INTRODUCTION

Much attention has been devoted to the study of the deterrence theory during the Cold War due to imminent nuclear threats.\(^1\) Following the end of the Cold War and given the growing desire to shift away from nuclear warfare towards conventional warfare, an examination of the fundamental concepts associated with deterrence strategies for non-nuclear states seem relevant and essential.\(^2\) However, little attention has been paid to the general literature concerning deterrence to the dynamics of conventional environments; the development of conventional deterrence as a unique, theoretical concept has lagged behind the evolution of nuclear deterrence policies.\(^3\)

Therefore, this essay examines the important role the Singapore Armed Forces (SAF) plays in Singapore’s deterrence strategies. The first part of the paper reviews the concept and theories of deterrence. Of significance, it identifies two key factors which affect the efficacy of deterrence—Credibility and Communication. The former is a function of a state’s capability and commitment to counter any potential aggressor, while the latter is about communicating the credibility to achieve deterrence.\(^4\)

Following that, the paper examines Singapore’s deterrence strategies against the two identified factors of credibility and communications. In essence, it analyses three strategies:
(1) Singapore’s defence strategy and capability, specifically the 3rd Generation Army;
(2) Singapore’s commitment through its political will to respond to any aggression; and
(3) Singapore’s strategies in communicating its credibility to employ force when necessary.

Additionally, the essay highlights that besides political will, the national willpower to fight is also key in establishing the credibility for deterrence. And, a strong deterrence must be complemented by defence diplomacy. Next, the essay recommends the way ahead for Singapore to enhance its deterrence—specifically how the SAF can be strengthened to enhance Singapore’s deterrence.

DETERRENCE

Deterrence comes from the Latin word – ‘Terere’, which has the same root as ‘terror’. Deterrence can be defined as the use of threats of harm to prevent someone from doing something you do not want him to do. One common categorisation of deterrence is nuclear deterrence and conventional deterrence. The former is commonly associated with deterrence by punishment while the latter is usually associated with deterrence by denial. Morgan defined the concept of deterrence by punishment as one party preventing another from doing something the first party does not want by threatening to seriously harm
the other party if it does. 9 On the other hand, Snyder defined deterrence by denial as the threat to deny an adversary the ability to achieve its military and political objectives through aggression. 10

**Theories of Deterrence**

According to Frank Zagare, Marc Kilgour and Stephen Quackenbush, there are two main theories of deterrence: classical (rational) deterrence theory and perfect deterrence theory (see Figure 1). 11

Classical (rational) deterrence theory was born in the 1950s and fully developed in the 1960s. Largely as a by-product of the Cold War era, it was confined to relationships between the nuclear states. 12 According to Zagare and Luca & Sekeris, the classical deterrence theory can be sub-divided into the structural deterrence theory and the decision-theoretic deterrence theory. 13 The structural deterrence theory posits that when the power parity of belligerent states is in balance and the costs of war are high, deterrence is more likely to succeed. 14 The decision-theoretic deterrence theory adopts a game-theoretic approach and emphasises the role of the threat’s credibility in deterring one’s opponent. 15

Zagare & Kilgour provided another theoretical deterrence framework called the perfect deterrence theory. 16 According to Zagare & Kilgour, the perfect deterrence theory has the following characteristics:

(1) Mutual deterrence works best when both states have capable and credible threats;
(2) There is a strong linkage between rationality and credibility—only rational threats can be credible;
(3) It affords no special status to nuclear weapons, i.e. the theory can be applied to conflict-of-interest situations between various combinations of large and small states, with or without nuclear capabilities. 17

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*Figure 2: Factors Influencing the Efficacy of Deterrence.*
The fundamental difference between the classical deterrence theory and the perfect deterrence theory is that the former assumes that conflicts are always the worst possible outcomes for both states, while the latter assumes that different states have their own internal characteristics and different preferences to conflicts.\(^\text{18}\) Though both theories differ in several aspects, they both hinge on the fundamental assumption of rationality—a potential aggressor is rational and will compare the expected costs and benefits of alternative courses of action before making an optimal choice.\(^\text{19}\)

War can only occur when the states in a conflict decide to use force. Premised on the assumption of rationality, these states will act as a function of opportunity—that is, when the expected net benefits of mounting a challenge to the status quo (expansion) exceed the expected costs of overcoming other states’ defences (opportunity).\(^\text{20}\) Therefore, the efficacy of deterrence lies in the defenders of a status quo situation in raising the costs of challenging it to an unacceptable level.\(^\text{21}\) Hence, the following two factors can influence the efficacy of deterrence (see Figure 2):

### Credibility

The credibility of a deterrent threat rests on two levels:

1. The possession of a capability that can inflict the threatened level of retaliation;
2. The existence of the political will to respond militarily.\(^\text{22}\)

Credibility is the quality of being believed—the aggressor must believe that the deterrer is militarily capable of inflicting damage and at the same time is committed through its political will to use that capability.

### Communications

Deterrence will succeed if the threatened costs can be communicated to the aggressor, assessed by the aggressor and believed by the aggressor.\(^\text{23}\) Communication is about:

1. Articulating the deterrer’s military capability to respond to any potential aggressor;
2. Demonstrating the deterrer’s commitment through its political will to act on the deterrent threat. In other words, the deterrer seeks to convince the potential aggressor that if he is challenged, the promised retaliation is unavoidable.

Based on the theory and factors discussed, the credibility of deterrence is a function of capability and commitment to respond to any potential aggressor. Deterrence will only be effective if this credibility is effectively communicated.

### DETERRENCE STRATEGY – IN THE CASE OF SINGAPORE

During the early years after separation till the 1980s, Singapore’s leadership followed a ‘poisonous shrimp’ strategy which aims to raise an aggressor’s cost of attacking it to such an undesirable level that no country would consider invading.\(^\text{24}\) However in 1982, Brigadier-General Lee Hsien Loong, then Chief of Staff (General Staff) of the SAF, declared...
the need for Singapore to eradicate the ‘poisonous shrimp’ strategy and adopt a defence posture that was capable of inflicting intolerable costs on potential aggressors—this posture was likened to that of a ‘porcupine’. Consequently, since 1984, Singapore’s deterrence strategy has been operationalised through Total Defence (TD), a concept to unite all sectors of society—government, businesses and the people in the defence of the country.

Credibility for Deterrence – Function of Capability and Commitment

In terms of military defence, the SAF is the crucial guarantor of Singapore’s capability to respond to any aggression. This is inextricably reflected in the mission of the SAF: to deter aggression, and should deterrence fail to secure a swift and decisive victory. When Singapore gained independence in 1965, it had almost no defence capabilities. The principal consideration for Singapore’s basic defence was not good enough. Then Defence Minister, Dr. Goh Keng Swee subscribed to Sun Tzu’s strategy of “subduing the enemy without fighting any battle.” This meant that the SAF would have to build up and demonstrate its fighting capability and will power for deterrence.
With its inherent vulnerability of lacking strategic depth, Singapore would be unable to afford a prolonged conflict. Hence from the early 1980s to late 1990s, the key focus of building up the 2nd Generation Army was to enable it to achieve a swift and decisive victory. Due to the new security challenges and more complex operating environments, the Army embarked on the 3rd Generation transformation in 2004. Today, the 3rd Generation Army is capable of conducting precision warfare supported by precision strike capabilities and enabled by an integrated Command, Control, Communications, Computers and Intelligence (C4I) system. It is also flexible to conduct a full spectrum of operations (e.g. Humanitarian Assistance and Disaster Relief (HADR), peacekeeping or peace support operations, etc.), yet remain focused and capable in fulfilling its primary mission to protect Singapore’s peace and sovereignty.

As Singapore works on developing its military capabilities to achieve deterrence, it must be wary of the dynamics of a security dilemma—when a state takes strong action to protect itself against a perceived threat, that action itself is often perceived as a threat because it is interpreted as an increased capability or commitment to attack.

Another key factor in determining the credibility for deterrence is the existence of Singapore’s commitment through its political will to use force when required. On 9th August, 1991, a joint, large scale tri-service exercise, codenamed Exercise MALINDO DARSASA was conducted by Malaysia and Indonesia. 4,000 troops from both countries were involved. The exercise was an airborne assault by paratroopers in southern Johor and the choice of drop zone was only 18km from Singapore. Notably, the exercise was conducted on Singapore’s National Day and less than a year after Mr. Goh Chok Tong had been sworn in as Singapore’s new Prime Minister. Singapore responded with an Open Mobilisation of its armed forces on the eve of National Day and this was reported extensively in the local media. This example clearly demonstrated that Singapore’s leaders will not hesitate to make tough defence and security decisions to signal Singapore’s national resolve to respond militarily when required.

National Willpower to Fight

Since Napoleon’s levée en masse, war has become a national effort. Therefore, besides a committed political will, the nation’s willpower to fight for Singapore’s sovereignty is also critical in establishing the credibility for deterrence. The nation’s willpower to fight can be demonstrated through Singaporeans’ Commitment to Defence (C2D). C2D is key to projecting strong deterrence and securing the public support needed to build a strong and credible Army. Over the years, the Ministry of Defence (MINDEF) and the SAF have reached out to Singaporeans through various C2D engagement initiatives such as the Committee to Strengthen National Service (CSNS), annual Total Defence Awards, SAF-School Partnership Programme (SSPP) and National Education (NE) Gaming Championship, etc. According to a survey conducted by the National University of Singapore’s (NUS) Institute of Policy Studies in October 2013, more than 98% of Singaporeans agree that National Service (NS) is necessary for Singapore’s defence. The survey results are testament that Singaporeans’ commitment
to NS and defence remains high.

**Communicating the Credibility for Deterrence**

To achieve a strong deterrence, communicating the state’s credibility in terms of capability and commitment (political and nation’s will) to employ force when necessary is key. Singapore’s strategic communication efforts on deterrence can be broadly classified into internal stakeholders (Singapore society) and external stakeholders (international audience).\(^3\)

The emphasis for internal communications is on strengthening Singaporean’s C2D, which in turn reinforces the nation’s will to fight and therefore enhances the credibility of deterrence. Various social media platforms such as Cyberpioneer TV, YouTube and the Army, Navy and Airforce Facebook Pages, etc. are expanding the outreach of internal communications.\(^4\)

Additionally, memorial services to remember past catastrophic events, e.g. World War Two (WWII) and Konfrontasi, serve to engage and remind Singaporeans of the need and commitment for defence.

External communications seek to inform and demonstrate to the external stakeholders that Singapore possesses both the capability and willpower to defend herself. These are communicated through the biennial defence White Paper, traditional media (e.g. news broadcast, newspapers), social media and Parliamentary Statements (e.g. the Committee of Supply Debate), etc. Regular bilateral and multilateral exercises between the SAF and the other armed forces are also good avenues of communications to facilitate a ‘show of force’ to enhance the effect of

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**Figure 4: Singapore’s Deterrence Strategies.**
deterrence. Moreover, how Singapore, particularly the SAF, responds and conducts its operations can further reinforce its military capabilities to enhance deterrence. One significant example was the success of Operation Flying Eagle, a HADR operation conducted by the SAF in response to the Box Day Tsunami in December 2004. The swift and decisive actions taken to conduct such a large-scale ‘joint’ operation was a show and demonstration of the SAF’s capabilities.

**Defence Diplomacy to Complement Deterrence**

As Singapore works on developing its military capabilities to achieve deterrence, it must be wary of the dynamics of a security dilemma—when a state takes strong action to protect itself against a perceived threat, that action itself is often perceived as a threat because it is interpreted as an increased capability or commitment to attack. Therefore in calibrating Singapore’s deterrence, there is a need to strike a balance between projecting a strong deterrence and avoiding being perceived as a threat by others. Here is where defence diplomacy plays its part.

Defence diplomacy is one of the twin pillars of Singapore’s defence policy and complements Singapore’s deterrence efforts. At the strategic level, within the regional arena, Singapore aims to shape and promote a robust, open and inclusive security architecture. Multilateral fora and meetings such as the Association of Southeast Asian Nations (ASEAN) Regional Forum (ARF), ASEAN Defence Ministers’ Meeting (ADMM) and ADMM Plus, etc., allow leaders of regional states to come together to resolve conflicts and exploit opportunities for mutual benefits.

At the operational level, the SAF’s participation in international security and humanitarian efforts, such as peacekeeping or peace support operations, anti-piracy, HADR, etc. earn Singapore the friendship and respect of our key partners. Besides giving the Army valuable operational experience, these deployments contribute to deterrence by profiling and validating our Army’s capabilities and operational readiness.

To sum up, in terms of credibility, premised on the concept of TD, Singapore has the capability to respond to any potential regional aggressor through a strong and capable 3rd Generation Army. Singapore is also committed with a strong political and national will to respond to any aggression. Singapore is also well-positioned in its communication strategies to reach out to its society to strengthen its C2D as well as its credibility to defend itself in the international audience. The grand scheme of the deterrence strategy is complemented by diplomacy to counter the dynamics of security dilemma (See Figure 4 for illustration).

**Looking Ahead – Strengthening our Army**

Deterrence, which requires both the capability and the commitment through its political and national will to fight, will remain at the heart of Singapore. As the crucial guarantor of Singapore’s peace and sovereignty, the SAF has to remain focused on building state-of-the-art fighting capabilities that can deter potential aggressors and should deterrence fail, secure a swift and decisive victory. Moving forward, the 3rd Generation Army’s conventional fighting capabilities should be strengthened to enable it to fight a more integrated, lethal and nimble battle. This is especially so when faced with Singapore’s declining birth-rate. The 3rd Generation Army should continue to optimise its force structure and leverage on technology to enhance its flexibility and capabilities to be deployed for the full spectrum operations it undertakes, while remaining focused and capable...
to fulfil its primary mission.

However, a strong and capable military is not enough for effective deterrence. It must be matched by a strong will and national resolve to fight. Going forward, the Singapore society’s C2D and support for defence cannot be left to chance. Continual engagement efforts must be invested to garner the society’s C2D and support for NS, so that the credibility of Singapore’s deterrence will not be eroded over time. With the change in demography attributed by an influx of immigrants, the engagement efforts on C2D must be expanded to involve these new citizens and Permanent Residents (PRs). With the changing societal attitudes where the society at large prefers a more open and consultative government, the C2D engagement will have to evolve into a more personal, inclusive and ‘ground-up’ approach. More interactive initiatives should be used to encourage the public’s ownership of Singapore’s defence. The recent proposal mooted from the CSNS to create a Volunteer Corps to allow Singapore citizens to contribute to defence is one such good initiative. Through the Volunteer Corps, the SAF can win positive mindshare from the public and the public can be the best advocates for C2D.

Continual engagement efforts must be invested to garner the society’s C2D and support for NS, so that the credibility of Singapore’s deterrence will not be eroded over time. With the change in demography attributed by an influx of immigrants, the engagement efforts on C2D must be expanded to involve these new citizens and Permanent Residents.

From the viewpoint of defence diplomacy, it must continue to complement Singapore’s deterrence efforts. At the strategic level, Singapore needs to ensure that its ASEAN-centred regional architecture remains inclusive and open to allow leaders of regional states to engage constructively and facilitate mutually beneficial co-operation. Being the key pillars of the regional security architecture, it is therefore essential for Singapore to strengthen the ADMM and ADMM Plus to facilitate strategic dialogue and practical co-operation. At the operational level, the SAF has to continue to seek opportunities for overseas deployments to maintain and earn more friendships with other armed forces.

CONCLUSION

This essay has examined the important role the SAF plays in Singapore’s deterrence strategies, specifically in establishing the credibility that it is militarily capable of inflicting damage. For effective deterrence, a state must have the credibility in terms of capability and commitment to respond to any potential aggressor and communicate its credibility clearly to employ force when necessary. Singapore has satisfied these key factors to achieve the effects of deterrence, complemented by diplomacy to counter the dynamics of security dilemma. However, there is always a contextual basis in determining whether a state’s deterrence strategies work. The litmus test for successful deterrence is only during periods of tensions or when tensions rise to ‘breaking point’. However, war remains a non-option for the potential aggressor. Therefore, it is only ideal to leave the evaluation uncontested.
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ENDNOTES


17. Ibid.

18. Ibid.


22. Ibid.

23. Ibid.


25. Figure and definition are adopted from Singapore Total Defence website at www.totaldefence.sg; TD is a comprehensive and integrated national framework to respond to security threats and challenges, and a key means through which a small nation can augment its defence capabilities. TD’s five aspects of Military, Civil, Economic, Social and Psychological Defence represent the key sectors involved in building and strengthening national resilience, and the country’s ability to defend itself.


Singh, B., The Military and Small States: the role of hard power in Singapore’s domestic and foreign policy, (Department of Political Science, National University of Singapore, 2007)


32. Adopted from Committee of Supply Debate 2014 Speech by Minister of State for Defence, Dr Mohamad Maliki Bin Osman.
33. Includes the public, employers, NSmen, Full-time National Service (NSFs) and SAF regulars.

34. Adopted from Committee of Supply Debate 2014 Speech by Minister of State for Defence, Dr Mohamad Maliki Bin Osman.

35. Adopted from MINDEF website at www.mindef.gov.sg: Operation Flying Eagle was a Humanitarian Assistance and Disaster Relief (HADR) operation conducted by the SAF in response to the Box Day Tsunami in December 2004.


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