 2009). In healthcare and aviation industries for example, psychological safety aids in reducing employee errors and enhancing safety (Newman et al., 2017). As most SPF officers undergo firearms training and carry arms at some point in their career, a culture of psychological safety provides an additional buffer against line-of-duty accidents. This underscores the compelling need for leaders to be able to cultivate and maintain psychological safety in their units.

Models of Psychological Safety

Initial research into psychological safety focused mainly on defining the construct, examining its application at individual and team levels, as well as exploring its relationships with other variables (Newman et al., 2017). Models of psychological safety only emerged later, often contextualised in specific settings.

For example, the SAFETY model of psychological safety was developed from a neuroscience perspective and identifies six buckets that an individual needs to address to feel psychologically safe. *Security* refers to one's need for predictability; *Autonomy* refers to one's need for control and choice; *Fairness* refers to one's need for fair exchanges; *Esteem* refers to one's need to be well-regarded; and *Trust* refers to one's need for belonging (Radecki et al., 2018). The final *You* bucket encompasses individualistic factors such as one's personality profile and history (Radecki et al., 2018).

Another model of psychological safety has been described as an Integrative Framework for the workplace (Cessan, 2020). This framework is centred on an axis; the horizontal axis details the scale on which psychological safety is being applied (i.e., ranges from Individual to System) while the vertical axis details the interactional perspective that one is adopting (i.e., ranges from Internal to External) (Cessan, 2020). There are four quadrants delineated by the axes: the External Systems quadrant refers to creating a psychologically safe environment; the External Individuals quadrant refers to experiencing psychologically safe interactions; the Internal Systems quadrant refers to self-management strategies in environments lacking psychological safety; and the Internal Individuals quadrant refers to self-talk that is psychologically safe (Cessan, 2020).

To identify an appropriate model to examine the state of psychological safety in the SPF, the project team considered applicability, intuitiveness, and parsimoniousness. Most models of psychological safety tend to be more abstract and theoretical or

requiring specialised knowledge to understand. They have their roots in psychological concepts that are unwieldy and inaccessible to the lay person.

The team ultimately found Clark's (2020) four-stage model of psychological safety to be the most intuitively applicable to the SPF context (Figure 1). These four stages are a result of a combination of two dimensions – respect and permission. Respect is the "general level of regard and esteem we give each other" while permission is the "degree to which we allow [others] to influence us and participate in what we are doing" (Clark, 2020). The four stages of psychological safety entail increasing levels of respect and permission and with progression into each stage, individuals are encouraged to contribute more to the value-creation process.

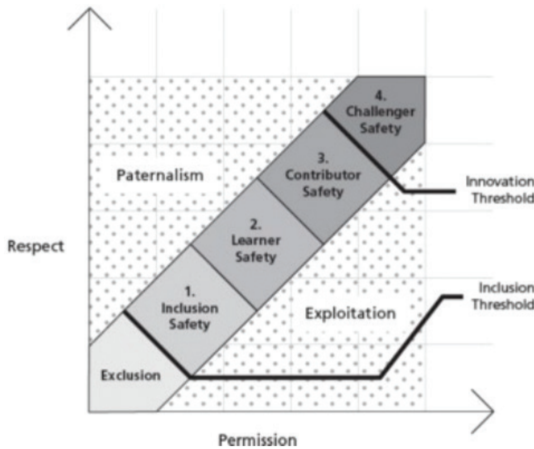

Figure 1. Clark's (2020) model of psychological safety

The first stage in Clark's (2020) model, Inclusion Safety, refers to the perceived safety that each individual is accepted for who they are and can simply be themselves. Within the SPF, this translates directly to officers' need to belong to their team, unit, and the organisation as a whole. The second stage, Learner Safety, refers to the perceived safety in asking questions, giving and receiving feedback, and making mistakes (Clark, 2020). Starting with officers' initial training phase and continuing through the multitude of development opportunities, this stage relates directly to the learning culture in the SPF. The third stage in Clark's (2020) model, Contributor Safety, refers to the perceived safety in using one's skills and abilities to contribute positively. This is especially important given the team-centric nature of the SPF operations. The fourth and final stage, Challenger Safety, refers to the perceived safety that one can voice out and challenge the status quo when there is an opportunity for change (Clark, 2020). This often constitutes the crux of psychological safety and is the gatekeeper for important organisational outcomes such as optimal decision-making and innovation in the force (Gallo, 2018; Schulz-Hardt et al., 2002; Ang & Du, 2021).

Given its intuitive applicability to the SPF context and general accessibility to the lay person, Clark's (2020) model was adopted by the project team as the foundation in developing the G-E-L Psychological Safety framework.

METHOD

Beyond conducting a horizon scan of the existing local and international literature on psychological safety in the law enforcement context, the project team collected and analysed contextualised data from various sources within the organisation. The Singapore Public Service's employee engagement survey provided quantitative and qualitative data, while a series of focus group discussions, engagement sessions with subject matter experts, and reality mapping cum gaps analysis efforts generated rich qualitative inputs.

The **2021 Public Service Employee Engagement Survey** (PS EES) spanned one month in August 2021, and contained 102 Public Service questions, Home Team core questions, and SPF questions. The following three items were identified as proxy measures for the state of psychological safety in SPF.

1. "Management generally understands the problems we face on our jobs."
   [Home Team core question]

2. "Most of the time, it is safe to share my candid views in this organisation."
   [Home Team core question]

3. "My response to this survey is honest and free from any influence from my supervisors."
   [SPF question]

Table 1. Composition of FGD Participants

FGD Group	Profile of Participants
1	Sergeant 1, Sergeant 2; < 5 years in service
2	Sergeant 3, Senior Staff Sergeant; > 5 years in service
3	Station Inspector, Senior Station Inspector; > 15 years in service
4	(Direct-Entry) Inspector 1, Inspector 2, Assistant Superintendent of Police 1, Assistant Superintendent of Police 2
5	(Rank and File) Inspector 1, Inspector 2, Assistant Superintendent of Police 1, Assistant Superintendent of Police 2
6	Deputy Superintendent of Police 1, Deputy Superintendent of Police 2
7	(Civilian) Management Executive 13 and below
8	(Civilian) Management Executive 12 and below

Overall insights and areas for enhancing psychological safety were gleaned from parsing through the item scores and verbatim comments.

To dive deeper into psychological safety in the SPF, eight one- to two-hour virtual **Focus Group Discussions** (FGDs) were conducted with incumbent SPF officers. The FGDs explored SPF management's understanding of ground concerns, SPF officers' perceptions of psychological safety, and factors that promote and inhibit psychological safety in the organisation. FGD groups were delineated based on rank and years in service, and each group consisted of six to eight officers of similar profile (Table 1).

To ensure survey hygiene, an external vendor was contracted to conduct the FGDs. The project team designed the FGD flow and script before handing over the relevant materials to trained external facilitators. Participants were invited to attend the FGDs on a voluntary basis and assured that all responses would be kept confidential without any names and identifiers. To create a conducive space for open and genuine sharing, no members of the project team were present during the FGD sessions. After the conclusion of the eight sessions, the external vendor produced redacted transcripts for the project team's analysis. Similarly, areas for enhancing psychological safety were extracted from a thematic analysis of the FGD findings.

In addition to gathering ground sentiments, multiple sharing sessions were organised with internal and external **subject matter experts** (SMEs) to understand best practices and their real-world effectiveness. Internal SMEs consisted of the SPF Land Divisions, Specialist Units, and Staff Departments that scored well on the three 2021 PS EES items taken as a proxy for psychological safety. In the spirit of learning from others' success, they shared their respective approaches to cultivate and maintain psychological safety in their units. The invited external SMEs, namely the Civil Service College and the Ministry of Defence, were identified as organisations at the forefront of championing the importance of psychological safety within Public Service agencies and a similar rank-and-file organisation. Their insights shed light on the roles of organisations, leaders, and individuals in actively building a culture of psychological safety at the workplace. Areas for enhancing psychological safety were again distilled from the SME engagement sessions.

Finally, **reality mapping sessions** were conducted with stakeholders with considerable influence over the state of psychological safety in the force. The project team leveraged the information shared to take stock of existing resources and identify gaps in the SPF's current approach to psychological safety. For example, topics such as training safety initiatives, mistake and risk management, as well as leadership upskilling platforms were discussed.

Areas for enhancing psychological safety were then synthesised.

Upon consolidation of all available data, common themes were adapted to guide the development of the SPF G-E-L Psychological Safety Framework.

RESULTS

The detailed survey findings and verbatim comments from the 2021 PS EES suggested that the responses garnered were honest and free of influence. Overall, the SPF was generally doing well in terms of psychological safety. While officers may not always feel psychologically safe to share their views and concerns, they perceived that increased understanding from the leaders could reduce the management-ground gap and improve their sense of psychological safety.

Upon reviewing the thematic analysis results, the project team distilled three pillars of psychological safety that encapsulate the areas where actionable steps can be taken for a culture of psychological safety to take root and flourish. These pillars have been presented to SPF stakeholders and senior management for guidance and endorsement, and are captured by the G-E-L Psychological Safety Framework.

SPF G-E-L PSYCHOLOGICAL SAFETY FRAMEWORK

The SPF G-E-L Psychological Safety Framework aims to inform and shape a culture of psychological safety within the organisation, through the following pillars: Guidelines and Frameworks, Engagement and Platforms, and Leadership Development (Figure 2). Each pillar targets cultivating psychological safety through a different basket of actionable steps, thereby contributing to a three-pronged approach.

Pillar 1: Guidelines and Frameworks

Guidelines and Frameworks refer to structures put in place to promote psychological safety, often by the organisation's management. In a disciplined force such as the SPF, existing structures encompass the Standing Orders, Directives, and Standard Operating Procedures that define organisational behaviours. Specifically for the SPF, these include the Code of Ethics, the Leadership Competency Framework, and the Training Safety Framework, to name a few. Establishing such organisational structures sends the signal that psychological safety is a priority at the systemic level and institutionalises how individuals should behave to create a psychologically safe

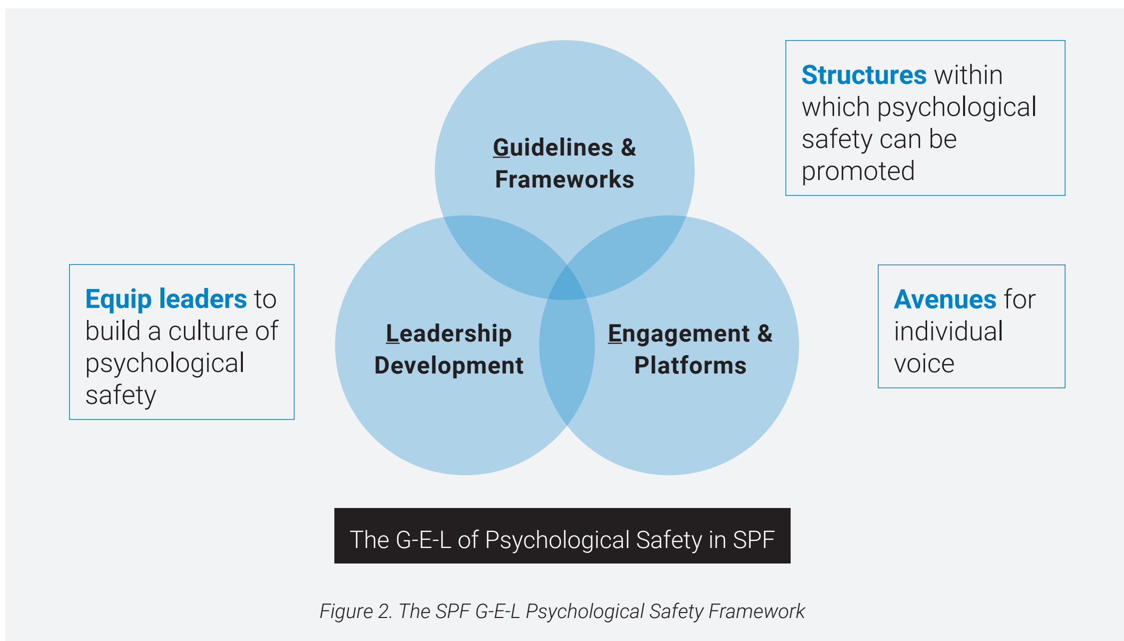

Figure 2. The SPF G-E-L Psychological Safety Framework

environment. Such structures also provide a sense of clarity and certainty for individuals in the organisation. Without the structures, subliminal group norms may end up directing group dynamics (Cave et al., 2016). In the SPF context, guidelines and frameworks are especially important to ensure that group norms continue to encourage voice behaviours regardless of one's hierarchical standing.

For example, the SPF rolled out the Guidelines on Supporting Victims of Workplace Harassment in 2022. The existence of these guidelines communicates the value of and importance that the SPF places on supporting such victims, thereby contributing to their sense of Inclusion Safety. The investigation process and recommended supervisory interventions detailed in the guidelines also provide victims with a clear idea of what to expect and how the organisation will manage their situation. This enhances their sense of Challenger Safety and should influence their inclination to report the experience.

Pillar 2: Engagement and Platforms

Engagement and Platforms refer to avenues for individual voice, as well as interactions to debunk false perceptions and negative stereotypes whilst promoting constructive feedback habits. The SPF is home to a multitude of such avenues, such as Commander's Dialogues, training courses, feedback portals, and unit-level 360 feedback exercises.

Effective engagement and platforms indicate that leaders care for and respect their subordinates and encourage them to respectfully voice differing thoughts without threat to their careers (Ashford et al., 2018; Devaraj et al., 2020). Furthermore, it is important that leaders respond appropriately to these interpersonal risks and express appreciation regardless of their personal opinions on the matter (Edmondson, 2019). These relate to all four stages of psychological safety: Inclusion Safety in that subordinates are valued; Learner Safety in that subordinates have a designated avenue to raise their queries; Contributor Safety in that all views shared are constructive; and Challenger Safety in that ideas that go against the grain are well-received.

Additionally, engagement and platforms allow leaders to model psychological safety on a larger scale (Murray et al., 2022). For example, when leaders share incidents that highlight their fallibility, they exhibit humility and the willingness to be vulnerable and acknowledge their weaknesses (Edmondson, 2019). This signals to subordinates that they can do the same. Encouragingly, when leaders exhibit more humility, teams tend to display more learning behaviours (Owens et al., 2013). Particularly in the SPF context where operations tend to have high stakes and consequences, leaders' anecdotes about their personal mistakes or negative experiences may increase the sense of psychological safety enough for officers to be less afraid of punishment or failure.

Pillar 3: Leadership Development

Leadership Development refers to the equipping of leaders with the necessary knowledge and skillsets to cultivate a culture of psychological safety. Leaders can influence their teams' level of psychological safety by training to create the appropriate environment, mindsets, and behaviours (Nembhard & Edmondson, 2006; McKinsey & Company, 2021). Developing specific skills such as open dialogue, mindful listening, and situational humility build positive leadership behaviours that foster psychological safety across the four stages in Clark's (2020) model and positively impact team outcomes (McKinsey & Company, 2021; Newman et al., 2017). Upon garnering the relevant knowledge and skillsets, leaders are expected to model the positive behaviours. For example, when leaders model listening behaviour and provide support within the team, they signal that it is safe to engage in risk-taking behaviour and that they value honest communication (Hirak et al., 2012; Walumbwa & Schaubroeck, 2009).

Leadership development in SPF taps on a repertoire of skills, ranging from understanding oneself and one's team to identifying and supporting distressed officers. In relation to cultivating psychological safety, leaders are equipped in areas such as delivering and receiving feedback, conducting coaching conversations, and shaping followership expectations. At a

broader level, SPF leaders are encouraged to make psychological safety an explicit priority through demonstrating specific behaviours in the SPF Leadership Competency Framework, holding intentional conversations with their officers, as well as drawing associations with broader organisational goals.

APPLICATION

The three pillars of the G-E-L Psychological Safety framework would be adopted dynamically in the SPF. Through the Guidelines and Frameworks, Engagement and Platforms, as well as Leadership Development initiatives, Clark's (2020) four stages of psychological safety can be systematically enhanced. Attaining greater levels of respect and permission within the SPF would enable progression through each stage of Inclusion Safety, Learner Safety, Contributor Safety, and eventually Challenger Safety. The ideal end state is for all leaders to actively model the organisational narrative, curate dedicated engagement processes, and be upskilled in psychologically safe practices, so as to cultivate and maintain a culture of psychological safety in the SPF.

Moving forward, the G-E-L Psychological Safety Framework will be incorporated into existing SPF training materials as part of Leadership Development efforts for leaders at different tiers in the force, to ensure the sustainability of efforts to build a workplace culture of psychological safety. In applying the framework, it is important that SPF's Guidelines and Frameworks are reviewed and refreshed in a timely manner so that they remain aligned with organisational priorities. Equally importantly, SPF leaders should cascade and adhere to the relevant structures where applicable. When implemented, the modality and regularity of the Engagement and Platforms will necessarily differ across leaders and units. Nevertheless, the reinforcing positive loop is cemented when leaders consistently react constructively when officers speak up.

It should be stated that the G-E-L Psychological Safety Framework is still in its nascent stage. The Framework may lack immediate amenity and resonance on the ground as it has yet to be formally implemented or evaluated. Nevertheless, while there is currently no post-conceptualisation data to definitively conclude that it has moved the needle, the Framework has been endorsed anecdotally by incumbent SPF leaders as parsimonious and practical to cultivate and maintain psychological safety in the SPF. Moreover, with the implementation of recommendations within the Framework, such as the reviewed SPF Leadership Competency Framework and revised leadership training modules, the G-E-L Psychological Safety Framework will gradually become more intuitive to SPF leaders. Concurrently, the Framework can be evaluated through future engagement surveys measuring the state of psychological safety within the SPF.

Over time, the G-E-L Psychological Safety Framework should serve as a comprehensive guide for SPF leaders to make a concerted effort to safeguard psychological safety within their spheres of influence. Such a climate will establish a conducive environment for the demonstration of leadership behaviours described in the SPF Leadership Competency Framework. This will ultimately enable SPF leaders to strive towards operational effectiveness and organisational excellence in both peacetime and during crises alike.

CONCLUSION

Psychological safety, where individuals feel safe enough to take interpersonal risks to voice out clarifications, concerns, or mistakes, is important as it helps to prevent mistakes, drive innovation, and push for organisational success. During times of crisis, psychological safety is even more crucial to ensure an optimal operational environment for mission success. This renders psychological safety an indispensable ingredient in the SPF culture.

Realistically, a culture of psychological safety will take time to evolve. Nevertheless, the SPF's emphasis on the equipping of its leaders with the ability to cultivate and maintain psychological safety is a heartening step in the right direction. As this paper has laid out, the hard work must be done by leaders in peacetime through the three pillars

of the G-E-L Psychological Safety Framework – Guidelines & Frameworks, Engagement & Platforms, and Leadership Development. With the development of this framework, there is reason to be optimistic that a culture of psychological safety will be built in the SPF.

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BUILDING CAPABILITY AND CAPACITY FOR CRISIS LEADERSHIP: SPIRALLING UP TECHNOLOGY PARTNERSHIPS

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ABSTRACT

In the reality of the modern world, fundamental principles of successful leadership have not changed; what has changed is the myriad of diverse demands on our modern leaders. Leadership in time of crisis is an extant example. History shows us crises have occurred across the globe for centuries and society has turned to its leaders to protect, resolve and rebuild their communities following crises of varying magnitudes and context. In today's highly advanced technological environment, there are opportunities to develop and support our leaders to optimise successful crisis management outcomes. Technology utilised in education-based activities and technology-driven tools to capture and analyse events and data are two key technology-centred attributes that have the capability and capacity to prepare leaders for crisis leadership circumstances. How are agencies utilising such assets and what are the potential outcomes? This article discusses the opportunities of partnering with technology to build depth and breadth into organisational leadership development with a future-focused lens on preparedness.

THE OBSESSION WITH LEADERSHIP

> A leader is one who knows the way, goes the way, and shows the way.
>
> John Maxwell

The world is obsessed with leadership, Johnson (2018) and Day (2000) suggested more than two decades ago as they observed the burgeoning global interest by scholars and practitioners in leadership and leadership development. Fast forward to 2024, and the interest in aspects associated leadership is now multifaceted as communities look to leadership in the face of financial crisis and instability, national and international safety, security and health crises and natural disasters whilst also developing the path to sustainable growth.

Whilst the list is not exhaustive, it provides the premise upon which to appreciate contemporary (21st century) organisations/entities and their leaders who are faced with operating in rapidly changing environments. As world events advance to include more frequent weather calamities, market upheavals, active shooter incidents, and terrorist incidents, the relatively stable conditions in which leaders previously found themselves operating now require capabilities to deploy leadership skills in a pivot from initial panic into productive action, such skills becoming a required competency (McNulty et al., 2019). The obsession Johnson (2018) noted is now not only scholarly; one only needs a brief dip into social media platforms such as LinkedIn and Instagram to witness this escalating trend. It is appreciatively understandable when we consider the vital role leaders undertake in often chaotic and catastrophic conditions, across a wide array of industries, business sectors and organisations (public and private) on the local, national, and international stage.

There is a wealth of published work describing the role of leaders, suggesting they include capacity and capabilities to be innovative, inspirational, and collaborative; to lead change, develop strategies to address current and future trends and solutions to address unforeseen circumstances (see Toor & Ofori, 2008; Kotter, 2017; Turner, 2021, Moura et al., 2022). In the context of the police profession, for example, the work of Broadbeck (2001) speaks to leadership as encompassing the capability and

capacity to engender engagement/commitment, and to empower individuals, teams and communities towards achievement of organisational goals. Fundamental to enabling leaders to employ these skills, achieve goals and pivot is their investment in building dedicated and committed supportive teams; irrespective of the business or profession, the achievement of mission/goals and/or crisis response is not achieved in isolation (Pearson-Goff & Herrington, 2013; de Moura, 2022). This aspect will be discussed later with respect to leadership and training endeavours.

It is valuable at this point to clarify the distinction this article makes between leadership and management. A manager, as discussed by Turner (2021), Toor and Ofori (2008), takes on a suite of responsibilities to operationalise organisational strategies developed by leaders – for example, people management, physical and financial resource management. A manager's focus is to implement leadership decisions. In the current 21st century business environment, these two roles are often referred to as one and the same, their designations used interchangeably and overlapping (Glinkowska, 2017; Turner, 2021). Glinkowska (2017) reflects a theme within the literature which proffers that in times of austerity and instability, the reality of the workplace is experiencing a merging of these two roles for some organisations and professions where individuals are purposefully both a leader and a manager. In addition, as discussed by Davies, Shepherd & Leigh (2022), there is an emerging concept within the leadership literature receiving attention and application which is variously labelled distributed leadership, transformational, team and or shared leadership. In this respect, Irvine (2021) proffers this concept of leadership and distributes some of the responsibility to teams whereby not all decisions are made by one person.

> **"In the context of the police profession, the work of Broadbeck (2001) speaks to leadership as encompassing the capability and capacity to engender engagement/ commitment, and to empower individuals, teams and communities towards achievement of organisational goals.**

In the context of the discussion in this article, leadership and management are viewed as two distinct yet complementary roles.

TECHNOLOGY-SUPPORTED LEADERSHIP EDUCATION

The array of potential opportunities for technology-enhanced learning is vast and rapidly increasing and it is not possible within this article to provide sufficient detail of each of these opportunities (e.g online courses, live streaming classes, desk top computer-generated activities). The paper thus concentrates on discussing technology assisted simulation-based learning. Day (2002) suggests that leadership development is oriented towards including building capacity in anticipation of unforeseen challenges and the competency of leaders. According to Walsh et al. (2007), leadership development includes "knowledge, skills, abilities, and attributes that enable leaders to develop followers' capacities, direct their efforts, and inspire their commitment to the successful accomplishment of complex missions."

These concepts resonate with the professions responsible for the safety and security of their respective communities at the local, national and international levels, i.e. first responder agencies of police/law enforcement, fire services, military, border patrol and paramedic/ambulance services. In the fast paced, often turbulent, and unexpected high-risk, high-stakes situations in which leaders of frontline responder agencies are responsible for resolving, are there technology applications to support developing leadership capabilities and capacities to prepare for such positions and the inherent critical decisions required? Herein lies the role of technology supporting simulation-based learning.

Technology supported simulation-based learning is not new. It has, according to Hays and Singer (1988) and Sallas and Cannon-bowers (2001), been evolving rapidly since the 1950s to 1960s, scaffolding on the advances initially in the aviation and military environments and extending, for example, to the police, health and education professions. Day (2000) refers to the work of Dotlich & Noel (1998), authors who signposted the emerging realisation by many organisations that the traditional approach

“Simulations offer an initial experience and reflection on the respective exercise, opportunity to understand the experience, adjust approaches... all whilst limiting any safety and security impact on learners and the wider public community.

to leadership development programmes, i.e., lecture, classroom-based, were only partially effective in preparing leaders for 21st century problems. Kimenkowski, Kimenkowski and Combes (2009) suggests the education community has taken advantage of the technology developments in the entertainment and gaming industries to extend the capacity of simulation environments to create “immersive, three-dimensional stereoscopic virtual environments that closely mimic the real world in both context [the situation] and surrounds [the physical environment]”. The motivation to “replicate” the real world supports the parallel focus to immerse learners in authentic, situated environments to bring their experience as close as possible to the real-world reality of their professional practice. The theatre of war is a good example. To prepare soldiers for the hell of war, defence agencies have turned to the realism effects produced through technology combined with artistry to create “heart pounding simulations which not only engage the mind but stimulate the senses, the holistic environment reflective of real time and the real world” (Davies, 2013).

In 2023 we have simulation environments which, through the use of technology, not only provide realistic replications and the fidelity of real-world environments – physical, physiological and haptic (smell, touch, feel) – they are interoperable. Land, sea and air engage within the scenarios of current technologies (e.g., drones, artificial intelligence, cloud-based data) and operate internally and externally across agencies and the globe.

Experiential Learning and Situated Learning

It is important to pause here and consider the educational influence of technology-assisted simulation-based education. There are two key concepts which align with and advocate for simulation-based education initiatives. Firstly, the concept of experiential learning. The seminal work of Dale in 1969 was responsible for advancing the concept of “cone of learning”, the premise of which is that learners who engage actively in their learning retain 90% of what they learnt versus 10% retention of what they read. When this concept was further expanded by Kolb (1984), the education world was exposed to the seminal adult experiential learning cycle which suggests there are five key phases in the experiential learning cycle: (1) the initial experience; (2) reflection on the initial experience; (3) interpreting the experience; (4) modifying/ adjusting understanding; and (5) replicating the learning endeavour. (See Figure 1.)

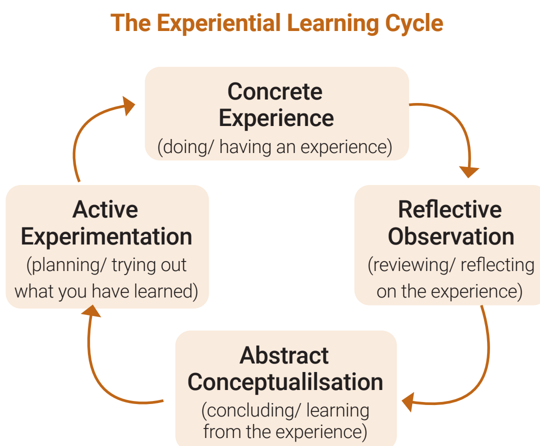

Figure 1. Kolb (1984) Experiential Learning Cycle

There is a clear nexus here between experiential learning and simulation-based learning (in this case technology-supported simulation). Simulations offer an initial experience and reflection on the respective exercise, opportunity to understand the experience, adjust approaches – consider application of learning or models and

reapply the learning – all whilst limiting any safety and security impact on learners and the wider public community.

The second key concept is that of situated learning. The situated learning theory suggests that meaningful and efficacy of learning will not take place unless it is embedded in the social and physical context in which it will be used (Brown Collins & Dugid, 1989). Situated learning is premised on providing contextually relevant learning environments to enable transfer of learning from the classroom to the real world (Knowles, 1990, Herrington, Oliver & Reeves, 2003).

Practising what is learnt

The simulation-based learning experience offers a further developmental opportunity which is particularly pertinent in leadership development training; here reference is to the seminal work in 1955 by Luft and Ingham, authors of the Johari Window Model. Briefly, the model as depicted in Figure 2 suggests there is knowledge we know and others know about us (Open); there is that which others see in us which we do not see in ourselves (Blind); there is knowledge we have that we do not share with others (Hidden); and there is the Unknown that neither we nor others know about us. These are relevant aspects when we consider leadership in the context of volatile, unexpected events. Simulations offer opportunities for the leader to find out what they are capable of in environments which replicate as close as possible the real world, offer scenarios previously not experienced, enable practice (potentially in multiple scenarios) applying knowledge and understanding in the training environment, building forward capabilities based on what is revealed as strengths and those abilities that require strengthening.

The key here is the opportunity to practise what is learnt. As educators we may provide a toolbox of skills and strategies in building leader capabilities. However, this requires complementing with practice, enabling the learner to understand what works and what does not, such that in the heat of a crisis they are best placed to select tools from the toolbox.

Johari Window Model

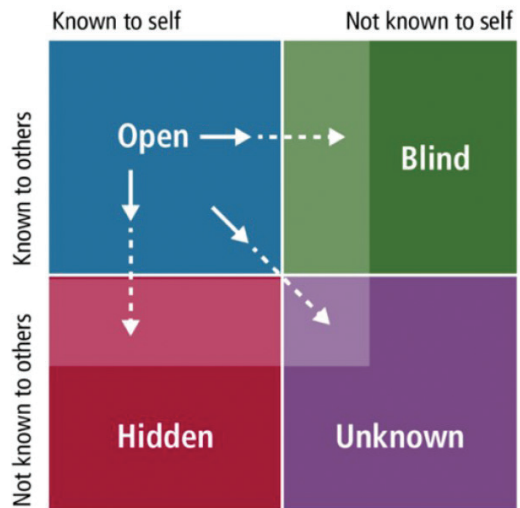

Figure 2. Johari Window Model (Luft & Ingham, 1955)

DESIGNING TECHNOLOGY-ASSISTED SIMULATON LEARNING

As the training environment has embraced the many exciting, new technological elements available in the market for embedding within simulation scenarios for leadership training, attention is required to ensure the level of educational fidelity is not overwhelmed. Concentrating not only on building authentic, relevant, engaging and stimulating learning environments but also the core purpose – educating the participants – allows, in parallel, consideration of what elements are critical to the simulation and what are "nice to have". One approach to ensure the training achieves desired levels of education validity is to establish at the centre of the simulation development the constructive alignment between the learning objectives to be achieved, the knowledge content on which the simulation scenario is based and, finally, assessing the level of achievement of the learning from the simulation. In addition, establishing, from the early drawing board partnership between educators and technology product providers, an educational fidelity framework is crucial.

Shepherd, Leigh and Davies (2022) have developed a five step/phase approach with the ADELIS model (Figure 3) for designing theoretically well-formed good practice in simulation design and application. In brief, this model draws together the andragogical approach (i.e. the art and science of adult learning) via these steps:

- Step 1 is dependent on the course/module/unit to which the simulation is embedded.
- Step 2 begins consideration of the andragogical approach – what is the knowledge content, the competencies, characteristics and abilities to be demonstrated within the simulation.
- Step 3 considers the design of scenarios, the technology platform, the depth of technological inputs required to achieve authenticity.
- Step 4 concentrates on the evaluation design not only of the learner achievement, importantly also is the capacity of the simulation environment to enable learners to demonstrate those attributes/competencies/characteristics and abilities to be assessed.
- Step 5 considers the holistic evaluation of the simulation and its fit-for-purpose.

One of the most valuable approaches to evaluation is to undertake data collection post simulation from the field-based perspective of the participants/learners. As the learners return to their respective professional roles and begin or continue their leadership roles, it is here that a number of distinct areas of evaluation should take place.

EVALUATING THE TECHNOLOGY PARTNERSHIP

A vital step in evaluating the partnership between technology and leadership development initiatives is to understand the influence of the simulation learning experience/s for those who, post simulation exercises/s or lead the response to real time crises and emergencies. In particular, the influence of the simulation experience on the leaders' level of preparedness and the assessment of this influence comes in the hot

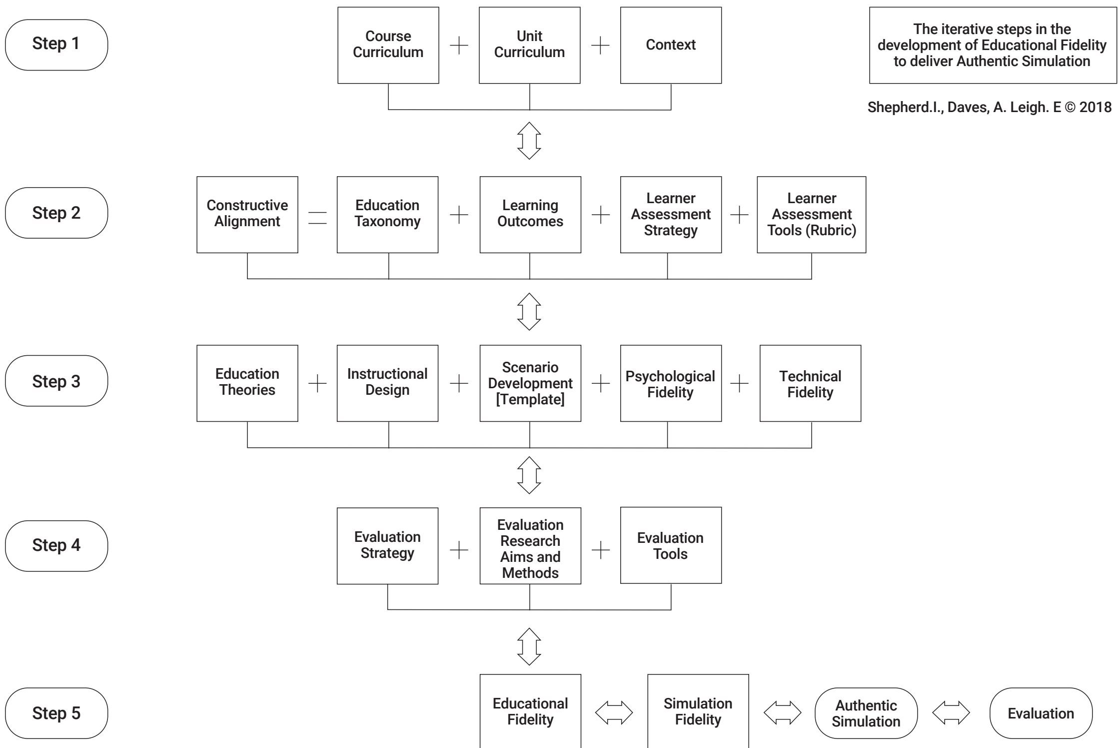

Figure 3. ADELIS Model

debrief/wash post the crises and also within the more general leadership demands of their daily work environment. As has been advocated by Jonathan Crego, founder of the Hydra (and associated simulation platforms for educating police leadership and decision making), equally important in the evaluation process is to understand what lessons can be learnt by the participant in respect of performance, what worked, and what did not (Alison & Crego, 2011). And from the perspective of those responsible for the technology platform and educational design (scenario and technology inputs, e.g. drones, AI and media), what is the level of realism and engagement experienced by the participants and the adequacy of the simulation to enable participants to apply knowledge and skills.

As the training and education community advanced the development of simulations for training leaders for high risk, high stakes, turbulent and unpredictable events, a wide array of approaches has emerged. These include the approach, often dependent on budget availability, leading to decisions including use of avatars versus real world video and people; the ability to rapidly adapt scenarios to create different events (particularly important to discourage pre-knowledge creep whereby participants learn from colleagues who have completed the scenario prior). This aspect of the learning design that necessarily involves consideration of the level of technology input to provide sufficient opportunity for realism and presence to be experienced are reflective of authentic and situated learning activities. Investing in the evaluation stage to best understand the adequacy of the simulation environment from the instructor and the participant perspective offers a substantial contribution to determining the level of fit-for-purpose achieved by the simulation-based learning exercise. The following case study is an illustration of a leadership education initiative embracing partnering with technology to build authentic situated learning experiences to prepare future leaders.

CASE STUDY

There is a wealth of literature discussing a wide array of simulation-based learning elements for professions associated with crisis and emergency leadership (see Aude et al 2013; Pavithran et al. 2018; Duran & McIvor, 2021; Petridou et al. 2023), and a less readily available literature reporting on case studies where technology has partnered with education to provide authentic, situated experiential learning exercises and environments. This is not to suggest it does not occur; there is much evidence of this in the professional world. It is the depth of published literature specifically focused on reporting of such case studies that is limited. To illustrate the potential and realised role of simulation-based learning that is supported by technological features, the following example is offered.

“Simulation-based learning offered in real time, face to face, offers opportunities for leaders to understand their strengths and weaknesses for engaging commitment and following from their team... and also for contributing to efficiency and effectiveness in their core professional practice.

A case study reported in 2013 and 2015 (Davies, 2013, 2015) centred on developing decision making by police commanders leading to a major incident response. In brief, the study centred on a police incident command exercise conducted through a Hydra[1] design environment in real time, with (a) a plenary/lecture room which acts as both a briefing and debriefing room; (b) three or four syndicate rooms with computer, telephone, video screen, networked to the control room, conference table, whiteboards; and (c) a fixed

[1] Hydra, created by Jonathan Crego, is fully integrated with the UK police training curriculum, used as a required part of various national training curricula such as Firearms Command, Public Order Command and Hostage Negotiations.

command support/control room from which each syndicate room is monitored via closed-circuit television and boundary microphones. Subject matter experts and simulation facilitation staff control the feed of information to the syndicate rooms via the computer, phone and televised media releases. A pivotal feature of the environment is the capability to "feed" information from the control room to the syndicate rooms as the scenario policing incident unfolds and with the benefit of the CCTV monitoring of the syndicate rooms, observing the actions and the decision-making process undertaken by the simulation participants. The post simulation evaluation revealed 95.3% agreed they learnt about their strengths and weaknesses by participating in the simulation and 95.3% of participants agreed that during the simulation exercise they utilised decision-making strategies they had not previously applied in their professional practice. Progressing to the field-based evaluation (three to four months post simulation exercise), 100% of participants agreed they were aware of reflecting on the simulation experience and the lessons learnt and applying them in their current work. In reflecting on the simulation scenario, 100% of the participants agreed the simulation exercise and environment made them feel as if it were a real incident to which they were responding and the resultant criticality of the leadership decision making that was required. The sense of reality the participants identified was created by the nature of the incident and the technology enabling inputs akin to those experienced in the reality of policing.

This case has been offered to illustrate the value of developing simulation-based learning activities with the advances in technology as fundamental elements for creating immersive, authentic, learning environments to build the capability and confidence of responders to lead in times of crises. An interesting note is this simulation did not carry any 'artistry' as would be found in the entertainment industry; it was, founded directly on the key ingredients of a major policing incident. To conduct such a simulation in 2023 would have the advantage of more current technology designed as injects into the scenario, e.g., live streaming of drone footage, CCTV camera, body worn cameras, artificial intelligence providing up to the minute analyses (facial recognition), social media platforms and mobile technologies. The capability of such learning environments to be team inclusive is critical to offering authentic leadership experience. As noted earlier, leadership attributes include inspiring others to follow. As Allan Sicard notes in his book, *The Courage to Lead* (2023), a leader cannot walk the path alone. Simulation-based learning offered in real time, face to face, offers opportunities for leaders to understand their strengths and weaknesses for engaging commitment and following from their team, to learn from such experiences in preparation for crisis response, and also for contributing to efficiency and effectiveness in their core professional practice.

CONCLUSION

The opportunities appear boundless in respect of what technology can offer to the education and training arena. For agencies seeking to provide the opportunity to develop their current and future leaders, there is an immense array of technology assisted andragogical approaches. It falls to the agency to determine the approach which aligns with their learning culture, fiscal and physical resources.

Whilst there will continue to be an ever-increasing array of exciting technologies available to embed within learning paradigms, establishing clear goals for the purpose of the intended learning is critical in order to maintain sound educational constructive alignment. It will be important to include modern technologies that relate to the agency; for policing and law enforcement, for example, the advent of drones, artificial intelligence, media platforms, facial recognition software, body-worn cameras. Mobile technologies are becoming common tools and there will be an increasing expectation these are embedded within learning exercises. As emergency responder agencies work forward to build the capabilities of their leaders and their work force, evaluating their endeavours will be pivotal for ensuring they are providing learning opportunities which reflect the reality of the workplace and the rapidly changing demands within our 21st century communities, locally, nationally and internationally, both natural and man-made.

ABOUT THE AUTHOR

Amanda Davies
is a Senior Academic and Researcher and holds a Doctor of Philosophy and a Master of Information Technology. She has been engaged in leading, developing and delivering police education and research for 20 years in Australia and the United Arab Emirates. Her research encompasses a wide range of policing and security domains with a key focus on the evaluation of field-based policing initiatives and education programmes including police recruit training programmes, police community engagement activities, police body-worn cameras, the influence of simulation-based learning in police/law enforcement education, use of force training, field-based officer leadership training, and major public order incident command training. Her recent published works are in the disaster, crisis and emergency management fields. Her work in police education has been acknowledged with an Abu Dhabi Police Teaching Award, an Australian Vice-Chancellor Award for Teaching Excellence and an Australian Learning and Teaching Council Award (Prime Minister's Award) for innovation and quality in teaching and learning practices.

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LEADING WITH AUTHENTICITY: A PRACTICAL LENS TO BUILDING TRUST IN CRISIS

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ABSTRACT

Fraught with uncertainties, complexities and risks, the crisis environment is a challenging one to navigate with high stakes for those involved. With the increase in public scrutiny of public safety and security officials and the need for greater transparency and accountability in decision-making, these challenges are also becoming increasingly multi-faceted. Amidst these difficulties, people turn to their leaders and officials for guidance and reassurance. This article posits the view that to tackle these challenges, while enabling effective team performance and establishing public trust, leaders should possess the ability to be authentic. Using a practical lens to study the issue, the authors begin with an exploration of what authenticity in leadership is and what benefits it can bring to leaders in times of crisis. Informed by academic research, local contextual understandings and practical experience, this paper then concludes by providing leaders advice and tips on how they can practise this trait.

BEING HUMAN AND BRINGING HOPE

In January 2023, Jacinda Ardern, the then-Prime Minister of New Zealand, announced her resignation in a move that prompted reactions of shock and surprise from world leaders and New Zealanders. Citing the inability to commit to another four years and a desire to spend more time with her family, Ardern stepped away from the office after an eventful six years. In her time as Prime Minister, Ardern oversaw the governmental response to two of New Zealand's most significant events in recent history, the Christchurch Mosque Shooting and the COVID-19 Pandemic. In her response to both of these events, Ardern earned international praise for her empathetic, compassionate and authentic actions towards the affected parties (Newson, 2019; Saman, 2019; Campbell, 2020). A key part of that praise was for Ardern's actions which demonstrated alignment with her personal values of being human and being authentic (Hunt, 2021). This authenticity could also be seen as she departed from office. Citing reasons such as "not having enough in the tank" and that it was time for her to step down, Ardern's graceful departure was also lauded as a personification of her personal and political ideals and values (Badham, 2023).

With the multitude of challenges posed following recent global crises such as the COVID-19 pandemic and the Ukraine-Russia war, phenomena such as the Great Resignation, quiet quitting and an increased search for meaning at work are taking place in organisations globally. It should thus be no surprise that the study of leadership, in particular authentic leadership, has taken on a much more central stage. It has been suggested that the experiencing of trauma and loss that crisis brings about has created renewed interest for leadership styles that can bring hope to others. Research suggests that authenticity in leaders can promote positive workplace behaviours and attitudes, and contribute to better organisational outcomes both in the form of tangible (e.g. work output) and intangible (e.g. employee engagement and commitment) results. However, authentic leadership has not been proposed as a style that one can readily adopt; instead it is a characteristic that underlies many leadership styles such as transformational and change-oriented leadership (Alavi & Gill, 2016). Beginning with a psychological understanding of what a crisis requires of leaders and what authentic leadership has been established to be, this article will provide leaders with an academic understanding

> **"…the mechanisms and benefits provided by a leader's authenticity in times of crisis can enable a leader to both navigate the handling of the crisis situation as well as the creation of a conducive post-crisis recovery.**

of the characteristic and a lens to practising greater authenticity. By balancing both, the authors hope to provide Home Team leaders with a new way of approaching leadership and a means to ensure continued mission success.

CHALLENGES FOR LEADERS IN A CRISIS

Crises, with their evolving circumstances, are often viewed as highly improbable events that when they occur, produce drastic consequences, necessitating swift and precise actions (Boin, 2008; Boin & Rhinard, 2008; Kayes, Allen & Self, 2013). For leaders, the uncertainty and dynamic nature of the situations and their solutions can create ambiguity when they have to try something new without knowing if it will be successful. As functions of leadership such as the creation of normative power, the encouragement of collaboration and the application of appropriate reasoning are necessary for the organisations and parties involved to understand, manage, and resolve the situation, the ambiguity places leadership in a critical and unique role in times of crisis (Grint, 2005; Riggio & Newstead, 2023). In addition to the demands placed on leaders as they navigate the complexities and consequences of traditional crisis events, new skills and capacities are necessary in order to minimise the potentially catastrophic losses that modern day crises can create (Gowing & Langdon, 2018). While most general leadership theories such as authentic leadership do not explicitly deal with the key features of a crisis, this paper posits the view that the mechanisms and benefits provided by a leader's authenticity in times of crisis can enable a leader to both navigate the handling of the crisis situation as well as the creation of a conducive post-crisis recovery. This is because with the focus being placed on collaboration and transparency today, leaders who practice authenticity would be better positioned pre, during and post crisis to traverse the complexities of crisis management (Desyatnikov, 2020).

WHAT IS AUTHENTICITY IN LEADERSHIP?

Often confused with being authentic, which is about being original or genuine, authenticity is actually more closely aligned to the understanding of the key facets of one's identity. It does not require complete openness or revealing of inner feelings but instead, it means being real and genuine while being someone who can be trusted (Schulz, 2015). In leadership, it is also a pattern of leadership behaviour that taps on and promotes positive psychological capabilities and ethical team climates. Authentic leadership encompasses the following four key characteristics:

a. ***Greater Self-Awareness:*** This component of leadership behaviour refers to the ability of the leader to understand how they see the world, their strengths and weaknesses, and the differing manifestations of personal behaviour that arise from reflective processing of one's own impact on others (Kernis, 2003).

b. ***An Internalised Moral Perspective:*** This perspective involves the leader's ability to practise self-regulation that is informed and guided by the differences between the individual's and the group's moral values. This typically results in decision making and behaviours that are consistent with the leader's internal values (Avolio & Gardner, 2005; Gardner, Avolio, Luthans, et al, 2005).

c. ***Balanced Processing of Information:*** By practising this, a leader would be able to analyse and perceive data in an objective manner and also seek views that could potentially challenge their own positions (Gardner, Avolio, Luthans, at al, 2005).

d. ***Relational Transparency:*** Lastly, this component refers to the leader's ability to present an authentic version of themself. This involves the minimising of inappropriate emotional displays and the maximising of expressions and sharing of their own thoughts and feelings (Kernis, 2003).

In addition to the above, there is also the inherent ethical and moral consistency present in authentic leaders. In most situations, the leaders hold a firm belief of who they are, are aware of their values, and act according to these values when interacting with others (Avolio, Zhu, Koh &

Bhatia, 2004). Such consistency in behaviours is seen in normal times as well as during crisis. Authentic leaders remain true to themselves, their values and judgement, without conforming to social demands and expectations, and lead with personal conviction and not to seek personal gains. They remain unfazed even in challenging or ambiguous situations (Avolio & Gardner, 2005). These leaders see it as their moral duty to respect and protect the interest of others. Authentic leaders also seek to bring the best out of their teams by creating a culture based on acceptance, respect and commitment. To lead diverse teams, authentic leaders display high abilities to regulate their behaviours and thoughts. They moderate their behaviours and emotions in group settings, seeking to influence their teams and motivate them for a common purpose. Therefore, it would be incorrect to assume being authentic is simply about speaking and acting in an unfiltered manner (Chamorro-Premuzic, 2023). Authentic leadership involves speaking and acting sensibly and sensitively, in congruence with one's moral core, aligning to the greater team goals, and developing the best in the team.

Leaders who are able to encompass the above authentic behaviours will be able to increase their effectiveness while being able to motivate and maintain the commitment of their team (Goffee & Jones, 2005). Authentic leadership is thus based on the ability of the leader to create honest relationships underpinned by an ethical foundation and personal credibility (Bruhn, 2021). This foundation and credibility are important because the understanding of the leader's own personal values and style and how they relate to different scenarios serve as their navigation compass during complex situations (Schulz, 2015).

In addition to the above characteristics of authentic leadership, other common characteristics found in authentic leaders include the showing of gratitude and the practising of greater humility.

Gratitude. Showing gratitude such as words of appreciation and acts of care go a long way in demonstrating the leader's gratitude to their team. Other acts such as celebrating small wins, affirming efforts, recognition tailored to the individual and regularly emphasising core values of the organisation support the leader's authenticity (Erikson, 2021).

Humility**.** Humility is also frequently associated with authentic leadership. Individuals high in humility have high self-awareness, and are modest about their own achievements. They are fair in evaluations, appreciate others and seek to learn from others to become better (Owens, Johnson & Mitchell, 2013). Authentic leaders who show humility facilitate learning and innovation in the organisation and also demonstrate flexibility in dealing with challenges.

Influence of Authentic Leaders in the Workplace

In an organisation, authentic leadership behaviours can provide positive effects such as increased job satisfaction, increased job engagement, higher levels of team trust, increased hope for the future, greater sense of meaning and a more positive work environment. These are usually done through positive role modelling, emotional contagion and social exchange interactions (Avolio & Garner, 2005).

Positive Role Modelling**.** Authentic leaders are good role models and lead by example as they practise transparent decision making, high moral standards, consistency in their behaviours, and show respect towards others. These leaders are likely to develop similar behaviours in their followers. When these behaviours are demonstrated widely and become norms in the organisation, followers will regulate and model themselves after their leaders, and in turn promote a culture of authenticity.

Emotional Contagion. This is seen when the leader's positive emotions become infectious and result in positive upward growth in organisational change such as creativity, innovation and trust. Researchers have found that two characteristics of authenticity – self-awareness and relational transparency – foster these positive emotions (Kernis, 2003).

"Authentic leadership involves speaking and acting sensibly and sensitively, in congruence with one's moral core, aligning to the greater team goals, and developing the best in the team.

Social Exchange Interactions. As explained by principles of reciprocity and value congruence in social exchange theory, authentic leaders engage in positive social exchanges with their followers. Authentic leaders convey self-relevant information, moral and ethical positions and demonstrate genuineness in a transparent and unbiased manner. This results in a relationship between the leaders and followers that is high in trust and respect (Ilies, Morgeson, & Nahrgang, 2005). Followers will align and reciprocate by displaying behaviours that are consistent with leaders' values, and over time, changing the workplace norms. This changing of norms allows for the creation of stronger relationships by facilitating more genuine behaviours and increasing levels of trust (Buote, 2016).

BENEFITS OF AUTHENTIC LEADERSHIP IN CRISIS SITUATIONS

Authentic leadership can be beneficial during crises. While responding to crises requires speedy and firm decision making, leaders who come across as genuine, compassionate and resolute are also highly valued. A crisis can challenge the skills of leaders as they manage the consequences, and deal with difficult decisions, and stressful events. In this case, the characteristics of self-awareness, internalised moral perspective, balanced informational processing and relational processing are able to provide authentic leaders with advantages as they navigate through the challenges posed by the crisis.

Self-Awareness. Authentic leaders who have a good sense of self-awareness and can maintain composure are able to better position themselves and make sense of the crisis. They are confident and are prepared to take charge to deal with crisis situations, while also being aware of the constraints. Having a good awareness of their strengths and weaknesses enable these leaders to mobilise the right support and resources to manage the crisis. Key partners and stakeholders are sourced to assist in solving the crisis. Fox et al. (2020) conducted a study during COVID-19 with organisations and found that authentic leaders were able to successfully steer their firms through crisis through close engagement with stakeholders. These leaders were also able to adapt flexibly to the challenges of COVID-19. The authentic leader does not see seeking help and support from others as a sign of weakness. Rather, they will keep in mind the wider

"...the characteristics of self-awareness, internalised moral perspective, balanced informational processing and relational processing are able to provide authentic leaders with advantages as they navigate through the challenges posed by the crisis.

objectives and goals to be achieved. Brown (2021) interviewed top corporate leaders and found that leaders who had good self-awareness and showed a sense of humility by not proclaiming to have all the answers during the COVID-19 pandemic were better able to lead through the crisis and also developed strong rapport with their staff. In those situations, there was also empathy shown by leaders to their followers. Empathy, a key feature in an authentic leader, promotes greater connection between the leader and followers. During a crisis, these leaders demonstrate empathy to followers by spending more time listening to followers' concerns and showing acts of care. These empathic acts reassure the team, providing calm and creating safe spaces for followers and in turn, strengthening team culture and bonding (Brown 2021).

Internalised Moral Perspective. Ambiguity and uncertainty tend to occur during a crisis as the relevant information and data that can support sound decision making may not be readily available. In such situations, the authentic leader needs to understand the extent and implications of the crisis and its potential consequences. When there are dilemmas, an authentic leader will fall back on their principles and values and rely on their internal compass to guide them. Usually, these values are apparent and practised through daily routine decision-making during the pre-crisis conditions. When tough ethical decisions have to be made, authentic leaders have been shown to rely on values such as care, compassion and safety of others as guiding principles. In addition, as there is likely to be high levels of trust, respect and congruence in values between the leader and followers, decisions made during crisis conditions are more readily accepted and followed through by the followers. These findings were found in Brown (2021) in which

employees were described to bond strongly with their leaders and felt that their leaders were together with them in the crisis. This sense of being in the same situation promotes a sense of loyalty among the employees. This in turn, inspires followers to work through the challenges faced during the pandemic. An authentic leader sees themself as responsible and accountable for their decisions and their team during a crisis and remains committed to their roles.

Balanced Information Processing. An authentic leader exercises objectivity when analysing the crisis situation. They are aware of the situational constraints and the challenges to lead under such circumstances. They are aware of their own biases and actively seek feedback and inputs from other sources to help formulate effective solutions. These solutions may be adapted over time as the situation changes. Authentic leaders thus innovate and produce creative problem-solving strategies to deal with the problems faced (Brown, 2021). Similarly, when the leader's decisions are challenged by others, the authentic leader is not defensive but prefers to adopt an inclusive approach to consider these alternative viewpoints. Timely decisions based on consolidated and balanced perspectives will be made by authentic leaders, without compromising on effectiveness. Similarly, these leaders learn from the past crises and set in place structures and processes so that past mistakes or issues could be resolved.

Relational Transparency. The authentic leader who is highly attuned to their own emotions and behaviours is also keeping a close watch on how their followers are experiencing the crisis. The authentic leader is not worried about showing their weakness; they communicate and share their thoughts with their followers. Followers see such expression of vulnerabilities in their leader as being genuine, real and personable. This in turn facilitates greater cohesion and understanding within the team to support one another and resolve the crisis. On the other hand, information available during crisis situations may evolve over time and result in difficulties in ensuring accurate information is passed down to followers. Thus, leaders have to adopt a regular communication approach to update followers with latest developments, in addition to correcting misinformation and rumours which typically occur during crisis (Brown, 2021).

At the same time, the authentic leader is also aware of the contagion effect they have on their followers. Guided by respect and integrity, the leader is mindful of their own behaviours and emotions through constant regulation, minimising inappropriate emotions that demoralise the teams while maximising those that help the team to cope with the crisis.

Impact on Personal and Collective Resilience

In addition to the above benefits, it would be useful for a leader to consider the impact that authenticity in leadership can have on trust, resilience and well-being, communications and psychological safety.

Trust. Authenticity plays a crucial role in building trust and credibility, which are essential during times of crisis. Research has consistently demonstrated that individuals who exhibit authenticity are perceived as more trustworthy, reliable, and credible by others (Gardner et al., 2019). When leaders and organisations display authenticity in their communication and actions, they foster a sense of transparency and openness, establishing stronger connections with stakeholders. This trust enables collaborative efforts, facilitates the sharing of crucial information, and promotes collective problem-solving, leading to more effective crisis management (Eismann, Posegga & Fischbach, 2021). Authentic leaders also promote a culture of trust and shared values, which contributes to the development of authentic teams. By consistently displaying integrity, fairness, and ethical behaviour, leaders establish trust among team members (Walumbwa et al., 2008). This trust creates a supportive environment where individuals feel comfortable being their true selves, taking risks, and making contributions that align with their personal values and the team's shared values. Authentic teams foster a sense of belonging and engagement, leading to higher levels of commitment, creativity, and performance (Walumbwa et al., 2008).

Resilience and Well-Being. Authenticity also positively impacts individual well-being and resilience during times of crisis. Embracing one's authentic self enhances self-esteem, self-acceptance, and self-awareness (Wood et al., 2008), which are vital

factors for psychological well-being. With an internal self focus, these leaders also engage in self-care activities whenever needed (Brown, 2021). Authentic individuals tend to experience higher levels of positive emotions, such as joy and contentment, and demonstrate greater psychological flexibility in adapting to adversity (Kernis, 2003). By staying true to their values and beliefs, individuals can maintain a sense of purpose, meaning, and personal integrity, which serves as a buffer against the negative effects of crisis-related stressors (Schnell & Krampe, 2020).

Communications. The strategic value of communication and management of perceptions is critical in a crisis; thus the ability of the leader to innately understand the need for empathetic and transparent communications and actions to be taken is an important function. This empathy and transparency in communication also provide a foundation for the leader and their team to endure the uncertainty of crisis (Erickson, 2021). Authentic leaders are able to adjust communication styles and select the right amount of information to be shared. They will also pitch their communication style according to the needs of the team. Based on the goals of the situation, the leader will translate the information to actionable strategies for the team to follow up. The leader shares their perspectives and encourages the team to embrace and work towards the shared goals. During crisis situations, adopting an empathic and open communication style facilitates understanding and team bonding where followers feel reassured by the leader's commitment to listen and share information; and to care for their well-being.

Team Psychological Safety. Authentic leaders have the ability to cultivate and foster authentic teams by creating an environment that encourages individual self-expression, mutual trust, and shared values. Through their own authenticity, leaders serve as role models, inspiring team members to embrace their true selves and bring their unique perspectives to the table (Walumbwa et al., 2008). Team members feel safe in expressing their ideas, concerns, and emotions. This psychological safety promotes open communication, collaboration, and constructive feedback within the team, leading to greater authenticity among team members.

Thus, authenticity brings numerous benefits to individuals and organisations facing crises. By fostering trust and credibility, enhancing well-being and resilience, and improving decision-making, authenticity serves as a powerful tool for navigating and overcoming challenges. Embracing authenticity during times of crisis enables individuals and organisations to remain true to their values, maintain psychological well-being, and make informed decisions that promote long-term growth and success. Recognising the importance of authenticity and taking practical steps to cultivate it can contribute to personal and collective resilience in times of crisis.

DEVELOPING AUTHENTICITY IN LEADERS

Fostering authenticity during times of crisis requires deliberate efforts at both the individual and organisational levels. However, during pre-crisis, individuals can engage in practices such as self-reflection, self-expression, and self-acceptance to cultivate authenticity (Harter, 2002). Seeking social support and developing authentic connections with others can provide a sense of belonging and collective efficacy. Having trusted colleagues, friends and family members whom the leader can turn to to share their thoughts or get feedback would also be helpful in the leader's development. In addition, through mentorship and coaching, leaders can make use of the safe space created to engage in deeper conversations about themselves and their leadership approaches. This provides good opportunities for leaders to engage in self-reflection which are core in the development of authenticity. Organisations can also consider creating environments that encourage psychological safety, where individuals feel comfortable expressing their true selves without fear of judgment or reprisal (Edmondson, 2018). Thus, leaders should embrace transparency, authenticity, and vulnerability in their communications to build trust and inspire their team. To facilitate the development of authenticity in leaders, we have provided the following sections to answer Frequently Asked Questions (FAQs) about authenticity in leaders and to also equip leaders with tips and considerations when developing authenticity.

Frequently Asked Questions (FAQs)

When trying to practise authentic leadership, individuals often surface the following questions.

a. **How do I know my one true authentic self?** Encouraging and aiming to practise authentic leadership behaviours does not mean that we default to adherence to a fixed set of actions we associate to be "us". Instead, with the acknowledgement that humans are multidimensional, our behaviours can vary across the different contexts yet underlying it could be values consistent with who we are. The more important question is whether our expressions are reflective of who we are (Buote, 2016).

b. **What are the characteristics of an authentic leader?** Authenticity is not an innate quality that we can possess. It is a quality that others attribute to you as a result of the expression of one's inner self and values (Goffee & Jones, 2005). Authentic leaders are also perceived as transparent, comfortable with aspects of vulnerability, and committed to the mission and vision of the organisation. They are also able to build positive culture of psychological safety (Perkins, 2023).

c. **How does authenticity help in leading groups?** Authenticity plays a crucial role in effective group leadership by fostering trust, promoting open communication, and encouraging shared values. Authentic leaders who demonstrate transparency and genuineness are more likely to gain the trust and commitment of group members (Walumbwa et al., 2008). This trust creates a safe space for open communication, where individuals feel comfortable expressing their ideas, concerns, and emotions. Authentic leaders also emphasise shared values, promoting a sense of collective purpose and facilitating cohesion within the group (Gardner et al., 2011).

d. **How does authenticity help in building trust?** Authenticity serves as a powerful catalyst for building trust in various contexts. When individuals demonstrate transparency and genuine behaviour, they create an environment where others feel safe and secure (Avolio, Walumbwa & Weber, 2009). By consistently aligning their words and actions with their true selves, authentic individuals are perceived as reliable and credible, establishing a foundation of trust. Trust is essential for fostering collaboration, effective communication, and successful relationships in both personal and professional settings.

e. **How does authenticity help in engagement?** Authenticity plays a significant role in increasing engagement among individuals. When individuals feel encouraged to embrace their authentic selves, they experience a sense of autonomy, competence, and relatedness, which are crucial factors for engagement (Reis et al., 2000). By creating an environment that values authenticity, leaders and organisations promote a sense of belonging, purpose, and personal fulfilment, leading to higher levels of engagement and commitment.

f. **Is my organisation supportive of authentic leadership?** At its basic level, being authentic is part of individual development. At the organisational level, authentic leadership is a characteristic that supports all forms of leadership styles. It can be developed and practised by individual leaders. When practising authenticity in the workplace, one can start by being aware of the key issues and concerns of the organisation, and that of the senior management and their followers. Individuals can also engage their teams to co-define and work on solutions for problems faced. Leaders can exert influence by using attributes such as objective processing of information, positive engagement and transparent communication.

Guiding Questions

To assist in building authentic leadership, leaders can consider the following questions. Divided into "Questions about Yourself" and "Questions about Others", these questions adapted from Bruhn (2021) will serve as a useful boost towards putting into place more authentic leadership behaviours. The aim of the questions is to facilitate greater reflection of one's own personal experiences and to also provide prompts to guide potential avenues to consider.

Situations for Authenticity

With the challenges in today's world growing in complexity and volume and authenticity growing in popularity, many leaders have turned to it to become the bedrock and launchpad to successful leadership (Perkins, 2023; Schulz, 2015). This desire to practise authenticity then creates a further set of challenges as leaders have to navigate the difficulty of balancing between over and under sharing information with their team members, with both producing different

Questions About Yourself	Questions About Others
Are you aware of your own identity anchors? • What are the people, places and events that have shaped who you are today? **Are you aware of your comfort zones?** • Do you lapse into them frequently? • Do you know what makes you uncomfortable? **Do you know what triggers your frustrations?** • Do you frequently seek honest feedback? • Do you know your strengths and your weaknesses? • Are you able to list some of your personal values? • Are you aware of how others see you now? **What do you normally share with others?** • Do you share your hopes, joy, fears, uncertainties?	**How well do you know the backgrounds, interests and families of your friends, superiors and subordinates?** • When was the last time you checked in on something other than work? **Have you implemented any barriers between yourself and those around you? (E.g. choosing not to show any form of weakness or vulnerability.)** • Do you care about the work processes and professional growth of your team beyond the results? • Do you provide truthful feedback that acknowledges and validates those around you? • How do people react to your feedback? Do they take it seriously and improve? **Do you approach others spontaneously?** • Similarly, do you feel if others welcome you? **Do you actively solicit points of views/ opinions from others?** • Do you talk more or listen more? **Do you practise gratitude and show appreciation to others?**

undesirable consequences such as creating insecurity or suspicion (Schulz, 2015). To assist leaders in deciding how to handle the myriad of situations, the following permutations of events can be considered.

a. ***When environmental conditions are favourable, team members are aligned with the leader, and work outcomes are positive.*** In this situation, an autonomous approach should be considered. There should be minimal interference with work processes by the leader with delegation of responsibilities and authority where appropriate. In addition, there should be continued involvement of the team through group decision making and goal setting processes. The leader would then take on a supportive advisory role and give encouragement and praise. This is as opposed to being an active contributor to the processes (Schulz, 2015)

b. ***When environmental conditions are confusing, commitment is mixed, and work outcomes are not entirely positive.*** When this occurs, instead of autonomy and minimal interference, the approach of the leader should be one of strengthening and building relationships within the team. Group participation would still be important, but the leader would now need to devote attention towards providing instructions, training, support and feedback (Schulz, 2015).

c. ***When environmental conditions are unfavourable, there is no team commitment, and work outcomes are negative.*** In this scenario, the leader would need to take an involved approach to matters. This would involve providing considerable support and direct detailed instructions. While there needs to be the setting of goals and outcomes, expectations and measurements would need to be detailed and specific (Schulz, 2015).

Thus, the choosing of a leadership approach should be based on the leader's circumstances and situational factors and authenticity can be navigated carefully when these circumstances and factors are carefully considered. Leaders should not simply select authenticity as a personal approach without proper consideration. Nobody will trust a leader if they perceive the leader as being fake because ultimately it is not whether the leader has remained true to their own personal values or what style the leader has chosen, but instead what matters is the leader's substance and whether they inspire others towards a common goal. This would then depend on other factors such as their ability, integrity, and social intelligence (Chamorro-Premuzic, 2021). Thus, at its heart, leadership is about inspiring others to follow a direction and create meaningful results and to achieve this, a variable leadership style which accounts for demands and changes would be more useful than a rigid model (Schulz, 2015).

CONCLUDING POINTS

In summary, authentic leadership emerges as a valuable and indispensable approach in times of crisis, offering numerous benefits for individuals, teams, and organisations. The concept of authenticity encompasses transparency, genuineness, and alignment with one's true self. Authentic leaders are able to inspire trust, foster psychological safety, enhance well-being, and facilitate effective decision-making, ultimately contributing to resilience and successful crisis management. In addition, this authentic leadership in times of crisis provides a solid foundation for trust and credibility. By embodying transparency and openness, authentic leaders establish genuine connections with their followers. This connection enables them to effectively communicate critical information, share vulnerabilities, and demonstrate empathy, leading to increased trust among team members and stakeholders. Trust is a fundamental element in crisis situations, as it promotes collaboration, information sharing, and collective problem-solving, ultimately facilitating more effective crisis management.

It is important to recognise that the value of authentic leadership extends beyond immediate crisis management. Authentic leadership practices during crises can lay the foundation for long-term organisational resilience and success.

By building trust, enhancing well-being, and promoting effective decision-making, authentic leaders contribute to the development of a strong and cohesive organisational culture. This culture, rooted in authenticity, fosters innovation, adaptability, and a sense of purpose, positioning the organisation for sustained growth and success even in the face of future challenges.

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TRAINING FOR CRISIS LEADERSHIP: THE FLETC EXPERIENCE

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ABSTRACT

The Federal Law Enforcement Training Centers (FLETC) Leadership Institute provides crisis leadership training to federal, state, local, and tribal officers from around the United States as well as international students through the US State Department's International Law Enforcement Academies. The training focuses on a broad set of tools/skills that assist law enforcement in a variety of crisis situations and does not focus on a specific type of crisis. From a curriculum standpoint, the programme is focused on four pillars of crisis leadership that include emotional intelligence, wellness, and resiliency. Students are then given an opportunity to practise these new tools/skills in an interactive technology-based exercise.

HONING LEADERSHIP SKILLS FOR ALL CRISES

For several years, the Federal Law Enforcement Training Centers (FLETC) has greatly focused on training law enforcement officers in the principles of crisis leadership. In 2013, FLETC began the development of the Leadership in Crisis Training Program (LICTP) to address a potential training gap in the area of crisis leadership. The LICTP is a research-based curriculum to help law enforcement officers and emergency managers from federal, state, local, tribal and international agencies hone the leadership skills that will be needed during a critical event. Because critical events can vary widely in size, scope and impact, this programme focuses on core concepts of communication, collaboration, critical thinking, and decision-making that are applicable in virtually any situation. Using innovative technology, LICTP creates an immersive environment that challenges the participants' ability to apply leadership, interpersonal and decision-making skills in a crisis situation.

The programme is three days and involves lectures, facilitated conversations, simulations in a small group setting, and feedback. The programme is designed to provide a higher-level view of crisis leadership and not focused on one type of situation, but a broad set of tools to help in any crisis. As evidenced through global events, critical and emergent events can come in many forms and vary drastically in how they are addressed from agency to agency and nation to nation.

Four Pillars of Crisis Leadership

The LICTP curriculum focuses on what FLETC has identified as the four pillars of crisis leadership and are buttressed by concepts including emotional intelligence, wellness and resiliency. The major pillars discussed in LICTP include communication, collaboration, critical thinking, and decision making.

The **first pillar** is communication. Communication issues can come in different shapes and sizes. In the area of a crisis, communication can be interpersonal, technical, how messages are presented and received, and other factors that include influences through our experiences in life.

The **second pillar** is collaboration. It is rare that a crisis only impacts one small group or a singular agency. Even within an agency, there are numerous stakeholders, departments or entities that may be involved. The groundwork for collaboration must take place before the crisis.

The **third pillar** is critical thinking. Critical thinking is easiest understood as a processed or systematic way of thinking. Critical thinking involves systems of thinking that are expounded upon in the programme, and the influence biases have on your thinking.

The **fourth pillar** is decision making. The FLETC Leadership Institute created a decision-making model that is partially based on the OODA loop cycle (observe–orient–decide–act), developed by military strategist and United States Air Force Colonel John Boyd. The model is called IDWAE (pronounced I'd Weigh), which stands for inquire, define, weigh, act and evaluate. "Inquire" and "Define" are problem and issue identifying elements of the process, whereas "Weigh" and "Act" fall within the decision-action portion of the process. "Evaluate" is critical in determining whether the process led to the mitigation of the problem or dilemma, and if the action brought about the expected results. All five steps require cognitively unbiased critical thinking.

"The programme is designed to provide a higher-level view of crisis leadership and not focused on one type of situation, but a broad set of tools to help in any crisis. As evidenced through global events, critical and emergent events can come in many forms and vary drastically in how they are addressed from agency to agency and nation to nation.

Emotional Intelligence, Wellness and Resiliency

Emotional intelligence also plays an important role in how leaders effectively lead during a crisis. Understanding emotional intelligence will help leaders monitor and temper their own feelings and emotions as well as those they are responsible for.

Individual wellness and resiliency play major roles in an organisation's resiliency after a critical incident. Attendees take a dive into concepts of wellness as well as ways to mitigate negative impacts. The idea is to build resiliency prior to the incident.

PIONEERING USE OF IMMERSIVE TECHNOLOGY

The Leadership in Crisis Training Program was a first of its kind for the FLETC due to the interconnected technology used to support exercises. The exercises are designed to reinforce the classroom material provided. The technology is designed to immerse participants into the exercises. The initial technology was provided by a United Kingdom-based company that specialises in immersive technology. This platform enables FLETC subject matter experts and instructors to aid participants in understanding the principles we facilitate in a way that is relatable outside of the classroom. Moreover, the immersive way in which this programme is delivered provides a safe space for leaders to interact with one another and put in practice theoretical concepts.

The LICTP continues to evolve with curriculum updates along with some technology changes to suit the delivery of the programme. A recent technology change, for example, will allow the flexibility to export this programme outside of FLETC Glynco while still leveraging immersive technology. This style of exported delivery has never been done with this programme and we expect a launch later in 2023.

Use of Simulations

Over the years, FLETC has developed a variety of simulations adapting specific scenarios that may be selected as determined by the makeup of the class. For example, FLETC has developed a specific scenario that involves state, local, and tribal executives that is run two to three times per year.

A key component of scenario development is that they are not designed to be won or completed. The goal rather, is to put into practice the tools and techniques shared in the programme in a real-life situation, versus trying to come up with the right answers for the simulation. This can sometimes be a challenge for participants in that they want to know the result. Instead, FLETC instructors provide feedback on their use of the tools and techniques. This helps to reinforce the idea of being able to use these principles in a variety of situations.

By immersing participants in the simulation, the goal is to create a realistic environment that engages them. Again, not with the intention to solve it, but to use the tools and techniques they have been presented with. The simulations are done in a small group setting of 5 to 10 participants depending on the cohort size. The students are required to use some of these tools within the small group before they are able to work through the scenario. In this environment, the first two pillars of communication and collaboration become very important.

The technology can best be summarised as a virtual tabletop exercise. Injects for the exercises are delivered electronically in a way that forces interaction from the students. The injects can be sent in a rapid succession, requiring the students to focus on not just one element but everything.

EVALUATION

The LICTP typically runs 8 to 10 times per year at FLETC Glynco, with variations taught throughout the world at the International Law Enforcement Academies. The number of programmes has increased over the last few years and continues to rise. FLETC looks forward to piloting the full programme as an export later this year for the first time and hopes to continue to adapt, meeting our partner agencies' needs.

Overall, the LICTP has seen significant success. FLETC utilises the globally recognised Kirkpatrick Model to evaluate the results of training and learning programmes. Consistent level 1 feedback received at the conclusion of the programme indicates the training will help participants perform their jobs better than prior to the training. This has been validated by participants who reported that the principles facilitated in the programme have been successfully used in real crises.

WHAT'S NEXT

Currently, new scenarios are being developed to include multi-disciplinary participation. The programme has focused primarily on FLETC key customers who are law enforcement officers, but the need to include other entities such as fire, rescue, ambulance, hospital, public works, and others has recently been presented. The goal is to include other stakeholders that will likely take part in working through crisis situations together, further enhancing the ability of agencies to better address critical events, fostering a collaborative environment.

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ENHANCING WHOLE-OF-GOVERNMENT CRISIS MANAGEMENT TRAINING IN POST-PANDEMIC SINGAPORE

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ABSTRACT

The unprecedented and prolonged COVID-19 situation in Singapore tested the crisis management capabilities of the public service. It also made clear that future crises will be even more complex. Hence, the Homefront Crisis Executive Group (HCEG), which coordinates the national response to crises in Singapore, has assessed that the public service can further strengthen its current coordination capabilities in anticipation of future crises. The Home Team Academy (HTA) thus established the Crisis Management Training Steering Committee (CMTSC) in March 2023 to drive and coordinate whole-of-government (WOG) crisis management training. It aims to develop a Crisis Management Capability Development Framework and a Capability Intervention Roadmap to establish a common set of terminology and structures for crisis management; and through training and the development of organisational capabilities, prepare senior officers to lead their agencies in mounting strong, collaborative crisis responses in the future.

SINGAPORE'S MANAGEMENT OF THE COVID-19 PANDEMIC

The COVID-19 pandemic was an unprecedented crisis which created prolonged and severe health and socio-economic damage to countries around the world. Governments across the globe had to both save lives and protect livelihoods at the same time, balancing the two priorities amid the escalation of the pandemic and public disgruntlement at state-imposed restrictions to contain the spread of COVID-19.

In Singapore, the scale and dynamic nature of the pandemic resulted in prolonged border closures which had spill-over effects on Singapore's economy and society, adding an additional layer of complexity on top of a seemingly unending crisis. The complexity and dynamism of the crisis and its impact on multiple sectors and almost every aspect of life required a whole-of-nation response that involved not only the government, but also businesses, non-government organisations and the community. The crisis also saw a whole-of-government (WOG) response, led by the Multi-Ministry Taskforce (MTF) and coordinated by the HCEG, and unprecedented levels of collaboration across the Singapore public service; agencies dealt with the dynamic challenges by taking up roles beyond their usual scopes of work and working closely together despite being stretched to the limits of their crisis management capabilities.

The Homefront Crisis Management Structure (HCMS), developed in 2004 to respond to national crises in a more comprehensive manner, brings agencies across the Singapore public service together to coordinate a coherent WOG response amid complex situations and competing sectoral considerations. This is overseen by the HCEG, which is chaired by the Permanent Secretary (PS) of the Ministry of Home Affairs (MHA) and consists of senior representatives from ministries and agencies in the Singapore public service. During COVID-19, the HCEG reported to the MTF for strategic and political direction.

Despite the complexities involved, time pressures and fluidity of the crisis, Singapore successfully exited the acute phase of the pandemic, to live with COVID-19 as an endemic disease in early 2023. While managing

the COVID-19 pandemic, Singapore has successfully safeguarded both lives and livelihoods, compared to other countries. Singapore has one of the highest vaccination rates globally, and its case fatality rate is less than 0.1%, significantly lower than the worldwide average of about 1.0%. While Singapore faced economic challenges in the early phase of the pandemic, the government's support measures, funded by an unprecedented draw on Past Reserves with the President's approval, helped the economy recover by the end of 2021, with unemployment rates returning to pre-COVID levels in 2022. This was further augmented with strong recovery in key sectors such as tourism, where Singapore's air hub expecting air travel volumes to return to pre-COVID levels by 2024.

ENHANCING WOG CRISIS RESPONSE POST-COVID-19

In any crisis response, there will be lessons learnt that prepare the nation for the next crisis. This was no different for Singapore's experience of the pandemic. Through analysis of the Singapore public service's response at both national and sectoral levels, key lessons were highlighted in the White Paper on Singapore's Response to COVID-19: Lessons for the Next Pandemic. The Singapore public service did well in areas such as maintaining clear and transparent public communications in times of uncertainty to uphold the population's trust in the Singapore government and the public service, and ensuring the resiliency and diversification of the country's supply chains. There are other learning lessons for the management of future crises, as well as the additional crisis management capabilities that the Singapore public service will require to augment its ability to tackle future crises more effectively. These include:

- Exercising more effective scenario planning and forward thinking to broaden the Singapore public service to potential shocks; to be more prepared to deal flexibly with these shocks during crises, and;

- Establishing key priorities upfront and striking the right balance between the need to ensure precision and maintaining flexibility to change, allowing the Singapore public service to be more agile in responding to the evolving situation.

The COVID-19 pandemic has demonstrated the complexity and multi-faceted nature of crises. It is noted that crises can typically fall under three key crisis dimensions. These are:

a) International dimension, comprising crises which require cooperation or partnerships with international organisations;

b) Civil dimension, consisting of crises requiring civil response; and

c) Societal dimensions, comprising crises with impact on societal harmony or values.

Exemplified by the COVID-19 pandemic, crises today can encompass more than one crisis dimension, highlighting the increasing complexity of crises today. Hence, the public service will need to strengthen its current coordination capabilities in anticipation of even more complex crises of tomorrow. To do so, a common set of terminology and structures for crisis management needs to be established to enable strong organisational crisis responses. This will take a two-pronged approach: training of senior leaders and functional experts across public service agencies, and the development of organisational capabilities to manage crises. This will allow for individual agencies will be able to take on new missions while continuing their daily operations in times of crisis.

To do this, it is imperative that a WOG crisis management training and development framework is developed to ensure the Singapore public service is sufficiently prepared for future complex crises posed by emerging global and local challenges. As the corporate university of the Home Team, the Home Team Academy (HTA) was tasked to coordinate with relevant subject matter experts in crisis management training across the WOG to capture a comprehensive understanding of the gaps within the WOG crisis management landscape that need to be addressed.

Imperative for Platform to Drive WOG Crisis Management Training

In the stock-take of the current landscape of available crisis management training across WOG in Singapore, HTA noted that there are highly specialised training interventions relating to crisis leadership and crisis management offered at WOG level. To continually enable strong, coordinated organisational crisis responses at WOG, sectoral and agency levels amid complex crises, crisis management training

and supporting resources that cover more diverse types of crises could be explored further, such that the common set of terminology and structures for crisis management could be applied and be deeply ingrained into organisations' crisis structures and responses regardless of the nature of crises.

There was thus a critical need to set up a WOG platform to drive and coordinate crisis management training across the WOG and across sectors, to ensure that the crisis management capabilities of WOG agencies can be levelled up collectively.

Establishment of the Crisis Management Training Steering Committee

HTA thus established the Crisis Management Training Steering Committee (CMTSC) in March 2023. The CMTSC, which is chaired by the Chief Executive of HTA and supported by Senior Director (Joint Operations Group) of MHA as Deputy Chairperson, comprises Director level representatives from 10 ministries typically involved in crisis management[1]. It is supported by a CMTSC Work Group led by the Home Team Centre for Leadership and comprises members from the 10 ministries.

The objectives of the CMTSC are to:

a) Establish oversight and provide strategic direction for WOG crisis management training interventions across the public sector;

b) Drive the development, operationalisation and synergy across WOG in the areas of crisis leadership and crisis management, and

c) Distil and align best practices, such as frameworks, methodologies and resources, for knowledge sharing among subject matter experts in crisis leadership and management.

TThe CMTSC, which is to be convened annually, met for the first time in May 2023. It was decided that its immediate aims were to identify the critical crisis management capabilities organisations require, as well as current training and developmental gaps in crisis leadership and management across WOG. It will also review training programmes in crisis leadership and management offered across WOG. This will lead to the development of a WOG Crisis Management Capability Development Framework and a WOG Crisis Management Capability Intervention Roadmap to align the crisis management capabilities to the interventions required to address the enhancement of these capabilities across the government. The development of the Framework and Roadmap will be an iterative process where HTA, in conjunction with CMTSC member agencies, will continually review and refine the needs across the WOG, in order to curate suitable interventions to equip the public service with the requisite knowledge and competencies in crisis leadership and management timely amid the dynamic operating environment.

Identification of Subject Matter Experts to Join CMTSC

As the crises we face today are complex and diverse, it is important to identify the appropriate subject matter experts within the CMTSC. Having the right subject matter experts will provide HTA with the required expertise, knowledge and content to develop high quality crisis leadership and management training programmes to ensure that WOG agencies will be adept in responding to future national or organisational crises.

As crises today have become increasingly complex, more agencies need to be involved in crisis management training at WOG level, especially within their domain areas of expertise. Hence, relevant stakeholders were identified to be involved in the CMTSC, to allow for the early identification of training gaps as well as address the diverse needs of the WOG more comprehensively. While not all ministries are currently represented in the CMTSC, HTA will assess the need to involve new agencies in future based on potential evolvement of the crisis landscape.

Focal Areas of the CMTSC

Given its objectives, the CMTSC will focus on three areas. The first focal area is the overview of the WOG crisis management landscape, i.e. (a) the overall trends and challenges in the crisis

[1] These ministries are MHA, Prime Minister's Office (PMO), Ministry of Defence, Ministry of Communications and Information, Ministry of Transport, Ministry of Trade and Industry, Ministry of Sustainability and the Environment, Ministry of Foreign Affairs, Ministry of Health, and the Ministry of Culture, Community and Youth.

management landscape, such as how new technologies may create new crises or alter the way the Singapore public service agencies have to manage crisis responses and communications; and (b) the identification of common gaps faced by WOG agencies, based on reviews and analysis of key findings from the management of crises and/or findings from assessments/audits conducted by MHA JOG on their crisis preparedness in peacetime. These will allow the CMTSC to analyse trends and issues that will impact the Singapore public service, as well as provide the crucial insights for HTA and sectoral subject matter experts to identify the critical competencies and capabilities required to review the relevance and adequacy of the current suite of WOG crisis management training programmes.

The second focal area is the review of WOG training programmes in crisis leadership and crisis management, with HTA taking the lead in coordination with the respective sectoral subject matter experts to close training gaps and ensure the continued relevance of training programmes in meeting evolving needs. The review of WOG programme offerings will include:

a) The review of existing WOG crisis management training programmes to incorporate new content or materials and enhance the relevance and quality of these existing programmes to officers across the WOG, and;

b) The introduction of new programmes if new requirements are surfaced from reviews and findings from the management of crises, or discussions at the CMTSC.

The final focal area is the synergy and alignment of WOG crisis leadership and management training and development for collective levelling up of WOG capabilities in crisis management. The CMTSC oversees the development of two key deliverables: the WOG Crisis Management Capability Development Framework; and the WOG Crisis Management Capability Intervention Roadmap. The development of these two key deliverables will be conducted by a Work Group, to be led by the Home Team Centre for Leadership with members from the 10 ministries represented at the CMTSC. The two deliverables will be developed in two phases, starting with the development of the Framework projected for completion in February 2024 and the development of the Roadmap projected for completion in April 2024.

The **WOG Crisis Management Capability Development Framework** will be designed as a guide that is applicable to agencies across the WOG to establish or enhance their organisational cultures, structures and processes, such that they are adequately prepared when a crisis strikes. In addition, the framework will seek to familiarise agencies with a common set of terminology and structures for crisis management to enable strong organisational crisis responses, and effective communication and coordination when multi-agency responses are demanded. Given the complexity, diversity and scale of crises across the WOG, the framework will provide agencies with the flexibility to delve deeper into the concepts that will be listed in the framework or expand beyond it to develop unique crisis management capabilities tailored to their specific contexts.

The framework will then guide the CMTSC to align and synergise training programmes and efforts across the Singapore public service, through the **WOG Crisis Management Capability Intervention Roadmap.** This Roadmap will address the enhancement of various crisis leadership competencies and crisis management capabilities outlined in the framework by aligning them to the interventions required for each agency to support them comprehensively in capability development, such as training programmes to provide the requisite knowledge and skills in effective crisis management, exercises that aid in validating agencies' and officers' preparedness in crisis management, as well as audits/assessments that provide feedback for continual improvements. These interventions can potentially provide comprehensive guidance to the respective agencies to drive and develop internal organisation structures, dedicated staffing and related roles, as well as necessary partnerships, to achieve high levels of preparedness and effectiveness in crisis management and responses within the organisation.

Developing these deliverables will be an iterative process, with inputs sought from key stakeholders in agencies across the WOG, such as (a) leadership group comprising Senior Directors, Group Directors and Directors, and (b) officers from units involved in functions that have oversight and involvement in times of crises. This will ensure that the deliverables reflect a more complete picture of the ground reality and address WOG needs comprehensively. Both

will be reviewed on a regular basis to ensure their continued relevance.

ENABLING STRONG AND EFFECTIVE CRISIS LEADERSHIP ACROSS WOG

Incorporating the lessons learnt and the need to develop strong leaders in crisis management that would ensure that the Singapore public service augments its ability to tackle future crises effectively. Future complex crises require more strategic and comprehensive collaboration efforts across the WOG, the wider community and even regionally, as well as stronger organisation capabilities among Singapore public service leaders and agencies. While the framework and roadmap are currently under development, HTA has taken the lead to enable strong and effective crisis leadership across the WOG through the introduction of a new WOG crisis leadership programme – the Leaders in Crisis Governance Programme (LCGP), with the inaugural run taking place in August 2023. Essentially, HTA aims to level up the leadership capabilities and capacities across the WOG to be more effective in managing and collaborating for future crises.

The LCGP is targeted at Group Directors and Directors in the public service. This is to facilitate the mindset and attitudinal shifts that such leaders require and equip them with the necessary skills to drive and manage change. The signature level of the programme also seeks to instil leadership accountability and responsibility, as well as to reinforce the commitment of agency leaders to be adept and involved in leading and managing crises at all levels, whether national level, domain level or organisational level.

Additionally, the inaugural LCGP catered to tiered learning. Participants were first introduced to the current crisis management context and the existing WOG crisis management structures in place. They were then brought through crisis leadership components such as psychological and behavioural aspects of crisis leadership, personal and team resilience, as well as managing complexity, before deepening their requisite knowledge of the guiding principles for crisis management planning and multi-sectoral crisis responses. Finally, participants underwent experiential exercises in crisis management such as crisis communication workshops and table-top exercises. Following this inaugural run, HTA will review participant feedback to further refine and enhance the LCGP to strengthen the programme's relevance and applicability for the WOG as part of continual improvements, incorporating from the Crisis Management Capability Development Framework and Roadmap.

Beyond theory and practice, the LCGP places strong emphasis on facilitating deeper discussions, through sharing and cross-fertilisation of ideas and best practices among senior public sector leaders on issues and challenges in how their agencies can enhance the government's ability to coordinate a multi-sectoral response, and harness societal

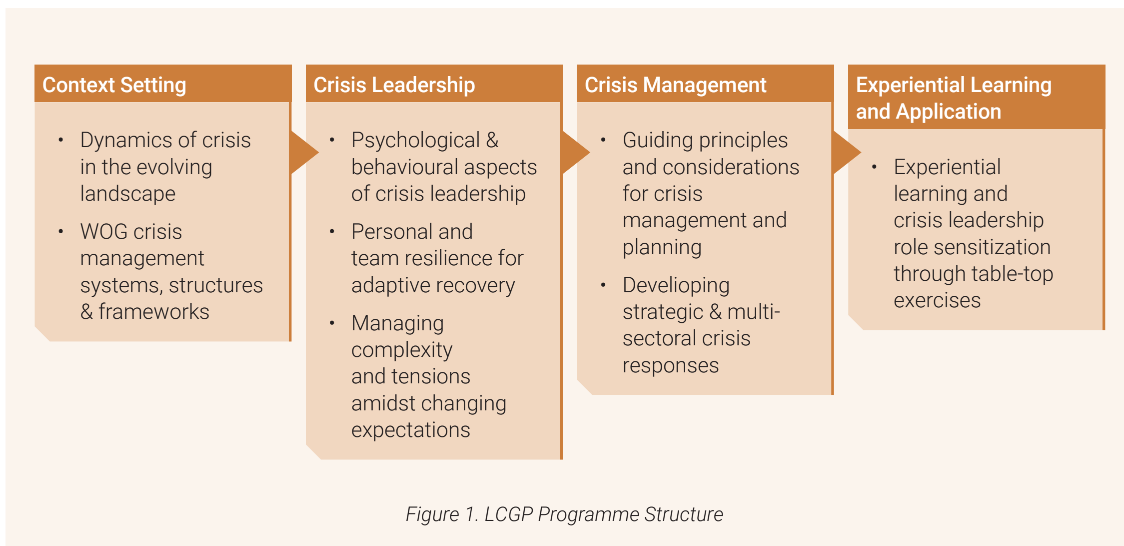

Figure 1. LCGP Programme Structure

resources more effectively for crisis response. Case discussions and dialogues with senior leaders also shifted from localised incidents and internal organisational issues to focus on broader contexts and multi-sectoral impact.

At the inaugural run of the LCGP from 14 to 24 August 2023, HTA played host to an illustrious range of local and international strategic partners, all of whom are seasoned players in the field of crisis management and leadership. These included key government personalities, as well as HTA's strategic partners, the Australian Institute of Police Management (AIPM) and Coventry University.

The inaugural programme was well-received by the participants, who appreciated the opportunities they had to hear the diverse perspectives from esteemed practitioners, as well as the platform to network and learn from their peers in crisis management across the WOG.

CONCLUSION

The COVID-19 crisis has opened the doors to new ways of working, useful innovations for agency and WOG operations during normalcy and crises; new partnerships across the whole-of-nation, and most importantly, working as a WOG to solve complex issues. HTA seeks to ride on this momentum and provide the platform to strengthen WOG collaboration not only in times of crises, but also during peacetime.

As the imperative for even more coordinated WOG crisis responses grows, HTA, together with the members of the CMTSC, must work closely together to collectively level up the crisis management capabilities of the WOG; to establish a common set of terminology and structures for crisis management to enable strong organisational crisis responses for future complex crises through training and the development of organisational capabilities.

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THE BSC BRIEF

Behavioural Insights for the Home Team

ANTICIPATING CRISES ARISING FROM INTERGROUP TENSIONS: DECODING IDENTITY-RELATED ONLINE DISCOURSE IN MULTICULTURAL SINGAPORE

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ABSTRACT

Diversity is an increasingly complex issue that may have a significant impact on society and public discussions. In a multicultural country like Singapore, where diverse groups coexist with their unique beliefs and practices, tensions can arise to pose challenges to social harmony and national security. Being able to assess threats and trends in online discourse is thus crucial for anticipating or managing crises stemming from intergroup tensions. This study aims to investigate the dynamics of online conversations about diversity and understand their implications for effective engagement and policy development. It focuses on four possible causes of diversity-related tensions: race, religion, sexual orientation, and anti-foreigner sentiments. Public social media contents from local English and Mandarin news outlets in 2022 were collected to gather insights. Machine learning techniques were then used to extract the emotions and stances expressed in the texts. Through a mix of network analysis and qualitative examination, the study explores the structure, dispersion, emotional expressions, and patterns of information spread within these conversations. The findings highlight the diverse patterns observed in discussions about diversity issues in Singapore. Moreover, the analysis uncovers distinct emotional patterns associated with different stances, providing valuable insights into the sentiments expressed by the public on various issues. These findings offer important implications for policymakers and leaders, as they provide a deeper understanding of the evolving landscape of diversity-related issues.

SOURCES OF IDENTITY-RELATED THREATS

Diversity-related threats and trends are increasingly complex, shaping societal perspectives and influencing public discourse. For example, the Black Lives Matter (BLM) movement in the United States sparked discussions on race and everyday racism in Singapore (K. Lim & Sukumaran, 2020). The global rise of LGBTQ+ rights movements has also challenged societal biases, equality, and acceptance (Pak, 2023). Consequently, exposure to more diverse and integrated settings could lead to a heightened awareness of social differences among communities and individuals (Theseira, 2021).

Certain groups and individuals in diverse communities tend to face systemic marginalisation and discrimination, which can be further exacerbated during crises, leading to heightened vulnerabilities and disruptions in societal functioning (Bundy et al., 2017). Emotions expressed by different communities, such as fear, anger, or grief, can significantly impact public discourse and attitudes on diversity-related issues (Kim & Cameron, 2011). The Integrated Threat Theory also suggests that strong identification with one's ingroup can lead to perceiving diversity as a threat, resulting in defensive reactions and potential conflicts (Iyer & Leach, 2009). This

phenomenon was observed in the 2022 Buffalo shooting, where a white gunman targeted African Americans based on a white supremacist ideology (Morrison et al., 2022). Singapore too has seen racially charged incidents, where in 2021, a Chinese man assaulted an Indian woman while hurling vulgar language (Alkhatib, 2021).

Diversity-related threats can also pose a challenge to Singapore's security interests. Since Singapore's multicultural fabric encompasses various groups coexisting with diverse beliefs and practices (Vasu, 2012), addressing and managing diversity-related threats becomes even more crucial. Furthermore, it is important to note that diversity encompasses many other characteristics (Vertovec, 2012) beyond ethnicity and religious beliefs (e.g., gender, sexual orientation, and culture). The challenges stemming from diversity can also manifest in various forms and, if not effectively managed, can have detrimental effects on society. Thus, this study will further examine four key types of diversity-related threats and trends that have an impact on Singapore's social fabric: (i) race, (ii) religion, (iii) sexual orientation, and (iv) anti-foreigner sentiments.

Race and Religion Issues in Singapore

Singapore's experience in the 1964 racial riots (Cheng, 2001) and the Maria Hertogh riots (Singapore Infopedia, 2014) showed how deep-seated tensions between ethnic and religious communities in Singapore can quickly spiral into violence due to the perceived threat towards the ingroup. A recent 2021 CNA-IPS study on racial relations in Singapore found that more than half (56.2%) of the respondents viewed racism as a serious issue, an increase from 46.3% in the 2016 survey (Mathews et al., 2022). This shows that race and religion remain a constant concern for Singapore.

According to the Integrated Threat Theory (Stephan et al., 2009), different groups may perceive each other as a symbolic threat (e.g., because of cultural differences) and this can lead to further tensions between groups. Notably, Singapore has taken the precaution of banning foreign segregationist and extremist preachers from entering the country (Baharudin, 2022) because their ideologies can threaten Singapore's security and harmony (Ong, 2022). While vigilant efforts have been taken to manage Singapore's social harmony, changing cultural norms can create new tensions that need to be managed effectively.

Sexual Orientation Issues in Singapore

Views on repealing Section 377A of the Penal Code, a law that criminalised gay sex, have been changing over time in Singapore (Ipsos, 2022). Although Singapore is gravitating towards a more accepting attitude towards LGBTQ+ rights, 44% of residents still support the retention of Section 377A (Ipsos, 2022). Furthermore, a survey of youths found that although 68% of respondents agreed with the repeal of 377A, there are differences in support for same-sex marriage and the defence of traditional marriage among those who profess to have a religion and those who do not (Elangovan, 2022). This suggests that issues of sexual orientation will likely remain a sensitive matter in Singapore in the coming years.

Anti-foreigner Sentiments in Singapore

Another issue of concern are the anti-foreigner sentiments in Singapore. The Institute of Policy Studies found that a considerable majority of residents, over 70%, expressed the need for stringent restrictions on the influx of foreigners into the country (J. Lim, 2021). This could have been driven by factors such as COVID-19 eliciting xenophobic sentiments in Singapore (Abdul Rahman, 2020; Ang & Das S/O A Sudha Ann Nancy, 2022). Disease outbreaks in migrant workers' dormitories contributed to blaming and scapegoating behaviour towards foreigners on social media (Ang & Das S/O A Sudha Ann Nancy, 2022), which heightened resentment towards foreigners (Tai, 2020). The Integrated Threat Theory suggests that Singaporeans, especially individuals from lower socioeconomic status, may perceive realistic threats (e.g., resource competition) from foreigners over jobs. Indeed, with growing financial pressures, the perception of intensified competition for limited resources between locals and foreigners may increase.

THE ROLE OF LEADERS IN NAVIGATING DIVERSITY THREAT

Effective leadership is instrumental in managing diversity-related threats as leaders play a crucial role in demonstrating a commitment to diversity, fairness,

"While vigilant efforts have been taken to manage Singapore's social harmony, changing cultural norms can create new tensions that need to be managed effectively.

and equal treatment. During the 2019 Christchurch shootings, former New Zealand Prime Minister Jacinda Ardern displayed cultural sensitivity by embodying inclusive behaviours and attitudes. For instance, she consciously covered her head during her visit to bereaved Islamic families as a symbol of respect and compassion (Malik, 2019). Ardern's speeches and public statements were also marked by compassion and genuine empathy focused on healing and unity (Luscombe, 2020). Thus, her actions and behaviours exemplified compassionate and inclusive leadership, creating a sense of trust and support amongst the communities.

On the other hand, leadership disregarding diversity issues can result in exclusion and perpetuate systematic inequalities towards marginalised communities. For instance, the 2005 Hurricane Katrina crisis in the United States was seen as a case of the negative consequences of failing to account for diverse demographics, which resulted in imbalanced suffering and loss of life (Bullard & Wright, 2009). A study from the Greater New Orleans Fair Housing Action Center found instances of discrimination in housing-related interactions, with African Americans encountering less favourable treatment due to race (Bullard & Wright, 2009; National Fair Housing Alliance, 2005). Consequently, Bullard and Wright (2009) noted that crisis management was marred by discrimination over housing for displaced people.

The cases above show that leaders who understand diversity can develop culturally sensitive solutions to address the unique needs, perspectives, and vulnerabilities of different communities. Furthermore, diversity-related threats cannot be underestimated as it can hamper social harmony and weaken social trust among different communities (Fu, 2019). Thus, Home Team leaders need to be aware of and be adept at navigating diversity-related threats.

OBJECTIVES OF STUDY

To gain a comprehensive understanding of the intricacies surrounding diversity-related threats in Singapore, this exploratory study investigates four key diversity issues discussed online: (i) race, (ii) religion, (iii) sexual orientation, and (iv) anti-foreigner sentiment.

Traditional approaches (e.g., relying on engagement metrics such as comments, reactions, and shares) are limited in capturing and comparing the complexity and dynamics of online discussions. Thus, other approaches are explored in this study to enrich the existing understanding of this issue. Network and time series analysis methodologies are adopted to provide a more data-driven understanding. Network analysis can highlight prevailing discourse topics or the presence of key actors driving these widespread discussions, whilst time series analyses can identify if diversity threats are sporadic or consistent.

Two research questions of interest in this study are:

1. How do online conversations about diversity-related issues differ in structure, dispersion, and emotional expressions across different topics such as racial identity, religious identity, sexual orientation identity, and foreigners?

2. What are the patterns of information spread, visibility, fragmentation, and organic nature in online discussions related to diversity? How can leaders and policymakers leverage these insights to engage and address the concerns of different communities effectively?

METHODOLOGY

Data Collection

The methods employed in this study involved collecting public social media content sourced from 11 local news outlets. These outlets consisted of eight English-language sources and three Mandarin-language sources. The data collection spanned from January 2022 to December 2022.

To establish inclusion criteria, two categories were identified. The first category encompassed identity-

based issues in Singapore, which included topics related to racial, religious, and sexual identity. The second category focused on issues about Singapore's security concerns, such as public trust in law enforcement. These criteria were used to select and include relevant content for analysis in this study. Keywords were developed to filter for content relating to these inclusion criteria.

Machine Learning to identify emotions and stances towards an entity of interest

Machine learning techniques were used to extract the emotions and stances towards an entity of interest in the text data. For example, given a hypothetical text such as this:

> "I OPPOSE this crime policy; it's foul & revolting. It maddens me that the govt is so blind."

The machine learning classifiers should extract "crime policy" and "govt" as entities of interest and then predict a stance among "against", "neutral", and "favour" towards each of these entities as well as one of Ekman (1992)'s six emotions: "Anger", "Fear", "Sadness", "Disgust", "Surprise", "Joy", and "Neutral". This is target-based emotion and stance classification, a variant of Aspect-based Sentiment Analysis[1] (as described in Gao et al., 2019; Sun et al., 2019).

To extract the targets of interest from the sentences, the *spacy* library (Honnibal et al., 2020) was utilised for named entity recognition. This allowed the identification of specific entities within the sentences. After extracting the entities, a manual filtering process was conducted to ensure the relevance of the targets for the classification task at hand. This step involved reviewing the extracted entities and selecting those relevant to the emotion and stance analysis. For this study, the relevant areas of interest to which an entity of interest belongs are the areas of Religious Identity, Racial Identity, Foreigners, and Sexual Orientation Identity.

Data Analysis

Finally, network analysis was conducted using the networkx library to examine the network properties of the collected social media data. This involved constructing graphs to represent the relationships and interactions between entities. *Gephi* was used to visualise the network graphs, providing insights into the patterns, clusters, and centralities within the network. Network analysis provides valuable insights into the structure of social connections and interactions, allowing for identifying patterns of group associations and exploring interconnections between different issues. By examining social networks, potential sources of threats can be revealed and their diffusion within these networks can be understood.

Two network measures are employed to analyse polarisation or the presence of echo chambers in online conversations on diversity issues: modularity and the number of connected components[2].

The content analysis approach employed in this study followed the principles of open and axial coding outlined by Strauss (1987). Open coding involves identifying and categorising entities of interest present in the collected content. This initial coding process was followed by axial coding, which involved examining the relationships and connections between the identified entities. To enhance the analysis, a qualitative close reading

[1]A sentence pair classification approach (Gao et al., 2019; Sun et al., 2019) was employed using a double-headed aspect level classification model and finetuning of large language models for the target-based emotion and stance classification. The Bidirectional Encoder Representations from Transformers (BERT) model (Devlin et al., 2018) was employed for English text classification, while the Chinese-BERT-WWM (Whole Word Masking) model (Cui et al., 2021) was utilised for Mandarin text classification. The models' predictions were evaluated against a set of testing data. The macro F1 scores (English emotion prediction = .91, English stance prediction = .92, Mandarin emotion prediction scores .74, Mandarin stance prediction scores .87) were comparable to the performance reported in similar studies (Di Giovanni & Brambilla, 2021; Sáenz & Becker, 2021).

[2]Modularity refers to the extent to which communities exhibit strong internal connectivity and limited connections with nodes outside the community. Higher modularity signifies a **more pronounced division into distinct communities** (Newman, 2018). On the other hand, connected components represent sets of nodes in a graph where each node is linked to every other node in the set. A greater number of connected components suggests **the presence of isolated clusters** and lower overall connectivity (Newman, 2018).

[3]First, topic modelling techniques top2vec (Angelov, 2020) were applied to extract recurring themes and patterns within the data as topics, while a text summarizer using BART (Lewis et al., 2019) aided in condensing and extracting key information from the topics extracted. This combined approach facilitated a swift and comprehensive content exploration, enabling a deeper understanding of the underlying themes and insights.

of selected content was performed by leveraging machine learning techniques[3].

FINDINGS AND DISCUSSION

Understanding Emotion-Stance Associations in online discussions of diversity issues

The results[4] show that when people expressed joy, they tended to have a supportive (Favour) stance. On the other hand, when people expressed anger, disgust, fear, sadness, or surprise, they were more likely to have an oppositional (Against) stance. Meanwhile, when people expressed a neutral emotion, they tended to have no specific stance.

Interestingly, sadness and disgust were not significantly associated with an oppositional stance when it came to the Mandarin language content. Instead, disgust was found to be significantly associated with having no specific stance. Similarly, surprise was not significantly associated with an oppositional stance when it came to the English language content. It suggests that there may be a linguistic variation, and applying a cultural lens is required to interpret the relationships between emotions and stances from different linguistic groups.

Awareness of how emotions and stances are expressed differently and uniquely local to their linguistic groups can help leaders thread cultural nuances in online spaces more carefully. For instance, understanding how emotions are expressed differently online is the first step for leaders seeking to avoid social media communication crises due to cross-cultural communication misunderstandings. Finally, the link between specific emotions and the degree of public support can be helpful for leaders to pay attention to, especially for issues relating to diversity.

Prevalence of emotion and stance

A time-series graph was plotted to identify patterns of social media activity (posts, comments and replies) for both English and Mandarin language local news sources from January 2022 to May 2023. A close read of the data at specific peaks (in Figure 1) shows that the conversations corresponded to the Ukraine-Russia War in February 2022, the move towards the repeal of

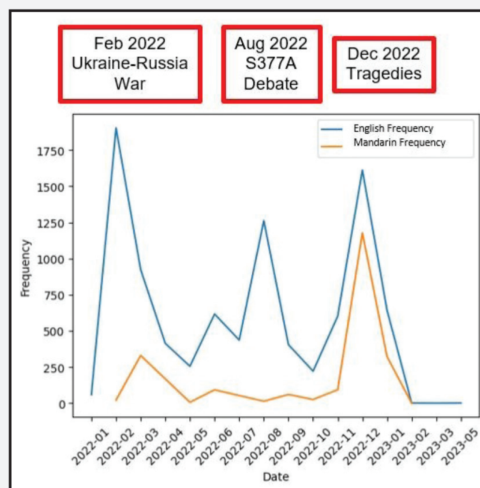


Figure 1. Frequency of activity (posts, comments and replies) between January 2022 to May 2023

[4]To derive the emotion-stance associations, chi-squared analyses were carried out. The chi-squared test of independence showed that there is a significant association between emotion and stance for English and Mandarin ($x2$ (12, N = 3533) = 1051.01, $p < 0.001$, V = 0.38), English ($x2$ (12, N = 2251) = 1231.44, $p < 0.001$, V = 0.52), and Mandarin ($x2$ (12, N = 1282) = 351.63, $p < 0.001$, V = 0.37). The relations between individual emotions and stances were subsequently probed based on the adjusted residuals (Bonferroni corrected) for all combinations of emotion and stances.

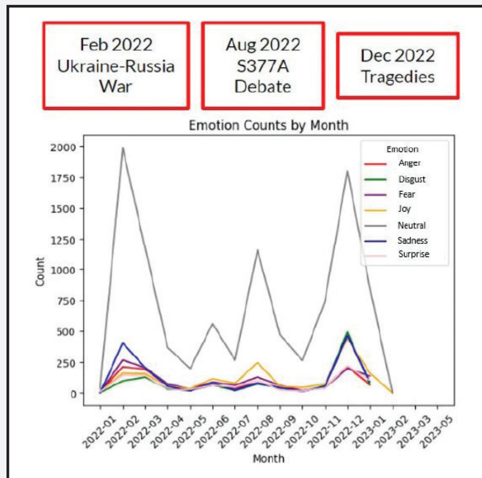


Figure 2. Frequency of emotions between January 2022 to May 2023

Section 377A of the Penal Code (which criminalised sex between consenting adult males) first proposed by Prime Minister Lee Hsien Loong in his National Day Rally speech in August 2022 and a series of tragedies reported in the news[5] in December 2022. The emotions associated with the different frequency peaks were also identified (Figure 2).

The AI-aided qualitative analysis of the online discourse also revealed additional events in 2022 that touched upon diversity issues. These included discussions on a prominent Catholic figure's sex abuse offences against teenage boys in Singapore, and Singapore's denial of entry to a radical preacher. In the context of racial identity in Singapore, the analysis showed conversations contrasting the identity of Singaporean Chinese to other Chinese in terms of upbringing, values, habits, and identities. Furthermore, mentions of foreigners focused on incidents related to stubbornness, selfishness, the lack of assimilation in terms of languages and behaviours, and perceptions of not contributing to society. However, for this analysis, the event which garnered substantial attention was the 377A debate, which will be examined below.

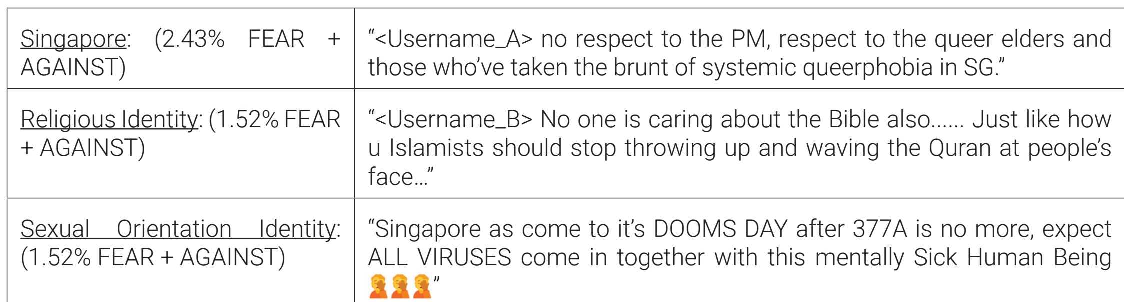
The top 3 emotions identified in August other than the neutral emotion were Joy (13%), Fear (6%), and Surprise (5%). Joy and support were directed towards entities relating to Singapore and the Singapore government for the repeal of Section 377A. This is seen in the following comments:

Singapore (20.12% JOY + FAVOUR)	Power to the people! Thank you for everyone who has joined forces in the fight to make Singapore a more inclusive community for everyone. Gay or not, love is love. ❤️ Singapore did the right thing tonight. Singapore is maturing! Well done, Singapore! A step forward for humankind.
Sg Govt (10.36% JOY + FAVOUR)	We are a much closer to social inclusivity. It's not an easy decision, it's also a delicate one but you have done the right thing. Thank you PM Lee Hsien Loong 😘

[5]These were a series of tragedies that occurred in Dec 2022 such as Malaysia landslide near Genting Highlands, when Singapore citizens were rescued, and the death of Singaporean Creative Technology's founder, Sim Wong Hoo.

As for negative emotions (anger, fear, sadness, disgust), fear and opposition were found to be directed towards the Singapore government, Religious and LGBT-related entities.

in the sensemaking of potential threats, especially in a scenario where threats are escalated towards vulnerable or minority groups. During times of crisis, when marginalised populations feel that their



Singapore: (2.43% FEAR + AGAINST)	"<Username_A> no respect to the PM, respect to the queer elders and those who've taken the brunt of systemic queerphobia in SG."
Religious Identity: (1.52% FEAR + AGAINST)	"<Username_B> No one is caring about the Bible also...... Just like how u Islamists should stop throwing up and waving the Quran at people's face..."
Sexual Orientation Identity: (1.52% FEAR + AGAINST)	"Singapore as come to it's DOOMS DAY after 377A is no more, expect ALL VIRUSES come in together with this mentally Sick Human Being 🤦🤦🤦"

The findings of this study shed light on the link between emotions and public support regarding diversity issues. Specifically, the analysis revealed that joy and support were observed concerning the repeal, while fear and opposition were directed towards the government and religious or LGBT-related entities. This emphasises the importance for leaders to anticipate that they will need to balance the perspectives of different groups to maintain social harmony and trust in future events. It may even entail early engagement and dialogue with various groups to avoid sharp societal divides.

Leaders can utilise this information to gauge public sentiment, identify areas of support or opposition towards diversity issues, and tailor their communication strategies accordingly. In the case of the Section 377A repeal, the presence of mixed emotions like joy, fear, and surprise indicates that the repeal is a highly emotionally charged topic. Such perspectives on 377A expressed often stem from considerations of societal norms, religious convictions, and apprehensions regarding potential societal consequences (Mathews et al., 2019). Therefore, leaders should recognise the depth of emotional engagement and consider it when formulating strategies and responses for similar events in the future.

Furthermore, the identified emotions and their associations with specific entities, such as Singapore and the Singapore government in the context of the 377A repeal, provide valuable insights into public perceptions and sentiments towards diversity-related matters. This can also be valuable perspectives are not acknowledged or respected, it can lead to a sense of exclusion, and this lack of inclusion can erode their trust in leadership (Fothergill et al., 1999). There could also be feelings of institutional betrayal experienced when an institution one trusts or relies on fails to support or protect them (Smith & Freyd, 2014).

Interpreting neutral emotions in online discussions

Notably, a significant portion of the dataset comprised neutral emotions and stances. One interpretation of this could be that many may not have strong emotions towards the issue, and thus it is important not to neglect this group. Another interpretation could be that the abundance of neutral comments suggests that users may have been involved in sharing information, exchanging perspectives, or engaging in a more objective analysis of the discussed diversity-related issues. This highlights the need for leaders to anticipate diverse viewpoints and foster constructive dialogue and understanding among stakeholders with different perspectives.

Network analysis of the structure of conversations around diversity issues

The conversations about different entities of interest showed distinct patterns in their networks (see Table 1). For instance, religious identity and racial identity issues had more nodes/unique user accounts, indicating greater engagement in conversations on social media than Foreigners and Sexual Orientation identity.

Table 1. Descriptives of diversity issue

Diversity Issue	No. of Nodes/ No. of Accts	No. of Connected Components	Overall Modularity
RACIAL IDENTITY	**408**	**96**	**.95**
FOREIGNERS	**243**	**57**	**.89**
RELIGIOUS IDENTITY	**988**	**42**	**.73**
SEXUAL ORIENTATION IDENTITY	**109**	**27**	**.81**

Interestingly, discussions related to racial identity and foreigners were more fragmented than discussions on religious identity and sexual orientation. Simply put, conversations about race and foreigners were more divided into smaller groups or pockets of discussion, whereas conversations about religion and sexual orientation were more connected and cohesive. This division was evident in the analysis of the conversation networks. Networks related to racial identity and foreigners showed higher scores for modularity, indicating a greater division into distinct groups, and a greater number of connected components, meaning there were more separate clusters of discussion. On the other hand, conversations about religious identity and sexual orientation were more connected overall, suggesting a higher level of overall connectivity.

When visually examining the graphs representing these conversations (Figure 3), it appeared that discussions about race and foreigners often occurred in news articles that did not specifically focus on these topics. This suggests that conversations about race and foreigners are more organic and dispersed, with individuals bringing up these issues based on their interests or concerns. In summary, discussions about race and foreigners tend to be more fragmented and decentralised, occurring in smaller pockets of conversation across various contexts.

Based on qualitative analysis of the relevant data, the high dispersion of comments towards foreigners could be due to persistent negative perceptions of foreigners as economic competition for jobs, and of well-off foreigners driving up prices in Singapore. According to Veilleux & Tougas (1989), this may be an experience of collective relative deprivation which refers to feelings of discontentment due to perceptions of being disadvantaged compared to foreigners. Buhr and Dugas (2002) suggest that such stress and feelings of relative deprivation can lead to a reduced tolerance for uncertainty, which can result in blaming outsiders or different groups for various issues. It might explain why sentiments towards foreigners may be made even in responses to news articles that are not about foreigners in Singapore.

Furthermore, when examining the negative emotions (such as anger, fear, sadness, and disgust) expressed in conversations about race and foreigners, these emotions were found to be scattered across different pockets of discussion. In contrast, discussions about religious identity and sexual orientation showed a different pattern. In conversations about religious identity, emotions like sadness and disgust were mainly concentrated within a single group of discussions. This concentration of emotions could be due to various tragedies reported in the Chinese media in December.

Conversations about sexual orientation identity exhibited a different pattern, characterised by polarisation and varying dispersion. Discussions expressing fear and anger were more spread out across different conversations, while conversations expressing joy more focused on specific news reports. One possible explanation for this pattern is that individuals from opposing viewpoints in these discussions may experience fear or anger when they perceive threats or challenges to their own cultural or personal identities (Davis, 2015). As such, these polar emotions might reflect people with opposing viewpoints in these conversations who are striving to protect and preserve their unique cultural or personal identities (Chen, 2013).

When examining the stances expressed on various diversity issues (as shown in Figure 4), it was observed that the level of organisation and clustering among those expressing support or opposition was similar across all the issues. This means that regardless of the specific diversity

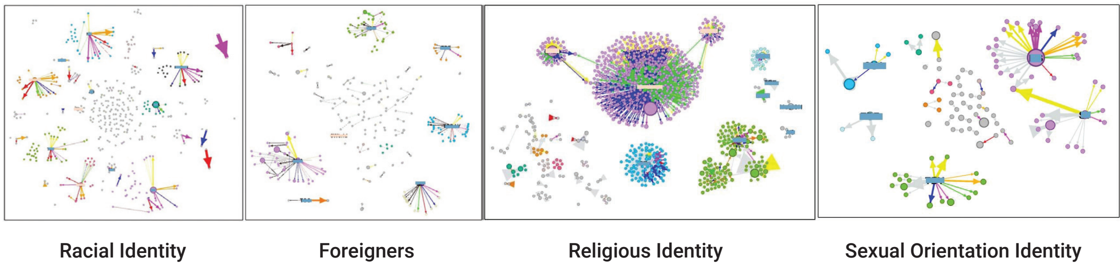


Figure 3. Networks of conversations referencing entities relating to racial identity, foreigners, religious identity, and sexual orientation identity

The orange boxes refer to the Mandarin news media outlets while the blue boxes refer to the English news media outlets. The coloured edges (lines) refer to the emotion expressed: Red for anger, Pink for fear, Green for disgust, Blue for sadness, Orange for surprise, Yellow for joy, Grey for neutral. The thicker the lines, the more replies one account has made to another. The colour of the nodes refers to the Component ID that each node is assigned to.

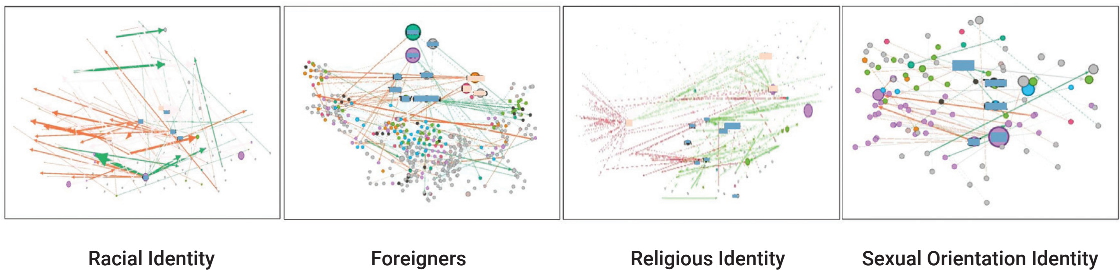


Figure 4. Networks of conversations referencing entities relating to racial identity, foreigners, religious identity, and sexual orientation identity

The orange boxes refer to the Mandarin news media outlets while the blue boxes refer to the English news media outlets. The coloured edges (lines) refer to the stance expressed: Red for against, Green for favour, Grey for no stance. The thicker the lines, the more replies one account has made to another. The colour of the nodes refers to the Component ID that each node is assigned to.

issue being discussed, there was a comparable level of structure and grouping among people who supported or opposed that particular issue.

By analysing the structure and spread of conversations on diversity issues, network analysis helps us understand how these discussions unfold online. One important finding is that lower levels of modularity in the discussions suggest that these issues are naturally integrated into the overall conversation. On the other hand, higher levels of modularity indicate the possibility of echo chambers, where people with similar views tend to interact and reinforce their beliefs without much exposure to opposing perspectives. This may mean that leaders and policymakers should engage in targeted listening and pay attention to the concentrated conversations to effectively identify

the emergence of diversity-related threats from such echo chambers.

Network analysis provides valuable insights into how information, ideas, and opinions about diversity are shared and discussed. It facilitates understanding of these conversations' visibility, fragmentation, and organic nature. The analysis shows that these discussions are complex and have multiple dimensions indicating the level of engagement, support, or opposition from different groups of people. Leaders and policymakers should pay attention to the unique patterns of emotional expression and sentiment associated with each diversity issue. Understanding these patterns can help leaders tailor their messaging and strategies to effectively address the concerns and perspectives of various communities (Liu et al., 2018; Rim et al., 2020).

GENERAL IMPLICATIONS FOR LEADERS AND POLICYMAKERS

This study provides insights into the dynamics of online conversations about diversity and their implications for effective engagement and policy development. The study used a combination of emotion and stance analysis alongside network analysis to gain a rich understanding of different diversity issues. The findings have broad implications for national policymaking and leadership.

Firstly, leaders and policymakers must anticipate the emotional impact of policies on different communities to maintain social harmony and trust in future events. This is because exclusion and feelings of institutional betrayal can arise when some communities feel that their perspectives are not acknowledged or respected (e.g., Smith & Freyd, 2014). They will need to balance the perspectives of different communities and engage in early dialogue to avoid sharp societal divides. To achieve this, leaders must have a strong understanding of the communities they serve, including their culturally unique needs, perspectives, and vulnerabilities. Thus, developing strategies to address concerns in a respectful and sensitive manner is crucial.

Understanding emotions and narratives is also important in developing effective government responses to complex and highly grey social issues regarding diversity. By focusing on these two aspects, policymakers and leaders can gain a better understanding of the underlying sentiments and perspectives associated with different conversations about diversity and develop more effective strategies to address diversity issues and mitigate the negative effects of online discussions. Thus, this study highlights the significance of listening to online conversations about diversity using social media analytics strategies. By doing so, leaders can become more aware of common lines of discourse and public sentiment towards these issues in order to develop a heightened sensitivity to the issues that can facilitate the spread of polarisation (e.g., Davis, 2015). Additionally, listening to online conversations can aid in the development of official responses, particularly during major crises. This is because it allows leaders to gain a better understanding of the emotions and perspectives associated with different conversations and different groups in the communities. With this knowledge, leaders can assess the risk of potential threats, especially in scenarios where threats are escalated towards vulnerable or minority groups, and develop more effective strategies to address diversity issues and mitigate the negative effects of online discussions.

Secondly, there is a need for contingency planning to contain the spread of false information and hate speech that can exacerbate negative sentiments towards certain identity groups. Diversity-related issues can become emotionally charged and spread widely, making regulations and legislation such as the Protection from Online Falsehoods and Manipulation Act (POFMA) and the Maintenance of Religious Harmony Act (MRHA) important tools to defend against negative effects on Singapore's social fabric. Developing social media/public communication strategies can help to mitigate the negative effects of online discussions on diversity matters. Additionally, it is crucial to track these issues over time as they can linger and be brought up in different contexts. Failing to do so in a timely fashion can cloud public and community judgment, leading to misunderstandings and misinterpretations of the issues at hand. Policymakers and leaders can also gain a more comprehensive understanding of the dynamics of online conversations about diversity by tracking these issues over time. This will allow them to develop more effective strategies to address these issues and avoid potential negative consequences.

Thirdly, there is no one-size-fits-all approach to diversity-related conversations, as seen in differences in how dispersed they are in the study. While persistent negative perceptions on diversity matters, such as race and foreigners, should be tracked and addressed, other issues may require more targeted listening to avoid missing out on potential threats to diversity. Leaders must also anticipate and understand that highly charged and potentially polarising conversations, such as those involving sexual orientation identity, involve groups who are striving to protect and preserve their unique cultural or personal identities (e.g., Chen, 2013).

Finally, the study recommends using mixed methods for sensemaking. For instance, social network analysis can be used to study how differently dispersed different kinds of conversations are on diversity issues. Additionally, emotion and stance analyses can be used to understand the emotions associated with different conversations. Policymakers and leaders should consider using a combination of these techniques to gain a comprehensive understanding of the dynamics of online conversations and develop effective strategies to address diversity issues. Finally, applied researchers should also consider such approaches when conducting research on social media to support policies and operations.

LIMITATIONS AND FUTURE WORK

It is important to acknowledge the following limitations of this study. Firstly, while this study provides insights into the functional aspects of emotions and their role in public reactions towards diversity issues, it is important to note that emotions remain a complex and multifaceted phenomenon. Further research should delve deeper into the specific functions of emotions and their implications for understanding diverse public reactions in the offline setting.

Secondly, the study is based on publicly available data from social media over a year. This approach may limit the visibility of threats and discussions occurring on more closed instant messaging platforms such as WhatsApp.

Finally, it is vital to acknowledge the language focus of this study, which primarily analysed English and Chinese language content. Singapore is a multilingual society with four official languages, and studying conversations in different languages could yield more nuanced and insightful findings. Future studies could consider incorporating a broader range of languages to capture a more comprehensive picture of diversity-related discussions and their associated emotions.

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