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FOREWORD



I am pleased to pen a few words for the second volume of the *Defence and Security Journal* published annually by the Defence Services Command and Staff College, Sapugaskanda, Sri Lanka. This journal provides a platform for student officers and faculty of DSCSC to exhibit their views and foster a wider understanding on matters pertaining to Defence and Security and provides recommendations for the future through strategic thinking and critical analysis. The Journal is further enriched by contributions from academia of higher educational institutes and defence establishments from both home and abroad.

This volume contains articles on topics of vital significance to readers whose interests lie in national, regional and global issues that can have an overarching impact on the present and future aspects of security and defence. Stressing the importance of everchanging field of security, submissions in this issue expect to provide sound guidelines and recommendations to higher defence and policy management to prepare suitable action plans. The contributions featured in this issue are related to a wider selection of papers covering national security; regional security communities; non-traditional threats related to human security, cyber security and non-state actors.

I would like to make this an opportunity to extend my sincere gratitude to all those who contributed to this endeavour with utmost dedication and unfailing enthusiasm. I would like to place my appreciation on record for the expertise extended by Professor Amal Jayawardane, Ms. Apsara Karunaratne and Ms. Bhagya Senaratne who undertook the arduous challenge of laying the foundation for a high-quality publication. Tireless efforts of Captain (ASW) KSP Banagoda RSP psc and his team of the Editorial Committee were crucial for the final product. My heartfelt gratitude is also conveyed to the Panel of Reviewers and the Technical Team for the tremendous effort rendered by them.

I sincerely hope that this second issue of the *Defence and Security Journal* would be beneficial to all readers. I also look forward to receiving many more outstanding scholarly work for our future issues.

JR KULATUNGA RSP ndc psc Major General

Commandant

THE IMPACT OF PANDEMICS ON NATIONAL IDENTITY AND STATE SECURITY: J'ADOUBE OR ZUGZWANG

Maneesha S Wanasinghe - Pasqual

ABSTRACT

This paper argues that threats external to the state, arising from climate change, over population and increased interaction that result in pandemics, can impact the state's identity (i.e. national identity, which is more than the sum of its population, its territory, and its stable government). National identity contains within it a people that have a sense of belonging – to a history, to a culture, to traditions – that is amplified at the national level to present a 'state'/'national' identity that is unique to that nation/state. Any drastic or dramatic challenge to a state's identity will in turn impact negatively towards the state's security vis-à-vis their internal security, security of the region and of like-minded states. When pandemics impact the citizens of a country, the options are to take 'preventive' and/ or 'curative' measures. Historically, when pandemics such as dengue emerged — a country could tweak or make small changes (like the Chess move J'adoube, where a small adjustment can be made after declaring, but without making a move on the board itself) such as dengue eradication movements, medical treatments - to ensure its citizens' survival. But, if the impact of a pandemic is on a massive, catastrophically adverse and hitherto unprecedented scale, the country might be forced reluctantly to make major changes (Zugzwang, a Chess term which highlights a desperate move that results in the weakening of the player).

Keywords: Climate Change, National Identity, Pandemics, State Security

INTRODUCTION

Any discussion on security pre-empts the focus on 'state' and how it guarantees security for the people within and the state itself externally. State security is basically related to sovereignty. Security from this understanding denotes 'national security' rather than 'human security'. This paper argues that when there is a threat to the security of humans within the state, it can impact but does not always endanger the national security. However, when that particular peril threatens the national identity, this in turn can endanger national security and even international security. When such pandemics emerge and they in turn challenge the very fabric of the socio-religious cultural base of national identity, then these human insecurity issues threaten the national identity of the whole state. This in turn impacts national/state security. Therefore depending on the severity, the threat becomes a situation of reacting either from a J'adoube or Zugzwang position.

This research used archival data on pandemics and epidemics that have impacted the world in the 20th and 21st centuries, and incorporated it with core ideas in Security and Human Security theory to examine a situation where national security is impacted by human security threats. Would decision-makers in a nation-state, when tasked with making a Zugzwang-type of move due to a threat to its very survival, act to prevent it, even if it threatens (i.e. weaken) the 'national identity' through disregarding core religious traditions, cultural beliefs, and/or social norms was the research question under study in this research.

ZUGZWANG AND J'ADOUBE

Zugzwang and J'adoube are two terms used in the ultimate strategy game, Chess. In the game, in which one opponent strives to win over the other through strategic long term action, J'adoube is;

When a player touches a Man [Chess piece], for the purpose of adjusting it and not with the intention of moving it, he must, before touching it, say J'adoube or words to that effect. He will then have the right of moving any other Man he thinks proper, notwithstanding his having touched one in question. But this expression must not be used as an afterthought to prevent the necessity of moving a Man already touched, nor must it be used to justify the touching of a Man which does not require adjusting (Howard, 1871, p.21).

In the real world, such an act might be construed as superficial tweaking or adjusting something rather than making any tangible changes. States may continue their long-term policies – such as a free education policy, non-aligned foreign policy, welfare health sector policy, etc. but – make small changes to overcome unexpected/sudden challenges. Such tweaking would not impact the identity of a nation.

Zugzwang, on the other hand, means "one is forced to move but has no good option" (Ethan, 2015, p.247). In real life, Zugzwang is an attack that paralyses the "opponent in such a way that he has no meaningful moves or any available move causes him to lose" (Johnson, 2014, p.299). Here, a major event/episode/ challenge occurs and its impact is such that the national identity is challenged. In the case of states, such a challenge would change the country's foreign policy outlook/worldview. It is possible, for example, to interpret Mikhail Gorbachev's attempts at transforming the Soviet Union due to the internal problems it faced by introducing 'Perestroika', 'Glasnost', and 'Democratisation' reforms as an example of Zugzwang. His socio-economic and political reforms were required due to internal and external pressure and these policies resulted in the questioning of the 'national' identity of the Soviet Union (Hauss, 2009). The eventual disintegration of the Soviet Union, the numerous conflicts that arose within and around it, can be linked to the challenge to Soviet Russia's national identity (Nye, 2003). Thus, a move that would challenge a state's identity can have detrimental effects on the state and its neighbours.

PANDEMICS

According to the World Health Organization (WHO), "A disease epidemic occurs when there are more cases of that disease than normal. A pandemic is a worldwide "epidemic of a disease" (Ryan, 2015). The WHO, among others, lists the Plague, which killed millions in Europe during the middle ages; Tuberculosis, which was highly prevalent during World War I era; Polio, which was seen as a pandemic disease in the 1950s although somewhat eradicated in the 21st century; Influenza, which includes avian, SARS, and H1N1 flu among others with a track record of killing millions in short periods of time; ebola; cholera, and of course, mosquitoborne diseases such as malaria, dengue, and zika as 'pandemics'. This list could also include AIDS, west nile disease; and even obesity. Therefore, at the outset, it is imperative to describe how this paper identifies a 'pandemic'. The classical definition of 'pandemics' used in this paper is that it is "an epidemic occurring worldwide, or over a very wide area, crossing international boundaries and usually affecting a large number of people" (Last, 2011). As noted by Morens, Folkers, and Fauci in the *Journal of Infectious Diseases*, a pandemic should have a;

- 1. Wide Geographic Extension: "Almost all uses of the term pandemic refer to diseases that extend over large geographic areas for example, the 14th century plague (the Black Death), cholera, influenza, and human immunodeficiency virus (HIV)/AIDS" (Morens *et al.*, 2009). The 'spanish flu' for example, was a "worldwide phenomenon, it is estimated to have infected one third of the world's entire population, and eventually killed as many as 100 million people" (Andrews, 2009).
- 2. Disease Movement: "most uses of the term pandemic imply disease movement or spread via transmission that can be traced from place to place, as has been done historically for centuries (eg.: the black death). Examples of disease movement include widespread person-to-person spread of diseases caused by respiratory viruses, such as influenza and SARS, or enteric organisms, such as Vibrio cholerae or the spread of dengue associated with the extension of the geographic range of vectors, such as aedes albopictus mosquitoes" (Morens *et al.*, 2009).
- 3. High Attack Rates and Explosiveness: "Notorious pandemics have tended to exhibit not only high attack rates but also "explosive" spread that is, multiple cases appearing within a short time. This epidemiologic feature typifies both common-source acquisition and highly contagious diseases of short incubation periods for example, the 14th century plague, cholera in 1831-1832, and influenza on many occasions" (Morens *et al.*, 2009). Indeed, the "World Health Organization estimates that each year that passes sees between 3 and 5 million new cholera cases, killing as many as 120,000 people" (Robert Wood Johnson Foundation, 2013).

- 4. Minimal Population Immunity: Even though the 'flu' has been around for centuries with the "first influenza pandemic may have been identified in 412 BC by Hippocrates" (Monto and Sellwood, 2009, p.40) and therefore people supposedly had immunity, the 'Spanish flu', which emerged soon after World War I and "in a few months was responsible for more deaths than occurred during the preceding 4 years of war" (Monto and Sellwood, 2009, p.42). The minimal immunity was due to the strain of the virus.
- 5. Novelty: "The term pandemic has been used most commonly to describe diseases that are new, or at least associated with novel variants of existing organisms – for example, antigenic shifts occurring in influenza viruses, the emergence of HIV/AIDS when it was recognized in the early 1980s, and historical epidemics of diseases, such as the plague. Novelty is a relative concept, however. There have been seven cholera pandemics during the past 200 years, presumably all caused by variants of the same organism; usage clearly dictates that when pandemics come and then disappear for long periods, they are still pandemics when they return. Indeed, pandemicity can be said to be a characteristic feature of certain repeatedly reemerging diseases, such as cholera and influenza" (Morens et al., 2009). The Plague for example existed from around 6th century AD, when the 'Justinian Plague' occurred. Since then, it has reemerged in the 14th century in China and Europe. Then called the 'Black Death', it "claimed an estimated 60% of the European population" (Centers for Disease Control and Prevention, 2016). In resurfaced in the 19th and 20th century.
- 6. Infectiousness: Cholera, for example, is highly infectious. Indeed, the 19th century Cholera "pandemic began spreading from Bengal (India) in 1839. Its spread was ... nearly worldwide ... for the first time the disease reached deeply into Latin America, as well as ... Europe and North America" (Hays, 2005, p.227).
- 7. Contagiousness: "Many, if not most, infectious diseases considered to be pandemic by public health officials are contagious from person to person, such as influenza. Other diseases have multiple means of transmission, including those that are occasionally contagious but more commonly transmitted by different mechanisms, such as plague (by fleas) and cholera (by water)" (Morens *et al.*, 2009).
- 8. Severity: "the term pandemic has been applied to severe or fatal diseases (eg.: the Black Death, HIV/AIDS, and SARS) much more commonly than it has been applied to mild diseases." (Morens *et al.*, 2009).

The above provides a set of qualifiers in defining a 'pandemic'. This emphasises 'worldwide' aspect, highlighting the human angle rather than focusing only on a state's response. It moreover does not discount the re-emergence of an old disease, such as Ebola or H1N1 virus.

PANDEMICS AND HUMAN SECURITY

The assertion of this paper is that the ever-increasing pandemics in the 21st century has impacted the state's identity. The zika virus, the most recent such pandemic, has had a disastrous bearing not only on the lives of ordinary people and the security of nations, but it has also challenged the very identity of a specific country. The terrifying increase in the emergence and spread of viruses such as Ebola, MERS, SARS, H1N1, bird flu and dengue, among others – mainly due to overpopulation, increased travel, climate change, de-forestation and loss of natural habitat, and "the global trade in wildlife and production of animals for food" – has meant an increase in the (non-traditional) threat to a nation (Akhtar, 2016).

Since the 1990s, the concept of 'Responsibility to Protect' (R2P) has been used in Human Security circles to denote the obligation of states, if not fulfilled, can resort to external intervention. At some point, these pathogens would not only inflict harm on the citizens of a country but, because of country's R2P towards its citizens, it could also challenge the very identity of that country. One such example is the zika virus, which has since 2015 spread to numerous countries and has drastically challenged the national identity of predominant Catholic countries.

NATIONAL IDENTITY AND PANDEMICS

Pandemics of great magnitude are not new. As Tozzi *et al.* noted, "In 1793 a mosquito-carried epidemic of yellow fever in Philadelphia shut down trade and killed a 10th of the city's residents. A century later, the same disease foiled France's effort to build a canal across Panama" (Tozzi *et al.*, 2016). To survive pandemics requires sacrifice as a people and as a nation, some at the cost of transforming traditions. Take the case of the spread of ebola were traditional practices actually helped spread the virus.

Spirituality runs wide and deep in Sierra Leone, Liberia, and Guinea. The population consists mainly of Christians and Muslims. Christians close the eyelids of the dead, wash and dress them. Muslims wash the dead as well, but wrap them in a white cloth. There are also rituals particular to ethnic groups – such as the Kissi, the Mende, the Sherbro, and the Kona as well as secret societies ... If they are ignored, the dead are thought to wander the Earth eternally and plague the community (Maxmen, 2015).

From shaking and holding hands to burial practices as mentioned above, the Zugzwang situation where either the people (and in a sense the nation) changed centuries of traditions or die of ebola were difficult choices for villagers. Yet, a core aspect of the national identity that of (some) tribal practices – was rejected in order for the people to survive (Hewlett and Hewlett, 2008 in Singbah, 2014). A caveat; it is not only pandemics that force a country to face a Zugzwang situation. But in crisis situations such as pandemics, certain beliefs inculcated as crucial to national identity can be questioned or tested.

The zika virus, for example, is relatively harmless to people in general with the specific exception of women about to become or is pregnant. It is imperative to understand that according to the WHO, the zika virus is a 'global health emergency' as there is a possible causal link to brain defects in infants (Cha et al., 2016). It is surmised that women who contract the virus can have children with microcephaly, "a congenital condition that's associated with a small head and incomplete brain development" (Belluz, 2016). To prevent a disaster whereby women increasingly deliver children with microcephaly, staunch Catholic countries in Latin America, where the zika virus has alarmingly spread (and most likely do so again), must either change its very identity as a 'Catholic nation' or face a humanitarian disaster.

This alarmingly dangerous virus, which does not have any medicine to counter its negative impact - which has existed in East Africa since the 1940s (Hewlett and Hewlett, 2008) - was first reported in the 21st century in Latin America in May 2015. Spread by a mosquito, countries such as Bolivia, Brazil, Columbia, Ecuador, French Guiana, Guyana, Paraguay, Suriname, and Venezuela (Centers for Disease Control and Prevention, 2015) were among the 22 countries with people infected (Outbreak News Today, 2016). Despite mosquito eradication efforts and requests to use repellents, to stem the spread appear improbable since the zika virus is transmitted through mosquitoes as well as through saliva and sexual interaction. This adds another level of terror for women who are going to be or are pregnant. Therefore, one solution suggested is to prevent births of children with extensive birth defects through the use of 'birth control' methods (Rengel, 2000). Indeed, this is the one aspect all countries with reported zika virus outbreaks are telling their citizens. But, often countries which have been impacted by the virus are telling women not to get pregnant or at least delay their pregnancy using 'natural methods (Ahmed, 2016). This is a problematic solution which is in a sense not a solution.

To clarify, "Latin America is home to five of the seven countries in the world in which abortion is banned in all instances, even when the life of the woman is at risk: Chile, Nicaragua, El Salvador, Honduras, and the Dominican Republic" (Anderson, 2013). These countries do not allow for abortion even when the outcome of the pregnancy is the death of the mother and the foetus (Kirk, 2013). Other than these five, other countries of the Americas have strict laws governing the circumstances for allowing abortion. Even in the United States of America (USA), Congress

attempt to defund Planned Parenthood Organization for performing, amongst others, abortions, illustrates the hostile nature of 'conservative' legislatures when they use religion to control the women's right to make decisions regarding her body (Center for Reproductive Rights, 2016). It is important to note that the "United States remains one of 45 countries that still ban over-the-counter birth control" (Wolfe, 2014). Such strict adherence is not present in many other countries.

FUTURE THREATS

As noted at the outset - with climate change, deforestation and the loss of natural habitat, overpopulation, increased interaction due to the revolution in transportation, and food consumption habits - the possibility of future dangerous pathogens to drastically impact population increases. It is possible for mutations of existing viruses – as in the case of zika virus in the 21st century – to have drastic sometimes catastrophic outcomes whilst new threats can emerge as well. Recall that no one expected the HIV/AIDS virus that spread from monkeys to humans since the 1920s to have the impact it had since the 1980s. Moreover, some pathogens can become 'multi-drug resistant' and therefore a major threat to people. Whatever pandemic is to assail citizens of a nation, due to ever increasing interactions through transportation, it is foreseeable that these pathogens would not remain inside the borders of a nation-state. As Ghitis noted "A public health emergency is, above all, a human crisis. But its consequences don't end there. A major emergency, whether its severity is real or perceived, can have significant economic and political impact" (Ghitis, 2016). It is therefore possible to imagine future pandemics forcing countries to change their laws and policies.

ZIKA PANDEMIC

The mosquito that is spreading the zika virus, the "Aedes aegypti mosquito weighs less than a grain of rice, lives only a few weeks, and doesn't stray more than 100 yards from where it hatches. For a creature of such limited scope, it has an outsize influence on human health and global commerce" (Tozzi *et al.*, 2016). Nicaragua and Honduras each reported the first cases of the Zika virus impacting pregnant women. Since initially reporting the infection in 2015 May, according to the WHO, "between 500,000 and 1.5 million people had been infected" in Brazil alone (Galagher, 2016). It has already spread to other regions of the world, including Europe.

It is not possible to find a 'curative' action against the zika virus in the foreseeable future as any vaccination would take years of research and testing to be ready for human application. Moreover, there is danger in attempting to use human 'guinea pigs' since only pregnant women and fertile men (i.e. their sperm) are adversely effected by the zika virus. The question, whether and how to test the

virus on human subjects (i.e. women who are pregnant), is an ethical and medical hurdle that must be overcome when a possible medication is found. This leads to preventive measures being adopted. The most effective short-term solution appears to be birth control. Here is the stumbling block. As noted before, the current stance among a number of Catholic Latin American countries facing the zika pandemic is to advise women not to get pregnant.

... because the virus has been linked to an incurable and often devastating neurological birth defect.

"I've never seen this advice before, and when you hear it, you think, What are the bishops going to do?" said the Rev. John Paris, a bioethicist and Catholic priest at Boston College.

"It's going to present a lot of problems for the bishops to sort out," echoed Daniel Ramirez, an assistant professor of history and American culture at the University of Michigan and an expert on Latin American religious culture.

"They're going to have to really thread a fine theological needle here," he added (Cohen, 2016).

Theology plays a major role in the national identity of these countries. The governments have focused on preventive action (i.e. J'adoube), which only requires hardly any changes to the existing laws. Yet, it is apparent that the J'adoube solution is inadequate with this pandemic.

In December [2016], authorities in Brazil urged women not to get pregnant. Then last month came the warning from Colombia to delay pregnancy until July. Then in an interview, a health official in El Salvador recommended that women try to avoid getting pregnant this year and the next.

Does this mean couples in these largely Catholic countries should abstain from sex for two years? Or should they use so-called "natural family planning"? The method, which involves a woman monitoring her basal body temperature and vaginal secretions to avoid having sex at fertile times of the month, has a 25% failure rate (Cohen, 2016).

The preventive measures – prevent pregnancies through birth control would entail more than J'adoube. It is, in the case of Latin American counties which are staunchly Catholic, a major measure that would change its laws and transform its national identity (i.e. Zugzwang).

These countries will either have to ignore the difficulties faced by women who have no access to effective birth control – as the Catholic teaching view all birth control other than the natural form to be evil or conservatives view abortion as a crime and therefore not available to its citizens. With over a quarter of such attempts resulting in pregnancies, these countries will have vast numbers of children with medical issues, costing tremendous pain to the families and a major financial burden on the state. It also places the onus of responsibility of not getting pregnant on women. Yet, women can be raped, forced or cajoled into having unprotected sex, or unlucky when using 'natural family planning methods and get pregnant. If pregnant, another quandary for women. As the Table below illustrates, legal abortion is not equally present in the Latin American countries.

Table 1: Legality of abortions in 2015

Reason	Country or Territory
Prohibited altogether, or no explicit legal exception to save the life of a woman	Chile, Dominican Republic, El Salvador, Haiti, Honduras, Nicaragua, Suriname
To save the life of a woman	Antigua and Barbuda, Brazil (a), Dominica, Guatemala, Mexico (a, d, g), Panama (a, d, f), Paraguay, Venezuela
To preserve physical health (and to save a woman's life)*	Argentina (a), Bahamas, Bolivia (a, c), Costa Rica, Ecuador (a), Grenada, Peru
To preserve mental health (and all of the above reasons)	Columbia (a, c, d), Jamaica (f), St. Kitts and Nevis, St. Lucia (a, c), Trinidad and Tobago
Socioeconomic grounds (and all of the above reasons)	Barbados (a, c, d, f), Belize (d) St. Vincent and Grenadines (a, c, d)
Without restrictions as to the reason	Cuba (f), Guyana, Puerto Rico, Uruguay

*Includes countries with laws that refer simply to 'health' or 'therapeutic' indications, which may be interpreted more broadly than physical health. Notes: Some countries also allow abortion in cases of (a) rape, (b) rape of a mentally disabled woman, (c) incest or (d) foetal impairment. Some countries restrict abortion by requiring spousal authorization or (f) parental authorization. In Mexico, (g) the legality of abortion is determined at the state level, and the legal categorization listed here reflects the status for the majority of women. Countries that allow abortions on socio-economic grounds or without restrictions as to reason have gestational limits (generally the first trimester); abortions may be permissible after the specific gestational age, but only on prescribed grounds.

Facts on Abortion in Latin America and the Caribbean (Source: Center for Reproductive Rights as cited in Cuttmacher Institute - 2016)

These American counties – including the USA – have to provide at risk women with the option of preventative measures such as birth control pills and/or abortions. If a country is to do so, it would, as discussed at the outset, challenge the very identity of that nation. To reiterate, the national identity of Bolivia is intrinsically tied with its Catholic beliefs. Therefore, if the country is to grant women birth control, the Bolivian government will not only have to change its laws, but also challenge its own national identity.

J'ADOUBE OR ZUGZWANG

The idea presented here is that in times of pandemics, when the health of a large number of people is endangered, one option is to make a small move which is almost a non-move. That way, this move will not markedly threaten the fabric of the nation

It is apparent that in striving to fulfil a country's responsibility to protect its citizens in times of pandemics (such as zika), some countries face difficult choices. Sometimes, as in the case of some of the Latin American countries, the choice is a reluctant move since, while a move (such as introducing birth control and allowing for abortions) might solve the problem, at the same time, it harms the national identity (see Figure 1 below).

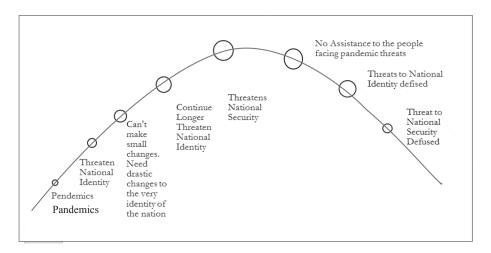


Figure 1: Escalation and De-escalation (Source: Author)

NATIONAL SECURITY TRUMPS HUMAN SECURITY

Any attempt to assist the people who face threat of zika will in turn impact the national identity. Any threat to national identity will have people with vested interests in that identification to protest, to even challenge the state peacefully or violently. This, in turn, might threaten the government, the neighboring likeminded nations. Therefore, despite the individual fears of the people who face a daunting future after a pandemic, it is unlikely that the country in question would make the vital changes to its policies, even if this in turn will challenge the national identity. Thus, unless a country is 'forced' into making a move (i.e. Zugzwang), the decision-makers of a country will focus on seeking temporary solutions (i.e. J'adoube).

Therefore, in conclusion, the paper argued that national identity is crucial to a nation-state, and in most cases, it might out-weigh the desperate needs of the people within the nation faced with the pandemic. National identity therefore trumps the security of the people.

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DRUG ADDICTION AND THE YOUTH: A THREAT TO HUMAN SECURITY

Lieutenant Commander Sudesh Vidanage

ABSTRACT

Drug consumption is a global problem that compromises both individual and social development. It affects human security in many ways as there is a high prevalence of drug abuse during adolescence. Empirical research reveals that due to different reasons many adolescents start to abuse substance at a very young age. Existing literature indicates peer influence, poor parental bonding, family history of drug consumption, lack of personal skills and mental stress as strong factors leading to this substance abuse. This article aims to identify the important motives which cause and sustain drug use among adolescents. It also identifies methods used to control or prevent drug addiction. In conclusion, the paper provides recommendations for individuals and authorities to implement remedial measures to mitigate threats arising from drug smugglers and to prevent youth being addicted to drugs.

Keywords: Drug Addiction, Human Security, Youth

INTRODUCTION

Consumption of narcotic drugs creates tremendous social and economic problems in a country. During the past, Sri Lankans used narcotics/psychotropic substances such as betel, areca nut, cannabis, opium and areca nut mixed with limestone etc. Sri Lanka was under Portuguese, Dutch and British ruling from 1505 until it gained its independence in 1948. During that era, the colonisers started cultivating tea, rubber, coconut, clove, pepper as well as tobacco. In addition, they imported alcoholic drinks such as whisky, brandy and wine and popularised those among the locals. Though not perceived as a threat to society during the initial days when these alcoholic drinks were introduced, this has greatly affected the livelihood of the Sri Lankan people as many are addicted to narcotics. Due to the consumption of narcotics, a significant amount of local earnings is being consumed by foreign companies, causing heavy economic losses to the country. It affects both at the individual level as well as at the national level. Further, the abuse of illegal drugs is threatening human security as drug addicts are involved in many crimes such as theft, vandalism, abuse of women and children, as well as undermining the rule of law. According to the geographical position, Sri Lanka has become a centre of the Golden Crescent and Golden Triangle. Consequently, Sri Lanka has become a transit point for illegal drug trade. Hence, drug smuggling has become a lucrative business damaging the safety and security of society.

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HUMAN SECURITY

According to the Commission on Human Security (2003), Human Security deals with protecting the fundamental rights of people, enhancing human freedom and human fulfilment. It needs strong political, social, environmental, economic, military and cultural systems in a country.

Human security can also be defined as the absence of threat to various core human values including basic human values and individual physical safety (Alkire, 2003). The broader concept of human security is economic, food, health, personal, community and political security. Any danger to the above branches of human security can be identified as a threat to Human Security. The main aim of human security is to safeguard human lives from critical prevalent threats. In the contemporary context, drug addiction is a leading threat to human security due to the high rate of crimes often associated with the drug trade. Drug trafficking generates violence due to competition in the drug market, disputes among individuals involved in the drug trade, attitudes and behaviours of smugglers and addicts. In the present day context, increased use of weapons among drug dealers has also increased the threat to human security.

SUBSTANCE ABUSE AND ADDICTION

Kuhar (2012) stated that the term 'drug abuse' or 'drug misuse' generally includes the use of substances, which are considered as the illegal use of legal substance without prescription. Use of tobacco or alcohol by teenagers is also considered an abuse. Most often, substances are consumed by adolescents for their psychoactive effect without supervision of physicians or medical professionals. The legal and illegal tag for this substance is given by government legislations and regulations in the country.

According to the Indian National Institute on Drug Abuse (2014), addiction is defined as a "chronic, relapsing brain disease that is characterised by compulsive drug seeking and use, despite harmful consequences. It is considered as a brain disease because drugs change the brain, its structure and the way it works. These brain changes can be long-lasting and can lead to much harmful, often self-destructive, behaviour." Addiction differs from individual to individual with some individuals being addicted for life. Various factors lead to the addiction of narcotics such as poor classroom behaviour or poor social skills, academic failure and association with drug abusing peers. Drug addiction creates various health and family problems later in a person's life, weakening the relationship between friends and society and has a negative effect on a person's personal career.

Narcotics drugs such as heroin, opium and cannabis are more popular in Sri Lanka as those drugs create a lack of sensation and stupor. Moreover, the above substances are medically used to relieve pain. An addiction is created when the drug is used to derive pleasure. Psychoactive drugs provide pleasure, ameliorate pain and may cause physical dependence and tolerance. The use of non-prescribed psychoactive drugs by individuals evolves into addiction i.e. cocaine, opiates, cannabis, amphetamines, barbiturates, benzodiazepine, hallucinogens, caffeine, nicotine, alcohol, etc. As per Badrani *et al.* (2016), at present psychoactive substance use in Sri Lanka is not at a significant level.

Edward (2009) indicates that drug addicts are usually below the age of 30 and may belong to any social class; poor, middle, or upper class families. Drug addiction severely affects mental and physical health. Drug misuse is directly associated with various crimes that are related to the feelings of invincibility, thus increasing social problems such as theft, prostitution, vandalism, assaults, drug dealing, violence and aggression, property crime, shoplifting and driving whilst intoxicated. More than other illegal drugs, alcohol is closely associated with violent crimes such as assault, rape, murder and spousal abuse. The above are threatening the peaceful coexistence in society and to human security.

VULNERABILITY

Youth are in danger of becoming addicted to narcotic drugs with their advancement from elementary education to middle school as they experience new academic and social situations which enables them to interact with a wider group of peers. In this early stage of adolescence, children are exposed to drugs. After entering high school, they face educational challenges incorporated with social and emotional influence. At the same time they are likely to be exposed to an environment of drugs and drug abuses. Thus, they face a risk of using alcohol, tobacco or any other substance.

Adolescents become insecure when they start their higher education. They attend tuition classes, sometimes far away from home and there is no adult supervision of their movements, activities and behaviours. Parents may not be in a position to continuously supervise them thus making it likely for them to abuse drugs.

Since narcotics addiction creates severe health issues, it increases the expenditure of local governments on the healthcare of addicts which has a negative impact on a developing country like Sri Lanka. A healthy and strong work force will positively accelerate the development of a country. The youth are the future generation of the world and their physical and mental development is essential for the future development of a country. Both legal and illegal drug abuse can obliterate the life of the youth and will have adverse effects on the nation. As there are many factors leading to drug addiction among youth and Sri Lanka being a developing country,

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it is more important to protect youth from narcotics and psychotropic substances. When adolescents start consuming drugs, they continue that habit into their adulthood, which makes them less productive and this workforce will negatively affect the country's economic security.

NARCOTICS ADDICTION: FACTORS

Individuals get addicted to narcotics due to different reasons. Peer pressure plays a considerable role on addiction. In addition, family history of drug consumption, social impact and psychological impact also matter in narcotics addiction. It is well understood that youngsters are more vulnerable to drug addiction and once addicted it is difficult to rehabilitate. Rather than attempting to rehabilitate, preventive measures are more important. To implement preventive measures and to minimise the prevalence, it is required to identify the leading factors that lead to youth abusing these substances. Hence, a research was conducted to examine the underlying factors that lead to drug addiction among youth.

The study was conducted in the Gampaha District. According to Badrani *et al.* (2016), majority of the drug abusers were reported from Colombo and Gampaha districts since the population density is considerably higher. Further, a large number of students frequent these two districts as there are many facilities for their higher education. As adolescents are more vulnerable to be addicted to narcotic drugs, the possibility of the above mentioned pupils being addicted to drugs is considerably high. Considering the above, the Gampaha District was selected for the study. The sample population consisted of 50 male inmates who were undergoing rehabilitation programmes at rehabilitation centres in the Gampaha District. These centres are operated by the Sri Lanka National Dangerous Drug Control Board and Non-Governmental Organisations.

The objectives of the research were to examine the underlying factors of youth narcotics addiction and to make effective recommendations to minimise the prevalence, as drug addiction is one of the leading threats to human security. Certain constraints were encountered when conducting the research. General samples were not selected as the sample population, because addicts did not like to reveal the fact that they are narcotic addicts. To minimise this issue, samples were selected from drug-rehabilitation centres in the Gampaha District. During the research, special care was taken to prevent revealing confidential details to a third party regarding respondents of the research. During the preparation of the questionnaire, precautions were taken to refrain from asking questions pertaining to their personal details which could lead to the identification of the respondent.

RESEARCH FINDINGS

Relationship between Age and Addiction

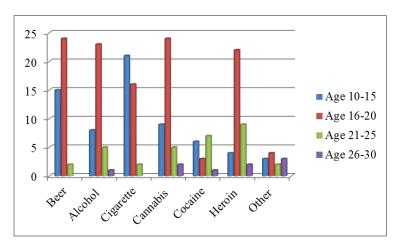


Figure 1: Statistical data related to age and addiction (Source: Author)

According to the findings, majority of the inmates have consumed beer, alcohol, cigarettes, cannabis and heroin, between the ages 16 to 20. Majority of the adolescents have smoked between the ages 10-15. The main motives for this behaviour were to look mature, to experiment or to be like their friends. When teens are exposed to adult smoking behaviour, especially through their parents, elder siblings and relatives, they also attempt to experience it. They like to imitate their elders, especially in schools, where junior students see their seniors smoke and they might try to resemble them. If the peers smoke, they may feel pressured into doing so in order to be accepted by their friends. Smoking is strictly prohibited for anyone less than 21 years and generally, parents do not permit their children to smoke. Since adolescents are willing to encounter the excitement of experimenting with something that is forbidden, they smoke to experience that feeling. As they start smoking at an early age, they are extremely vulnerable to the consumption of drugs, especially due to association with addicts.

As per Kandel *et al.* (1978) typical sequence of drug use commences with tobacco, beer and alcohol. As per the responses received from drug addicts, it was confirmed that many addicts have used one of the legal substances such as tobacco, beer or alcohol before they were addicted to illegal drugs like cannabis, heroin and cocaine.

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Peer Influence

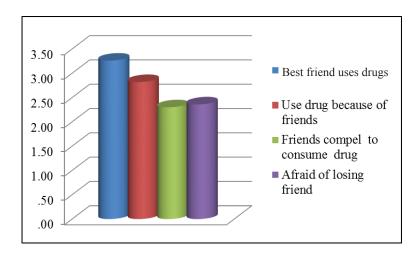


Figure 2: Statistical data related to peer influence (Source: Author)

According to the findings, 84% of the addict's close friends use drugs. According to Oetting and Beauvais, the Peer Cluster Theory is a psychosocial model that defines peer clusters as small and cohesive groupings that form a great deal of adolescent behaviour (1986). A peer cluster consists of best friends, share beliefs, values and behaviours. Potency of peer influence on drug consumption is not a new concept but is a broad term. Small identifiable peer clusters determine where, when and how drugs are used. It has been proven by the research that peers play a vital role in deviant behaviour.

Adolescents are keen on experimenting new challenges even with drugs. When they realise their friends use drugs, they too get curious and get the urge to experiment with it. When inquired whether they were compelled to use drugs by their friends, 70% addicts have responded as "no" and "not at all." This indicates they were not pressured by their friends to use drugs. However, as per the research findings, 56% of addicts agreed that they initially used drugs because their friends used them. As stated by Oetting *et al.* (1997), those addicted to drugs are normally reluctant to accept the fact that they use drugs due to the influence of their peers. Hence, the reply given by inmates, whether they were compelled by their associates to use drugs or they felt to use drugs after envisaging their behaviours may not be genuine answers. Thus, there may be some more population towards "yes" for that indicator.

Youth consume drugs to sustain within the peer group as they want to continue the friendship among peers. Drug addicts are willing to increase their power-base, and are eager to have more members in their group and they may compel the non-addicted members to use drugs. If one is not strong enough to leave that peer group, they also become more vulnerable for being addicted. When questioned, 62% of the inmates responded as "no" and "not at all". Hence, a majority of them have not used drugs to maintain sound relationships among friends in their group, but the balance 38% responded as "yes sometimes" or "yes always". This denotes that they have used drugs to maintain friendship among peers.

Considering the above facts, initially, drug addicted peers have made a strong influence on adolescents to initiate substance abuse. After they become a victim, there was not much influence on sustaining, because once addicted, it is difficult to divest. However, certain respondents continued to use drugs to maintain their relationship within the group, though they have a desire to move away from drug addiction.

Family History of Drug Consumption

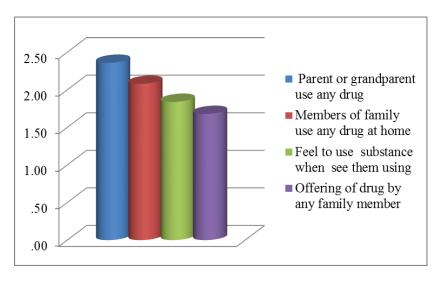


Figure 3: Statistical data related to family history in drug consumption (Source: Author)

Poor parental bonding and peer pressure are key triggers for adolescent substance abuse, because both are primary groups where adolescents learn about norms, attitudes and behaviour. Adolescents whose families communicate anti-drug values and attitudes are likely to develop friendships with healthy youth rather than with drug addicts. Hence, families appear to be important for learning attitudes and behaviour about substance abuse.

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When inquired about their parents' or grandparents' drug behaviour and attitude on drugs, 44% of addicts responded that their parents or grandparents used some kind of a drug. Further, 32% of the drug addicts' family members have used some kind of a drug at home. A proportion of 20% addicts were tempted to test the same substance when they witnessed their adults consuming drugs.

As per Rutter (2008), an individual's desire to use alcohol or drugs is their own preference, but it may be influenced by their environment, peers, family, and availability of substance in the vicinity. However, once someone initially uses alcohol or drugs, the risk of developing alcoholism or drug dependence is heavily influenced by genetics. Alcoholism and drug dependence differs from person to person because people's bodies respond to the effects of alcohol and drugs differently. Based on that response it is ascertained that addicts may continue to use drugs. Many researches have conclusively revealed that family history of alcoholism or drug addiction is in part genetic and not limited to family environment. Individual health is the result of interaction between genes and environment. For example, risk of developing high blood pressure is influenced by both genetics and environment, including diet, stress and exercise. It is the same for the addiction to drugs, which is influenced by genes and environmental factors.

As per Beauchaine and Hinshaw (2008), genetic factors make considerable influence on youth drug addiction. Once a substance is used, a body acquires it in different ways continuing the dependence on the acceptance. As per the Social Learning Theory, adolescents initially learn norms, behaviours and values from their family. Social learning theorists, Miller and Carroll (2006), and Bandura (1977), focus on peers because adolescents learn from associates and gain autonomy from their parents. However, families appear to be important in learning attitudes and behaviours regarding alcohol and other drugs. Hence, when adolescents closely associate with a person who frequently uses drugs over a long period of time, they are likely to acquire a favourable attitude towards drugs leading towards its use. These interactions are strong among primary groups such as families or close friends. Consequently, when family members use drugs at home, they learn to use drugs from their own family members. As per the findings in this research, around 20% of the inmates have acquired a desire to use drugs from their immediate family members.

Relationship with Parents

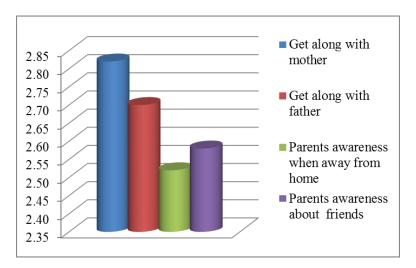


Figure 4: Statistical data related to relationship with parents (Source: Author)

Negative relationship with parents is another prominent factor for drug addiction among youth. As per the findings in the research, 40% of the drug addicts have got along with their mother "very well", whereas 60% of the addicts "fairly" or "do not" get along with their mother. Addicts who got along with father "very well" were 36% and the rest 64% were "fairly" or "do not" get along with their father. These results denote that a majority of inmates had not maintained good relationships with parents.

Among the parents, 16% were constantly in touch with their child while away from home, while 38% of the parents were sometimes aware when their child was away, and 46% were not aware of their child's whereabouts. When youth realise that their parents do not interfere in their activities, they tend to misuse the parents' lack of supervision. When inquired about the friends their children associate with, 62% of parents have responded that they knew about some of their children's friends, while the majority of parents were not fully aware about their children's friends. Hence, the above three facts have made a certain contribution for youth drug addiction.

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Personal/Academic Skills

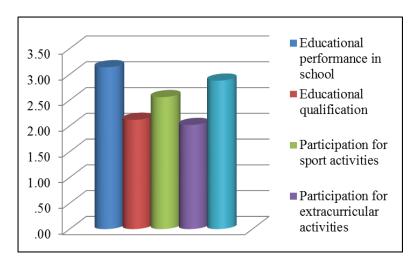


Figure 5: Statistical data related to personal and academic skills (Source: Author)

As per the findings in this research, 66% of the inmates in rehabilitation centres had studied up to GCE O/L while 20% of the population had studied up to GCE A/L. As per the findings, many addicts had studied up to a certain level.

Majority of the addicts are skilled in sports and 80% of the inmates have taken part in some kind of sports activity during their school time. In addition, 64% of the population has taken part in an activity related to arts or literature while schooling. When analysing the above facts, personal and academic skills were at an average level for the majority of the drug addicts. Hence, personal and academic skills do not have a positive correlation towards substance abuse among youth. Bachman *et al.* (2008), has highlighted that the education level has some influence on those who abuse alcohol and other drugs.

Mental Stress

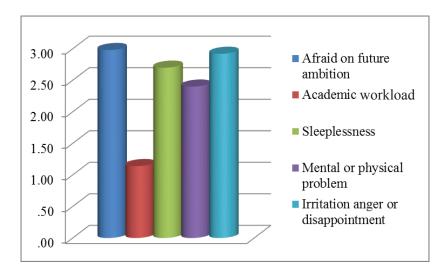


Figure 6: Statistical data related to mental stress (Source: Author)

As per the findings, 26% of the inmates were uncertain about achieving their future ambition, while the rest were not concerned. A significant majority of the addicts have spent less than six hours for their studies thus, have not spent long study hours. It means that they were not suffering from excessive academic workload.

Sleeplessness, irritation, anger and disappointment were selected as another indicator for mental stress. 56% of the population suffered from sleeplessness and 42% of the population from irritation, anger or disappointment. A population of 78% has stated that they were suffering from long-term physical or mental disorders. According to the above facts, mental stress has considerably contributed towards youth drug addiction.

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TESTING OF HYPOTHESIS

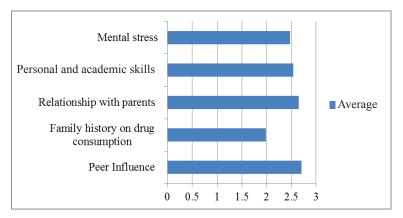


Figure 7: Relationship between individual factors (Source: Author)

The hypothesis was developed as per available literature related to youth drug abuse. H¹ was "the peer pressure on drug consumption is the leading factor on youth narcotic addiction". According to the findings, peer pressure shows a significant influence on youth drug consumption compared to other factors. Hence H¹ was positively proven. The next strong factor on youth drug consumption is parental bonding. Adolescents with weak relationships with parents are also more vulnerable to becoming victims of drug addiction.

CONCLUSION

The abuse of drugs directly affects human security and has become a vital social issue in Sri Lanka as it creates many social, economic problems and health issues. Drug addicts are a burden on society and this has a negative impact on a developing country like Sri Lanka. The addiction to drugs creates a less productive workforce.

During the study, common theories that helped explain motives for youth drug addiction were identified. Based on these theories, the research focused on finding the most prominent factor influencing substance abuse amongst youth. Initially, a hypothesis was developed based on experience about few cases of adolescent drug addiction, empirical research and available literature.

Humans learn from observing others and children learn from society. Peer groups are the immediate social group after the family hence they learn norms (values, customs and traditions that governs individual behaviour) and behaviours from their peers. Peer groups consist of best friends or a small group of close friends who share attitudes within the group. They develop positive and negative norms towards drugs and they may establish group norms for drug use. When adolescents live in a drug culture, they too imitate their peer group because they may need to socialise.

As per the findings in this research, it is certain that peers have a strong influence on the drug addiction of adolescents, where 84% of the sample population responded that their best friends were addicted to some kind of drug. Other factors such as parental bonding, family history of drug consumption, lack of personal and academic skills and mental stress make the under-aged addicted to drugs.

RECOMMENDATIONS

It is difficult to rehabilitate someone after they are addicted to drugs. Hence, preventive measures have to be implemented before addiction. The primary responsibility for early detection lies with the parents who have to be alert to dangers and to note symptoms of drug use among their children. Awareness programmes should be conducted at the school level to educate students regarding drug use and its negative effects. The media should consider this as a national requirement and educate the community regarding the negative effects of substance abuse.

Drug addiction is undesirable for the development of a country, as it reduces the healthy workforce and is harmful for the safety and security of society. National government has to endure the cost to maintain rehabilitation centres, to provide medicine and conduct rehabilitation process. National government must establish strong policies to prevent drug trade within the country and task government authorities, who are responsible in effectively controlling drug prevalence. A comprehensive overview of drug control activities should be maintained by the government, relevant ministries/agencies, non-government/community organisations and others entities concerned. Cooperation, collaboration and facilitation are to be done by government ministries/agencies, non-governmental/community organisations and the media to implement anti-drug projects, programmes and public information campaigns to educate the public.

Multilateral and bilateral discussions should be held to adopt mechanisms to share intelligence on drug trafficking and related networks, within regional and extra-regional countries. Strategies/policies and programmes are to be developed to prevent drug abuse, treatment/rehabilitation and supply reduction and related matters. Regular surveys and studies are to be conducted to assess the state of drug control and implementation of the anti-drug strategy. Further cooperation with the relevant governmental entities is essential to assess the implementation of obligations of international drug control treaties, articulate government policies in regional and international organisations.

Peer pressure is a prominent factor in youth drug addiction. According to the Social Learning Theory, adolescents are more vulnerable to substance abuse due to peer influence. It makes a strong involvement of initial abuse. Parents should build strong relationships with their children and closely supervise their offspring. Parents should have a fair understanding about their children's close friend as well

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as their activities, especially when they are away from home. Adolescents do not like to accept parental interference. In fact, they admire total freedom. If parents have continuously maintained a close relationship with their offspring since childhood, they consider their parents as close friends. This allows parents to monitor their activities and they can notice minor behavioural changes of their children. Offspring must be educated regarding negative repercussions of unsuitable association which will definitely help in minimising the prevalence of substance abuse.

Mental stress and substance abuse are always linked together. Those who suffer from mental stress may turn towards drugs as a way to ease the pain. Those who suffer from some form of mental stress, such as anxiety, depression or irritation, should seek trained professional help for treatment before it leads to substance abuse. Further, individuals can take up exercising, reading and engaging in innovative and positive activities that diverts the mind away from using drugs to relieve stress.

Adolescents consume drugs due to an imbalance in their life, such as frustration, low self-esteem or lack of personal and academic skills. Parents and teachers have a vital role to play to prevent substance abuse by offspring and students. Adults must closely supervise their children's work and their behaviour. Any anomaly noticed must be inquired. Parents and teachers must maintain good relationships with the children and there must be good communication between teachers, parents and students.

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RISE AND FALL OF THE ISLAMIC STATE (ISIS)

Muhammad Abbas Hassan

ABSTRACT

The Islamic State, commonly known as ISIS, emerged as one of the deadliest terrorist organisations in the globe in the recent years. The organisation grew by leaps and bounds through the effective execution of modern warfare tactics such as media, violence and drug trafficking. Their effective propagation of violent tactics was one of the main reasons for their rise. This fame and rise allowed them to expand their activities to other parts of the world. This paper aims to analyse the rise of ISIS within a short time span and its consequent downfall leading to lose its grip on important fronts. The paper also details the efforts of international powers along with the regional forces in bringing a definitive and logical end to this terrorist outfit.

Keywords: Iraq, Islamic State, Syria

INTRODUCTION

West Asia which has been a hotbed of conflicts for decades pivoting around oil has claimed lives of hundreds and thousands of innocent people and displaced millions. The region witnessed a new wave of conflict; this time on sectarian lines right after the installation of a Shia government in Iraq by USA in 2006. This policy of USA agitated the Sunni faction that had traditionally enjoyed power and authority under the Ba'ath party of Saddam Hussain.

Under the Saddam regime, the Sunni population of Iraq enjoyed all the privileges. They held public offices and key military positions. This made the Shia population often feel deprived and victimised (Karon, 2006). On the surface, Saddam's rule was relatively calm but in reality a storm was brewing, waiting to explode at the right time. This storm came immediately after the US invasion of Iraq in 2003. The US alleged that Saddam has accumulated weapons of mass destruction and that it was posing a threat to world peace. The invasion of Iraq led to the fall of the Ba'athist regime, but it also pushed the region into one of the bloodiest conflict-ridden territories the world has ever witnessed.

In 2004, a new terrorist organisation called Al Qaeda in Iraq (AQI) was formed by Abu Musab Al Zarqawi and pledged its allegiance to Osama bin Laden (Bruno, 2006). AQI was quick to realise that it can only make an impact if it acts big. AQI launched a series of attacks primarily sectarian in nature. The organisation was responsible for killing thousands of Shias and also carried out regular attacks on the state machinery. This is the organisation that also laid the foundation for the Islamic State in Iraq and Syria (Hannah, 2016).

The Islamic State in Iraq and Syria or more commonly known as Islamic State is a terrorist organisation which had its origin as an Al Qaeda splinter group. Headed by Abu Bakar Al-Baghdadi, ISIS is considered one of the most ruthless terrorist organisations due to the brutality and effective use of its propaganda tactics through the internet (BBC, 2015). The group has also carried out 140 attacks in 29 countries killing nearly 2,043 people (Hassan, 2017). At least 18,802 civilians have been killed in Iraq in ISIS-linked violence in less than two years (Hassan, 2017). The group had deep rooted public support in the war hit areas of Iraq where the Sunni majority was feeling oppressed due to the Shia regime planted by the Americans. This support actually worked in favour of the organisation and allowed it to have an unprecedented growth. Despite the fast tracked growth of ISIS and all the terror and pain it inflicted across the globe, the ISIS is facing a steady fall. This paper attempts to look into the causes that led to the rise of the ISIS and deals with the efforts that have resulted in its decline.

RISE OF ISIS

ISIS which is primarily a Sunni organisation resurfaced on the map in 2013. Earlier in 2011, it was said that the organisation is no longer active after joint operations against it by coalition forces. However, the organisation managed to fly below the radar and accumulate resources for its renaissance (Gopal, 2017).

The ISIS realising that it could easily capitalise on the uprising in Syria decided to build its base in Syria through Abu Mohammed Al-Joulani, a trusted worker of the ISIS. It was through the efforts of Al-Joulani that Jabhat Al-Nusra, a powerful terrorist network, was established (BBC, 2013). Joulani ensured that his organisation benefits from both sides i.e. the conflict in Syria and the back channel support by the ISIS. In 2013, Jabhat Al-Nusra and the ISIS developed differences. The ISIS crushed Al-Nusra at multiple fronts and in the process thousands of fighters were killed. These battles strengthened the ISIS position in Syria and allowed it to capture the territory in the region. This fighting with a former ally was part of the ISIS strategy to ensure faith in its leadership which is authoritarian in nature, modeling charismatic leadership patterns. This strategy adopted by the ISIS is in line with the fifth wave of terrorism as explained by Jeffery Kaplan (2010). According to Kaplan, the fifth wave of terrorism was predicted to initiate in 2025, but it seems, it has already begun with the presence and tactics used by the ISIS. The very first characteristic of this wave is the radical quest for purity - racial, tribal, and ecological (Reed, 2008). This means that the ISIS in particular has embedded the ideology to pursue a pure, radical quest as portrayed in the sectarian divide concept to achieve its goals and objectives effectively. The ISIS describes themselves as the purest and pious form of Muslims with an aim to hire only Sunnis into the organisation (Dabiq, 2013). They consider all other sects an infidel however, there are contradictions among them as only those who pledge allegiance to them are considered Muslims and all others are considered to be non-Muslims or non-believers and a threat to the ISIS. Kaplan also

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argued that the terrorists build on the authority exercised by a charismatic leader. However, the ISIS is an amalgamation of both the fourth wave that was put forward by David Rapport (2006). The fourth wave primarily dealt with religious terrorism and ISIS is displaying the characteristics of both fourth and fifth waves of terrorism.

During 2014-2015, the ISIS made significant advances and accumulated a vast amount of wealth. The group used a ruthless modus operandi and never backed down from spreading violence in both Iraq and Syria. The core factors that contributed in its rise are discussed below.

THE MOSUL CONQUEST



Figure 1: ISIS five-year expansion plan (Source: Daily Mail, 2014)

The ISIS was making advances in various parts of Iraq and Syria, without winning a significant battle. In Iraq, defeating the Yazidi tribes was fairly easy as they were unable to defend themselves (Dearden, 2017). The ISIS forced their women into sex trade and started to make money from these victories (Al Arabiya, 2014). The organisation was also benefiting from the situation in Syria which had already plunged into a civil war. Further, the central government in Iraq was suffering from corruption and served as an aiding factor for the ISIS to grow. Still ISIS needed that one win to register itself as a dominating force in the region. This came in the form of Mosul.

Mosul is the second largest city in Iraq and its origin goes back to 25th century BC. Referred to as the land of prophets in ancient manuscripts, the city has always been a centre of intellect, art and trade. Standing next to the west bank of river Tigris, Mosul had a population of 2 million and was protected by almost 60,000 army personnel (Astore, 2014).

The Iraqi government had tried to ensure to keep this ancient city safe but the corruption within the system was quite evident. Over two thirds of the soldiers surrendered half of their salaries to officials and took a long-term leave in return. Further, this Sunni dominated city was not enjoying its due status as it was being controlled by Shia soldiers. Therefore, a sense of hostility and tension was continuously rising (Chelsea, 2014).

The ISIS started its Mosul campaign on the 6^{th} of June, 2014 (New York Times, 2014). The gist of the campaign was an element of surprise. It started to create a few diversions by carrying out a series of small attacks in other parts of the country and then launched a full throttle attack on Mosul. This campaign was overambitious, like aiming for the sky, as ISIS fighters were limited in numbers. It took the ISIS just four days to capture the city. Later on the ISIS claimed that they had divine aid on their side and angels from heaven to fight side by side with them (Cockburn, 2017).

This victory cemented the ISIS as a force to reckon with in the region. The ISIS went on to declare the caliphate under the leadership of Abu Bakar Al-Baghdadi. Within the same month the ISIS also took over the city of Tikrit and made substantial advances in Syria.

SOURCES OF FUNDING

Becoming one of the wealthiest terrorist groups in history, the ISIS at its peak had accumulated reserves of around \$2 billion. The ISIS started to make money by capturing the oil wells in Syria and Iraq. Ironically one of their buyers was the Syrian government. It is also alleged that the Turkish government was also buying oil at discounted prices from the wells operated by the ISIS (Pagliery, 2015).

However, the ISIS soon realised that oil refineries are sitting ducks if there is an air strike and they shifted their attention towards other forms of financing. The group resorted to extortion and kidnapping of civilians plus businesses. They started to charge heavy taxes against the protection of life in the areas they controlled. The ISIS also imposed Zakat, an Islamic way of giving to the needy from the citizen (Solomon, 2015). Civilians who were already battered by the war started to pay the organisation. The ISIS further started to rob the banks in the areas it captured. In Mosul alone, the group was able to rob \$425 million (McCoy, 2014).

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The ISIS also started to loot and sell ancient artefacts from this region. On the face, the group used to post videos of its fighters destroying the artefacts placed in museums, but in reality the group was selling majority of the items in the black market. These historical pieces are worth millions of dollars in the black market and could be easily smuggled out of the country (Pagliery, 2015).

In an area where there were a number of dismantled organisations and with AQI on its last breaths, the ISIS offered something more to the fighters. The diverse sources of funding allowed the ISIS to pay exuberant salaries to its fighters and it was also one of the reasons why a large number of people joined the organisation (Bender, 2015). With the sort of finances under its belt, it was always easy for the ISIS to recruit more people. The ISIS also used the same funds to engage in media activities.

USE OF MEDIA

After the victory of Mosul, the ISIS streamlined its use of media as a propaganda tool. Prior to this event, the ISIS was using the media primarily for recruitment purposes. This allowed the organisation to attract teenagers from Europe and England to come and fight for the organisation (Awan, 2017). The ISIS also used local recruiters based in western countries that used the internet to recruit radicalised individuals. Then there were jihadi brides; innocent young teens lured in the name of money, fame and Jannah, the Paradise according to Holy Qur'an. Later on, majority of them revealed the horror they had to face as a jihadi bride (Farand, 2017).

The ISIS' tactical use of media as a tool to spread its activities was well planned and craftily executed. The group has presence on all the social media platforms and despite its regular banning, the pages kept on re-emerging with horrific details of their activities (Awan, 2017). The pages were also used as discussion for and the ISIS even managed two online magazines which were relatively moderate, but followed the central idea of the organisation (Koerner, 2016).

The ISIS propaganda videos showed execution of foreigners carried out by a man speaking in a British accent, labelled as Jihadi John and later identified as Mohammed Emwazi by the western media. The propaganda videos also showed ISIS executing soldiers they had captured and the videos made sure that they showed the maximum amount of blood. One such video was of approximately 75 Syrian soldiers beheaded by the ISIS fighters. This video shot in detail sent horror waves across the globe and showed the heartlessness of this organisation.

In another video, the ISIS burned a Jordanian Pilot named Muath Safi Yousef Al-Kasasbeh alive. The young pilot was caught by ISIS militants after he ejected from his fighter jet which crashed near Raqqa (Fox News, 2015). The ISIS tried

negotiating after killing the pilot and after the negotiations failed, it released the video. The video sparked anger from all across the globe and King of Jordan; an ex air force pilot, took part against ISIS in an airstrike as retaliation. However, the ISIS kept on releasing such videos where they burnt their prisoners alive.

Later on, the ISIS also started to release videos of its members looting and vandalising the museums in areas under its control. The UNESCO world heritage site Palmyra was vandalised and the curator of the city was also brutally murdered. This bad move by the ISIS sparked global outrage and demanded for strict action against the organisation. Apart from this mistake, the ISIS has been extremely successful in using the media to its advantage.

FALL OF ISIS

The ISIS which spread across Iraq and Syria at a rapid pace and showed intent to capture the rest of West Asia along with some portions of South Asia and Northern Africa is now facing stiff resistant from multiple fronts. The ISIS which was known as a brutal force due to its barbaric methods and the crimes it committed against humanity is moving towards a steep decline. The group has witnessed such dips in the past and has managed to surge against all odds.

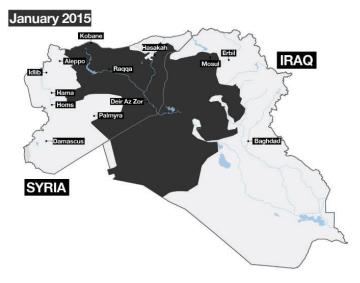


Figure 2: ISIS in 2015 (Source: Al Jazeera)

However, this time the scenario is totally different. The countries and actors fighting against the ISIS have learnt from their mistakes and they also realise how much destruction ISIS can inflict if it is allowed to regroup. A number of countries have joined hands to fight against the ISIS. It is due to the efforts of these countries that ISIS has lost a major portion of the land it had controlled. Some of the factors and events that are now indicating a fall of the ISIS are discussed below.

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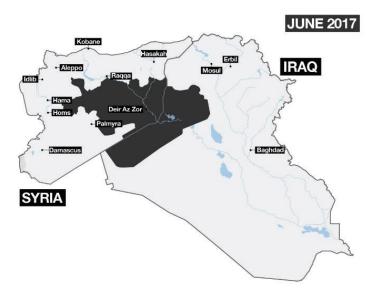


Figure 3: ISIS loss of Territory in 2017 (Source: Al Jazeera)

INTERNATIONAL OPERATIONS AGAINST ISIS

The ISIS developed sympathisers and supporters in various parts of the world. They used Turkey as a route to build a small network in Europe and also tried to make inroads into Afghanistan and Pakistan. However, it was most successful in Europe (Hershco, 2017). European countries that had taken a relatively neutral stance when ISIS took over Mosul were now under the radar of the ISIS. Later on the ISIS also released a map that showed the areas it wanted to capture and establish its caliphate on (Figure 1.1). This rang alarm bells for the European countries as a string of violent events started to take place in these countries. France was among one of the countries that were largely affected by ISIS operatives. Similarly Turkey witnessed a series of bombings on its soil (Diebelius, 2016).

The international efforts started against the ISIS initially in the form of coalitions. The top coalitions were the US-led coalition, Russian-led coalition, French-led coalition and Muslim states' coalition (Boghani, 2016). These coalitions initially formed a framework for action against the menace of the ISIS. The ISIS despite all its strength and will to fight till death was no match to the technological advancement these countries possessed. The coalitions started limited scale calculated actions against the ISIS, but in 2015 it was King Abdullah of Jordan who took the lead and launched a three-day air strike on ISIS. According to media reports, these three days of strikes resulted in the death of around 7,000 ISIS fighters (Sridharan, 2015).

Majority of the damage to the ISIS, apart from the Jordanian air strikes, was caused by the US air and ground forces. By mid 2015, US had flown over 44,000 sorties over Iraq (Standard Examiner, 2015). This highlights the intensity of aggression

used against the ISIS. Apart from the US operations, Russia using its influence over the Al-Assad regime, undertook strong military actions against ISIS in Syria. Britain, France and Australia also actively took part in field operations against the ISIS. Surprisingly, Iran which has very cold relations with the US government came out in support of the Iraqi government. Iranians and Americans both provided training to the state army and enabled it to fight against the ISIS (O'Connor, 2017).

As the international actions grew, the support base of the ISIS across the globe started to shrink. The organisation that was once attracting as many as 2,000 international fighters per month decreased to about 50 fighters a month (Witte, 2016). This was due to the continuous losses incurred by the ISIS. As a result, the ISIS was also facing problems in paying its militants.

DIMINISHING LOCAL SUPPORT

The ISIS gained enormous power due to the local support it enjoyed. The locals saw the ISIS as a liberator that would end the influence of Shias on the Sunni majority. The ISIS following the traditions of AQI, killed a number of Shias in the beginning. But eventually, the ISIS started to pursue its own vested agenda.

The ISIS started to collect heavy taxes from the local population and the locals who once saw the ISIS as the saviour and liberator from the Shia regime started to feel disgruntled. Their barbaric methods also worked against them as the ISIS adopted equally horrific ways on the locals who revolted against them.

Without realising the impact of what they are doing with the locals, the ISIS continued its activities and kept on imposing new taxes. As the ISIS failed to deliver on its promises of forming a state that operated on the lines of Madinah at the time Prophet Muhammad (PBUH) was alive, the local support kept declining. The locals also realised that the ISIS is not a long term solution and it is only a matter of months before the international community starts to take action against the terrorist organisation. These factors combined, contributed towards the loss of support and as a result, the ISIS which once relied on popular public support started to lose territory faster than it could have imagined.

THE FINAL BLOW

Mosul that was considered to be the strongest stronghold represented the strength of the ISIS. It was becoming clear that till the time the ISIS has control over this city, it would remain a potent enemy. With all the international support and newly trained army, the Iraqi government decided to launch an all-out war against the ISIS to recapture Mosul. The ISIS on the other hand vowed to fight till death for the defence of Mosul (Kalin, 2017).

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On 17th October 2016, Iraqi Prime Minister Haider Al-Abadi announced the retake of the Mosul operation. This operation was carried out with combined troops of approximately 100,000 (Chulov, 2016). The subsequent fighting lasted for almost eight months. ISIS fighters have held out and inflicted heavy losses by adopting a fluid defensive system, snipers moving quickly from house-to-house through holes cut in the walls and through a network of tunnels (Patrick, 2017). This made it extremely difficult for the Iraqi army to make advances against the ISIS.

As the ISIS had vowed to fight till death in Mosul, the army had to face stiff resistance as the the fighters started to fall back into the old town of Mosul which provided the perfect venue for their style of fighting. As the ISIS started to fall back, it also blew the Al-Hadba minaret and the Al-Nuri mosque; the same place from where their leader announced the caliphate three years ago. Towards the end, a number of ISIS fighters jumped into the Tigris River to avoid being arrested. All these fighters were killed by the Iraqi troops. the ISIS was not expecting this defeat and this rocked its structure from the core. The once resilient terrorist organisation was now crumbling like a cookie (Coles, 2017). The destruction of the historical grand Mosque of Mosul by the ISIS themselves marked a symbolic end to Islamic State's war and this also highlighted the level of frustration among its rank. The mosque stood as a symbol of its caliphate and supremacy and they did not want anyone to claim the mosque.

CHANGE OF STRATEGY

Within a couple of months after the recapture of Mosul, an interesting development took place at the Syrian-Lebanese border. The ISIS trying to find new strongholds faced the alliance of the Syrian forces, Lebanese force and the Hezbollah. The battle took place for a little over seven days and the ISIS faced a crushing defeat. The militants who once had vowed to fight till death now faced eminent death. Instead of dying, they came up with a different solution. The ISIS fighters negotiated with the joint forces and asked for a safe passage to Raqqa, a town still under the control of the ISIS in exchange for the return of dead soldiers (Hassan, 2017).

Surprisingly, instead of dealing with iron hands with these barbaric individuals, the authorities agreed to this deal and granted the ISIS fighters, all 300 of them along with their families,' safe passage towards Raqqa. The Americans after learning this development were furious and bombed the road towards Raqqa and as a result the convoy stood deserted in the middle of nowhere. There are also reports in that the Russians have also bombed the road ahead of the convoy (Hassan, 2017).

This shift in strategy by ISIS is a clear indicator that the group has realised that it no longer has the fame and power that it once enjoyed. As a result, they must negotiate and save their devoted members. Only by doing so, would they be able to continue fighting for their cause.

CONCLUSION

At the moment, the ISIS is involved in a gruesome battle of survival. With fighting taking place on multiple fronts, the ISIS is up against forces that have international support. This comprehensive action against the ISIS has resulted in the fall of the organisation. Within the past six months, the ISIS has lost control over one third of its area. Witnessing the retreat of the ISIS has been a morale booster for the forces fighting against it.

The ISIS always considered the victory of Mosul as a divine sign of help and support. No doubt it was an achievement on the part of the ISIS and was a main source of confidence for them. The organisation believed that as long as they have control of Mosul, no force in the world would be able to defeat them. This is also one of the reasons why it vowed to defend it till death and they actually abided by their word. The fall of Mosul also rattled the command and control structure of the ISIS.

Organisations like the ISIS are fuelled by initial successes. These successes are not only symbolic of their superior fighting power, but of the vacuum created due to the incompetence of the ruling elite. This is exactly what was seen in the case of the ISIS's victory over its de-facto capital Mosul followed by Raqqa. However, the ISIS lacked a system of governance and heavily relied on taxing the people living in the cities it occupied. The subsequent brutalities carried out by the ISIS also created resentment among the people and it started to lose the public support it once enjoyed.

Today, the organisation is under heavy fire and the ISIS is finding it hard to fight back. Abu Bakar Al Baghdadi in a recent audio tape has urged his fighters to keep on fighting, but the fighters are finding it hard to do that. They are not paid in a timely manner, they are not receiving regular guidance from their central command and Mosul, their symbol of caliphate is now occupied by the Iraqi forces.

The Iraqi forces need to keep on fighting the ISIS forces in support of their international fighters. Now that the end of the ISIS is in sight, the dwindling flame of the self-proclaimed caliphate needs to be extinguished. This would only be possible if the organisation is not allowed to restructure. The ISIS brokering a deal with the authorities is a positive sign, but instead of making deals, the ISIS should be wiped out and strong action need to be taken thereafter to ensure that this terrorist organisation does not rise again.

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EFFECTIVENESS OF REGIONAL SECURITY COMMUNITIES IN DEALING WITH TRANSNATIONAL THREATS: A CASE OF PIRACY IN THE STRAIT OF MALACCA

Colonel Ranjan Wijedasa

ABSTRACT

This paper examines the question of how MALSINDO, a regional security community in South East Asia, is dealing with piracy in the Malacca Strait which is one of the world's busiest maritime passages. The paper examines the typology and the general efficacy of 'security communities' by using security in the Malacca Strait as a case study. The approach is based on Alex Bellamy's work on 'Security Communities and their Neighbours'. The four key components in his theory are interrelated, and provide a tool with which to analyse the 'security community' concept. The analysis finds that the ASEAN acted as a loose-linked regional security community after 2004 by providing a legal and diplomatic framework in dealing with piracy in the Malacca Strait; while MALSINDO, which was initially weak as a security community, grew in efficacy as its members improved cooperation and the mechanism produced increasingly positive results. The study concludes that the cooperation among regional communities and the international community has shown that it can mitigate piracy incidents through better sharing of information and intelligence as well as by installing coordinated naval and air patrols that compose a mechanism that has shown statistically that it produces improved security.

Keywords: Piracy, Regional Security Communities, Strait of Malacca, Transnational Threat

INTRODUCTION

The Malacca Strait is a narrow stretch of water flowing between the Malay Peninsula and the Indonesian Island of Sumatra, named after the Malacca Sultanate that ruled over the region between 1400 and 1511. The Strait extends for 850 kilometres (459 nautical miles) between Malaysia, Singapore and Indonesia. Piracy in the Malacca Strait increased with South East Asian financial crisis of 1997. In response, MALSINDO, the acronym which forms the key 'security community' consisting of Malaysia, Singapore, and Indonesia was instituted in 2004 to combat piracy in the Malacca Strait.

This article examines the effectiveness of regional security communities in dealing with transnational threats, taking as an example the case of piracy in the Malacca Strait. Alex J. Bellamy's 'Security Communities and Their Neighbours' theory, defines a security community as the collaboration between states in an area or region where possibilities for conflicts, violence, or war are real or likely (Bellamy, 2004, p.5).

The term 'security community' was initially introduced by political scientist Karl Deutsch in the 1950s. He explained a security community as a group with a mutual understanding and agreement for combating common issues such as conflict or social problems (Deutsch *et al.*, 1957 as cited in Bellamy, 2004). Deutsch believed that common security problems could be resolved by healthy dialogue that could build trust within the community. For Deutsch, peaceful changes are defined as "the resolution of a social problem normally by institutionalized procedures, without resorting to [a] large scale physical force" (Deutsh, 1957, p.5). He explained that a security community must be bounded by a sense of community, sympathy, trust and common interest.

"The security community concept could be traced back to seminal work led by Karl Deutsch in 1957, though Richard Van Wegenen has been credited with first introducing the concept in the early 1950s" (Deutsh *et al.*, 1957). According to Deutsch and his collaborators, a security community is one in which there is real assurance that the members of the community will not fight each other physically, but will settle their dispute in some other way.

Karl Deutsch's idea of the security community, offers an explanation of these modern inter-state dynamics. "The existence of a security community allows states to adopt a different logic from feeling under threat. The evidence suggests that they do so (although there are exceptions to the rule)" (Bellamy, 2004). Every country has its own national interests and tries to achieve them. In a globalised world, such inter-state relationships assume even greater importance. Thus this paper is concerned with issues of state and inter-state security. Most security threats are not independent and can be considered as a shared risk. Criminals operate across frontiers, just as easily as pollution crosses borders; in both cases, they easily affect neighbouring populations. In the present globalised world, no country is an island, not even physical islands.

No single government is able to police the high seas without international cooperation, requiring close cooperation between neighbouring countries. Considering piracy on the high seas, the Deutsch model offers assurance of fighting against a common enemy, which implies that members of the security community will not fight each other physically, rather they will come to mutually advantageous agreements and settle their problems peacefully, leaving little room for pirates to gain an advantage.

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Piracy in the Strait of Malacca can be traced back to the days of European colonial powers that developed trade routes in the area. Piracy in the Malacca Strait resumed after the Second World War and the end of colonial rule. It continued to increase with the South East Asian financial crisis of 1997. "Pirate attacks in the Malacca Strait are estimated to be almost 40% of global piracy incidents" (Brandon, 2003). The Malacca Strait is located in the centre of the South East Asian Sea, providing a vital corridor between the East and West. It extends for 850 kilometres (459 nautical miles) between Malaysia, Singapore and Indonesia. Piracy has become a serious security concern in the region and for world trade. The Malacca Strait carries, huge maritime tonnage serving South and South East Asia. 83,740 vessels passed through the strait in 2016, carrying about one-fourth of the world's traded goods, including oil, containers and other bulk cargos (Hand, 2017). The strategic value of the geographical area is derived from this being the shortest sea route between the Indian and Pacific Oceans. Therefore, combating piracy in the Malacca Strait is of vital importance to regional and global traders. MALSINDO, which comprises of the three countries stated before, form the key 'security community', studied in this paper.

In 2004, the regional countries of the Malacca Strait were struggling to tackle the burgeoning piracy threat and they formed a joint patrol called the Malacca Strait Sea Patrol (MSSP) codenamed MALSINDO (Southgate, 2015). The MSSP, coordinated patrols to mitigate the problem of piracy and to ensure maritime security in the Strait. In 2005, the Eyes in Sky (EiS) programme initiated joint air patrols between the three countries. Then in 2006, the Malacca Strait Patrol (MSP) coordinated naval and air patrols began. In 2008, the Malacca Strait Patrol & Information Sharing (MSP-IS) programme was launched and MSP-IS became a new member of the security community ensuring free passage of goods and maritime security in the Malacca Strait (Collin, 2016). In identifying responses to perceived threats, Malaysia, Singapore and Indonesia formulated an increasingly complete security mechanism, by moving from 'MALSINDO' to the 'MSP'.

The Association of South East Asia Nations (ASEAN) was created on 8 August 1967 in Bangkok, when officials from Malaysia, Singapore, Indonesia, Thailand and the Philippines signed a declaration establishing the association (Acharya, 1992, p.10). The number of ASEAN member states eventually increased to ten with the inclusion of Brunei Darussalam, Cambodia, Laos, Myanmar and Vietnam. The organisation was initially formed to develop cordial relations among member states, which they managed to achieve by going beyond the politics of confrontation.

ASEAN focuses on economic growth, social progress, the protection of regional stability and provides a mechanism through which problems can be solved in a peaceful manner. It covers a total area of 4.4 million km² and is home to about 625 million people. This makes ASEAN the sixth largest economic grouping in the world with a nominal GDP of US \$2.8 trillion. Military expenditure was about US \$35 billion in 2013 and the expected estimate for 2016 was over US \$40 billion (ASEAN, 2015).

The organisation comprises a loosely grouped cluster of states that have assembled for economic purposes. However, due to the rise in piracy on the high seas, which has obvious economic and political impacts, ASEAN has become involved in maritime security (ASEAN Charter, article 2). After 2004, the ASEAN evolved from and economic grouping into a regional security community and found itself well-placed to provide legal and diplomatic advice for member states.

Bellamy (2004) included six key interrelated components in his theory which are loosely coupled security communities, successful community building, response to perceived threats, perception of outsiders, role of socialisation, and institutions. For the purpose of this paper the author has chosen to analyse Bellamy's first four components.

Security communities have succeeded only in certain regions. For example, South Asia (India, Bangladesh and Sri Lanka) has succeeded in organising against transnational threats. On the other hand, the Middle Eastern States (Jordan, Syria, Egypt, Lebanon, Iraq, Saudi Arabia and Gulf States) have failed to establish Bellamy's "proliferation of security communities" in this "era of intensified global integration" in their conflict against Israel (Deutsh *et al.*, 1957 as cited in Bellamy, 2004). This case study on piracy in the Malacca Strait examines the concept of 'security community' and analyses whether the mechanism has been successful.

MALSINDO: A SECURITY COMMUNITY FOR THE MALACCAN STRAIT

The Strait of Malacca, one of the most important shipping lanes in the world, has become vital in terms of supplying important commodities such as fuel to fast developing countries and beyond. Out of 87 million barrels produced per day, approximately 15.2 million barrels passed through the Malacca Strait. This remains the shortest sea route between Asian suppliers, African and Persian Gulf countries. Compared to the Suez Canal and Panama, a huge volume of oil passes through the Strait of Malacca (Hussain, 2017). When looking at the countries of the Malacca Strait region, Indonesia, Malaysia, and Singapore play key security roles. Piracy attacks have become more sinister and violent in recent years. to the extent that

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pirates even hijack the crews for ransom. Sometimes they are supported by a much larger "mother ship", and they transfer cargo and oil/gas from the hijacked ship into their mother vessel.

In July 2004, the Malacca Strait countries established the first security community, code named MALSINDO, a joint naval patrol conducted within states' territorial waters. For reasons of state sovereignty, states were not allowed to engage in cross-border patrols and were confined to national territorial waters. This physical limits placed on operations by the MALSINDO agreement, failed to achieve the required outcome against piracy between 2004 and 2006 (Hirst, 2013), requiring the three States Malaysia, Singapore and Indonesia to develop additional mechanisms. This paper considers the original MALSINDO arrangement to have the characteristics of a loosely-linked security community.

PIRATES: WHO ARE THEY AND WHERE ARE THEY FROM?

Pirates of the Strait of Malacca are a complex network of criminal factions. Indonesia is the world's largest archipelagic state, consisting of 17,504 islands with approximately 54,000 kilometres of coastline. Indonesia also has a large and growing population which faces considerable ecological challenges, some of which are self-inflicted. Some of the decisions taken by the country's leaders have involved economic reforms promoting modernisation and industrialisation, leading to large numbers of jobless people who have little to do and face extreme poverty (Storey, 2008).

At the regional level, Indonesia, Malaysia, and Singapore play key security roles. Singapore has a highly developed and successful free-market economy, but is small in size and population. It enjoys a remarkably open and corruption-free environment, stable prices, and a per capita GDP higher than some of the most developed countries. Unemployment is very low in Singapore. Malaysia and Indonesia have now been forced to outlaw the export of sand to Singapore in order to protect their own coastlines. Malaysia falls into the category of an upper middle income country of medium size; whereas Indonesia is the largest economy in Southeast Asia (and one of the largest countries in the world). They have some considerable economic differences. Singapore's rapid development led the city-state to become a global commerce, finance and transport hub, which creates further economic disparities with the other two countries (Revelli, 2016).

There are other major differences affecting their relations. In addition to the economic differences, Malaysia and Indonesia are predominantly Muslim countries, while Singapore has a mixed population with large Buddhist, Christian, Hindu and Muslim minorities. Their social differences also indirectly affect cohesion and trust between them. However, in certain areas, these three countries bilaterally complement each other. Because of their different perceptions and economic inequalities, these three countries do not exhibit a very high level of mutual cohesion regarding each other's behaviours. They do not have much confidence in each other because of different ideologies, leaving little room for trust.

A combination of these factors has encouraged certain groups to become involved in piracy as a solution to their unemployment. Most of the pirates of this region are from Indonesia. They live in islets and operate from river outlets, using small vessels like speedboats. The pirates operate from areas around Medan, Sumatra, Bangka, Phuket and Pekanbaru. The attacks are carried out for money, food and other goods. Items stolen from vessels are sold on the black market. They initially adopted hit and run tactics as a modus operandi by boarding vessels, carrying knives or small arms and attacking the crews and escaping whilst taking what they can find (Storey, 2008). As per the statistics of ICC International Maritime Bureau from 2010 to 2014, there has been a remarkable decline in piracy attacks and only seven actual and attempted attacks were observed in Malacca Strait.

SECURITY COMMUNITY RESPONSES TO MALACCAN PIRACY

On 20th June 2005, the Joint War Committee (JWC) of Lloyd's of London designated the entirety of the Strait of Malacca as a war zone. This declaration from a formidable insurance giant, other insurance companies to increase their rates by as much as 30% (Southgate, 2015).

The joint security operations evolved from the MSSP to EiS, the MSP and most recently (since 2008) the MSP-IS expanded the anti-piracy security community to four countries. In addition, Malaysia has taken a number of unilateral initiatives to combat piracy by installing radar stations and employing police officers to set up regular patrols along the coastline. Further, the creation of the Malaysia Maritime Enforcement Agency (MMEA) under the Government Act No. 633 in 2004 to collect information and to ensure coordinated national maritime security should be noted.

Before 2004, littoral states had cooperated in occasional (one-off) joint activities. Based on the number of pirate attacks that took place, the measures taken prior to 2004 were generally ineffective. The three countries have traditionally followed individual and bilateral security approaches, rather than multilateral approaches to security.

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Under the 1992 bilateral agreement between Indonesia and Malaysia, "each state patrols within its own territorial seas, but the patrols are coordinated by keeping the other states informed" (Li and Cheng, 2006). Cooperation among littoral states has been limited, since governments prefer to act at national levels.

Despite some successes, the EiS has been criticised for having a rather low number of flights available for operation and surveillance. The initial plan was to have 115 flights/ Unmanned Aerial Vehicles (UAVs), but in actuality only about 25 flights were utilised for anti-piracy operations per week (Liss, 2011, p.279). Aerial surveillance operations are conducted with Mission Masters, Search Masters and UAVs. Surveillance cameras that can detect targets at different altitudes are a vital factor. With existing capability, most of the patrol flights can cover about 500 nautical miles, whereas they need autonomy over 1,500 miles to provide effective cover.

When Thailand joined the security community in 2008, Indonesia, created the Malacca Strait Patrol with an information sharing system, which became the South East Asia's first multilateral arrangement involving the navies, coast guards and air forces of four-member countries. The three littoral states use their own naval vessels including frigates, corvettes, fast attack crafts and patrol crafts for sea patrols.

While Singapore has been trying to obtain the support of the international community, Indonesia and Malaysia opposed this initiative. Extra-regional military support failed due to the ideological differences between these three countries. Financial and training aids were accepted, but Indonesia and Malaysia were unwilling to accept foreign military presence. American proposals were that the US forces should support a Regional Military Security Initiative, sharing information and patrolling the Strait of Malacca with the recently developed speed boats. However, this was perceived as the interference of outsiders, and was not welcomed. Only Singapore expressed support for the Regional Military Security Initiative; the other two states rejected it. This rejection stemmed from their strong feelings concerning the basis of sovereignty over their territorial waters and their unwillingness to accept help from extra-regional powers. Piracy threats were causing huge indirect costs such as additional patrols and increasing insurance premiums for shipping companies and these costs explain the interest of the US and other extra regional powers.

In addition to government forces, there are a number of Private Security Companies (PSCs) operating in the region to combat piracy. The services rendered by PSCs are a valuable supplement for anti-piracy operations in South East Asia. This is a new trend in anti-piracy operations and representative of the important and growing privatisation of the security sector which can potentially generate weakness in present day maritime security. The PSCs operate without clear rules and regulations and their extra-judicial status is a major concern. However, PSCs can offer active and effective service, PSCs are getting more popular as ship owners tend to employ them. This article does not discuss PSCs in detail, as it is a vast subject area with potential for further research.

Corruption by military authorities and their direct involvement in politics may be another major concern, particularly in a country like Indonesia where some of the military and civil customs authorities and political leaders are believed to be earning money illegally by supporting pirates (Liss, 2011, p.280-282).

The regional countries' approach before 2004 and after 2004 was different. Some of the new collective measures taken with regards to coordination were appreciable after 2004, as the regional states began to maintain higher levels of coordination and eventually, cooperation. Coordinated patrols were conducted within each capital's territorial sea. However, most of the vessels like frigates in sea operations maintain a speed of 15-18 knots (kts), which does not match the speed potential of the speed boats operated by pirates in the Malacca Strait, which travel at 22-26 kts. As a result, naval patrols are more easily able to see pirate threats on the radar, than to intervene to stop their attacks or to arrest criminals.

CONCLUSION AND RECOMMENDATIONS

The three countries Malaysia, Singapore and Indonesia surround the Malacca Strait, and they have created a form of security community with which to confront the piracy menace. The form of the community has changed through time and interstate collaboration has become gradually more successful since 2004 in reducing the impact of piracy.

MALSINDO can be classified as a loosely-linked security community, due to the political differences among the group which led to lack of trust, particularly between Singapore and the other two countries. Each country tends to give priority to its own national interests rather than to the common cause. Especially when the USA and India were ready to provide assistance, the loosely coupled nature of MALSINDO and the inter-country disagreements made such external participation impossible. In a situation like piracy, security needs to be provided through a comprehensive approach rather than by countries giving priority to their own agendas.

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Malaysia, Singapore and Indonesia, as a regional security community, initially failed in community building. After 2004, they managed to install better cohesion among the three-member states. This paved the way to successful campaigns after 2007 and to the inclusion of a fourth country, Thailand in the 'MSP-IS' in 2008. It is a clear indication that establishing an integrated and successful, mutually-motivated community is one of the key factors in fighting a common enemy. The security community became more closely linked, as it moved through various stages until four member MSP-IS emerged.

At the regional level, continued participation in a second security community ASEAN has been important for peaceful relations. Training and education in all levels of regional, strategic, national and tactical operations are vital in finding coherent and long-lasting solutions in response to perceived threats. Operations with regard to piracy, narcotics and human smuggling require special attention and a better legal framework for dealing with them. At the same time, it is important that the processes of arrest, trial, and imprisonment of condemned criminals should be handled according to international standards. By looking at the pattern of piracy attacks, it is possible to conclude that the financial crisis in South East Asia increased pressure on the piracy crisis and is one of the root causes that explain the increase of piracy in the Malacca Strait. At the state or strategic level, political leaders should study the possibilities of procuring the latest maritime assets to accelerate implementation of the joint patrol process. At a tactical level, security officials must think about how different modus operandi and smarter tactics could enhance the effectiveness of operations.

Considering these difficulties, certain regional states have requested increased cooperation within ASEAN to tackle piracy. The ASEAN countries should step up unified efforts to share intelligence and hold law-enforcement exercises. As maritime security issues affect only a few ASEAN member states, the organisation has yet to find an effective response to the increased threat of piracy. To date, there is no antipiracy initiative involvement by all ASEAN member states. The ASEAN Maritime Forum (AMF) and Maritime Security Expert Working Group (MSEWG) aim to address issues associated with maritime security. While these institutions enhance dialogue between member states, they have not prescribed definitive measures to tackle piracy that involve all ASEAN member states (Southgate, 2015).

Certain regional countries have shown lapses, especially corrupt officials involved in counter piracy activities have slowed the success of operations. Some military and immigration authorities are reported to have close links with pirates, giving information for money which have sometimes prevented success.

PSCs operating in the region can provide a valuable supplement for anti-piracy operations, but experience worldwide shows that clear laws and regulations for them are urgently needed and should be agreed in law before the PSCs are allowed to combat piracy in the Malacca Strait. Even though regional countries have managed to diminish piracy in the Malacca Strait, piracy still exists on a small scale.

Examination of the root causes of piracy, which include a number of socio-economic and security issues, needs subtlety and determination. To combat piracy, new trends and practices must be identified by the security sector and by politicians. Underlying factors such as poverty, poor governance and overweening authorities need to be addressed.

It is important to appreciate the initiatives taken by international organisations such as International Maritime Bureau (IMB) to provide timely information with regard to the scale of piracy incidents. The IMB also provides required equipment and facilities, including technological advancements for people involved in reducing piracy in the Malacca Strait.

Involvement of the regional organisation ASEAN has been a key to success. Although it has an economic vocation, ASEAN has also acted as a loosely-linked security community in fighting piracy. Since piracy affects most countries in ASEAN, the organisation is keen to support security operations. However, ASEAN has not yet found a way to provide an effective mechanism to address the piracy issue regionally. In order to improve information-sharing and the impact of maritime security activities, it appears vital that ASEAN should become involved more with piracy threats in the region. ASEAN can act as a regional security community with all member states to curb piracy in a more coherent and comprehensive approach to guarantee success. Even if they are loosely coupled and despite a number of challenges concerning different perceptions of the common threat the efforts of security communities that we have presented can be said to have been successful.

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WEAPONISATION OF CYBERSPACE: STRATEGIC IMPLICATIONS

Harinda Vidanage

ABSTRACT

This article attempts to locate the evolving and complicating terrain of cyber security. The article traces the core components of cyber security since the inception of cyber space and its commercialisation in the mid 90's to where Nation States and defence establishments are struggling to maintain dominance in coping with cyber threats in the second decade of the 21st Century. The strategic logic of dealing with cyber threats through an array of regulations and institutions in the last 30 years are confronting new complex and fluid challenges that forces strategists to rethink responses.

Highlighting the underlying shift of cyber power from the cyber pioneering states to rising global powers and a loosely networked sub and non-state actors who are challenging established great powers both in the cyber domain and in the state domain, the article looks at two distinct forms of cyber weaponisation. The first is cyber weapons systems that are being developed to target enemy critical infrastructures which follow the same strategic thinking behind the military modernisation strategies of the late 20th Century. The second comes in the form of weaponised narratives, a far more sophisticated and insidious way of exploiting cyber space and people who are linked to it through millions of smart devices identified as the Internet of Things (IOT). These devices create new narratives about events, corrupt information systems, exploiting cognitive flaws to effect the political decisions made by the public especially in democratic societies. This article makes the readers rethink security, power and strategy in an emerging mass weaponisation of cyber space and how key aspects of liberal democracy are being used against the system by adversaries capable of deploying traditional cyber attacks such as hacks, cyber espionage resulting in altering political narratives and in creating domestic and international crises.

Keywords: Cognitive Flaws, Cyber Power, Cyber Security, Cyber Weapons, Information Security, Weaponised Narrative

INTRODUCTION

The term 'Cyber' was first used by Norbert Wiener, a mathematician from the Massachusetts Institute of Technology (MIT) in 1940, when he coined the term 'cybernetics' (Rid, 2016), to focus on developing intelligent and autonomous machines. It later entered the science fiction lexicon in 1984, when Canadian American science fiction writer William Gibson coined the term 'cyber space'.

Thus till the early 20th century, policymakers were reluctant to use the term cyber space in the context of creating a serious conversation and policy process on a term borrowed from science fiction. Irrespective of the usage of the term, its deep connection with the information technology revolution and the emergence of the internet as a revolutionary technological advancement has made cyber a key area in the focus of domestic and international governance mechanisms.

This article makes a case for the intellectual comprehension of the evolving militarisation and weaponisation of cyber space. The article comprises of four key sections with the first outlining the emergence of the cyber space and its militarisation. The second section focuses on the importance of merging strategic thinking with cyber properties. Cyber crime and espionage set the stage for more militarised responses to achieve militico-political objectives through cyberspace. The third section analyses as to how that was achieved. The final section traces the key characteristics of the on going cyber weapons programmes and their strategic implications from the perspective of Nation States.

WHAT IS CYBER SPACE?: THE NOTION OF CYBER SECURITY AND CYBER WAR

Defining cyber space and generating a consensus around the definition has been a significant challenge. In his novel Neuromancer, Gibson (1984), defines cyber space as, 'A consensual hallucination experienced daily by billions of legitimate operator[s], in every nation state...'. However, in policy circles there was reluctance to identify this new virtual space which is created through a massive interconnection of computer networks and the data or information that runs through it. Singer (2014) points out this complex task when he traces how the United States Department of Defense (DoD) came up with nearly twelve definitions for the term in the past few years. The current head of the US Cyber command, Admiral Mike Rogers in the annual conference organised by the Air Force Association on Air, Space and Cyber Space claimed, "The idea that we're going to stick to a specific construct, a specific set of operational practices, or a specific set of skill sets over time, I think, is very flawed" (Rogers, 2017). While it is acknowledged that the key spatial component of cyber is that of a constantly evolving and fluid informational environment, the definition Singer provides is more pragmatic and applicable even to the debate on cyber weapons that this article highlights. As Singer articulates, the 'cyber space is the realm of computer networks which includes the users behind them in which information is stored, shared, and communicated online' (2014).

Who governs, controls and benefits from the cyber space is transforming the ways and means of understanding and projecting power in global politics. Joseph Nye (2011) called this cyber power and as a decisive proponent of future power. This article attempts to look at the emergence of securitisation of the internet and

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the ways and means by which the cyberspace has transformed into a key domain of warfare, conflict and reached every nation's top priority when it comes to national security policy and national security strategy. The fundamental argument is that the sources of cyber power, means of consolidating and expanding cyber power have become an unwavering domestic and foreign policy strategy. In this light, this articles explores and addresses the intersection of cyber power and strategy through dimensions of cyber security, cyber espionage and cyber weaponisation.

Cyber security has evolved into a mainstream security policy priority powered by many intellectual discussions and pressures created by the intense sense of insecurity in the cyber space. The discourse on cyber security has vastly expanded with research on cyber crimes, espionage (state and industrial) to terror activities. Cyber security is a priority in the corporate, state and civil society initiatives leading to a plethora of forums, publications and discourses. The challenge has been amplified in the last ten years since the 2007 cyber attacks on the Estonian critical infrastructure.

Yet, the idea of cyber war was first discussed in an article by then RAND experts Ronfledt and Arquila, titled 'Cyber War is coming' (1993). There were terms prior to that where the Bulletin of Atomic Scientists in 1992 September edition discussed about cyber war which was primarily focusing on autonomous weapons and robots. The Ronfledt and Arquilla argument displaced the centrality of weapons instead they argued to locate the importance of information and information networks at the heart of strategic advantages in future war. They followed up in 1996 with a robust argument to use information networks in US military modernisation in the publication 'The Advent of Netwar'.

Despite the mass diffusion of power and capabilities to non-state actors and the emergence of sub-state actors, Nation States remain pivotal players in global politics. Great powers and emerging powers are pouring in billions of dollars into research and development into fields of the internet technologies and allied fields such as artificial intelligence (AI) and robotics. American and Chinese rivalry and competition in these fields is a separate case study in itself. Cyber space and recent developments such as radical transparency movements, hacker collectives, the Arab Spring, cyber espionage and sophisticated cyber attacks, the emerging power of digital industries have all compounded fears of several major powers in global politics (Sifry, 2011). They also seek to establish and lead in the aforementioned fields as they feel dominating in the technological spheres make it a primary objective for information and technological dominance. Thus, these fears and expectations of states such as the Unites States, Russia, China, Germany, Brazil, India, Australia and Israel are shaping the future of the cyber space. These geopolitical competitions are manifesting in the cyber space which is both a site and a critical strategic network to be defended and attacked. Thus, the next section of the article focuses on the importance of a strategic approach to dealing with cyber security and cyber war.

IMPORTANCE OF CYBER STRATEGY

Strategy and strategic studies has significantly evolved over the decades from being a component of International Relations and Security Studies to a major subfield in International Security Studies. In the context of policy, the theories of strategy focus on explaining how and why military power is utilised to achieve political objectives of state policy (Gray, 2016). A key reality in both academic and policy terms is that the strategic future is unknown. Lawrence Freedman (2013), points out in his ground breaking work 'On Strategy', that the picture of Strategy remains governed by the starting point and not the end point. Thus, in the context of cyber weaponisation in both developing a weapons programme to creating defensive mechanisms, this fundamental remains constant.

Strategising cyber weapons programmes would aid in limiting the range of political folly, which Gray argues as a primary function of strategy. This will be discussed further with reference to the American cyber weaponisation programme. The emergence of strategy as a deeper intellectual and policy convergence was parallel to the increasing bureaucratisation of organisations, professionalisation of functions and the increasing range of social sciences. Freedman (2013) stresses this in his own research, where he also alludes to the limits of understanding and explaining strategy from a purely rational choice foundation. He specifically relates to the rise of 'Mentalisation' (2013), which involves how people's minds are affected by narratives, experiences and scripts. The critical engagement of limits of strategy is a key highlight in this article, specifically on the weaponised narratives in cyber space and their impact on statecraft. As strategies were neither designed nor implemented in controlled environments when the fluidity of cyber space encroaches on structured state organisations, norms and practices limits of strategy are exposed. This article provides an insight into such limitations and intellectual requirements to rethink strategy productively to convert cyber vulnerabilities into advantages and counter weaponised narratives. Thus, cyber power and strategy are the two fundamental convergence points in this exploratory article.

The relentless pursuit of excellence in cyber space and cyber technologies are pushing states to innovate and grow, but at the same time they want to exploit the data of adversaries while simultaneously safeguarding their own which inadvertently leads to cyber conflicts. One classic example is how the National Security Agency (NSA) of the United States, developed a massive surveillance programme called PRISM to unleash mass scale surveillance locally and globally as revealed by the files leaked by Edward Snowden (Segal, 2016).

The final piece of this complex cyber scenario is the existing geopolitical conditions. President Trump making his debut at the United Nations General Assembly (UNGA) claimed that the United Nations (UN) was in need of reforms and indirectly claimed that the organisation did not do its job properly. Thus, what is clear is that in a global

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system which experiences constant fluctuations and major turbulence, the strategic impetus of cyber power will gain further traction as nations compete to dominate global forums and prepare at the same time for impending global conflicts.

To illuminate and critically engage with the latest developments in cyber securitisation trends, the article focuses on levels of cyber weaponisation, i.e. on two major dimensions of cyber weaponisation. This article exclusively focuses on states' responses to cyber conflict rather than the non-state dimension. Many researchers from Sifry (2011), to Tufekzi (2017), have focused on non-state actors and cyber politics. However, during the last decade in global cyber politics, states were utilising massive resources to develop cyber offence and defence solutions that requires serious academic and policy attention.

There is a major vacuum, especially in countries like Sri Lanka to understand cyber weaponisation, as our society and military establishments are still focused on cyber security threats that emerge from traditional hacks or conventional cyber crime. What is especially important for smaller countries is to grasp two things. Firstly, cyber weaponisation itself will make most of our critical infrastructure vulnerable amidst geopolitical tensions that are taking place around the country. Secondly, cyber weapons create opportunities for smaller states especially in the realm of developing cyber resilience by centralising and building awareness programmes to counter such threats. Smaller states could achieve both these objectives efficiently than larger states (Manjikian, 2010).

A major hurdle in engaging in this theme is the inconsistencies of definitions, parameters and contradictions in approaches to cyber security among members of the academic community. As Miller indicates, this is because the concept of cyber war itself is ill-defined and the definition involves linkages or what he refers to as conflations, which distorts the meaning and facts as the boundaries between concepts such as cyber war, cyber crime and cyber terrorism are extremely blurred (2011). He also outlines a further criticism on the subject itself, where much of the information or evidence regarding how networks or computer systems are compromised and its actual effects are exaggerated and hyping the effect of cyber vulnerability for funding purposes. Yet, the White House Commission titled 'Cyberspace Policy Review' of 2009 claims, "The Nation's approach to cyber security over the past 15 years has failed to keep pace with the threat" (2009, p.7). It was the US report from 1991 titled 'Computers at Risk: Safe Computing in the Information Age' which was prepared by the Computer Science and Telecommunications Board that highlighted the matter of security. Now even the Information Telecommunication Union (ITU), the UN's special agency for Information Communication Technologies, indicates cyber security as one of its major areas of security concerns.

Singer (2014) points out that even the United States which stands as the key innovator of cyber technologies seems to be struggling hard to operate in this domain. The United States Department of Homeland Security (DHS) under whose command the civilian and corporate cyber security tasks fall, on its homepage of the cyber security programme provides an elaborate definition of cyber security:

The growing number of attacks on our cyber networks has become, in President Obama's words, 'one of the most serious economic and national security threats our nation faces.' The Department of Homeland Security plays an important role in countering these threats. We're building one of the best teams anywhere to keep our federal civilian networks secure, and secure the cyber space and critical infrastructure on which we all depend. That means working across the federal government, partnering with the private sector, and empowering the general public to create a safe, secure, and resilient cyber environment, and promote cyber security knowledge and innovation.

In the aftermath of a major hack attack on the United States targeting Sony Corporation in December 2014, President Obama created a centre for effective multi-agency coordination in 2015 under the Directorate of National Intelligence called the Cyber Threat Intelligence Integration Center (CTIIC). Its objectives as outlined on the centre web page are, "to produce coordinated IC analysis of foreign cyber threats to US national interests, ensure the information is shared among the federal cyber community, and support the work of operators, analysts, and policymakers with timely intelligence about significant cyber threats and threat actors." Thus, if the above DHS cyber security objectives are compared with the CTIIC, it is very clear that the new agency was formulated due to the failure of the DHS cyber security initiatives. Though it is not explicitly discussed, a careful analysis demonstrates that even the United States is still trying hard to adapt its institutional architecture to respond to cyber attacks and breaches.

Hansen (2009) points out that even though the topic of cyber security is a dominant issue in many realms of governance, there is hardly any reference to it in any major contributions to security studies. The policy heavy approaches also coincide with the geopolitical condition of the current global security architecture. With the rapid global realignment of power structures combined with the effects of the rise of powers such as China, India and the re-emergence of an aggressive Russia, there has been much discussion on the expansion of confrontations in the cyber realm. The cyber attacks on Estonia in 2007 and Georgia in 2008, the multiple major hack attacks on the United States, and cyber confrontations between India and China are all linked to the surge in cyber espionage, hacker deployments, and surveillance handled by global militaries and discussed at the heart of security initiatives of major powers (Clarke, 2010). To understand the current status of cyber weaponisation, the adjacent concepts of cyber crime and cyber espionage have to be discussed. The workings of cyber espionage have set the necessity and provided the strategic vision to state actors that cyber weaponisation in a necessary stage of evolution that needs to be achieved for strategic advantages to be gained in current geopolitical scenarios.

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CYBER CRIME AND CYBER ESPIONAGE AS A PRECURSOR TO CYBER WEAPONISATION

In 2007, the ITU launched the Global Cybersecurity Agenda (GCA) to develop a global response to cyber crime based on a report by a global High-Level Experts Group (HLEG), which outlined five spheres of countering cybercrime. It provided a cascading plan to initiate directives from UN based agencies to intra-regional associations such as the European Union (EU) to counter the transnational challenges of cyber crime. These efforts culminated in regional efforts such as the European Convention on Cyber Crime of 2001, as there appears to be a major increase in criminal activities such as hacking into bank accounts, stealing credit card information, compromising ATMs, running major international scams etc.

What is more important is to understand the role of states and sub-state actors in the use of cyber espionage as a form of cyber warfare or providing the necessary information that aides in making cyber weapons programmes accurate and lethal. Western narratives of cyber espionage have always pitched China and Russia as key culprits in running mass espionage. Early revelations such as GhostNet, one of the earliest mass scale espionage networks uncovered by the Citizenlab at Munk School of Global Affairs, attached to the University of Toronto, compromised computers in nearly hundred countries mainly targeting Tibetan groups in exile, the Dalai Lama's office and foreign ministries of Iran, Bangladesh, Latvia and Indonesia among many others and its victims included foreign missions of India, South Korea, Indonesia and Thailand among others. Citizenlab researchers managed to find one of the GhostNet users entering from a digital subscriber line (DSL) through an IP address on Hainan Island (Diebert, 2013).

The American led cyber espionage campaign has received little attention as the dominant narrative on cyber espionage points to Western adversaries. According to Segal, the United States is the farthest reaching, most invasive and established espionage operator in the world (2016). A glimpse of how the United States approached cyber was presented through Edward Snowden's revelations, where it was clear that the United States was trying means of staying ahead of the curve to track global terrorism and it was highly concerned about the power of digital technologies at the hands of various powerful state and non-state actors. This prompted the United States to develop a massive digital surveillance apparatus under the NSA which according to Snowden had the ability to 'Collect it all', 'Process it All', 'Exploit it All', 'Partner it All', 'Sniff it All' and 'Know it All' (Segal, 2016).

Based on conversations with White House senior staff, researchers point out that 75% of daily presidential intelligence briefings are made up of content provided by cyber spies (Segal, 2016). The United States have the institutional and legal frameworks to facilitate mass scale surveillances.

They mainly utilise three approaches for this purpose, i.e. by firstly establishing legal procedures where technology companies are forced to retain digital records of their customers and hand them in when there is a federal request. Secondly, through direct interception of data, this will be elaborated below and through direct computer exploitation. The Patriot Act – which was introduced in the aftermath of the 9/11 attacks – in its section 215 authorises the NSA to collect metadata.

The more pervasive means the United States has engaged in data collection is by utilising the 1978 Foreign Intelligence Surveillance Act (FISA). After its 2008 revisions, this act especially allows the Chief Justice of the US Supreme Court to appoint a secret court of 11 judges who will authorise the NSA for mass acquisition of data for the purpose of fighting terrorism and espionage. This was the legal framework that the NSA utilised to develop the mass data gathering surveillance solution called PRISM which Edward Snowden revealed.

The PRISM programme enabled the NSA to collect data in bulk and analyse it (Segal, 2016). It even developed operations to breach Google and Yahoo Data centres that were spread across Europe, Asia, South and North America. Apart from the five countries that formed what the intelligence community called the five eyes alliance, which include five countries that are part of the NSA surveillance partners that include Australia, Canada, New Zealand and the United Kingdom, every other state was vulnerable for cyber surveillance and spying conducted by the NSA. Cyber espionage has paved way to strategically rethink the use of cyber space for warfare and targeting an adversary's critical infrastructure to achieve political objectives. This has resulted in the increased interest in creating and developing cyber weapon programmes.

CYBER WEAPONS, CYBER POWER AND STRATEGIC NECESSITIES

Two types of cyber weapons programmes having distinct features and capability to be used at tactical and strategical levels are emerging simultaneously. The tactical weapons programme emerged as a solution to prevent an all-out war with an adversary when softer approaches such as economic sanctions fail. One major challenge for global powers was, what option to pursue when an array of diplomatic and military options run out? When all such options are exhausted, it damages the power projection capability of any great power. A classic example is when the Bush administration was confronted with a nuclearising Iran, as the latter resumed uranium enrichment at its nuclear facility in Nantaz in 2006 (Kaplan, 2016). At this time in 2006, the US was already engaged in two war theaters in Iraq and Afghanistan, thus they were forced to look at the third option.

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America's pursuit of the third option led them to seriously invest in a nascent cyber weapons programme which was setup by General James Cartwright, the then Commander of the Nuclear Strategic Forces (Sanger, 2013). The Director of the National Security Agency, General Keith Alexander was a strong proponent of the utilisation of cyber weapons. The solution was to develop a malware that could attack the Siemens Supervisory Control and Data Management Systems (SCADA) that were monitoring and controlling the centrifuges in the Iranian nuclear facility.

When President Barack Obama took office in 2008, the Bush administration's nascent drone programme and cyber weapons programme fitted well with Obama as he was unwilling to put troops, spend millions of dollars for America's global wars in the aftermath of the financial crisis of 2008. The utilisation of a cyber weapon in 2009 to disrupt and destroy the Iranian nuclear weapons programme was the debut of the third option Bush administration was desperately seeking. Obama was wary of its consequences as there was no historical precedent. His major concern was the possibility of the malware that was used as a weapon escaping to the internet and infecting other similar SCADA systems.

Though the attacks were launched in 2009, its initial exposure was made in 2010, but only in 2012 did the world discover that the infection on the Siemens SCADA systems was a result of a cyber smart weapon, the first of its kind. The German security researcher Ralph Langer was the first to identify that the malware was actually super advanced malware designed as a weapon specifically targeting Iran (Clayton, 2011). The attack was coordinated between the NSA, CIA and Israeli Cyber War Bureau Unit 8200 and the United States Office of Tailored Access Operations (TAO). The malware consisted of 650,000 lines of code, and the developers used five vulnerabilities in the Windows Operating System of the Siemens controllers. According to Kaplan (2016), the operation took eight months to plan and execute.

With the global press igniting over reports of the cyber weapon, in October 2012 President Obama signed the Presidential Policy Directive (PPD-20) known as the US Cyber Operations Policy. The directive identified the importance of cyber warfare, development of offensive cyber capabilities and led to the institutionalisation of cyber attacks as an integral tool of American diplomacy and war (Segal, 2016). The weapons programme is currently expanding as the coding of cyber weapons have advanced. Currently, the weapons are developed in modular fashion. Designers could add extra features and functions by adding modules to each cyber weapon. A classic example of this modular cyber weapon was the use of the malware called 'Flame' which targeted hundreds of computers in Iran, Sudan, and the Middle East. The code was twice as large as Stuxnet, the first cyber weapon, and was designed to work for a limited time and in a limited geographic area. Stuxnet malware had a deep strategic impact on major global powers and it also made many smaller and mid-range powers feel vulnerable. It started a new phase in research and development of cyber weapons which is still ongoing. The second type of weapon

that is being used and received a mass interest in both policy and academic circles especially in the aftermath of the United States presidential elections of 2016 was the concept of weaponised narratives. Cyber security researcher Herrman (2017) observes, "Decades ago, the power of nuclear weapons required new research. Now, the power of weaponised narrative requires new research."

The idea behind the conceptualisation is through a myriad of cyber hacks, attacks and proliferation of unauthentic social media accounts narratives that may directly influence the thought processes and decision making of the public of an adversarial state. The strategic objective is to make an impact on the political processes of a third country, breaching the mind of the nation. It is cyber power utilisation with strategic sophistication touching the elements of power Foucault (1980) exposed in his key interventions about the discursive on framing of power.

The ability to compromise the vulnerabilities of state security regimes using the cyberspace and achieving the desired outcomes that may or may not directly compete or conflict with national security, is the power component. Joseph Nye's definition of cyber power is important here, he claims:

Cyber power is the ability to obtain preferred outcomes through use of the electronically interconnected information resources of the cyber domain. Cyber power can be used to produce preferred outcomes with Cyberspace, or it can use cyber instruments to produce preferred out come on other domains outside Cyberspace (Nye, 2011, p.123).

According to Segal (2016) cyber power varies according to great power capabilities. He identifies key denominators to be a great cyber power, a state with a large and technologically advanced economy, secondly public institutions that are capable of channelling energy and innovation of the private sector. Thirdly, rapacious military intelligence agencies and finally an ability to create a cyber narrative that is attractive. Currently, forty nations possess cyber warfare doctrines and half of them are actively developing cyber weapons. China is in the forefront of adopting a robust cyber deterrence as well as offensive capability.

In 2014, President Xi created a cyber security core group which he personally chaired, and in 2017 China adopted a rigid critical infrastructure protection regulation. The doctrine of this regulation claimed; "The implementation of cyber space deterrence before the attack, through a wide range of public opinion propaganda campaign, issued a warning to the enemy, and declared to the world the injustice of their actions in order to gain international understanding and support" (China Copyright and Media, 2017). When studying the way the principles of the doctrine are presented, it is clear that China is responding to both types of cyber weaponisation.

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The rise of weaponised narratives has gained major attention from Western and Non Western thinkers and state policy. Former Hilary Clinton campaign manager Eric Rosenbach and former Republican presidential candidate Mitt Romney's campaign manager Matt Rhoades with the aid of the Harvard University think-tank Belfer Center recently launched a new initiative titled, Defending Digital Democracies to create academic research for policy exposure to deal with the undermining of democratic processes through weaponised narratives.

Celebrating the Internet as a liberation technology and leveller of community power is currently put into question as smart devices and their tethered applications have the capability to function as tools and weapons of the weaponisation process. As Singer (2016) argues, vulnerable communities and individuals are exposed to virulent ideologies leading to inflaming dormant ideologies that snowballs into massive crowds filled with hate and major shifts in opinions. It alludes to our current global transformation, especially across the globe, the emergence of radical forms of political mobilisation based generically on nationalist political causes. Thus, in the context of strategy, the viral narratives create patterns of behaviour that is virtually impossible to predict or track. The nascent origins of weaponised narratives are forcing scholars and decision makers to rethink what sorts of strategic advantages such tools can provide and how it displaces or consolidate the resources of cyber power.

CONCLUSION

A strategy is imperative when policy makers have to decide for future matters, providing the insight to look through all the clutter yet devise long term solutions to challenges and whenever possible to address causes rather than having to respond to the symptoms. In this context, a deep exploratory discussion on the emergence of cyber weapons provides an insight into the relationship between strategy and cyber power. Cyber power as a concept has been in circulation for a while since the inception of cyber space, and cyber space has become both a site and medium of political activism. The radical feature of cyber weapons that has a history of less than a decade, is the way in which delivery of payload has revolutionised. Stuxnet was a revolutionary cyber weapon, but such cyber weapons are very much limited for tactical usage. The focus on weaponised narratives is broader and remains open as there is convergence of strategy and cyber power, and the outcomes of weaponised narratives seem to have a far reaching social and political impact. While the controversies around the US presidential elections still linger, German legislative elections will soon be held and there is an intense conversation about foreign intervention through cyber space mainly through weaponised narratives. The field for intellectual discovery is wide open and research on how these new strategic implications of cyber politics will continue to evolve. This article intended to highlight such connections and illuminate developments in the strategic reconfiguration of cyber politics.

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