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Message from the Chief Patron

It gives me immense pleasure to introduce you all to the new 34th issue of DSCSC journal “MIRPUR PAPERS”. For almost thirty years, this esteemed journal – one of the oldest in the armed forces, has been dedicated to shedding light on the sphere of cognition. I personally believe that this Journal will bloom to become an invaluable source for researchers, academicians, and students who wish to do further research and contribute to the body of knowledge. I hope that the articles published in “MIRPUR PAPERS” will encourage all its readers to write new articles on various topics.

I appreciate the editorial board for yet another interesting volume of “MIRPUR PAPERS” comprising ideas related to security and military studies. I am also happy to announce the journal as a bi-annual peer-reviewed journal from this 34th issue, encompassing national, international, and professional matters. We are happy to blend this journal with the write-ups of course participants, faculty members, and DSCSC alumni.

I wish this journal a good going and expect to have a certain appeal to readers. I am confident that it will generate interest among scholars and practitioners with renewed vigour and motivation.

I sincerely appreciate all who worked behind this publication in different capacities to make the “MIRPUR PAPERS” (Volume 30, Issue 34) a reality.

Maj Gen Md Faizur Rahman, BSP, SGP, ndc, afwc, psc
Commandant
Defence Services Command and Staff College

Editor's Note

Dear Readers

Like previous years, the Defence Services Command and Staff College, Mirpur, Bangladesh has once again released the MIRPUR PAPERS. This journal mainly features articles authored by the participants of the Command and Staff Course. Additionally, it also includes write-ups by the faculty members and alumni of the College. The current release comprises eight articles covering assorted topics.

The first article of this publication focuses on why military officers need a personal leadership philosophy and how to develop one. Here the author argues that officers need to be self-aware and genuine, capable of leading with integrity, making sound decisions, understanding organisational dynamics, and staying composed in challenging and uncertain situations. In this context, a written leadership philosophy serves as both an internal and external compass, helping to realign leadership focus during difficult times. Therefore, it is essential for each officer to have a leadership philosophy to enhance personal as well as the organisational effectiveness of our esteemed armed forces.

The second article focuses on the weaponisation of social media and its use in modern warfare. The rise of social media has introduced new dimensions not only to politics and the economy but also to the evolution of warfare. While the hybrid nature of warfare suggests the synchronised use of various instruments of power, social media acts as a force multiplier to achieve this synchronisation. Social media outlets possess unique features that allow both state and non-state actors to employ elements of power effectively. This article explores how social media platforms are used as weapons in modern warfare and proposes a practical framework to address the threats.

The third article is on defogging the clouds of 'Centre of Gravity (CG)'. CG analysis is one of the prominent key concepts of operational art and design. Conceptualised by Carl von Clausewitz in his seminal work 'On War' in 1832, it became the center point of analysis, debates, and discussions. This article delved into the most widely debated theoretical frameworks surrounding CG, their interconnections, and their evolution across various military doctrines, including those of Bangladesh. It also discussed the reasons for confusion and obscurity, and finally suggested a simple and effective method for CG identification and analysis.

‘Need for a Dedicated Disaster Response Force for Bangladesh to Achieve Resilience in Natural Disasters’ comes next in the queue. Bangladesh's success in disaster management is well-recognised in the world. However, the disaster management system has some challenges, especially regarding coordination due to the absence of a dedicated disaster response force. This paper argues that a Dedicated Disaster Response Force for Bangladesh will significantly enhance the capability to manage natural calamities.

The fifth article is on socio-economic changes in Bangladesh and its impacts on the functioning of mid-level commanders of the Bangladesh Army. Over the past decade, Bangladeshi society has undergone considerable transformations. As a key part of society, the army is inevitably affected by these socioeconomic changes. These changes notably impact mid-level commanders in the army, especially in their roles of motivating and influencing individuals to accomplish mission objectives. The author identifies potential measures that could be implemented by the Bangladesh Army and its mid-level commanders to address the negative impacts of socioeconomic changes and take advantage of the opportunities that arise.

The integration of Generation Z (Gen Z) officers into the military landscape presents a dynamic challenge within the context of the Bangladesh Army (BA). In this 6th article of the paper, the author tried to unearth the challenges of leading Gen Z officers which are multifaceted, encompassing disparities in teamwork, adherence to established practices, and soldier connectivity. As such, the author argued that a wholistic organisational approach is a must. By recognising and addressing generational dynamics, leaders can develop a resilient and adaptable military force that is well-equipped to tackle modern challenges.

The understanding of military ethics is crucial for military personnel, given their key role in the state, society's protection, and state defence. Society permits military personnel to be trained in managing violence to safeguard territorial sovereignty and protect the populace. They are also authorised to use lethal force and take lives when necessary. In the seventh article of this issue, the author asserts that under legal constraints, military personnel must act like a double-edged sword, with one side being effectively lethal and the other side being life-preserving. The paper critically examines the development of military ethics and its evolution from moral values to the codification of International Humanitarian Law (IHL).

The last article of this publication analyses the strategies employed in Russia-Ukraine war to bring out the lessons for Bangladesh. The ongoing conflict between Russia and Ukraine stands as a major event of the 21st century showcasing numerous valuable military strategies such as hybrid warfare, siege warfare, information warfare, proxy warfare, and diplomatic endeavours. Thus, studying this war holds relevance for any nation, including Bangladesh. Keeping this in view, the author tried to analyse the key strategies employed in the Russia-Ukraine war and proposed a comprehensive approach for the Bangladesh Armed Forces (BDAF).

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Why Military Officers Need a Personal Leadership Philosophy and How to Develop One?

Group Captain Md Mahbub Ur Rahman, acsc, psc, GD(P)

Abstract

The concept of leadership philosophy is a less understood topic in the context of military leadership. Many military officers may think that they do not need a personal leadership philosophy since some of them will not have command opportunities in their military career. However, one should remember that as officers of the armed forces, each of us leads people irrespective of appointments. Thus, it is crucial to understand the importance of having a leadership philosophy for each officer for the better organisational effectiveness of our beloved armed forces. Officers should be self-aware, authentic individuals who can lead ethically, make good decisions, understand organisational behavior, and maintain composure in complex and ambiguous circumstances. In this regard, the written leadership philosophy becomes the internal and external guide that provides a beacon to refocus leadership efforts under trying conditions. A leadership philosophy also helps leaders to discover what they stand for and what is important to them and articulate this to followers. This technique leads to mutual trust and confidence, which becomes a foundation for long-term relations in an effective organisation.

Introduction

Stephen R. Covey, the author of the famous book 'The Seven Habits of Highly Effective People,' used an analogy of a team of people cutting their way through the jungle to contrast the concept between a manager and a leader. According to Covey, efficient managers sharpen machetes for their teams, hold machete training classes, bring automated equipment to haul out the cleared bushes, and cut through the jungle efficiently. In contrast, *'The leader is the one who climbs the tallest tree, surveys the entire situation, and yells, "Wrong Jungle"!'.*¹ This example entails the most crucial aspect of leadership, 'providing direction' to subordinates. Military and corporate world alike, effective leaders lead their respective organisations to success by finding and showing the right direction to the followers or under command. Again, managers help the leaders by carrying out the tasks efficiently while going ahead on the leader's directed path. As an effective organisation, the armed forces of Bangladesh also has leaders and managers at different levels. Officers are supposed to show directions and have a long-term vision as the organisation's leaders. Moreover, an officer should be self-aware, able to make ethical decisions, sensitive to organisational behavior, and

maintain composure in difficult situations irrespective of his employment. Thus, training on leadership gets due importance in different formal courses in the armed forces of Bangladesh. However, the concept of leadership philosophy is still a less understood topic in the context of military leadership. This paper highlights the importance of having a leadership philosophy for each officer in the armed forces of Bangladesh irrespective of rank and position. The terms 'officer' and 'leader' are used interchangeably in this paper.

George Ambler defined leadership philosophy as 'A set of beliefs, values, and principles that strongly influences how we interpret reality and guide our understanding of influencing humans.'² Ambler also argued that leadership philosophy affects how a leader interacts with people, responds to an event, and reacts to a situation. Thus, writing a Personal Leadership Philosophy (PLP) is a personal exercise that begins with defining the leader's values, beliefs, priorities, and expectations. Again, self-awareness and situational awareness affect leadership style. Therefore, military officers need clarity about their leadership philosophy, style, and behaviour. This article elaborates leadership philosophy, its importance, and the steps to formulate one. It also cites an example of the author's PLP at the end.

Basic Concepts

Before delving into the importance and method of constructing a leadership philosophy, it is important to understand some basic concepts related to leadership and philosophy. Some of these basic concepts are discussed below:

a. **Leadership:** According to the BAF draft doctrine, 'leadership is exercise of character far more than it is an application of management skill. Leadership inspires and persuades men and women to help a commander achieve his objectives even in the face of adversities and danger.'³ In other words, effective leaders influence others through their wisdom, experience, and knowledge to accomplish organisational goals. It is more of an art than science. Hence, a magic solution or formula to solve every leadership problem is nonexistent. A leader has to be responsive, dependable, and virtuous to be able to handle uncertainty. Therefore, leadership is a life-long process of self-assessment, learning, application, and reassessment.⁴

b. **Elements of Leadership:** Self-awareness, the ability to lead ethically, make sound decisions, comprehend the organisational culture, and remain calm in difficult situations are some essential traits of an effective leader. Therefore, one should examine four dimensions of leadership to evaluate the traits of a leader: the

personal dimension (to assess self-awareness or authenticity), moral dimension (to evaluate the ability to make morally sound decisions), organisational dimension (to assess the sensitivity towards organisational culture), and the challenge dimension (to evaluate the ability to make creative solutions in crisis).

c. **Philosophy:** The word philosophy comes from ancient Greek, which means 'love of wisdom.'⁵ Florida State University's School of Philosophy describes philosophy as 'an activity people undertake when they seek to understand fundamental truths about themselves, the world in which they live, and their relationships with the world and each other.'⁶ This definition suggests that philosophy is a personal self-assessment process during which an individual examines his fundamental beliefs and how he shapes his relationships with the under command. These values define the leader's philosophy.

d. **Leadership Philosophy:** A leadership philosophy is a well-defined statement about assumptions on which the leader provides daily direction for the organisation.⁷ 'Thus, a PLP refers to an individual's beliefs, principles, and sentiments that he uses to lead an organisation.'⁸ For example, when an officer deals with disciplinary issues of his/her under command, he/she consults with the Judge Advocate General/Base Legal Officer, his/her immediate boss, or even peers to get some advice on how to handle the case at hand. Based on his values, beliefs, and principles, the officer then decides the fate of his/her under command. Those values are his/her leadership philosophy. Besides, an officer with a PLP remains on track by constantly assessing the available information and devising an appropriate course of action in changing circumstances. Moreover, the leadership philosophy enables under command/peers/colleagues to comprehensively understand a superior officer's decision-making points. It also gives the under command/peers/colleagues a glimpse of the superior officer's values and how he/she seeks to manifest that commitment in leading a section/flight/unit etc. As such, a PLP is needed for all officers irrespective of his/her appointment/role in the unit/formation.

e. **Difference between Leadership and Command Philosophies:** A leadership philosophy is a starting point for developing a command philosophy. A PLP describes the leader's beliefs and values, irrespective of his appointment or position in an organisation. As such, he/she may not take inputs of higher-level commander's PLP for developing his/her own PLP. On the contrary, a command philosophy is needed for specific command assignments. A commander translates his/her PLP to develop a command philosophy to meet the command requirements of a specific unit/formation/service. It contains the commander's do's and don'ts list

and guidance on accomplishing a task. It also includes the commander's vision for the unit and a road map for achieving it.⁹ Thus, the main difference between these two philosophies is the leaders' responsibilities in their assigned appointments. A commander provides the vision for the unit through his command philosophy, while the leadership philosophy aims at a section's mission and reinforces the commander's vision and priorities.¹⁰ A commander needs to align his/her vision with the higher-level commander's vision. Thus, while developing a command philosophy, one needs to study the higher-level commander's command philosophy. However, everyone does not need a command philosophy as all will not get the opportunity to command a unit/division/base. On the contrary, each military officer requires a PLP as all of us lead people in various capacities.

Why Does a Military Officer Need a PLP?

Almost every military officer comes across a few commanders in their military career who could not infuse a sense of purpose amongst their under command. One may consider that those military officers lacked a proper understanding of the concept of leadership philosophy.¹¹ To succeed in any assigned task, each military officer must have a personal vision and a sense of purpose while leading a unit or group. Many officers may think that they will not command a squadron/battalion/ship or subsequent higher command positions in their military career. Thus, they may wrongly perceive that they do not need a leadership philosophy. As discussed in the preceding paragraphs, only the commanders need command philosophy, but everyone needs a PLP to lead people. All officers of the armed forces lead people irrespective of their appointments in command, staff, and instructional capacity in the military and associated organisations. Therefore, officers of the armed forces must have a PLP. Besides, leaders define culture and are worth following regardless of their positional authority.¹² Some of the benefits of having a PLP are described in the following paragraphs.

a. **A Way for Self-Assessment:** The development of a PLP starts with self-assessment, which helps one understand the strengths and weaknesses of his character. This self-assessment helps one to devise a personal leadership strategy to accomplish organisational tasks. Besides, leadership is the ability to marshal resources, build a collective vision, and develop creative and adaptive teams to accomplish organisational goals.¹³ Moreover, if an officer is clear on what he needs to do through his philosophy, he can become more aware of his natural blind spots. By identifying those blind spots, he can determine ways to fill those gaps and become more effective as a leader in any given capacity be it a command, staff, or instructional duty.

b. **Clarity in Action and Priorities:** In the absence of a sense of prioritisation of tasks, everything becomes necessary for some officers of the armed forces. They fail to prioritize the tasks and unnecessarily put extra pressure on the under commands by prioritizing everything as urgent. Thus, an officer first must be clear about his behavior, why this behavior is essential, and the objective he is achieving through his behavior.¹⁴ In this regard, PLP enables an officer to act with clarity on his priority.

c. **Fosters Collaboration:** The under commands can collaborate with the OC/CO effectively if they understand an OC's actions clearly. In this regard, a written PLP informs the employees about the leader's values and likely responses during different situations. This awareness of expectations helps ease workplace tension, fosters collaboration, and improves overall productivity for the organisation.

d. **It is Enduring:** Most officers serve as commanders for only a brief portion of their military career. However, all will be leaders when they serve in various staff and instructional appointments, Extra Regimental Employment (ERE) and UN Missions. By applying various leadership styles to different work environments and situations, an officer influences or leads people which may include his boss, peers, or subordinates.¹⁵ As such, a written PLP is an enduring document that one officer can apply at any time.

e. **Increases Effectiveness of an Officer:** A well-written PLP enables followers to know the leader's expectations. This process leads to mutual trust, reliability, and confidence in any organisation. Thus, an officer becomes more effective and endures less stress. Moreover, followers/under command will admire him/her for being authentic.

How to Develop a PLP?

There is no prescribed format for developing a PLP. The primary tools for developing a PLP are self-reflection and humility. Reflection helps an officer internalize his/her beliefs, comprehend the rationale, and find the best way to implement those beliefs. On the other hand, humility enables self-awareness through objective analysis of own strengths and weaknesses.¹⁶ Thus, writing PLP is a personal exercise that defines the officer as a person, what he believes in, values, priorities, and expectations of himself and others.¹⁷ Therefore, options to develop a PLP are endless. It depends on how one approaches his/her soul-searching exercise. Although there are no set rules or magic formulas to develop a PLP, the following steps may provide some guidance for beginners.¹⁸

Why Military Officers Need a Personal Leadership...

- a. **Step 1:** Before writing a leadership philosophy, an officer must identify his/her values. It is also essential to determine the strengths and weaknesses of his personality. To do that, one needs to define the expected qualities of an effective leader. As a starting point, he/she may analyze his/her observations about some of the leaders with whom he/she previously worked. For example, all military officers come across many superior officers/commanders in their service careers. One can list the qualities of the best and worst leaders from his/her own experience.
- b. **Step 2:** Analyze the characteristics of both the 'Best' and 'Worst' superior/commander. The following examples may be taken as references in this regard.

Table-1: Best Leader Characteristics

Integrity	Fair	Optimistic	Self-confident
Effective Listener	Sets Clear Goals	Good Communicator	A Teacher
Competent	Compassionate	Genuine	Has Sense of Humor
Encourages Feedback	Leads by Example	Respectful	Sets High Personal Standards
Praises in Public	Reprimands in Private	Supports His People	Delivers on Promises
Insightful	Loyal	Straightforward	Has a Vision
Morally Strong	Enjoys life and encourages others	Gives due credit to the under command for their jobs	

Source: Author's self-construct

Table-2: Worst Leader Characteristics

Self-centered	Uses Fear Motivation	Berates People in Public	Inconsistent Behavior
Lacks Personal Integrity	Poor Communicator	Seeks Confrontation	Workaholic
Lies	Sets Poor Example	Backstabber	Indecisive
Deceptive	Lacks Curiosity	Insecure	Micro-manager
Never Listens	Caustic	Takes Credit for Others' Work	Does not Trust People
Moody & Unpredictable			

Source: Author's self-construct

c. **Step 3:** The officers serving in the armed forces of Bangladesh come from different social backgrounds. Again, people with different backgrounds have different views because they perceive and judge the world differently.¹⁹ As such, before writing a PLP, one needs to be confident about his/her values, strengths, and weaknesses, which he/she can identify through self-reflection and humility. One can also carry out a self-assessed personality test to identify his/her strengths, weaknesses, and values. An officer should analyze his/her leadership style and ethical values from the personality assessment and list the top three or four values from the lists that are commensurate with his personal preferences. Among many tools for self-assessment, the Myers-Briggs Type Indicator (MBTI) stands out as an excellent instrument for evaluating own personality.²⁰ This self-assessment tool can guide officers to identify their strengths, weaknesses, and values.²¹ The Figure below illustrates different personality types assessed through MBTI:

Figure-1: Personality Types Assessed through MBTI

INTJ INNOVATIVE, INDEPENDENT, STRATEGIC, LOGICAL, RESERVED, INSIGHTFUL. DRIVEN BY THEIR OWN ORIGINAL IDEAS TO ACHIEVE IMPROVEMENTS.	INTP INTELLECTUAL, LOGICAL, PRECISE, RESERVED, FLEXIBLE, IMAGINATIVE. ORIGINAL THINKERS WHO ENJOY SPECULATION AND CREATIVE PROBLEM SOLVING.	ENTJ STRATEGIC, LOGICAL, EFFICIENT, OUTGOING, AMBITIOUS, INDEPENDENT. EFFECTIVE ORGANIZERS OF PEOPLE AND LONG-RANGE PLANNERS.	ENTP INVENTIVE, ENTHUSIASTIC, STRATEGIC, ENTERPRISING, INQUISITIVE, VERSATILE. ENJOY NEW IDEAS AND CHALLENGES, VALUE INSPIRATION.
INFJ IDEALISTIC, ORGANIZED, INSIGHTFUL, DEPENDABLE, COMPASSIONATE, GENTLE. SEEK HARMONY AND COOPERATION; ENJOY INTELLECTUAL STIMULATION.	INFP SENSITIVE, CREATIVE, IDEALISTIC, PERCEPTIVE, CARING, LOYAL. VALUE INNER HARMONY AND PERSONAL GROWTH, FOCUS ON DREAMS AND POSSIBILITIES.	ENFJ CARING, ENTHUSIASTIC, IDEALISTIC, ORGANIZED, DIPLOMATIC, RESPONSIBLE. SKILLED COMMUNICATORS WHO VALUE CONNECTION WITH PEOPLE.	ENFP ENTHUSIASTIC, CREATIVE, SPONTANEOUS, OPTIMISTIC, SUPPORTIVE, PLAYFUL. VALUE INSPIRATION, ENJOY STARTING NEW PROJECTS. SEE POTENTIAL IN OTHERS.
ISTJ RESPONSIBLE, SINCERE, ANALYTICAL, RESERVED, REALISTIC, SYSTEMATIC. HARDWORKING AND TRUSTWORTHY WITH SOUND PRACTICAL JUDGEMENT.	ISFJ WARM, CONSIDERATE, GENTLE, RESPONSIBLE, PRAGMATIC, THOROUGH. DEVOTED CARETAKERS WHO ENJOY BEING HELPFUL TO OTHERS.	ESTJ EFFICIENT, OUTGOING, ANALYTICAL, SYSTEMATIC, DEPENDABLE, REALISTIC. LIKE TO RUN THE SHOW AND GET THINGS DONE IN AN ORDERLY FASHION.	ESFJ FRIENDLY, OUTGOING, RELIABLE, CONSCIENTIOUS, ORGANIZED, PRACTICAL. SEEK TO BE HELPFUL AND PLEASE OTHERS. ENJOY BEING ACTIVE AND PRODUCTIVE.
ISTP ACTION-ORIENTED, LOGICAL, ANALYTICAL, SPONTANEOUS, RESERVED, INDEPENDENT. ENJOY ADVENTURE, SKILLED AT UNDERSTANDING THINGS.	ISFP GENTLE, SENSITIVE, NURTURING, HELPFUL, FLEXIBLE, REALISTIC. SEEK TO CREATE A PERSONAL ENVIRONMENT THAT IS BOTH BEAUTIFUL AND PRACTICAL.	ESTP OUTGOING, REALISTIC, ACTION-ORIENTED, CURIOUS, VERSATILE, SPONTANEOUS. PRAGMATIC PROBLEM SOLVERS AND SKILLFUL NEGOTIATORS.	ESFP PLAYFUL, ENTHUSIASTIC, FRIENDLY, SPONTANEOUS, TACTFUL, FLEXIBLE. HAVE A STRONG COMMON SENSE, ENJOY HELPING PEOPLE IN TANGIBLE WAYS.

Source: *Myers-Briggs type indicator (MBTI): 16 personality types* (2024, January 29)

d. **Step 4:** At this stage, one should start writing the PLP by translating the strengths, weaknesses, values, and ethical rules into leadership principles. He/she needs to blend his/her likings and dislikes about the best and worst leaders' qualities in those principles. Moreover, leadership is about knowing oneself and people, which facilitates creating an adaptive and effective team. Thus, leadership needs to be judged from four different dimensions: the leader as a character, the leader as an ethical decision-maker, the understanding of organisational behavior, and the performance of a leader in complex and ambiguous circumstances. Through years of experience in different capacities and formal training programs, officers can learn about these four dimensions of leadership. One may consider these aspects of leadership while concisely writing a PLP. Once the first draft of PLP is completed, one has to review it, make corrections, and repeat the same until satisfied with the philosophy.

Figure-2: Blending Personality Preference with Preferred Leadership Qualities



Source: Author's self-construct

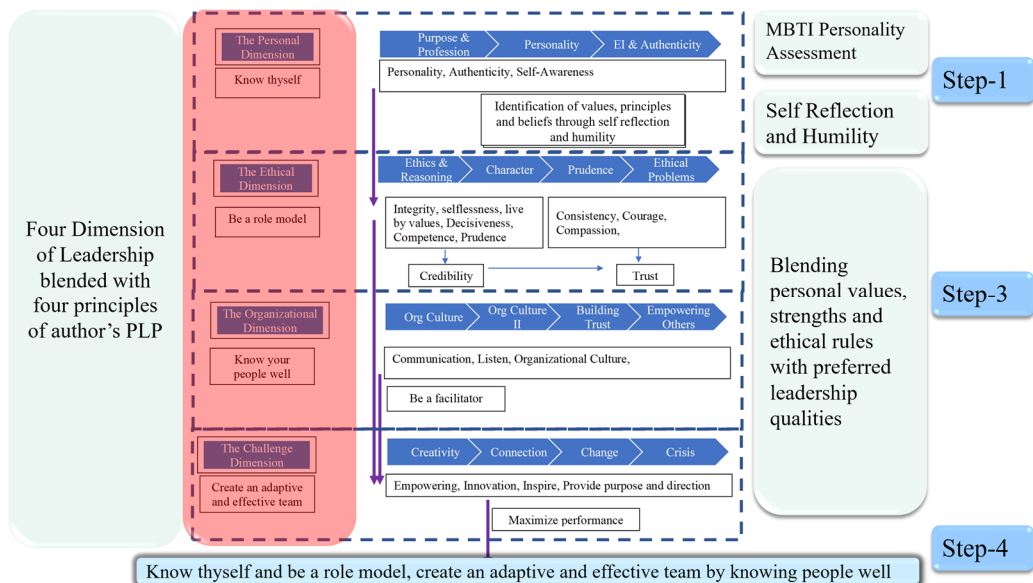
A written PLP is not just a written checklist. It is the eternal guiding lighthouse for an officer through the highs and lows of his/her personal and professional life. Through deep reflection and the discipline of concisely writing it down, he/she will have greater self-knowledge, self-confidence, and personal energy. The following sections explain the PLP of the author.

Example of a PLP

As discussed earlier, since there are no set rules or magic formulas to develop a PLP, the author followed a mixed approach by combining the process of formulating a PLP described in the preceding paragraphs and his theoretical understanding of leadership. To him, leadership is an art that enables a leader to persuade a team to participate

selflessly in achieving organisational objectives. Based on the theoretical understanding mentioned above, the author's leadership philosophy is, 'Know thyself and be a role model, create an adaptive and effective team by knowing people well.' The author's PLP has four sections: know thyself, be a role model, know your people, and create an adaptive and effective team. These four segments are similar to personal, ethical, organisational, and challenging dimensions of leadership. It also expounds on how different segments of the author's PLP interact to achieve the full potential of an effective leader. The following schematic diagram shows the interrelationship of different parts and the process for the development of the author's PLP.

Figure 3: Connection between the author's PLP and different dimensions of leadership



Source: Author's self-construct

The first part of the author's PLP is 'know thyself.' As a leader, one needs to know how to manage his behavior and feelings to motivate a team toward achieving organisational goals. The author identified his values, strengths, and weaknesses through self-reflection and humility. Additionally, he conducted a self-assessment of personality through MBTI to identify preferences about accomplishing a task. The self-assessment helped the author to analyze his personality and character, which prepared him to be a better role model.

Next, the author blended his values, strengths, and weaknesses with the preferred qualities of a good leader identified from his work experience. Subsequently, to

streamline the principles of his PLP, he examined all four aspects of leadership through the identified values and preferred leadership qualities. He identified the key elements of his PLP from each dimension of the leadership as illustrated in Figure 3. Subsequently, he expounded on those key elements for clarity of his thoughts and guidance for his followers. Subsequently, he started combining different pieces to write his philosophy in a concise manner that was easy to understand and remember. Different aspects of the author's PLP are discussed in the following paragraphs.

The ethical dimension of leadership explains how an officer deals with an ethical dilemma while accomplishing mission objectives. An officer's character, values, wisdom, and principles help him to take the right actions at the right time to reach the desired objective. This dimension relates to the author's second component of the PLP, 'be a role model.' Everyone in a team looks to the role model for hints on how they should behave. Integrity, selflessness, decisiveness, competence, consistency, courage, and compassion are a few qualities an officer should have to set the standard for the under command. The author considers integrity as the foundation of trust. One cannot internalize integrity overnight. Thus, an officer should always be self-conscious and continue to do the right thing. Next, he should be selfless to inspire mutual support within a team. Again, an officer should work consistently and energetically to fulfill his teammates' expectations as a role model. An officer's positive attitude may provide hope and encouragement to his teammates. Moreover, the values and principles help an officer establish the credibility of his action and create trust amongst his followers. Subsequently, trust and credibility can assist him in developing an adaptive and effective team.

An effective leader should understand the importance of self-adjustment to fulfill a unit's requirements, the significance of trust in military operations, and the concept of empowerment from different services' perspectives. The third element of the author's PLP is 'know your people well.' The author considers communication as a critical element in building and maintaining trust. A leader must communicate his vision to his followers and give them a clear direction towards success. A leader should inspire followers to invest their energy and time in achieving organisational goals. He should also listen to all ideas from his teammates. According to the author, this level of communication can take place in a team built on trust. Again, how the leader performs as a role model heavily influences the depth of trust and credibility, which is the central element of an adaptive and effective team.

A successful leader achieves organisational goals in unknown and uncertain conditions. Thus, the fourth element of the author's PLP includes creating an adaptive and effective

team shaped by trust and credibility. Figure 3 shows how the author's performance as a role model influences the performance of this team. An effective team will do the right thing at the right time; an adaptive team will negotiate uncertainty successfully. Though military organisational culture is inherently resistant to innovation and change, creativity and acceptance of change are crucial to dealing with today's complex military tasks. The author's concept of an adaptive team encourages innovation, embraces adjustments, and works collaboratively to overcome the crisis.

Developing a PLP should start with self-analysis to determine the strengths and weaknesses of character that help an officer to lead by example. Attributes such as integrity, selflessness, decisiveness, and consistency help him build trust and lead an adaptive and effective team. If an officer can provide a clear purpose to this team, he can accomplish any task even under adverse conditions. Innovation and changes are crucial for military operations, especially in the current complex operational environment. The author's PLP also expresses a similar idea, where he proposes the creation of an adaptive and effective team that can get the job done under uncertain situations.

Conclusion

The armed forces of Bangladesh need both managers and leaders. However, one must understand the distinction between these two for effective use of this concept. According to Stephen R. Covey, 'Management is efficiency in climbing the ladder of success; leadership determines whether the ladder is leaning against the right wall.'²² Since an officer provides crucial directions to his under command for organisational success, he should have a vision and clarity on his beliefs and principles. A PLP should enable an officer to reinforce those personal beliefs and help him make ethical decisions when careful reflection is not a viable option. Again, a PLP should allow creativity, effective communication, overcoming failures, and leading through crises.

A written PLP acts as an internal and external guide like a beacon throughout an officer's career and equips him with those qualities. Publishing a PLP helps an officer discover what he stands for and what is important to him and articulate this to teammates/under command. This technique leads to mutual trust and confidence, which becomes a foundation for long-term relationships in an effective organisation. Once written down, the PLP becomes an essential tool for many aspects of a military officer's workplace and personal life. The PLP is only the beginning of a leadership journey that transforms the people in an organisation into a high-performance team. However, it is also a crucial first step.

Many military officers may think that they do not need a PLP since some of them will not have command opportunities in their military career. However, one should remember that as officers of the armed forces of Bangladesh, each of us leads people irrespective of appointments. Thus, it is crucial to understand the importance of having a PLP for each officer for the better effectiveness of our beloved armed forces. Although there is no set procedure for writing a PLP, one can follow a theoretical framework to develop a PLP as a starting point. The focus of writing a PLP should be to make an unbiased self-assessment that will help one to identify his values, strengths, and weaknesses. Through self-reflection and humility, an officer can accurately make a Strength, Weakness, Opportunity and Threat (SWOT) analysis of his/her personality and identify the values he believes in. In turn, correct identification of values and principles enables him to develop a leadership philosophy that assists him in leading ethically, making good decisions, understanding organisational behavior, and maintaining composure in complex and ambiguous circumstances.

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Brief Biography



Group Captain Md Mahbub Ur Rahman, acsc, psc, GD(P) got commission on 25 November 1999 in General Duties (Pilot) Branch. He held several important command, staff, and instructional appointments in Bangladesh Air Force, Special Security Force, Inter-Service Selection Board and Defense Services Command and Staff College (DSCSC). Besides, the officer served twice in the UN peace support mission. He is a graduate of DSCSC, Mirpur and Air Command and Staff College, USA. He is credited with Master of Science in Military Studies from Bangladesh University of Professionals, Master of Business Administration from IBA, Dhaka University, and Master of Military Operational Art and Science from Air University, USA. Currently, he is serving as Officer Commanding, Flying Training Wing in Bangladesh Air Force Academy.

Weaponisation of Social Media in Modern Warfare: Embracing the Obvious

Lieutenant Colonel Mir Kamrul Hasan, psc, G

Abstract

Two wars are not fought alike. Technological inventions have always influenced the evolving nature of warfare. Emergence of social media has brought new dimensions not only to politics or the economy, but it has also added new features to the evolution of warfare as well. While the hybrid nature of warfare suggests synchronised use of various instruments of power, social media acts as force multiplier to achieve this synchronisation. There are certain features that make social media outlets unique in employing elements of power by both state and non-state actors. The benefit of social media comes with a price. To make sure that we are paying as little as possible, there should be an appropriate response framework to deal with social media. This article aims to provide an insight on how social media platforms are being utilised as a weapon by both state and non-state actors alike in modern warfare. It also suggests a pragmatic framework to respond to social media threats in modern conflicts. The study applies secondary data collection method through content analysis.

Introduction

Aylan Kurdi, the three- year- young Syrian boy lying with face down on a beach in Türkiye just few years back (2015) takes all of us awestruck and devastated. The picture, which was rapidly shared in social media, puts a face of suffering and injustice, calling for immediate restraint on atrocities in Syria. Although the truce lasted only for a few days, it signals how powerful social media can be to influence the current information environment of warfare. However, the lethality of social media was first showcased during the Arab Spring of 2010-2012 which sparked the mass demonstration for political change spreading like a firefly across the region. Platforms like Facebook and Twitter served as catalysts for organizing protests and disseminating information. Nevertheless, these same platforms were also utilised by authoritarian regimes to monitor dissent and suppress opposition.

Let's look no further. In Myanmar, Facebook became a tool for spreading hate speech and inciting violence against the Rohingya minority. False rumors and inflammatory posts circulated unchecked, fueling ethnic tensions and contributing to a genocide that resulted in the deaths of thousands and the displacement of a million. Social Media

platforms have been extensively used in the recent conflicts like Israel-Palestine, Russia-Ukraine, Nagorno-Karabakh, Syrian, and Yemen to disseminate own perspectives, garner international support, and shape public opinion. Modern warfare is evolving very rapidly. Although it involves technological processes and fighting with increasingly sophisticated weaponry, modern warfare goes beyond the simplistic purview of the physical domain.¹ In that cognitive domain, social media has emerged as an influential tool having a significant impact on shaping up events. Arguably, the potential of social media has become so profound that it is being used as an effective information warfare tool by state and non-state actors alike. Unlike traditional media, social media is more accessible, leveraging greater freedom and a wider reach. Its distinct features undeniably earned it with the title of ‘new weapon of modern warfare’. At this backdrop, this article delves into how social media is being weaponised amid an evolving hybrid environment of warfare. Initially, the nexus between modern warfare and social media including its potential will be ascertained. Later, it analyses two significant case studies - the Ukraine-Russia conflict and the involvement of non-state actors like the Islamic State to illustrate how both state and non-state actors employ social media as a tool of warfare. Finally, an effort was made to find out expedient approach to deal with this new weapon. While there are multiple facets of social media, this essay focuses on how social media is weaponised in recent conflicts with its corresponding impact on physical domain.

Modern Warfare and the Social Media Nexus

In war, the role of media is not a novel concept. For many years, media played instrumental role in shaping public opinion. During the Vietnam War, the horrifying image of a little girl fleeing deadly napalm attack became a signature of atrocity of the 20th century. It dramatically attacked the strategic centre of gravity of the USA in that war resulting in the premature termination of the war.² However, the hybrid characteristics of modern warfare have further deepened the relationship.

Multinational Capability Building Campaign (MCDC) sheds light on present hybrid warfare environment by connecting it with the use of various instruments of power: political, military economic, civil, information. It also suggests that both state and non-state actors synchronise these instruments of power to varying degrees to attack their adversary's vulnerabilities.³ Hybrid environment is further characterised by mix methods involving both conventional and unconventional elements, military and civilian components, visible and clandestine actions, and cyber and information warfare. Social media has become inseparable from all these facets and instruments of hybrid environment mentioned above even more than ever. All actors purposefully utilise, manipulate or integrate social media while using instruments of power.

Arguably, the effects of information on the development of conflict make modern warfare unique. This is because the audience-perception of a conflict appears more important than the facts themselves.

Geographical limitations can no longer prevent a global audience, diaspora, and neutral actors from interacting with real-time events linked via social media. Presumably, controlling people's perceptions has emerged as an integral part of modern conflict. It is also predicted that integrating psychological operations, information warfare, and cyber warfare into a single coordinated approach will be vital to all warfare in the future. That is why, the bond between modern warfare and social media is only getting stronger with every passing day. Because of its popularity, social media now has 4.62 billion users worldwide, with a compound annual growth rate of 12%.⁴ What capabilities make social media so powerful? Let us examine those first.

Features that Make Social Media Unique

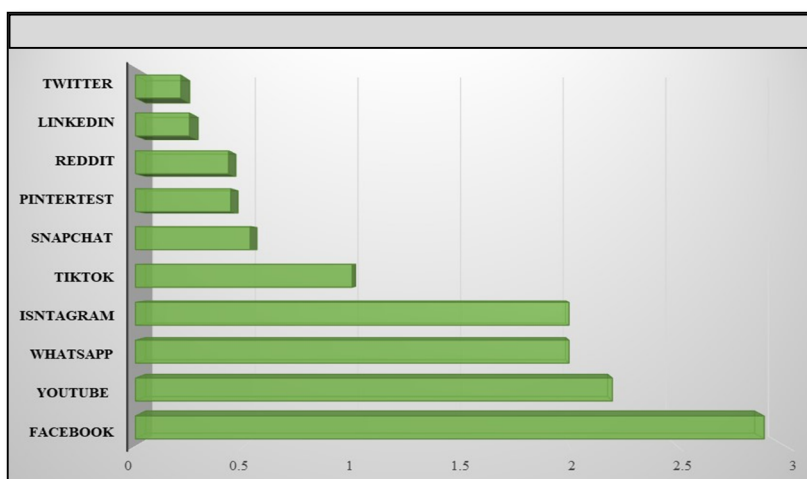
Social media can be defined as web-based technologies used for social interaction. There can be wide varieties of social media based on purpose, like social networking, microblogging, instant messaging, video content sharing, etc. As of 2023, there were approximately 5.42 billion social media users worldwide, which accounts for over 63% of the global population. Some of the popular social media sites are Facebook, Twitter, Instagram, Snapchat, YouTube, TikTok, Telegram, etc. Among different platforms of social media, Facebook appears to be the most used application (3.1 billion active users per month), featuring both visual contents and instant message sharing (Figure-1). In recent years, the rise of social media has been substantial, with its usage and impact growing exponentially.

The most prominent feature that makes social media stand out is its accessibility and speed. It provides the capability to disseminate a huge volume of information rapidly and using relatively cheaper devices. The news of a young man in Tunisia who set himself on fire spread so fast to so many people that it triggered a civil unrest in an entire region popularly known as 'Arab Spring'.⁵ In the recent conflict in Gaza, millions around the world are witnessing the horror in Gaza through the eyes of Palestinians who are sharing their daily realities on social media. Through their posts on Instagram, Twitter (X) and other platforms, these citizen journalists are putting a face to the conflict. It has also created a strong emotional connection among the people around the world to stand against oppression. Due to the widespread projection on social media, the Pro-Palestine protest which began in Columbia University has spread in other universities in the USA very quickly.

Social media has emerged as an interactive platform, even during conflicts. It is interesting to notice the shift in people's choice to receive news during conflict. People demand instantaneous information where they can interact. Instead of listening to others' stories, they want their own stories to be heard. What could be a better platform than social media, where people can express their opinions unfiltered and unaltered. Thus, citizen journalism is becoming more prevalent in the social media landscape. The heart-wrenching videos posted on social media from the debris of Kyiv (Ukraine) had become powerful ammunition to galvanise people's perceptions rapidly. As a result, some experts believe that social media platforms will be the future of traditional journalism. Social media also provides anonymity as well as the freedom to express oneself without fear of repercussions. It thereby implies the danger of false or fabricated information.

The other advantage of social media is that it is free of territorial or content-related restrictions. With the advent of social media, actors who previously had little opportunity to express themselves through mainstream media outlets can now reach millions across borders. While radio and TV are alleged to be controlled by media personnel, social media unlocks the stage for anyone to say anything they want. Is that always a good thing? Probably not. It may generate disinformation, fear, and hatred among millions. Good or bad, this contagion of emotion can be more powerful than many sophisticated weapons and social media is capable of that.⁶ Having learned about the power and uniqueness of social media, it is important to see how its potential is harnessed as a weapon of modern warfare.

Figure-1: Active Users of Social Media in 2023 in Billion⁷



Source: Author's Construct from Reference 7

Ways of Weaponising Social Media

There are multiple facets and activities how social media can be weaponised in military operations. However, these activities are complementary to each other and are often conducted in concert with physical activities; some of these are discussed subsequently:

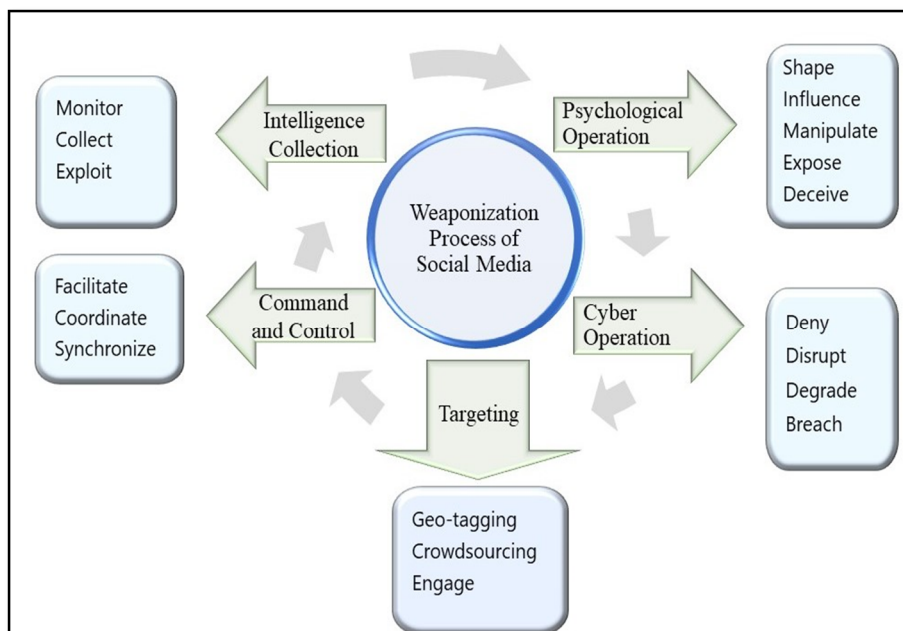
- a. **Determining Targets:** Identifying potential targets for military operations in physical domain is significant among the activities of weaponisation. This is usually done based on geo-tagged pictures or trending conversations in social media. During NATO's intervention in Libya (2011), social media sites were used extensively, along with Google Maps and cell phones to spot regime positions, which were later engaged by air power.⁸
- b. **Intelligence Collection:** Through focused analysis, social media helps understand the environment by providing detailed information about a network of actors and their activities. Several approaches are used for such analysis, e.g., trend analysis, network monitoring, geo-spotting, content and behavior pattern analysis, and information analysis. If studied consistently, social media can be useful for providing warning signals of impending crisis.⁹ Thereby, it can assist in monitoring the threshold of hybrid warfare. It is claimed that the presence of Russian troops in Ukrainian territory during the annexation of Crimea was identified using social media. The images and activities of Russian troops revealed through social media profiles and crowdsourced information from eyewitnesses confirmed their location.
- c. **Conducting Cyber Operations:** While cyber operations can be both offensive and defensive, social media can be used to conduct cyber operations mostly offensive in nature. The actions can range from denial of certain emergency services, attacks on website, to password hacking for exposing or altering the contents of e-mails, confidential conversations, cell phones, etc. Twitter accounts of US Central Command and The Associated Press (news agency) were hacked in 2013, and the tweets from these accounts created huge chaos in international order.
- d. **Establishing Command and Control:** This is particularly more applicable to the non-state actors, such as insurgent groups who lack formal command-control (C2) structures or spread over large geographical areas. Social media provides an effective platform for internal communication, coordination, sharing information, and synchronisation of action. Such a virtual C2 arrangement makes it challenging for conventional armed forces to attack the C2 network of non-state actors due to the absence of centralised networks, nodes, or physical targets to attack. Any attack on such non-military infrastructure and platforms also calls for a variety of legal issues. However, using social media for establishing C2

comes with a price, as it exposes the activities of insurgent groups to intelligent services.

e. **Applying Swarming Tactics:** Social media can be a suitable tool for ‘swarming’ tactics, i.e., the dissemination of information to organise and synchronise non-state actors for a common purpose. It provides the actors with the advantage of gathering protests while giving security forces little or no time. Similar swarming tactics were used during ‘Arab Spring’ revolutions to unite thousands of protesters to rally against the alleged corrupt or authoritarian regime.¹⁰

f. **Psychological Operation:** The purpose of using social media in psychological operations is to achieve multiple military effects in the cognitive domain, such as to shape, influence, manipulate, expose, promote, deceive, etc. In a conflict, social media techniques can be both overt and covert, with non-state actors or undemocratic organisations preferring covert methods. Whatever may be the technique, actors use misinformation and rumors, social engineering and spamming, panic and deception to manipulate situations in their favor. In Chittagong hill tracts, subversive activities through social carried out by armed groups like the UPDF have been identified by social media in recent years. Having learned about the method of weaponizing social media, let us now examine two specific cases.

Figure-2: Social Media Weaponisation Process



Source: Author's Construct

Social Media in Russia-Ukraine Conflict

Since the annexation of Crimea in 2014, the Russia-Ukraine conflict has become a demonstration of how social media plays instrumental role in a hybrid environment. Russia has employed a combination of information warfare, cyber-attacks, and diplomacy using social media alongside military tools. As a pretext to annex Crimea, pro-Russian voices are alleged to systematically cultivate fear, anxiety, and hatred among ethnically Russian of Ukraine through social media. Various social media platforms were used for mass distribution of images of alleged atrocities by Ukrainian Army. Some of those were mass graves of tortured people, burning of crops, recruiting child soldiers, etc. So, Russia has applied 'swarming tactics' to systematically shape the mind of Russian speaking Ukrainians to support any intervention in favor of Russia. 'Little Green Man' with unmarked uniform became a symbol of peaceful presence of Russian troops through the wide circulation of social media.

The invasion of Ukraine by Russia in March 2022 that shell-shocked the world has gradually been regarded as full-blown 'Social Media War'. War journalists even go as far as labeling it as 'World Cyberwar 1' for Ukraine.¹¹ Both countries have weaponised social media before and during the conflict, where state and non-state actors are attacking the information structures of the combatants. Before the invasion, Russia carefully used social media to demonise Ukraine for conducting genocide in Donbas. Ukraine's desire to join NATO was projected as dangerous as using weapon of mass destruction against Russia. During the conflict, Russia used social media to spread misinformation about the events as part of a psychological operation. Realizing the potential of social media, Russia targeted Ukrainian mobile communication networks, launched a missile attack on Kyiv's hub, and went after communication infrastructure in Mariupol as well.

Ukraine, on the other hand, is using social media to rally support and share real time information from the frontlines. Alongside government organisations, individuals are reporting unfiltered events to show devastation and suffering in Kyiv, Donbass, and Mariupol. Ukraine's official Twitter account has been very lively in garnering support during this conflict. The hospital's social media accounts have emerged as manifestations of the civilian toll, showing unbearable details of suffering. Civil society groups and humanitarian organisations also played a vital role in amplifying voices in disseminating information in favor of Ukraine. Furthermore, some of the emotional images shared on social media shocked the international community to such an extent that they contributed to public pressure on Russia for sanctions. So, Ukraine is using social media for both psychological warfare and for pursuing international powers in

countering Russia in this conflict. It is even claimed that, had this conflict been a social media war, Ukraine would have won already.¹²

Use of Social Media by Islamic State (IS)

Although IS is not the first non-state military militant group to use social media for pursuing its goals, they have done it more effectively than any other non-state actors. IS could quickly realise that the way people perceive a narrative is more important than actual success or combat on the ground. Its initial success in Syria was fueled by extensive use of social media for recruitment and propaganda. Although IS lacks a unified territory, social media provided them with a brilliant platform for the creation of an abstract 'virtual state' and to demonstrate to the rest of the world that they should be perceived as a respectable state-like entity. The members of IS, both covert and overt, spread all over the world and connected mostly through social media sites like Twitter, Rapid Share, Telegram, etc.

They target potential recruits, especially young and vulnerable individuals who are easy to brainwash or direct. Following that, powerful and emotional propagative messages are circulated using virtual platforms, glorifying the activities of their organisation. They portray themselves as competent and righteous, while portraying opponents as unjust. In order to attract the young, tech savvy generation, IS mostly uses visual content showing a plethora of emotional media content. Alongside narrative, they promise the opportunity of becoming something larger, more powerful and more important than themselves.¹³ It is estimated that 40,000 foreigners from 110 countries moved to Iraq and Syria to join the IS between 2015 and 2017.¹⁴ IS has used social media strategically to coordinate attacks, disseminate operational instructions, and intimidate adversaries. Telegram, a messaging app popular among extremist groups, has been utilised by IS for secure communication and operational planning, enabling them to evade detection and maintain anonymity. Apart from recruiting, social media sites are used for fund raising and passing operational instructions on the ground. Evidently, IS is employing sequential techniques like targeting, content creation, amplification, and distraction using social media to materialise their agenda. Overall, IS's use of social media exemplifies the convergence of technology, extremism, and propaganda in the digital age.

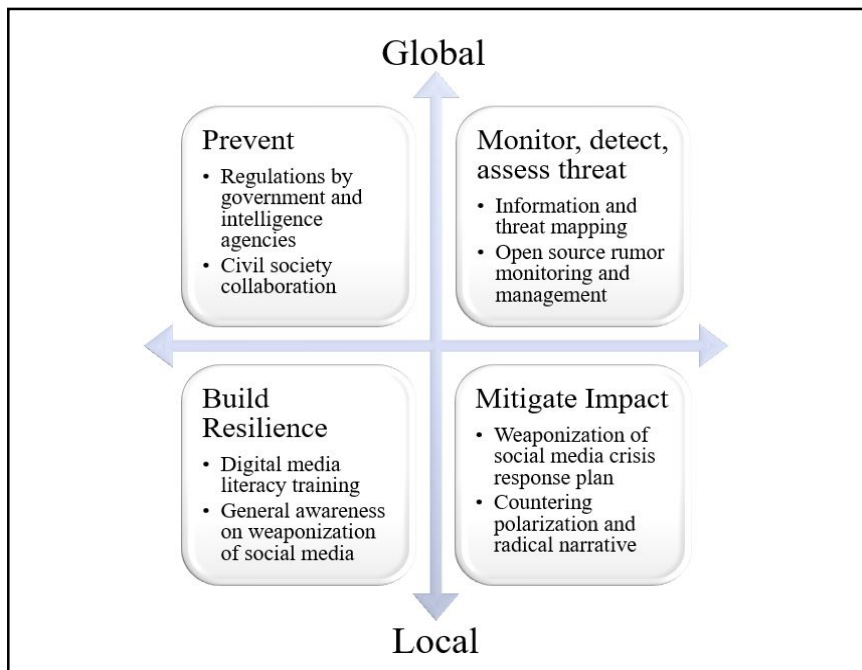
Responding to Weaponisation of Social Media

From the discussion, it is now quite evident that social media is becoming an increasingly powerful tool to influence the outcome of war; be it by state or non-state actors. While it is empowering people from remote areas to voice their opinions and interact in any conflict, it is also generating disinformation, propaganda, rumor, hatred,

hate speech, etc. However, it is undeniable that with the rapid growth of social media platforms, cyberspace can be used for both disruption of physical information systems and influencing the attitude and behavior of actors and audiences. Therefore, a framework is necessary at all levels to embrace social media against its weaponisation preventing the malice and dangers it can bring. A suggested framework is discussed below:

- a. **Prevention:** To reduce the incidences of malicious propaganda, the government, multinational bodies, and security stakeholder organisations should implement regulations. Such regulation should focus on data protection, accountability of information sharing, and transparency of organisations. Besides, punitive efforts might be in place to deter potential manipulation and harm. However, the increasing debate of free speech may at times challenge such effort.
- b. **Monitoring, Detection, Assessment of Threat:** To this end, the government, intelligence agencies, and civil information technology (IT) experts should work together through a central coordinating body. The activities may involve mapping potential threats, establishing management systems to oversee malicious rumors and hate speech. It should be followed by social network monitoring, analysis, and reporting.¹⁵
- c. **Building Resilience to Threat:** This refers to the development of a technologically aware population capable of combating the consequences of social media weaponisation. It also necessitates a collaborative approach to building awareness programs, ensuring digital media education training and developing social cohesion. Initiatives like ‘digital story telling’ may prove effective in educating mass people against social media manipulation. Such events can be organised both by military and non-military outfits.
- d. **Mitigation:** It refers to reducing the damage caused by weaponised information that has already reached a wide audience. The events to mitigate such danger can be both online and offline. It may involve integrating response components into monitoring systems, establishing crisis and response plans, and addressing and countering online hate speech and radicalisation narratives.¹⁶

Figure-3: Response Framework against Weaponisation



Source: Author's Construct

Once the framework is established, a pragmatic approach can follow through the development and deployment of advanced algorithms and artificial intelligence (AI) systems. These technologies can be employed to detect and mitigate the spread of misinformation, hate speech, and propaganda across social media platforms. For instance, platforms like Facebook and Twitter have invested in AI-powered content moderation tools that automatically flag and remove harmful content, thereby reducing its false spread and impact. Moreover, collaboration between tech companies, governments, and civil society organisations is crucial to effectively combat the weaponisation of social media. By sharing data, insights, and best practices, stakeholders can collectively develop more robust strategies for identifying and addressing malicious activities online.

Furthermore, regulatory measures play a pivotal role in mitigating the weaponisation of social media. Governments can enact legislation that holds tech companies accountable for the content shared on their platforms and imposes penalties for violations. In addition to technological and regulatory interventions, promoting digital literacy and critical thinking skills are essential in countering the weaponisation of social media. Educating users about the techniques used to manipulate online discourse, such as fake accounts, echo chambers, and algorithmic bias, can empower them to discern fact from

fiction and resist manipulation attempts. Schools, universities, and community organisations can play a pivotal role in delivering comprehensive digital literacy programs tailored to different age groups and demographics.

Conclusion

The nexus between media and warfare is age old. Modern warfare is gradually becoming a high-tech combat zone where social media has appeared as a surprising and effective weapon. Applications like Twitter, Facebook, YouTube, Rapid Share, and Telegram have penetrated the psychological domain of the battlefield with a consequent impact in the physical domain. Besides, the hybrid characteristics of warfare is closely interrelated with and influenced by social media. Social media outlets are contributing to the synchronised use of elements of national power. Social media also offers the advantages of greater speed and anonymity, global reach and interaction, realism, and emotional contagion.

Both state and non-state actors are pursuing political and military goals combining military operations with cyberattack, information warfare, and economic power. Social media is allowing these actors to more effectively execute events in the existing hybrid environment. Although, the power of social media was acutely felt during ‘Arab Spring’, Ukraine-Russia conflict is a recent example of how state actors are using it to regulate events in a hybrid environment. Russia used psychological operations on social media to justify their invasion of Ukraine, while Ukraine used it extensively to garner international support and sympathy. Non-state actors like IS are using social media for recruiting, fund raising, passing motivational, and operational instruction.

The infiltration of social media in modern warfare cannot be ignored or avoided. Realizing its inevitability, a pragmatic framework can be followed to fight disinformation, propaganda, rumor etc. The unchecked proliferation of misinformation and propaganda on social media exacerbates conflict dynamics, perpetuates human suffering, and undermines prospects for peace and reconciliation. As technology continues to evolve, it is imperative that policymakers, civil society actors, and tech companies collaborate to develop robust frameworks for regulating online content, safeguarding digital rights, and promoting responsible digital citizenship. The framework should include prevention, monitoring and assessing threats, resilience building, and finally mitigation. Above all, a collaborative approach from all government and private sectors is essential to fight this new weapon before it is too late to react.

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Brief Biography

Lieutenant Colonel Mir Kamrul Hasan, psc, G was commissioned in the Corps of Artillery in 2002 with 47 BMA Long Course. He held various appointments in several artillery regiments. Besides, he has served as GSO- III (Operations) at HQ 24 Artillery Brigade in Chittagong Hill Tracts, GSO-II at Military Operations Directorate in GS Branch of AHQ, and Directing Staff in DSCSC, Mirpur. He has previously commanded 9 Field Regiment under Operation ‘Purbo Pracheer’. As a peacekeeper, he participated as an Observer in Western Sahara and Staff Officer in Mali. He is a graduate of DSCSC, Mirpur and Armed Forces Command and Staff College, Saudi Arabia. He has three masters to his credentials. He also obtained PGD in International Relations from University of Dhaka. Presently, he is commanding 41 Medium Regiment.

Defogging the Clouds of 'Center of Gravity' Concept and its Analysis: Theories, Debates and an Option

Lieutenant Colonel Md Solaiman, SUP, psc

Abstract

Center of Gravity (CG) analysis is one of the prominent key concepts of operational art and design. Conceptualised by Carl von Clausewitz in his magnum opus '*On War*' in 1832, it became the center point of analysis, debates, discussion, and analysis in the military domain. Stronger armed forces like the USA and the UK, later NATO and Australia also, have indoctrinated this concept. Due to the obscurity of the original concept, CG went through a lot of transformation over time. Theorists like John Warden, Eikmeir, Milan Vego, Joe Strange, Echevarria, and Barfoed have explained this concept diversely. Confusion on Clausewitz's concept of CG and its interpretation by various translations and meanings also existed and continued later on. Apart from the mistranslation of the German '*On War*', numerous reasons have added fuel to this confusion e.g. defining CG by various theorists in different ways, too much reliance on the metaphor, doubt regarding the usefulness and relevance of CG in different types of warfare - conventional, unconventional, insurgency, peacekeeping, hybrid, etc., various methods and analysis processes of CG, the concept of multiple CG at one level, etc. In the Bangladesh Armed Forces, the use of CG as a planning tool is also significant. A lack of clear doctrinal guidance on the concept, identification, and analysis process has espoused a fog of confusion. Considering the above, this research aims to analyze the most discussed grounded theories on CG and their connectivity, explore the refinement of CG in different military doctrines including Bangladesh, discuss the reasons for confusion and obscurity, and finally suggests a simple and effective method for CG identification and analysis. This descriptive research is based on secondary data analysis; however, a few expert interviews were also taken into cognizance.

Introduction

Center of Gravity (CG) is one of the most discussed, debated, and argued yet least understood concepts of the present time, especially in military parlance. When Clausewitz first coined the concept of CG in 1832, probably no one ever imagined that this could provoke discussions in the 21st century among strategists, theorists, or campaign planners. The concept of CG, later, was first introduced for practical implementation in the US doctrine in 1980 and subsequently by other armies (for

example: the Australian Army doctrine in 1992) including NATO, as part of operational art.¹ Tantamount to this, the relevance of the CG concept is also noticed in the doctrine of Soviet/Russia, the UK, Australia, and some other armed forces that follow similar doctrines of the USA. However, like Sir Lawrence Freedman,² a few other like Eikmeier, Michael D. Reilly, A. Fox and T. Kopsch, contended that the CG concept has lost its relevancy in the modern-day warfare concept, arguably due to the mistranslation of the original German word '*schwerpunkt*'.³ Additionally, this problem lies because most users (specifically military practitioners) used this term without even reading the '*On War*' of Clausewitz in full and without understanding the background and conceptual underpinnings.⁴

The reasons for obscurity being emanated not only from the misinterpretation of Clausewitz's German writing into English by various theorists in different ways, but also from too much reliance on the metaphors, lack of consensus regarding the applicability of CG in different types of warfare (conventional, unconventional, insurgency, peacekeeping, hybrid, etc.), diverse method of CG determination and analysis, debate on its applicability or usefulness at various levels of warfare i.e., strategic, operational and tactical, concept of multiple CG at one level of operation, etc. have added fuel to this debate. Explanation and theorisation of CG are quite different in various military literature, and to make things worse, it is continuously changing. Apart from Clausewitz, other proponents like John Warden (US Air Force), Joseph L. Strange (US Marines) and Richard Iron (British Army), Echevarria and D. Eikmeier (US Army), Milan N Vego (US Navy), Barfoed (Danish Air Force), etc. have explained CG differently. While there are some similarities among their theories, they also vary significantly due to their application through the lens of the respective services they belong to. The fact remains that it is still considered a fundamental planning tool for planning any military operations, starting from strategic planning to tactical action.⁵

Revolution of military affairs, hybrid warfare, and technological upheaval – robotics, artificial intelligence, nano/bio-technology, sensors, multi-domain operations, etc. have challenged the linear and force-on-force type warfare of the 19th century and its concept of CG.⁶ Bangladesh Armed Forces also embraced this concept inspired by western doctrines. But often lack of clarity, lack of amplification, and mix of different models have made it foggy over time. Against this backdrop, this study aims to first identify and then analyse the most discussed grounded theories and models on CG analysis. Subsequently, the interpretation and application of these theories in different military doctrines, including the Bangladesh Armed Forces, are discussed. Then, a synthesis of the primary sources of confusion and debates is done to find out the discords. Finally, a brief effort was taken to propose an option for the Bangladesh Armed Forces for CG determination and analysis at the operational level.

Theories of CG and Models of Analysis: Points of Diversion

In the absence of any clear prescription by Clausewitz on how to determine and analyse CG, the main points of diversion centering CG debate can broadly be classified under three sources: comprehension and explanation of CG by various theorists differently, the emergence of a few other models of CG analysis, and finally application and modification of CG in different military doctrines in different ways.

Renowned Proponents of CG Theory

Clausewitz's Concept of CG: The first appearance of CG in military literature originated through Clausewitz's magnum opus *Vom Kriege* (On War) in 1832, and later its translation in English by J.J. Graham in 1874 and Michael Howard & Peter Paret in 1976. Clausewitz referred to CG as many as 39 times in varied contexts and situations, implying different contextual meanings.⁷ The most popular and represented concept of CG is found in Book VIII (War Plans) of Chapter 4 (Closer Definition of the Military Objective: The Defeat of the Enemy), which Howard and Peret translated as:

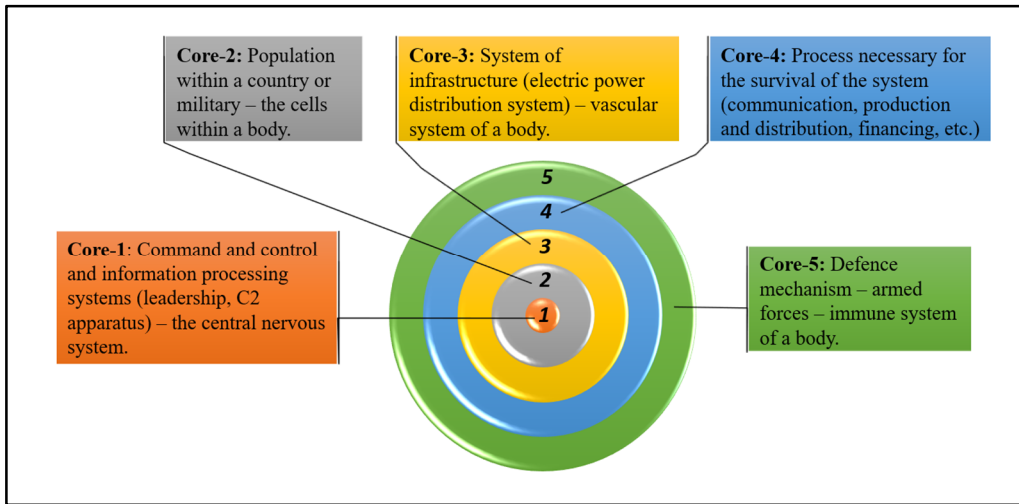
'One must keep the **dominant characteristics** of both belligerents in mind. Out of these characteristics, a certain **center of gravity** develops, the **hub of all power and movement**, on which everything depends. That is the point against which all our **energies should be directed**.'⁸

This 'hub of all power and movement' relates more with the concept of physics, which denotes a point where gravity/center of mass is concentrated in a single point. In Book VIII (War Plans), Clausewitz used CG in a broader national or grand strategy perspective as a 'hub of all power and movement.' However, another explanation of CG is also noticed in Book VI, Chapter 27 (Defence of a Theatre of War):

'A **center of gravity** is always found where the **mass is concentrated** most densely. It presents the **most effective target for a blow**; furthermore, the heaviest blow is that struck by the **center of gravity**. ... where there is cohesion, the analogy of the **center of gravity** can be applied. Thus, these forces will possess certain **centers of gravity**, which, by their movement and direction, govern the rest; and those **centers of gravity** will be found wherever the **forces are most concentrated**.'⁹

John Warden's Theory: Known as the 'Five Ring Model' or 'Warden's Ring' conceptualised by John Warden,¹⁰ initially in 1988 in his book *The Air Campaign*, later in 1995, the concept was refined through the article *The Enemy as a System*.¹¹ This theory advocates that every entity works as a 'system' or a 'system of systems' (which is also the core idea of Clausewitz); each system has several rings to keep it functional, and there are **one or more CG** within each ring.¹²

Figure-1: The Strategic Ring Model by John Warden



Source: Researcher's construct inspired by the concept

Warden is a proponent of considering **multiple CGs** in a singular campaign where each ring is considered as one CG. However, he thinks CG may not change with the progress of the campaign. As per Warden, CG **exists at all levels** of operation and is also applicable to **all types of warfare**. He also thinks that only **physical CG** exists as moral CG is difficult to target.¹³ This theory advocates the identification of a decisive target acting on which may lead to '*strategic paralysis*.'¹⁴ The 5-rings model—which Warden also considers as rings of vulnerability¹⁵—which is explained in Figure 1 which also explains the concept of CG and means of determination.

Joseph Strange's Theory

Concept of CG: Strange defined, initially in 1996, that CGs 'are **physical** or **moral** entities that are the *primary components* of physical or moral strength, power, and resistance. They do not just contribute to strength; they '**are**' the strength.'¹⁶ This, however, was modified in 1997, narrating CG as 'physical or moral entities that are the *primary components* sources of moral and physical strength, power, and resistance.'¹⁷ Finally, in 2004, the redefined version appeared as 'dynamic and powerful **physical** and **moral** agents of action and influence with certain qualities and capabilities that derive their benefit from a given location or terrain.'¹⁸ He advocated that CG is not, as Clausewitz stated, 'characteristics, capabilities, or locations' (which are in fact critical requirements (CRs); rather, they are more dynamic and powerful 'physical and moral agents' of actions or influence.'¹⁹

CG Analysis Process: Joe Strange proposed a 'six-box grid' method for CG analysis²⁰ as shown in Figure 2.²¹

Figure-2: Joe Strange’s Six Box CG Analysis Model

• Entity’s aim/Objectives:	
① CG (Physical or moral entity that are the Primary sources of moral and physical str, power, and resistance)	② CC (Primary abilities (verbs) that merit a CG to be identified as such in the context of a given scenario, situation, or mission. One or more CC is/are required for a CG to function as a CG.)
④ CV [Those CRs or its components that are deficient or vulnerable to neutralisation or defeat will contribute to a CG failing to achieve its CC. CV is noun (and verb).]	③ CR [Essential conditions, resources, and means that are essential for CG to achieve its CC. CR is noun (and verb).]
• Conclusions:	

Source: Researcher’s construct based on Strange’s Theory

He introduced the idea of Critical Factors (CF) which is based on a construct CC-CR-CV. Being a Marine Corps member, Strange mostly advocated for exploiting enemy CVs which can degrade or deny CRs necessary for CCs. When CCs are sufficiently degraded or denied, it systematically affects the functioning of CG.

Table-1: Joe Strange’s CG-CC-CR-CV analysis process²²

Steps	Activities	Remark
Step-1	Identify friendly-enemy CG/ CGs	Steps 1 to 5 are not sequential, rather, they can be done simultaneously or in any sequence
Step-2	Identify CCs inherent to each CG	
Step-3	Identify CRs which enable each CC to be realised	
Step-4	Identify CVs against each CR that are deficient or vulnerable	
Step-5	Devise a strategy, campaign plan, or plan and attack which takes the maximum advantage of the CVs	

Source: Researcher’s construct based on the theory

Milan N Vego’s Theory

Concept: Milan N. Vego²³ first noticed that Clausewitz used the term ‘schwerpunkt’ denoting ‘weight (focus) of effort,’ which was mistranslated by Howard & Peret’s 1976 translation of *On War*.²⁴ His CG theory is founded on the supposition that every objective at the strategic or operational level will have a corresponding CG. Therefore, CG is no longer a domain of operational art only, it applies to the tactical level also (and

multiple CGs at each level), and the CG concept is equally applicable to all types of operations.²⁵ The main aspect of his definition of CG is, a ‘*source of massed strength*’ or a ‘*source of leverage*’ (for own or enemy) which can influence the attainment of objectives. He is probably the first to delineate a comprehensive idea of the process of CG determination by establishing the concept of Critical Factor (CF), which is composed of critical strength (CS) and critical weakness (CW).²⁶ Among all the CSs, one of the CSs becomes a CG. His explanation of CS-CW-CV is as follows:

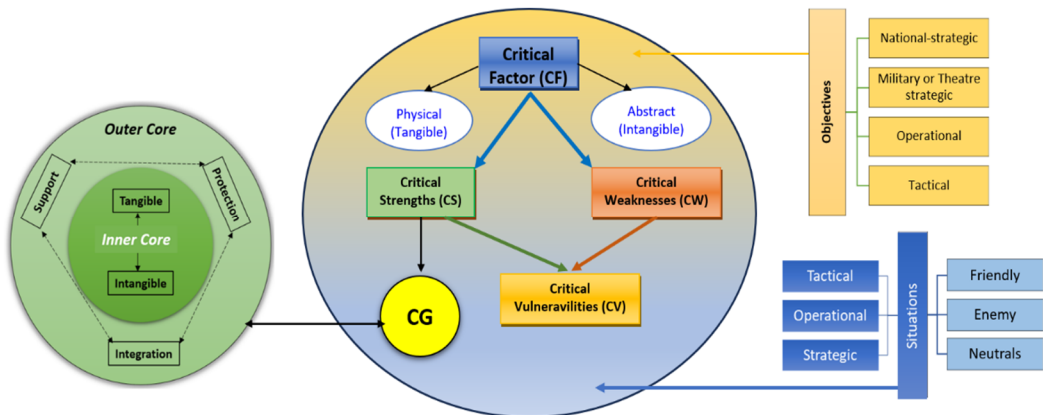
Table-2: Milan Vego’s CF and CV concept

Critical Strengths (CS)	Critical Weaknesses (CW)	Critical Vulnerabilities (CV)
Friendly or enemy capabilities those are considered essential for accomplishing a given or assumed military objective	Those sources of power that are considered essential for the accomplishment of the objectives but are at the same time grossly inadequate to perform their intended function or task	Those elements of one’s military or non-military sources of power open to enemy attack, leverage, or exploitation
Note: Mostly, CVs are related to CWs, though often CS can also be CVs if they lack protection or support		

Source: Milan Vego’s explanation of CG in Operational Warfare

CG Construct: Vego further amplified CG by describing the ‘inner’ and ‘outer’ core of the CF (or CG).

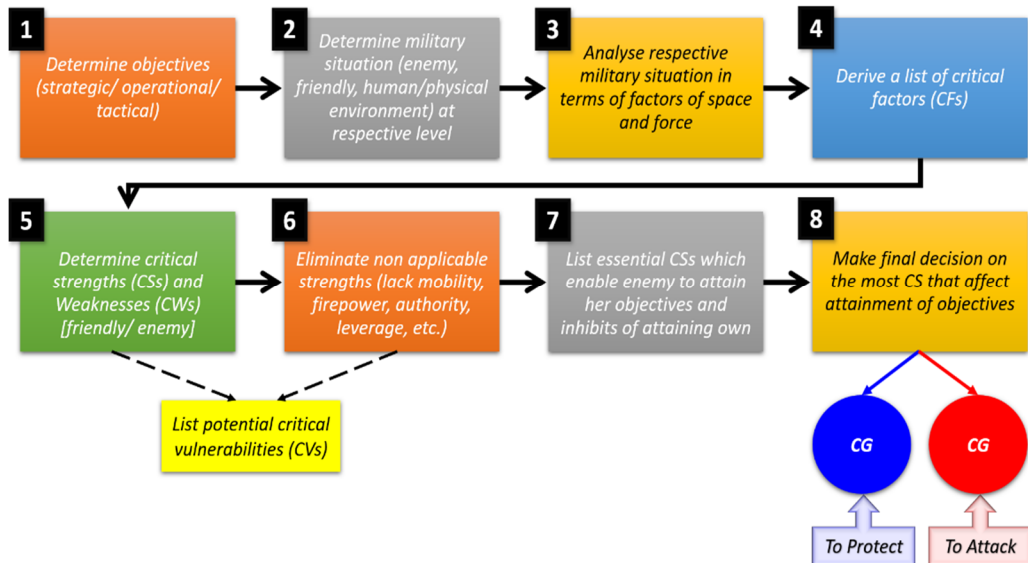
Figure-3: Milan Vego’s Concept of CG



Source: Researcher's construct

CG Determination Process: Vego proposed an eight-step process for CG determination based on the above-mentioned conceptual construct.

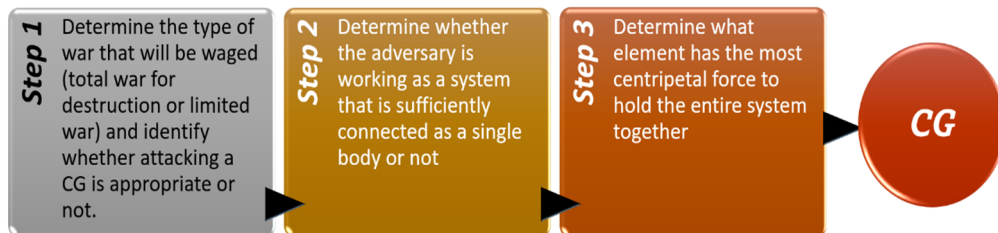
Figure-4: Simplified Version of Vego’s CG Identification Process



Source: Andersson (2009), p. 24 and Vego (2009), p. IX-91

Echevarria’s Theory: Disregarding the concept of Critical Strength (CS) or ‘source of strength,’ Echevarria’s²⁷ concept of CG is based on the idea of ‘a focal point’ or the main power which is the original concept of Clausewitz. He made the CG concept a strategic concept drawing relevance to the war designed to complete the defeat of the enemy.²⁸

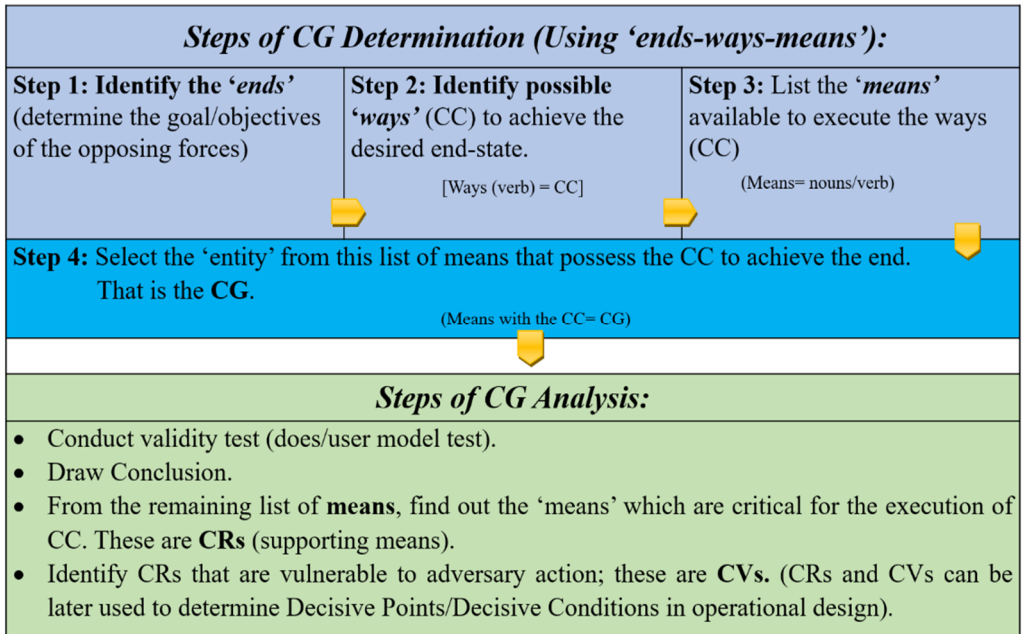
Figure-5: Echevarria’s CG Identification Process



Source: Researcher construct based on literature review

Dale Eikmeier’s Concept: Dale Eikmeier²⁹, brought in his theory of CG analysis, first in 2004, which was later (in 2012) perfected in his book chapter ‘Modernising the Concept of Center of Gravity Concept – So It Works.’ As per Eikmeier, CG is ‘the primary *entity* that inherently possesses the CCs to achieve the objective,’³⁰ which means CG is the principle ‘**doer**’ to achieve the objective, not an abstract entity.

Figure-6: Eikmeier's CG Determination and Analysis Model



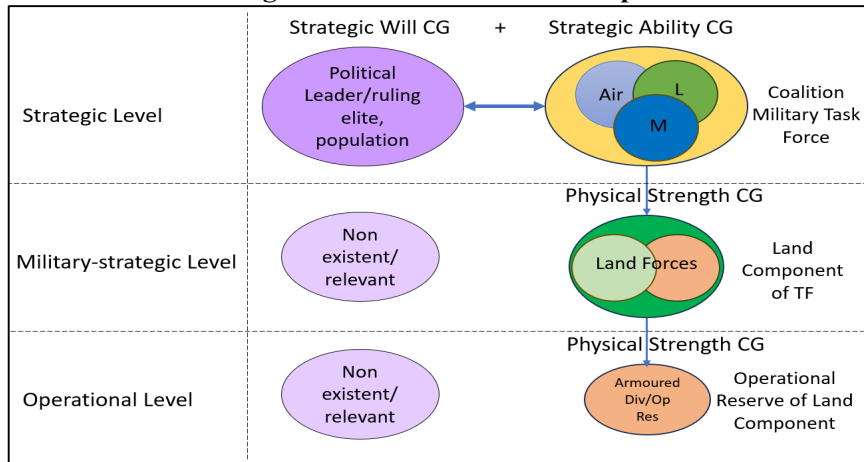
Source: Researcher's construct based on study

After identifying a CG, his model also assists planners in identifying further CRs and CVs from which Decisive Points (DPs)/Decisive Conditions (DCs) can be derived.

Barfoed's CG Theory

Concept of CG: Barfoed's³¹ theory, published in 2018, is inspired by Strange, Eikmeier, and the concept of Effect-based Operations (EBO), and it is founded on both physical and moral CG concept. He defined CG as 'an *entity* that is the primary component of physical or moral strength, power, and/or will to fight at a given level of command.' He advocates that at the strategic levels, both 'moral strength' (*Strategic Will CG*) and 'physical strength' (*Strategic Ability CG*) exist, but both should be an entity – not an abstract aspect.³² As per Barfoed's claim, this model applies to all types of warfare or situations, at all levels of warfare, and for all actors.³³

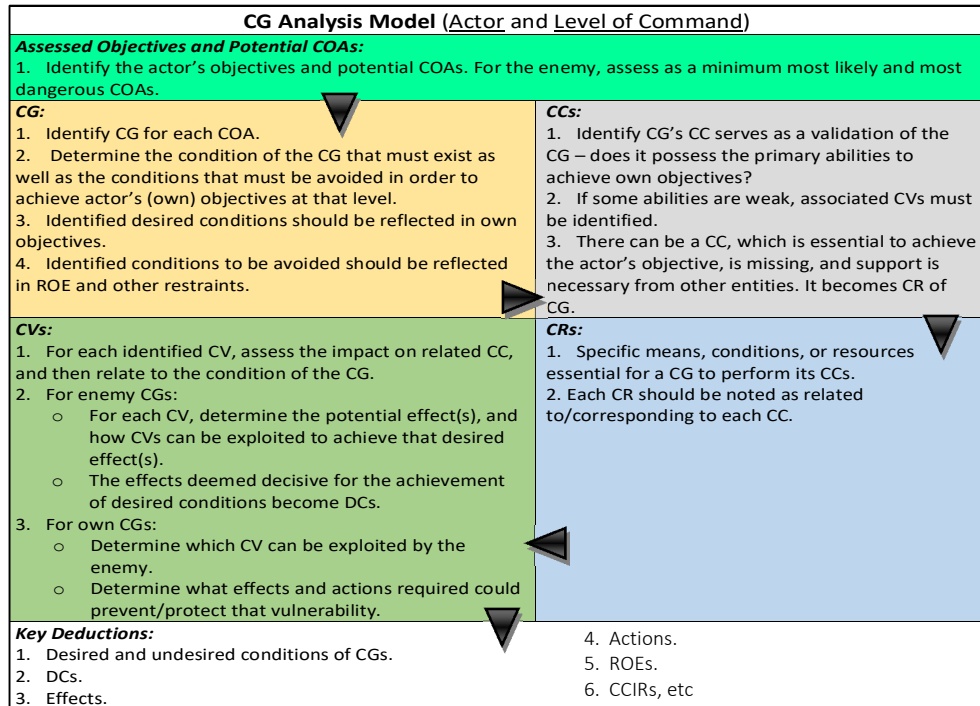
Figure-7: Barfoed’s CG Concept



Source: Researcher’s construct

CG Analysis Model: Barfoed suggested a 25-step method of CG analysis³⁴ and validation, out of which Steps 1-16 are applicable at the strategic level and Steps 17-25 are applicable at the operational and tactical level. The whole process can be summarised as given in Figure 8:

Figure-8: Barfoed’s CG Analysis Model



Source: Researcher’s construct based on Meyer (2022)

Other Popular CG Analysis Models

The CARVER Method: It was first developed by the Central Intelligence Agency, USA during World War II as an offensive targeting tool to determine effective bombing targets. Later, during the Vietnam War, it gained popularity through extensive use by the Office of Strategic Services, USA. CARVER stands for Criticality, Accessibility, Recuperability, Vulnerability, Effect, and Recognisability.

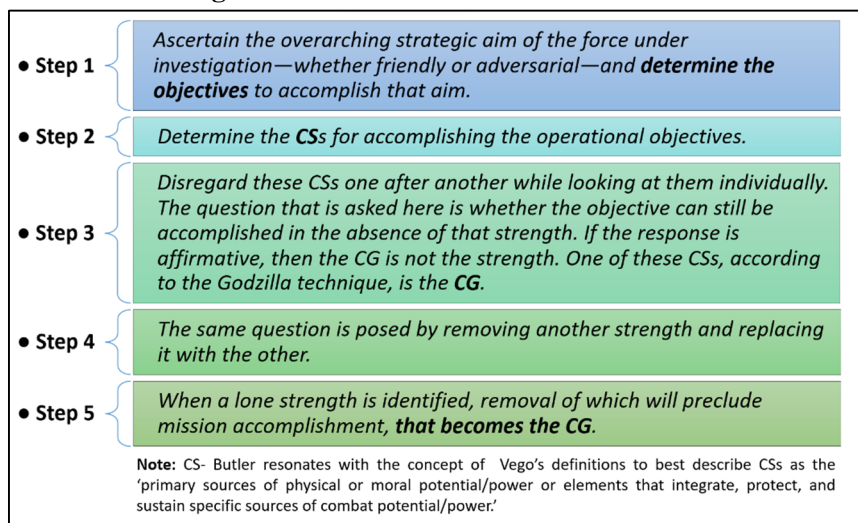
Figure-9: Explanation of CARVER Model

Criticality	Its critical importance to the successful functioning of the CG (system/component)
Accessibility	Its susceptibility to attack or exploitation given its defence/protection, and own capability?
Recuperability	Its ability to recuper/recover from damage/destruction.
Vulnerability	Its susceptibility to neutralization, damage or destruction given own offensive capability?
Effect	Acting on this element will produce what effect in the way to achieve own mission.
Recognisability	Its exposure to be recognized by own system and time available to take action.

Source: Researcher's construct based on literature

Godzilla Method: James Butler³⁵ is the proponent of the Godzilla model of CG determination. Though this model is useful in identifying the CG, it also provides an opportunity to refine or evaluate the potential candidates of CG. The process can be summarised as follows:

Figure-10: Butler's Godzilla Method



Source: Researcher's construct based on literature

Application of CG Concept in Military Doctrines: The Clouds of Confusion

The US Military Doctrines

US Army and Joint Doctrines: The indoctrination and gradual refinement of the CG concept in the US Army and Joint Doctrines are briefly presented below in a tabular form in Table 3:

Table-3: CG Concept Refinement in US Army and Joint Doctrines:

Year	Doctrine	Concept	Remark
1986	Field Manual (FM) 100-5	CG as a ‘ source of strength or balance , characteristics , capability , or locality from which the force derives its freedom of action, physical strength, or will to fight.	
1993	FM 100-5	CG is not a source of strength (which is a CR); rather it is the ‘hub’ itself. It also included the existence of CG both for the enemy and own.	Subsequently, FM 3.0 and JP 5 revised the definition and concept of CG almost ten times.
	Joint Publication (JP) 3-0	CG is that ‘characteristic, capability or location from which alliances, nations, and military forces derive their will to fight, their physical strength, or freedom of action.’	
1994	JP 1-02	CG is that ‘characteristic, capability or location from which alliances, nations, and military forces derive their will to fight, their physical strength, or freedom of action.’	Military force is not a CG, some part of it or something associated with it can be a CG
2001	JP 3-0	CG is ‘characteristics, capabilities, or locations sources of power from . . .’	
2006	JP 3-0	CG is a ‘characteristics, capabilities, or sources of power that provides freedom of action, physical strength, and will to fight.’ CGs are inherently singular in nature (one CG for each entity for each level of war).	
2008	FM 3-0	Same definition of JP 3-0 (2006) but clarifies the existence of a single CG at the strategic level, but multiple at the operational level, and no CG at the tactical level.	
2009/ 2014	JP 2-01.3	Same revised definition of FM 3-0 (2008) but included CGs connectivity with the objectives.	
2011/ 2015/ 2017	JP 5-0	Same as JP 2-01.3	
2017	JP 5-0	Suggested the inclusion of tactical CG again. It also said CG is a source of leverage.	Aligned with Milan Vego’s concept.
2020	JP 5-0	CG as ‘the source of power or strength that enables a military force to achieve its objective ’ and is what an opposing force can orient its actions against that will lead to enemy failure.’ It also says a campaign plan may have multiple CGs if it includes operations along multiple and independent LOEs.	Vego’s concept for CG identification, and Strange’s model for CG analysis

US Navy: The US Navy first indoctrinated the CG concept in 1994 in their Naval Doctrine Publication-1 mirroring the original concept of Clausewitz as ‘characteristics, capabilities, or locations’; however, it also said that while CG is a **source of strength**, it is not necessarily the strongest or strength in itself.³⁶ Later, Naval Warfare Publication (NWP) 5-01 (2013) first delineated a detailed and refined concept of CG which integrated both models of Vego (for CG identification) and Strange (for CG analysis).³⁷

US Marines Corps: Conceptually quite different from JPs or other US services’ publications, US Marines viewed **CG as a vulnerability** and a means of attack. In 1989, US Marines inscribed this concept in Fleet Marine Force Manual (FMFM) 1-Warfighting, narrating - ‘by the enemy CG, we do not mean a source of strength, but rather a critical vulnerability.’³⁸ Later in 2010, MCWP 5-1 first changed their understanding of CG and aligned with the definition of JP as a ‘source of power, not

vulnerability.³⁹ Finally, MCDP 1-2 (2018) defined CG as an ‘enemy key source of strength.’

US Air Force: The first version of the CG concept appeared in the US Air Force Manual 1-1 (1992) as ‘**sources of strength or balance.**’⁴⁰ AFDP 3-0 (2016) retained the definition of JP 5-0 as a ‘source of power.’⁴¹ Arguably, Warden’s five-ring model is more popular in the Air Force.

NATO Doctrine: In congruence with US doctrines, NATO also introduced the CG concept in the NATO Glossary of Terms and Definitions in 1992, highlighting CG as ‘characteristics, capabilities, or localities from’ However, AAP-06 (2017) brought changes as the ‘**primary source of power** that provides an actor its **physical** strength, freedom of action **and/or** will to fight.’⁴² Primarily founded on Barfoed’s theory,⁴³ the NATO process of CG analysis is a blend of Strange’s CG-CC-CR-CV model and Eikmeier’s model.⁴⁴ The NATO model of CG analysis is explained in Table 4.

Table-4: NATO CG Analysis Matrix

Actor:	
Deducted Aim and Desired Outcomes	
What is the actor’s main goal, and what conditions does the actor seek to establish by his actions?	
CG - What is the primary element of power upon which an actor depends to achieve objectives – at this level? - A noun, an entity, a complex system, a thing. ✓ Determine the condition of the CG that must exist and the condition that must be avoided to achieve the objective. ✓ The required condition must be reflected in own objectives; if not, a revision of own objectives is imperative. ✓ Conditions to be avoided must be reflected in ROE and other restraints.	CC - What are the primary means that enable the CG to gain and maintain dominant influence over an opponent or situation, such as threaten or coerce an opponent, or to control a population, or a political system. - Key phrase: ‘the ability to...’ ✓ If a CC, essential to achieve actor’s objective is missing, and this CC is provided by an entity that possesses it, then the missing ability becomes a CR. ✓ Identification of CG’s CC serves as a validation of the CG.
CV - What are the weaknesses, gaps or deficiencies in the key system elements, capabilities, relationships and influences through which the CG may be influenced or neutralised? - To be exploited in an opponent and protected in a friend - A noun with modifiers.	CR - What are those key system elements and essential conditions, characteristics, capabilities, relationships, and influences required to generate and sustain the CG’s CC, such as specific assets, physical resources, and relationships with other actors? - Noun, things ✓ There will normally be an overlap of CR to perform various CCs, but it is useful to note which CC each CR relates to.
Conclusions - Draw Conclusion on exploitation/protection, which will change the capabilities and behaviour that would lead to improved conditions in the engagement space. - For key system elements: which weaknesses, gaps, or deficiencies? - For an opponent/friend: which essential conditions, characteristics, capabilities, or influences? - Various conclusions should lead to further planning of objectives, Decisive Conditions (DC), Effects, Actions, CCIRs, etc.	

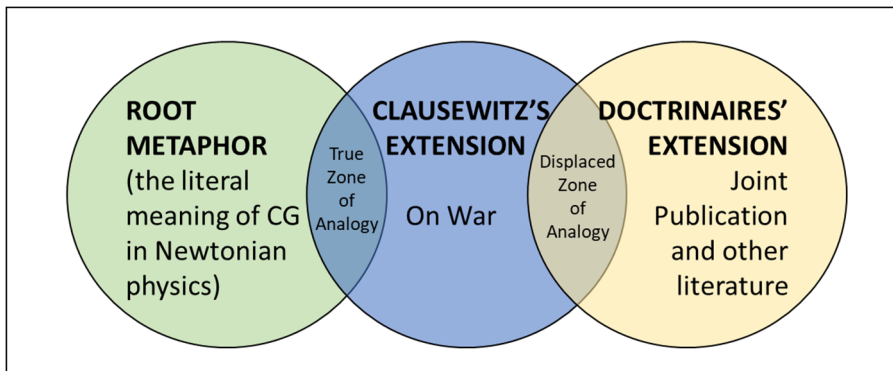
Source: Based on AJP-5, 2019 (Annex B, page B-10)

Debates and Diversions Revolving CG: The Fog of Confusion

Misinterpretation of the Original Concept

Reliance on Metaphors: Newton’s theory of CG and Clausewitz’s concept of CG are in unison – both relate to balance, equilibrium, interconnectivity and interdependence, and mass (combat power as per Clausewitz). In order to describe the socio-political concepts of Clausewitz’s time to Prussian officers having a background in engineering, Clausewitz used a mechanical science metaphor to clarify his audience better. Therefore, today, as military practitioners deal with his concept of CG, they fail to consider those from the mechanical science perspective and rather try to find relevance in a socio-political context.⁴⁵ As per mechanical science, CG represents the ‘point where the forces of gravity converge within an object.’ Therefore, CG does not denote the *source of strength*, rather it is more a *factor of balance*.⁴⁶ This notion of mechanical CG as a metaphor was also supported by Milan Vego and Echevarria who believe that CG exists when an actor operates within a system perspective.⁴⁷ Figure 11 shows how the CG as a metaphor was gradually displaced.

Figure-11: Displacement of CG as a metaphor



Source: Based on Paparone and Davis⁴⁸

Misinterpretation of Clausewitz’s CG: Probably, the most striking cause of misconception, ambiguity, confusion, and debate centering on Clausewitz’s CG is due to its lack of clear definition in his *On War* and the inconsistency of its description in various chapters. Most scholars opine that his work was unfinished and lacked revision and editing. Clausewitz did not use the German term ‘Gravitationspunkt’ which means ‘center of gravity’ in English; instead, he used the word ‘schewrpunkt’ which means ‘weight of focus’ or ‘point of effort’ in English.⁴⁹ General Krause (Australian Army) gave an alternative explanation, saying ‘schewrpunkt’ means ‘main effort’ or ‘center of gravity’ which are synonymous, but the use of ‘main effort’ is more appropriate based on the contextual translation of *On War*.⁵⁰ Milan Vego also identified a few more

mistranslations of other important concepts by Howard & Peret.⁵¹ The below table gives a summary of how the most common ideas of CG were differently translated by JJ Graham and Howard:

Table-5: Different types of translation of CG

Serial	Editor/s	Reference	Translation/Interpretation
1.	J.J. Graham	On War, Carl von Clausewitz (1874) Book 8, Chapter 4. Ends in War More Precisely Defined: Overthrow of the Enemy	That the great point is to keep the overruling relations of both parties in view. Out of them a certain centre of gravity , a centre of power and movement , will form itself, on which everything depends; and against this centre of gravity of the enemy, the concentrated blow of all the forces must be directed.
2.	Michael Howard and Peter Peret	On War, Carl von Clausewitz (1976) Book 8, Chapter 4. Closer Definition of the Military Objective: The Defeat of the Enemy, p 595	One must keep the dominant characteristics of both belligerents in mind. Out of these characteristics, a certain center of gravity develops, the hub of all power and movement , upon which everything depends. That is the point against which all our energies should be directed.

Interpretation of CG by Theorists Differently

Diverse Definition and Interpretation of CG: As per Strange & Iron and Milan Vego, the translation of Howard & Peret is the prime source of confusion and misunderstanding as explained before. The term ‘hub of all power and movement’ is often misinterpreted, using it out of context. As an example, Strange & Iron concluded that the mass of armed forces is difficult to take as CG because it does not act as a ‘hub of all power and movement’ and as a glue that holds everything together.⁵² Despite being widely recognised by the US and NATO as the ‘primary sources of power and resistance,’⁵³ Strange's definition (proposed in 1996) of CG was contested by Echevarria, who saw the CG as a physical concept more of a ‘focal point,’ rather than ‘source of power.’⁵⁴ Warden considers only physical CG exists, no moral component/entity as CG.⁵⁵ As per Eikmeier and Vego, CG can be found from any of the CSs/CCs which enable a force to achieve objectives; whereas as per Strange and the NATO model, a CC is derived from the analysis of a CG.⁵⁶ It is more evident while looking at how the US Army, Navy, Air Force, and Marines have drawn different explanations and understandings of CG based on Clausewitz's concept.⁵⁷

Concept of Multiple CGs at One Level of Warfare: While Clausewitz, Echeverria, Eikmeier, and Barfoed prefer a single CG at one level; others like Warden, Strange, and Vego opine for multiple CGs at every level. Clausewitz's work makes it extremely evident that it is highly desirable to have a single CG. Lee also contends that since the true CG is not always visible and may even be hidden during campaign planning, it is important to develop multiple kinds of perceived CGs.⁵⁸ The US Joint Staff Officer's Guide and JPs also acknowledge that there can be multiple CGs at the same level of warfare, which may change during the campaign.⁵⁹ Giles & Galvin also supported that

at the operational level, there can be multiple CGs for every force/component, but strategic CG is one and fixed for every force.⁶⁰ Even Kornatz said that it is important to identify CG for all components of the joint task force and in all domains.⁶¹

Application of CG Concept

Applicability and Relevance of CG in Modern-day Warfare: Meyer claimed that the ambiguity and debate in the philosophical domain of CG revolve around the validity of an 18th-century concept in the present-day operational environment of complex connectivity of state and non-state actors, technological diffusion into warfare, information revolution, and the hybrid nature of warfare.⁶² A system's resilient source of strength is created by the 'interdependencies', 'connections', and 'redundancies' among its constituent parts, rendering a single source of power invalid.⁶³ There is hardly any example of modern warfare where planners were able to appropriately identify and validate a CG using any of the methods and got success. For example, during the Gulf War 1991, a lack of consensus among services led General Schwarzkopf to decide and concentrate on three CGs instead of one: the Republican Guard, Weapon of Mass Destruction (WMD), leadership and Command and Control (C2) nodes. The C2 and leadership CG matched with the Air Force's interpretation of CG whereas Army's attention was on the Republican Guard CG. Similar examples can be drawn from the Iraq War 2005, where General Casey struggled between two CGs. Following doctrinal teaching, planners suggested the Iraqi Government is the CG, whereas Col. Eikmeier suggested the Population as CG following the ends-ways-means method.

Applicability and Usefulness at Various Levels of Warfare: Clausewitz did not describe CG as per levels of war, the same was also echoed by Echevarria. The whole purpose of CG identification was the complete defeat or destruction of the enemy forces, which is more applicable at the strategic level of planning.⁶⁴ Warden and Vego considered the applicability of CG at all levels of operations. Even at the operational level, there can be more than one campaign CG while operating under multiple Theatres of War conducting multiple campaigns or when enemy forces are not coherent.⁶⁵ Similarly, at the same operational level under one campaign, each major operation may have a CG making multiple operational CGs in a campaign.

The Changing Nature of CG: Most of the theorists, including Clausewitz, Strange & Iron, Milan Vego, Echevarria, Eikmeier, and Barfoed agreed that CG is dynamic, changeable, and force-oriented to the factors of situation–time–space.⁶⁶ CG at the higher level may affect the CG at the lower level and vice versa; a change in the enemy CG may result in a change in own CG also.⁶⁷ In addition, FM 100-5 (1996, p. 34) also says that a CG may change due to a major shift in operational direction, replacement of a key enemy commander, and fielding of new weapons and units. As per Milan Vego,

CG can change due to a major change in the composition of an alliance/coalition, a major change of the objective, radical weakening of friendly or adversary's offensive strength in the course of the campaign.

Final Thought for Bangladesh Armed Forces: The Convergence

Grey Areas: CG concept is found in three main doctrinal publications: Operations of War (GSTP 0032), Joint Warfare Doctrine (Draft) (JW D), and Defence Services Staff College Precis (JW-F) which still hold the definition and concept of CG that was published in the US FM 100-5 (1986). Further, JW-F delineates a clear-cut process of CG determination and analysis which is absent from GSTP 0032 or JW-D. The process prescribed in JW-F is a mix of Milan Vego's CG determination process (following CF-CS-CG-CW model as shown in Figure 4), and Strange's CG analysis model (CC-CR-CV model as shown in Figure 2). Though the US Navy and JP 5-0 also follow a similar process, some conceptual discords prevail between these two processes. A few ambiguities are enumerated below:

- Milan Vego defined CG as a '**source of massed strength or a source of leverage**' but JW-F defined CG as a '**source of power**' and JW-D defined CG differently as a '**characteristic, capability, or locality**.'
- The discussion of CF in JW-F is very scanty not fully replicating the essence of Milan Vego's concept of CF. As per Vego, CS and CW can be identified from the analysis of CF, and CVs are derived from CSs and CWs (Figure 4). The discussion of CW is totally missing in JW-F. Moreover, to apply Vego's method, planners need a detailed understanding of the concept of CF-CS-CW which is very dissimilar to other methods like Strange or Eikmeier.
- Milan Vego's concept of CS equates to **capabilities/sources of power** (can be considered as CC) that are essential for accomplishing military objectives, whereas JW-F describes CS as the '**strength**' that enables the CF to function. As per Vego, any one of the CSs (or CCs) becomes CG; but as per Strange's theory, CC is identified from the analysis of CG.
- After CG identification, Vego suggested the analysis of CG by deconstructing its inner and outer core. From there, CRs and CVs can be derived. But JW-F suggests analysing CG following CC-CR-CV which is the Strange's model.

Proposed Approach to CG Identification and Analysis

CG determination and analysis process should not be a science, rather it should be a pure art based on experience, expertise, knowledge, and awareness. To simplify the

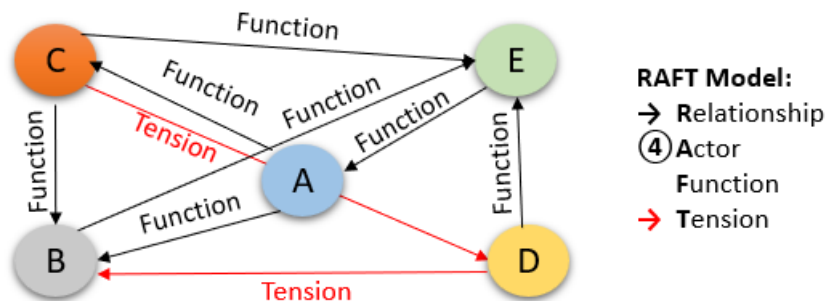
process and to maintain uniformity, the following method can be followed which will be more relevant at the operational level CG identification and analysis.

CG Identification Process: It will be easier and more effective to follow a mixed method comprising the **Eikmeier model** for CG identification and Validation and **Strange’s CC-CR-CV model** for CG analysis. Both these methods have similar explanations of the CFs (CC, CR, CV). Command and General Staff College (CGSC), USA also follows Eikmeier’s model due to its simplicity and ease of application. For Bangladesh Armed Forces, the CG identification steps can be as follows:

- **Preliminaries:** Before CG identification, planners need to gain a clear understanding of the following as a starting point:

(1) The adversary/friendly forces should work as a ‘system’ or ‘systems of systems.’ This will help the planners to identify the nodes (actors/means), links (relationships), and tendencies or tensions of the system. For this analysis, RAFT (relationship, actor, function, and tension) model can be followed for understanding the system.

Figure-12: A sample RAFT analysis model



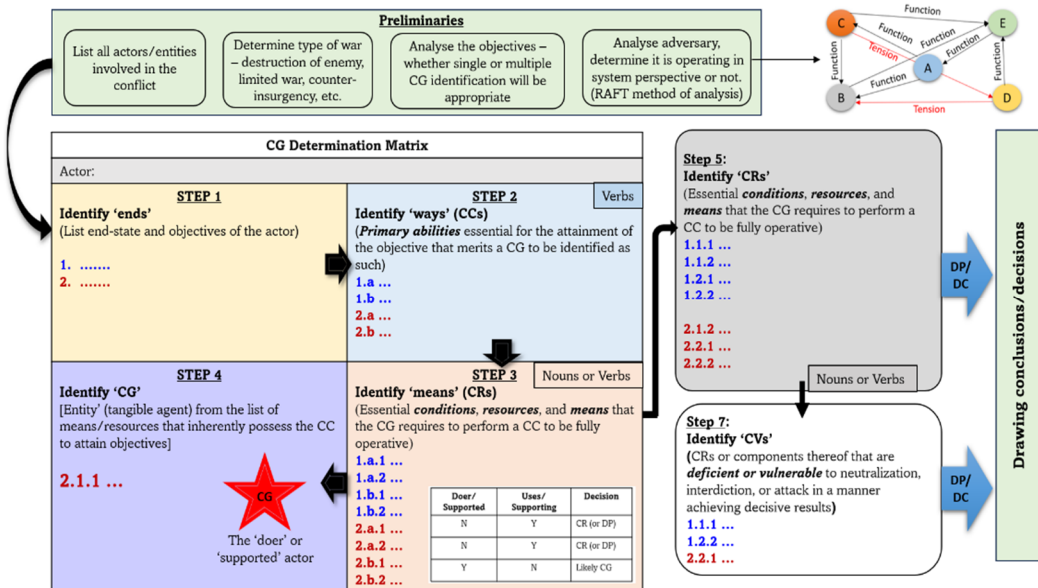
(2) CG identification is more relevant when a complete destruction of the enemy is desired. While dealing with hybrid threats, often identifying a CG is not easy or practical as there are multiple actors, and threats are also diverse.⁶⁸ Often, the type of conflict may dictate the type of CG – moral (for insurgency operations) or physical (for conventional operations).

(3) Number and type of objectives and end state at the strategic or operational level. If the objectives are quite independent in nature or deal with achieving multiple theatres of operations objectives, there can be multiple CGs.

- **Step 1: Identify ‘Ends’:** Determine the end state and objectives at the operational level and nest it with the end state and objectives at the strategic level.

- **Step 2: Identify ‘Ways’ (CCs):** Identify likely ‘ways’ or ‘actions’ for achieving the end state and objectives. From a list of ways/actions, identify the most essential ways/ actions – those are considered as CCs. That means, from the list of ‘ways,’ a refined list of CCs is identified.
- **Step 3: Identify Means:** From the list of CCs, identify ‘means’ or resources necessary for the attainment of the corresponding CC. There may be same means/resources which is necessary for the attainment of multiple CCs.
- **Step 4: Identify CG:** Select the ‘entity’ (tangible agent) from the list of means/resources that inherently possess the CC. That is the **CG – the doer** (node).

Figure-13: CG Determination and Analysis Model (Proposed)

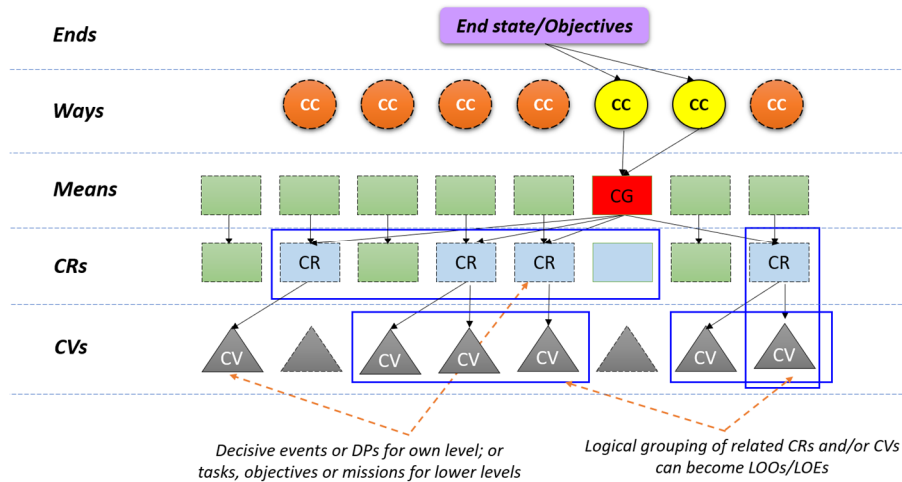


Source: Researcher’s own construct

- **Step 5: Identify CRs:** From the leftover list of means (those are identified as uses/supporting), list the CRs necessary for other CCs to attain objectives.
- **Step 6: Identify CVs:** From the list of CRs, identify the CRs that are vulnerable to enemy exploitation, attack, or neutralisation. These are CVs.
- **Step 7: Draw Conclusions:** Identification of CG and CF helps the planners to develop a concept of operations – what to attack or defend/protect. A combination of CR and CVs will help to identify Decisive events or Decisive points for own level; or tasks, objectives, or missions for lower levels. Logical grouping

of related CRs and/or CVs can become Lines of Effort/Operations (LOOs/LOEs). Sequencing of CRs and CVs will help to determine the phasing of operations.

Figure-14: Ends-Ways (CC)-Means-CG-CR-CV Link as per Eikmeier theory



Source: Researcher’s construct based on Eikmeier’s Lecture on Youtube

- **CG Validity Test:** After the identification of the CG (Step 4), a subjective analysis or validity test should be carried out following Eikmeier’s ‘doer/supported and uses/supporting’ relationship⁶⁹ of the CG. The test can be carried out following Table 6:

Table-6: CG Validation Model (Proposed)

Serial	Objectives	Likely CG	Can the Objectives be achieved without this?	Decision
1.		A	Yes	Not CG, these are CR
2.			No	Yes, CG
3.			Yes	Not CG, these are CR
1.		B	Yes	Not CG, these are CR
2.			Yes	Not CG, these are CR
3.			Yes	Not CG, these are CR

Source: Researcher’s construct based on Eikmeier’s theory

CG Analysis Process: Having identified the CG, planners may now analyse it further to determine specific CRs and CVs that are directly related to the identified CG. This will later help to determine DPs/DCs. Point to note, CCs in previous steps were related

to what capability is necessary to attain the objectives, here the CCs will focus on the capability of the CG (what CG can do). Some of the CRs and CVs identified before may be duplicated here also, but there will be additional CRs and CVs related to the CG itself. The CG analysis process can follow Strange's model of CG analysis as shown in Figure 15:

Figure-15: CG Analysis Matrix

CG Analysis Matrix				
CG		CC		
		(Primary abilities essential for CG to be identified as such. Some CCs identified before while determining CG may be duplicated here if those are related to the identified CG) 1. ... 2. ... 3. ...		
		Verbs		
CV		CR		
(CRs or components thereof that are <i>deficient or vulnerable</i> to neutralization, interdiction, or attack in a manner achieving decisive results)		(Essential conditions , resources , and means that the CG requires to perform a CC) 1.a. ... 1.b. ... 2.a. ... 2.b. ... 3.a.		
	Weakness	Vulnerability	CV	Nouns or Verbs
1.a.1 ...	Y	Y	✓	
1.a.2 ...	Y	N		
1.b.1 ...	Y	N		
1.b.2 ...	Y	Y	✓	
2.a.1 ...	Y	Y	✓	
2.a.2 ...	Y	N		
2.b.1 ...	Y	Y	✓	
2.b.2 ...	Y	N		
Decision on potential DPs		Decision on potential DPs		

Source: Researcher's construct based on Strange's theory

Conclusion

The CG concept has been a center of discussion, debate, controversy, and study since its inception by Clausewitz in his notable work *On War* (1832). The discussion became more pronounced after the Vietnam War when US military doctrine incorporated this concept in 1986. Gradually UK, NATO, Australia, etc armed forces also followed their footstep. However, there was confusion regarding the understanding and interpretation of the CG. The prime reason may be the book itself where CG is described and explained in varied contexts and meanings in different chapters. That confusion continued when J.J. Graham and Howard & Peret translated this book into English from German. As it was incorporated into military doctrines, different forces interpreted it differently and the fog of confusion became more obscured. Different publications of the US Army, Navy, Air Force, and Marines continued with their change and

modification of this concept till 2020. Meanwhile, theorists like John Warden, Eikmeier, Milan Vego, Joe Strange, Echevarria, and Barfoed also explained this concept diversely. While there are some similarities in the core concept, there are deviations in terms of explaining it and the analysis part of CG.

Subsequent confusion emanated from the application of this concept in the planning process. Eikmeier, Reilly, Amos Fox & Kopsch, and a few others opined that this concept is irrelevant to modern-day warfare due to the complex nature of the adversary and non-linear type of operations. While there is debate about whether CG should be a tangible entity or an intangible entity, theorists like Eikmeier, Strange, Dr Kem, and doctrines like NWP 5-01, and ADFP 5.0.1 suggested a physical entity CG. Most doctrinal publications concur that CG exists at all levels of warfare, especially at the strategic and operational levels. There are also different interpretations of CS, CC, CR, CV, CW, and associated supplementary concepts. Strange, Vego, US Air Force Doctrine, ADFP 5.0.1, etc. considered there can be multiple CGs that can change. Most doctrines and theorists found a link between CG and objectives. As, Bangladesh Armed Forces doctrines and publications are often inspired by western doctrines (USA, UK, NATO), similar ambiguity exists in our doctrinal publications also.

DSCSC considers JW-F precis as a base publication for CG identification and analysis. The process suggested here is a mix of Milan Vego’s CF-CS-CW-CG-CV analysis model and Strange’s CC-CR-CV model. Conceptually there are differences between these two theorists and interpretations of terms like CS, CC, CW, and CV. AFWC does not follow any fixed model and still prefers Strange’s 6-box model which is also followed by UK and NATO. However, to keep conformity and similarity with the core concept of CG, a CG determination model following Eikmeier’s theory is suggested. Though Eikmeier’s model helps to determine CRs and CVs as a whole, Strange’s CC-CR-CV model is suggested for the further analysis of CG. These two processes of CG determination and analysis will help the planner to better understand the interlink of the OE, adversary, and friendly forces, determine DPs/DCs, LOOs/LOEs, and mission and task for lower level planners. Finally, it is to be remembered that, the process is nothing conclusive, it is merely ‘a way’ of analysis. Planners and commanders need to understand the core concept and its spirit in military operations and apply it with judgment.

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Brief Biography



Lieutenant Colonel Md Solaiman, SUP, psc, Infantry was born on 01 September 1980. He was commissioned from Bangladesh Military Academy (BMA) with 45 BMA Long Course in the Corps of Infantry on 27 December 2001. In regimental life, he served under OPERATION UTTORON thrice and OPERATION PURBA PRACHEER twice. He served in six different infantry units and commanded 79 East Bengal Regiment (Division Support) which is a newly raised unit. In the process, he experienced the raising of two infantry units.

Apart from serving in different regimental appointments, he also experienced serving in the most coveted training institutions of the Bangladesh Army as an instructor. He has served as an Officiating Instructor Class B of Tactics Wing at the School of Infantry and Tactics (SI&T) and Platoon/Term Commander in Bangladesh Military Academy. He also has a stint of service as a Guest Directing Staff in Land Forces Atlantic Area Training Camp, Aldershot, Canada for Junior Command and Staff Course (JCSC). He has participated in United Nations Peacekeeping Mission in Cote d'Ivoire as a contingent member and in Darfur, Sudan as a staff officer. He is a proud graduate of Defence Services Command and Staff College, Mirpur and Command and General Staff College, Fort Leavenworth, USA. Presently, he is serving as a Directing Staff in Defence Services Command and Staff College. He is happily married and blessed with a daughter.

Dedicated Disaster Response Force for Better Management of Natural Calamities in Bangladesh: A Feasibility Study

Major Md Faisal Amin, psc, Infantry

Abstract

Bangladesh is a developing country with a long history of natural disasters. Bangladesh's success in disaster management is well-recognised around the world. However, the disaster management system has some challenges, especially regarding coordination, due to the absence of a dedicated disaster response force. This research has been carried out to analyse the feasibility of forming a dedicated force to better manage natural calamities in Bangladesh. Initially, the paper explained the existing disaster management system of Bangladesh and the roles of various stakeholders. To understand the urgency of the problem, the researcher has identified the challenges of the present system in achieving disaster resilience. A mixed-methods research methodology has been followed to investigate the research problem, with a sample size of 385 following random and quota sampling was followed for the quantitative method. Officials from armed forces, paramilitary forces, concerned ministries and NGOs/INGOs, resource personnel from universities, government and non-government employees with hands-on experience, and proficient officials of a few foreign countries were picked as the samples. In addition, content analysis of different kinds of literature, open sources, policies and instructions, case studies, and secondary data analysis (previous research) were conducted for the qualitative method. Analysing the data and following a systematic approach, the research proposes restructuring the Fire Service and Civil Defence Department to perform as the dedicated force for managing natural disasters. Finally, through an analytical process, the researcher has proved the hypothesis: A Dedicated Disaster Response Force for Bangladesh will significantly enhance the capability to manage natural calamities better.

Introduction

Disasters pose significant challenges to sustainable development, causing loss of life, decreased productivity, and environmental hazards (Carter, 1992). Natural disasters include floods, earthquakes, cyclones, landslides, droughts, crop failures, hurricanes, etc. On the other hand, artificial disasters include fire breakouts, building collapses, chemical explosions, road or water accidents, etc. (Carter, 1992). Bangladesh, located in the largest delta formed by three major rivers and three tectonic plates, faces significant risks from natural and human-induced hazards (Standing Orders on Disaster, 2019). To overcome

these challenges, well-planned and coordinated disaster management operations are essential.

Countries like the USA, India, Turkiye, Mongolia, Sri Lanka, Nepal, and Indonesia have dedicated disaster response forces (DDRF) or dedicated outfits to deal with disasters as the first responders (Hossain, 2014). The Fire Services and Civil Defence (FSCD) is a dedicated force for fire hazards, but there is no dedicated force for disaster management (Shoyeb, 2014). As such, the Armed Forces, FSCD, police and other law-enforcing agencies, including non-government organisations (NGOs), are the main disaster management stakeholders (National Disaster Management Policy, 2015). The Ministry of Disaster Management and Relief (MoDMR) is a dedicated ministry for disaster management; however, they do not have any dedicated force under their command to mobilise as the first responder (Allocation of Business Among Different Ministries and Divisions, Schedule I of the Rules of the Business, 1996).

Recent disasters in Bangladesh, such as the Rana Plaza collapse, landslide in Chattogram, chemical explosion in Sitakundu, flood in Sylhet Area, etc., have underscored delayed responses and difficulties in organising responders (Minutes of the IMDMCC Meeting, 2022). Despite being recognised as a role model in disaster management, Bangladesh is still not disaster-resilient due to underlying challenges like lack of unified command structure, non-availability of qualified personnel and equipment, lack of communication and coordination between the stakeholders, variety of working patterns of various stakeholders, etc. Future threats from global warming and ecological changes may intensify disaster frequency. The failure to manage disasters may challenge Bangladesh's Vision 2041. It is visualised that a trained workforce with readily available equipment under a centralised command is a dire need to enhance the disaster management capabilities of Bangladesh (Swarna, 2020).

At this backdrop, the paper initially evaluates Bangladesh's present disaster management system and identifies its underlying challenges. After that, it outlines the likely outputs of having a DDRF in tackling natural disasters. Finally, the paper proposes feasible options for forming a DDRF, aptly considering the likely challenges in forming a DDRF to achieve disaster resilience in Bangladesh.

Analysis of Present Disaster Management System and its Challenges

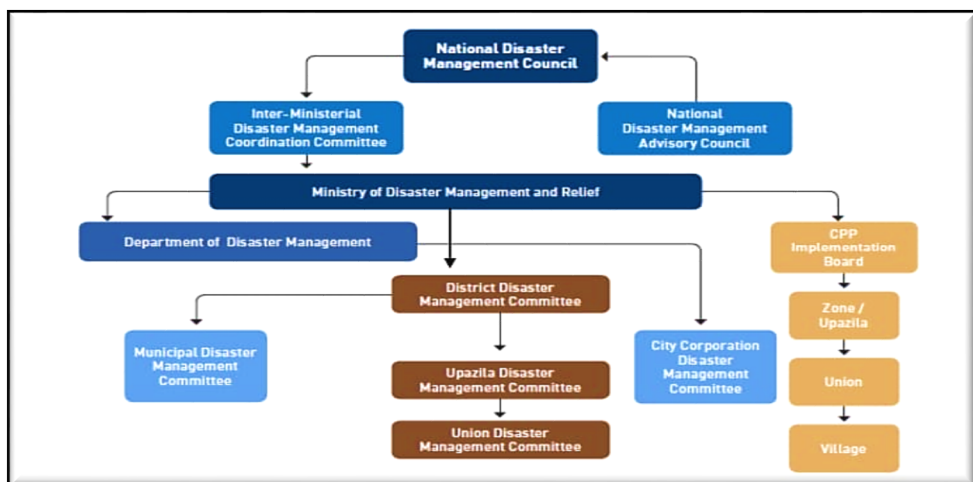
Present Disaster Management System of Bangladesh

- a. **General:** Bangladesh, being located near the Bay of Bengal, faces significant natural hazards due to its low-lying terrain, monsoons, and rivers. From 1970-2019, storms were the most frequent disaster, with floods following at 31% (Bangladesh: Disaster Management Reference Handbook, 2020). The country ranks as the seventh

most risky natural disaster globally, with around 10 million citizens affected annually (Comprehensive Guidelines for Armed Forces in Disaster Management, 2019). Despite this, Bangladesh has implemented disaster risk reduction plans and invested in climate-resilient infrastructure, serving as a global model for proactively investing in disaster risk reduction.

b. **Current Disaster Management System in Bangladesh:** Bangladesh's disaster management system comprises three central bodies: the NDMC, IMDMCC, and National Disaster Management Advisory Committee (NDMAC), where NDMC is the highest-level decision-making body (Disaster Management Act, 2012). Bangladesh is one of the few countries with a dedicated ministry, the MoDMR, which provides legal guidelines for mitigating disaster risk reduction (Standing Orders on Disaster, 2019). The country has various ministries, organisations, agencies, and departments managing natural disasters, as the National Disaster Management Policy outlines. The stakeholders have risk reduction and development plans and participate in disaster management operations guided by organisation-specific policies. Various stakeholders, including community-based organisations, organise decentralised training. The Department for Disaster Management (DDM) prepares a yearly training plan, while other stakeholders train their personnel according to their curriculum (National Plan for Disaster Management, 2021-2025). Individual stakeholders maintain damage assessment databases for future reference and decision-making (Hossain, 2014). Figure 1 shows the present disaster management regulatory framework of Bangladesh.

Figure-1: Disaster Management Regulatory Framework

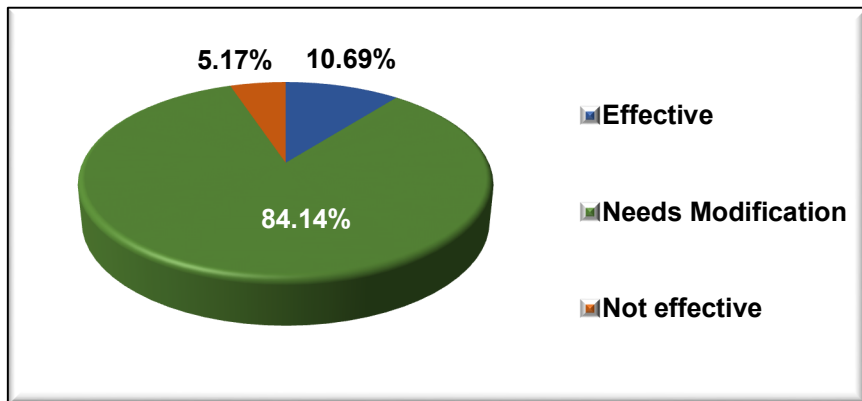


Source: MoDMR, Standing Orders on Disaster, 2019

Challenges of the Present Disaster Management System

a. **General:** Based on 67 rules and regulations, Bangladesh's disaster management system is resilient and recognised as a global role model. However, challenges persist, particularly in earthquakes and multi-disasters. A survey found that, according to 84.14% experienced officials, the existing system needs improvement (see Figure 2). Therefore, it is required to adopt a few measures to modify the present system.

Figure-2: Effectiveness of the Present Disaster Management System



b. **Absence of Dedicated First Responder:** According to the disaster management regulatory framework, MoDMR is the focal point for disaster management. However, the ministry does not have any dedicated outfit under it which can be mobilised at their jurisdiction. Thereby, MoDMR performs only as a coordinating ministry which can employ efficient outfits like the Armed Forces, FSCD, and different NGOs in coordination with the parent ministries of this organisation (Standing Orders on Disaster, 2019). Thus, the absence of a dedicated first responder and clear-cut guidelines generally causes a late response, resulting in massive loss of life and property. The survey reveals that the absence of a first responder is a significant challenge in achieving disaster resilience in Bangladesh.

c. **Lack of Command, Control and Coordination (C3) Structure:** Well-delineated command and control mechanism is essential for executing disaster management activities once different stakeholders are employed. Coordination is crucial in acquiring and applying assets for disaster response, working vertically and horizontally within an organisation. However, the lack of coordination and cooperation among stakeholders and conflicting command and control (C2) mechanisms can create confusion. The survey results show that lacking a well-designated C3 structure impedes successful disaster management.

d. **Complexity in Communication between Stakeholders:** Disaster management requires a holistic approach of the whole government and the community, having a shared understanding and goal (Carter, 1992). Bangladesh's disaster management system faces challenges due to the complexity of communication among various stakeholders, which leads to miscoordination and lack of synergy. Study shows that this is a significant challenge of the current system.

e. **Absence of Damage Assessment and Evaluation System:** Damage assessment is crucial for tackling any disaster and ensuring future preparedness (Guidelines for Disaster Incident Management Team, 2021). The lack of expert assessment can lead to more casualties and delays in search and rescue operations. The study reveals that the absence of such assessment challenges achieving disaster resilience. The chemical explosion at Sitakundu, Chattogram, in 2022 is a testimony to this issue.

f. **Lack of Coordinated Training and Exercises:** Training aims to achieve organisational effectiveness and national confidence (CAS Training Directives, 1/2023). In Bangladesh, training curricula are designed for volunteers rather than experts. Thus, the lack of coordinated events and exercises poses challenges in achieving harmony and eradicating shortfalls. The survey respondents echoed this.

g. **Lack of Responders in Absence of Armed Forces:** Bangladesh Armed Forces are the government's trusted machinery, performing secondary duties like disaster management following the constitution, law, and government instructions (Defence Policy of Bangladesh, 2018). The outstanding civil-military relations have helped Bangladesh to overcome disasters and pandemics. However, the survey reveals that other responsible organisations are less likely to tackle natural disasters successfully if the Armed Forces are employed in national emergencies like war. The flood of Ukraine in 2022 due to the destruction of the Kakhovka Dam suitably indicates the Armed Forces' requirement in disaster management.

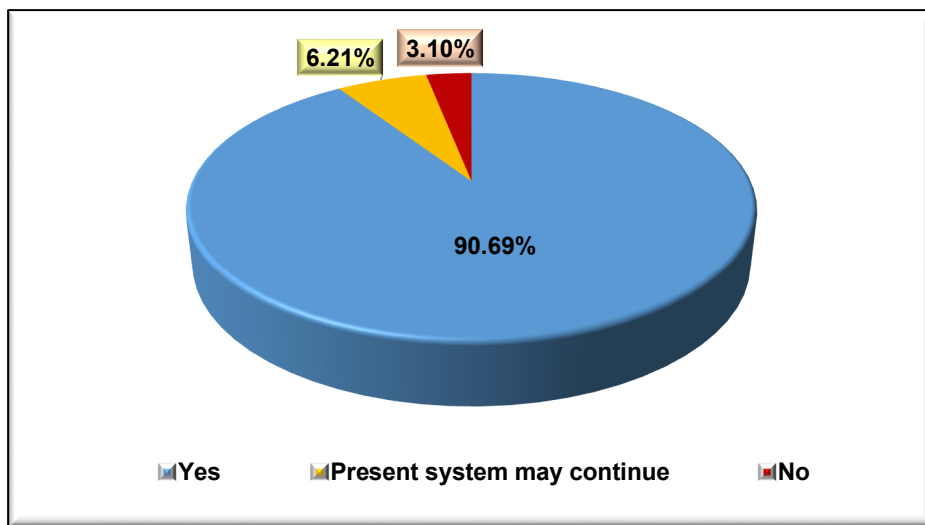
h. **Oriented with a Reactive rather than Proactive Approach:** Disaster management operations require a proactive approach, not a reactive one. Bangladesh's disaster management framework is well-established, but many organisations lack farsightedness and preparedness, which leads to more casualties. Many organisations prioritise media coverage over practical support, as the survey respondents echoed the statement. The recent flood in Sylhet Area in 2022 illustrates this issue.

j. **Employment of Semi-skilled/ Unskilled Personnel:** Disaster management requires practical experience, ground knowledge, and equipment expertise. Employing semi-skilled/unskilled personnel increases casualties and property damage. Due to the need for more skilled personnel (Hossain, 2014), Bangladesh often employs semi-skilled/unskilled personnel in disaster management, which was agreed upon by the survey respondents, who opined that this is a significant challenge of the present system.

Possible Outcome of a DDRF in Tackling Natural Calamities

General: Bangladesh's prevailing disaster management system faces a few challenges in achieving better resilience to different natural calamities. It has been felt that engaging in a war might be a far-reaching possibility for Bangladesh; however, fighting disasters is a regular phenomenon that demands a well-established mechanism supporting the country's national development. The survey results show that 93.7% of respondents feel that Bangladesh should form a DDRF to overcome the existing challenges (see Figure 3).

Figure-3: Requirement of a DDRF for Bangladesh



Outputs of a DDRF: The feasibility of a DDRF concept is assessed by analysing the possible outcomes of dedicated forces globally, such as India's National Disaster Response Force (NDRF), USA's Federal Emergency Management Agency (FEMA), Turkey's Disaster and Emergency Management Presidency (AFAD), and Nepal and Sri Lanka's mechanisms, etc.

a. **First Responder for All Types of Natural Disasters:** A DDRF, trained and available for rapid response, can reduce fatalities during multi-disasters and sudden disasters. Survey results show that a DDRF can ensure significant damage

reduction and effective natural disaster tackling, being designated as the first responder.

b. **Effective C3 Structure:** A well-designed C3 structure is needed to coordinate with various stakeholders, such as the Armed Forces, FSCD, Police, RAB, Ansar and VDP, Coast Guard, NGOs, and volunteers, to ensure disaster resilience in Bangladesh. The study reveals that DDRF will provide an effective C3 structure among all stakeholders.

c. **Quick Response for Dealing with Diverse Disasters:** A dedicated force can ensure a swift response to any disaster and smooth coordination among all stakeholders. In Bangladesh, CPP is an ideal example that ensures the reduction of fatalities from coastal cyclones due to their quick response (Haque & Haider, 2022). The contribution of AFAD during the recent earthquake in Turkiye is a testimony of the reduction of damages from disasters by quick response. The survey shows that the DDRF will ensure a rapid response for dealing with diverse natural disasters in Bangladesh.

d. **Enhanced Disaster Management Capabilities:** A dedicated force with adequate equipment and experts can effectively tackle natural disasters. A dedicated force positioned throughout the country with required all-round capabilities like the NDRF of India or an area-based force like Sri Lanka can effectively tackle the disasters. The study shows that the DDRF has enhanced capabilities if the force is sufficiently equipped with the required equipment and expert personnel.

e. **Reduction of Damage and Enhanced Future Preparedness:** Disasters significantly impact national development, but post-disaster assessment can ensure better future preparedness and reduce damages (Carter, 1992). A DDRF can reduce disaster effects through effective, quick response and adequate preparedness. Survey results show that DDRF can reduce damage by enhancing future preparedness.

f. **Ensured Support in the Absence of Armed Forces:** In Bangladesh, the Armed Forces have always been seen as the first responder to any disaster whose absence is likely to affect the operation significantly. However, a dedicated force can provide an initial response and tackle the more significant damages in the absence of the armed forces. The survey testifies to the same impact of a DDRF.

g. **Integrated Capacity-Building Training:** Training for disaster response is crucial for future development (W. Carter, 1984). Bangladesh's present system provides an excellent opportunity for volunteer training; however, the experts lack training opportunities, mainly encompassing integrated efforts. The survey reveals

that DDRF can ensure integrated capacity-building training and joint exercises of all stakeholders.

Options and Challenges in Forming a DDRF for Bangladesh

General: The study reveals that Bangladesh needs a DDRF to enhance resilience in tackling natural disasters. It has also been identified that a DDRF will facilitate the successful execution of the prevailing disaster management framework and alleviate the inherent challenges. The researcher has identified several options for forming a DDRF and a few challenges which may be faced while forming a DDRF.

Options for Forming a DDRF

a. **Option 1: Dedicated Force Comprising All Stakeholders:** A dedicated force comprising relevant stakeholders can effectively tackle natural disasters, especially with technical and specialised personnel to tackle earthquakes and flash floods. India has an NDRF of 16 battalions, including search and rescue teams, engineers, paramedics, technicians, electricians, and canines (National Disaster Management Plan, 2019). However, it will likely be a long-term process associating legal jurisdiction and considerable expenditure. 42.76% of survey respondents considered this option the Priority-1 option for Bangladesh.

b. **Option 2: Composite Force Encompassing Military and Paramilitary Forces:** As in Bangladesh's RAB Forces, a composite force can perform a given mission by sharing each organisation's experience and capabilities. Many countries follow this concept by maintaining forces like FEMA of USA, NEMA of Mongolia, AFAD of Turkiye, BNPB of Indonesia, etc (website analysis). Forming composite forces with deputed personnel from armed and paramilitary forces could be feasible for Bangladesh. Despite these challenges, 43.79% of survey respondents considered it the Priority-2 option.

c. **Option 3: Area-based Force Encompassing Relevant Stakeholders:** Bangladesh is prone to different types of hydrometeorological and geophysical disasters. An area-based disaster response force comprising relevant stakeholders, similar to Sri Lanka, would be feasible (National Emergency Operation Plan, 2017). However, biodiversity and climate change may alter disaster patterns, questioning the effectiveness of this force. 31.72% of survey respondents considered this option the Priority-1 option. Figure 4 shows Bangladesh's geographical configuration, which is prone to different types of disasters.

Figure 4: Area-based Natural Disaster Assessment of Bangladesh



Source: Ministry of Planning, Bangladesh Climate and Disaster Atlas, 2021

d. **Option 4: Dedicated Army Battalions as the First Responder:** Bangladesh Army is responsible for disaster response operations whenever called for (Defence Policy of Bangladesh, 2018). Dedicated Army battalions earmarked at different army formation areas and assisted by other services and paramilitary forces can be able to tackle any disaster effectively, as seen in Nepal, which has two Disaster Management battalions under their Army Headquarters (Disaster Risk Reduction National Strategic Plan of Action: 2018-2030, 2018). 32.41% of respondents considered this the Priority-1 option.

e. **Option 5: Restructuring the FSCD Department:** The FSCD Department, originated from East Pakistan, promotes public welfare and security by protecting

lives and property from fire hazards and disasters. The department is highly capable of fire prevention but moderately capable of search and rescue (FSCD Department website). Restructuring the department could be feasible for designating as the first responder, but it would require strengthening and placing under MoDMR for easier coordination and legal framework. Respectively, 31.38% and 33.10% of respondents have considered this as the Priority-1 and Priority-2 option.

Likely Challenges in Forming a DDRF

a. **Necessary Budget Allocation:** Bangladesh has allocated 11% of its budget for disaster risk reduction, becoming a global role model (statement of State Minister of MoDMR in UN Headquarters, 18 May 2023). However, more budget allocation may be required to form a dedicated force for force generation, management, training, capacity-building, infrastructure development, etc. The survey respondents consider this a very significant challenge.

b. **Provisioning Skilled Manpower:** Skilled manpower is crucial for successful disaster management operations. Bangladesh's disaster response stakeholders and volunteers lack adequate training; thus, provisioning skilled manpower and training them is a long-term and costly task. Besides, ensuring regular training to transform them into seasoned disaster managers is also a mammoth task. The study reveals this as another significant challenge in forming DDRF.

c. **Procurement of Required Equipment:** Disaster management equipment are crucial for response operations and recovery programs, especially of paramount importance to place them in appropriate places (Carter, 1992). A DDRF can only function effectively if it is adequately equipped with the required equipment. However, procuring modern equipment and ensuring its storage is another costly arrangement. As such, the survey shows it as a crucial challenge in forming a DDRF.

d. **Establishment of Training Institutions:** High-standard training institutions are crucial for responding to disasters and capacity-building of volunteers. Countries like India, Nepal, and Sri Lanka have Disaster Management Training Institutions, but Bangladesh does not have any which is required for employment within the country and abroad with INSARAG certification (website analysis). The study reveals that it will be challenging to establish training institutions to ensure training facilities of DDRF.

e. **Collaborative Communication System:** Effective communication is crucial for facilitating assessment and disaster management operations, ensuring the economy of efforts (Draft Guideline on Disaster Incident Management Team, 2019). A DDRF can produce effectual output through collaborative communication among

stakeholders and corroboration with existing organisations like SPARSSO, BMD, NDRCC, etc, for correct forecasting and disaster assessment, which is presently lacking in Bangladesh. Thus, the survey respondents consider this a crucial challenge for forming and functioning of the DDRF.

Feasibility Analysis: The survey data analysis shows that ‘Option 1: Dedicated Force Encompassing all Stakeholders’ would be the Priority-1 option for forming a DDRF. However, the resource personnel stated that ‘Option 5: Restructuring the FSCD Department’ would be the most feasible option for Bangladesh. A feasibility analysis was conducted between these two options by considering the impacts of the challenges which may be faced in forming a DDRF. Thereby, it was established that ‘Option 1: Dedicated Force Encompassing all Stakeholders’ would be an effective option but costlier and long-term, whereas ‘Option 5: Restructuring the FSCD Department’ would be a more practical, affordable and short-term option (see Table 1).

Table-1: Feasibility Analysis between Option 1 and Option 5

Criteria	Outputs of KII for Option 1	Outputs of KII for Option 5
Execution Time	Long-term process	Short-term process
Budgetary Requirement	Very high	Moderate
Recruitment of Skilled Personnel	Requires long time and detailed study	A standing force is available
Provisioning Required Equipment	Requires long time and detailed study	The standing force already has bulk equipment
Employment	Employment around the year in presence of existing forces may be redundant	Worthy and effective employment
Operational Reach	Need to deploy throughout the country; otherwise, mobilisation and response time will be more	Availability of fire stations at the upazila level ensures easier mobilisation and lesser response time
Infrastructural Requirement	Huge requirement	Existing facilities may be revamped
Coordination with Stakeholders	Easier due to the availability of all stakeholders	Challenging due to a single-service force
Compatibility with National Development	It may not be feasible in the present context	Better suited

Source: Researcher’s construct

Conclusions

- a. Bangladesh, a highly risk-prone country for natural disasters like floods, cyclones, and earthquakes, is recognised as a global role model in disaster management due to its well-structured framework and volunteer management. However, quick response and stakeholder coordination remain challenging for Bangladesh in achieving disaster resilience.
- b. A few challenges of Bangladesh's present disaster management system have been identified, such as a lack of a dedicated responder, communication complexity, a lack of coordinated C2 structure, the employment of semi-skilled/unskilled personnel, and a lack of a damage assessment/evaluation system. The system requires modification for improved resilience.
- c. To alleviate the challenges of the existing disaster management system, the requirement of a DDRF as the first responder has been felt. It has been found that a DDRF would better handle disasters, especially when armed forces are absent due to higher-priority employment. The DDRF's outputs, such as rapidity, better coordination, enhanced capability, mass awareness, and preparedness for future economic development, can enhance the disaster management capabilities of Bangladesh and reduce losses of life and property from disasters.
- d. An in-depth analysis by consulting the mechanisms of different countries was conducted to determine the feasible option for Bangladesh to form a DDRF. In addition, the challenges in forming a DDRF were also identified and prioritised. The feasibility study revealed that 'Restructuring the FSCD Department' would be the most feasible option for Bangladesh in the present context, but 'Dedicated Force Encompassing all Stakeholders' is the preferred option for long-term resilience.

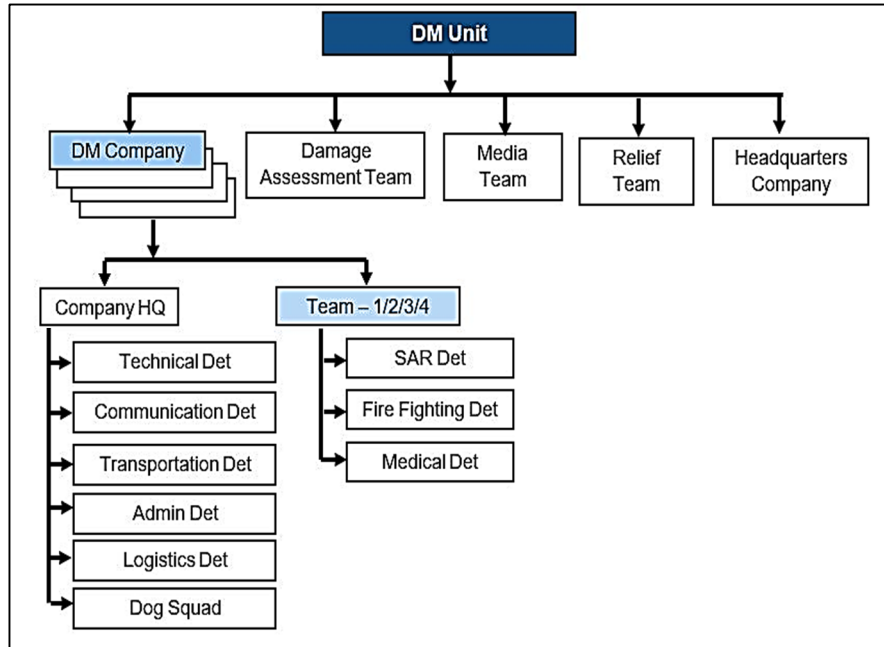
Recommendation

a. Short-Term Recommendations

- (1) Prioritising the options of forming DDRF and likely challenges for Bangladesh, the FSCD Department may be restructured and designated as the dedicated force. Since, the existing responsibilities and capabilities of FSCD may not be adequate in performing as the first responder for disaster management, it may be split into two organisations, 'Disaster Response Department (DRD)' and 'Civil Defence Department (CDD),' where DRD may be placed under MoDMR and CDD may remain part of the Ministry of Home Affairs (MoHA). The proposed DRD will be entirely organised, equipped and trained for managing natural disasters, and the CDD will remain

responsible for fire management and civil defence as per existing practice as mentioned in the War Book of Bangladesh. Figure 5 shows the proposed structure of a Disaster Management Unit under DRD.

Figure 5: Proposed Structure of a DRD Unit



Source: Researcher's construct

(2) The DRD will be comprised of the existing FSCD Department, the members of CPP, and other specialists as necessary, and the units may be organised and equipped on the area-based probability of disasters.

(3) The preparedness of the armed forces may remain as existing, which can be employed by the competent authority for disaster management according to the existing practice as mentioned in the Defence Policy of Bangladesh and In Aid to the Civil Power Act.

(4) A coordination cell may be organised at the district level, including the district's dedicated force and representatives of other stakeholders. Besides, the NEOC should have representatives from all disaster management stakeholders to coordinate with the respective organisation.

(5) MoDMR should prepare a database of disaster management equipment, and procurement of equipment by different organisations should be

centrally controlled by MoDMR. MoDMR should establish a damage assessment cell/organisation.

- b. **Long-Term Recommendations:** A DDRF comprising all stakeholders may be formed in future. The DDRF should be formed based on area-based probability of disasters and responsible for all natural and manmade disasters. A detailed study may be carried out about this.

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Brief Biography



Major Md Faisal Amin, psc, Infantry was born on 26 October 1989 at Khulna. He passed both Secondary School Certificate and Higher Secondary Certificate Examinations from Jhenidah Cadet College. He was commissioned from Bangladesh Military Academy (BMA) with 61 BMA Long Course in the Corps of Infantry on 24 December 2009. He has diverse experience of serving in unit and staff and instructional appointments. He served in the 1st Bangladesh Infantry Regiment at different regimental appointments. As an instructor, he served as Instructor Class ‘B’ of the Tactics Wing in the School of

Infantry and Tactics. As a staff officer, he served in the Armed Forces Division, Prime Minister’s Office, where he experienced dealing with disaster management activities. He was involved in arranging Disaster Response Exercise and Exchange (DREE) in 2021 and 2022, the concept development of Indo-Pacific Regional DREE, and the upgradation Earthquake Management Plan for Dhaka City and attended various seminars and workshops on disaster management both at home and abroad. He has participated in the United Nations Peacekeeping Mission in South Sudan. Presently, he is a Course Member in the Defence Services Command and Staff College Course 2023. He is happily married to Farzana Nargish and blessed with one daughter and one son. His hobbies include travelling and playing.

Socio-Economic Changes in Bangladesh and Impacts on the Functioning of Mid-Level Commanders of the Bangladesh Army

Major Md Al Amin, SUP, psc, Infantry

Abstract

Socio-economic changes encompass the modification of various elements within the social structure. The army, as an integral component of society, is inevitably influenced by the consequences of socio-economic changes. The study attempts to analyse the impacts of socio-economic changes on the functioning of mid-level commanders of the Bangladesh Army. The researcher analysed socio-economic changes in Bangladesh over the past decade and examined their effects on the functioning of mid-level commanders in the Bangladesh Army. This analysis was based on content analysis, primary and secondary data, surveys, focused group discussions, and interview findings. The study shows that socio-economic changes significantly impact the functioning of mid-level commanders in the Army, particularly because of their role in motivating and influencing individuals to achieve mission objectives. In conclusion, the research identifies potential measures that could be implemented by the Bangladesh Army and its mid-level commanders to address the negative impacts of socio-economic changes and take advantage of the opportunities that arise.

Introduction

We live in an era of a globalised society experiencing rapid changes. Bangladesh is also not an exception. The country has been experiencing significant economic growth and development in the past decade. The statistical data provided by the Bangladesh Bureau of Statistics reflects changes in all spheres of our social life, be it education, living, amenities, institutional behaviour, etc. (**Statistics & Informatics Division, 2021**). The development of Bangladesh has had definite impacts on our social system. The change in mindset and attitude of the younger generation is an important factor in social change. Social change also influences moral and religious beliefs, respect for others, work ethics, inclinations towards technology, etc.

The military, being a significant part of society, cannot ignore the changes. The knock-on effects of socio-economic changes are likely to impact military personnel and organizations. It has been appropriately narrated by Ruth Jolly, **‘If the army as an organisation stands still and turns to back the tide of the social changes, they may find themselves suddenly in deep water, floundering’**. Soldiers of the present generation are exposed to the outside world more than ever before. Furthermore, their

family structure has undergone a significant transformation. The soldiers of the current generation are more intelligent and better educated than their predecessors. Access to the internet and social media also influences their perception and behavior. Some or all of these effects of social change require a critical examination. Commanders in the military provide direction, purpose, and motivation. Mid-level commanders are the unit and sub-unit commanders, i.e., officers of the rank of Major and Lieutenant Colonel. In fact, mid-level commanders are directly involved with under-commands to accomplish the organisational mission. The aforementioned social phenomena pose challenges to the functioning of the mid-level commanders of the Bangladesh Army.

At this backdrop, this paper attempts to analyse the socio-economic changes in Bangladesh, focusing on the impacts on mid-level commanders and appropriate measures on negative issues.

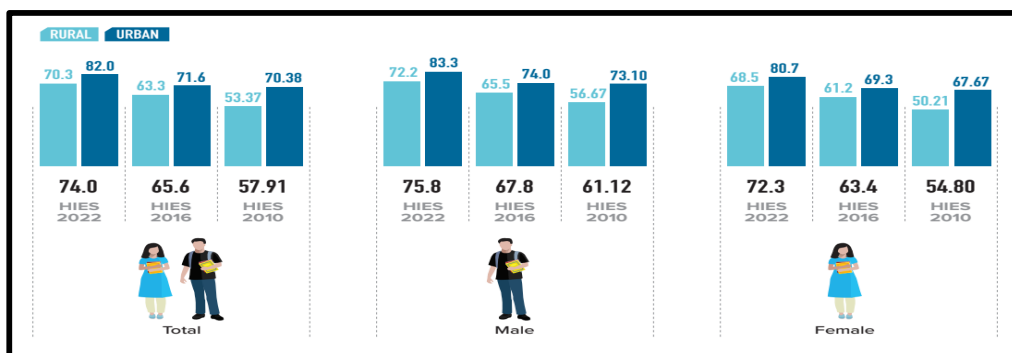
Socio-economic Changes in Bangladesh in the Past Decade

General: Socio-economics, also known as social economics, is a broad term that encompasses various applications. Social economics is the application of economic principles to the analysis of societal phenomena. Bangladesh, like numerous other societies around the globe, has experienced significant socio-economic changes in recent years (**Alamgir, 2023**). A few mentionable fields of socio-economic development are discussed in subsequent paragraphs.

Economic Development: Recent economic expansion in Bangladesh is emblematic of the country's socio-economic transformation. The Gross Domestic Product of Bangladesh has **grown by 7.1 percent** in the fiscal year 2022-2023. Besides, the country has made remarkable progress in poverty reduction, relying on its demographic dividend, RMG exports, and strong macroeconomic conditions. Eventually, **poverty declined from 13.47 in 2016 to 10.44 in 2022** (using the international poverty line of \$2.15). This economic development has significantly influenced people's lifestyles, aspirations, and attitudes, as well as the socio-economic fiber.

Educational Change: Advancement in education is another significant socio-economic development in Bangladesh. The preliminary report of the "Population and Housing Census 2022" indicates that the literacy rate in Bangladesh has increased from **51.77 percent** in the 2011 census to **74.66 percent (The Daily Star, 2022)**. Significantly, the adult women literacy rate has increased to 72.82% in 2022 from 54.24% in 2012 (**World Bank, 2023**). The following data illustrates the steady increase in the literacy rate in Bangladesh.

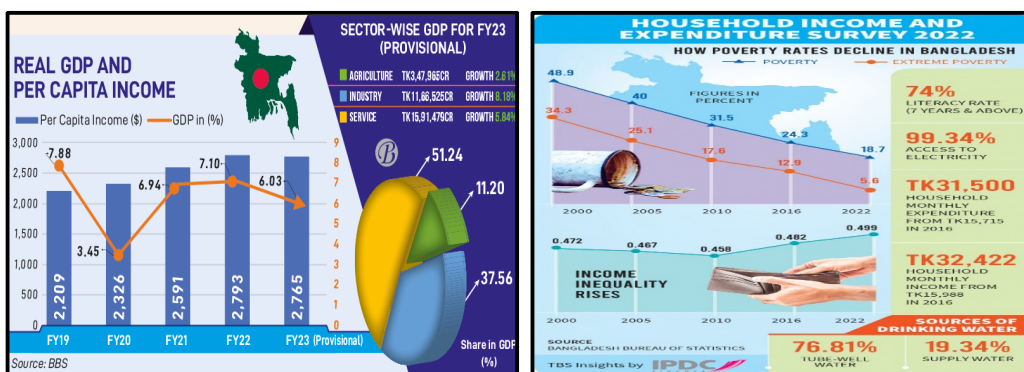
Figure-1: Progressive Growth in Literacy Rate in Bangladesh



Source: Household Income and Expenditure Survey 2022

Change in Lifestyle and Living: The socio-economic transformation has eventually led to improved lifestyles and living standards. Economic development has elevated people's financial capacity and affordability, leading to higher standards of life and consumption (Ahamed, 2023). An increase in average life expectancy, a decrease in child and maternal death cases, and an increase in literacy rates, as depicted in Figure 2.7, indicate the overall changes in living standards (BBS, 2022). Exposure to the internet and improved connectivity impact people's eating habits, clothing, and even choices, resulting in lifestyle changes. Tourism spending in Bangladesh has risen from US\$ 100 million in 2012 to US\$ 391 million in 2019 (World Bank, 2023).

Figure-2: Per Capita Income of Bangladesh



Source: Statistical Year Book 2022

Media Influence: There has been a remarkable change in Bangladesh's media landscape. Society is now highly moved and influenced by media. Bangladesh's media sector comprises 45 privately owned TV channels, 28 FM radio stations, 32 community radio stations, 1,248 daily newspapers, and over 100 online news portals. Simultaneously, participants acknowledged the increasing inclination towards digital

platforms, including websites and social media platforms, as a primary source for accessing informational content (USAID, 2022).

Table-1: Sources of Information to remain updated

All Respondents	First Mention	Other Mentions	Total Mentions
Television	46.6%	24.9%	71.5%
Internet	33.1%	23.3%	56.4%
Social Media Platform	8.6%	19.5%	28.1%
Newspaper and Magazines	2.9%	13.3%	16.2%
Word of Mouth	2.7%	7.5%	10.2%
Radio	2.3%	13.3%	15.6%

Source: Secondary Source (USAID, 2022)

Changes in Family Pattern: The traditional family structures in Bangladesh are undergoing significant changes, resulting in a rapid transformation of the Bangladeshi family. Nuclear families have supplanted joint families, with fathers adopting a more relaxed and carefree approach as heads of households, while working mothers have replaced stay-at-home mothers. About 10.47% of the households in HIES 2022, reported migration either within the country or abroad. Among them, 2.25% of households reported migration within the country, and 8.33% reported migrating abroad (BBS, 2022). On the other hand, the number of applications for divorce has increased by 34% in the past seven years (The Economist, 2019).

Impacts of Socio-Economic Changes in Bangladesh

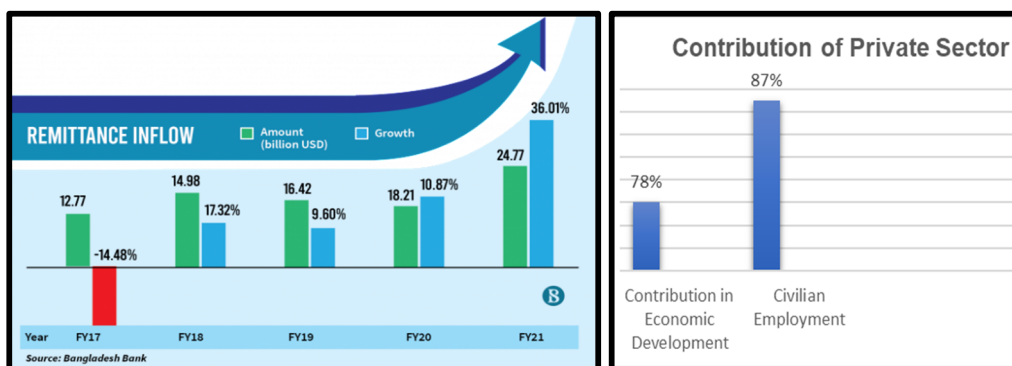
General: The socio-economic fabric of Bangladesh is consistently transforming. Any change within society will have a definite impact on its citizens or any organisation within it (Rashid, 2021).

Changes in Values and Ethical Beliefs: As society changes, so do people's ideals, beliefs, and attitudes. Changes in the economy and society lead to openness in thought and make people more aware, which leads to changes in work ethics, culture, and gender relations (Sajed, 2023). Contrary to this, socio-economic change also has negative influences. Extensive engagement with mobile devices, the internet, social media, and cable television has contributed to the erosion of moral values, causing individuals to deviate from their regular routines.

Rise of Corruption: Corruption has affected all aspects of the nation's existence. According to Transparency International's Global Corruption Perception Index 2022, Bangladesh was ranked **12th out of 180** countries worldwide and second in South Asia in terms of corruption (**The Business Standard, 2023**). Corruption not only hurts people's rights, leads to crime, and makes people feel frustrated, unhappy, and unsafe but also affects the discipline of the members of any organisation and their cognitive dissonance.

Increased Job Opportunities: Economic growth, educational change, industrial expansion, etc, have considerably improved job options. People used to rely on government work because there were fewer prospects in the private sector even a decade ago. However, the situation has now completely flipped since the private sector offers superior pay and benefits, including higher education and permanent relocation abroad (**Zaved, 2023**). Increased labour demand in the Middle East, as well as easy migration options, have increased opportunities and the flow of remittance in the country (**Bangladesh Bank, 2021**).

Figure-3: Increased Job Opportunities



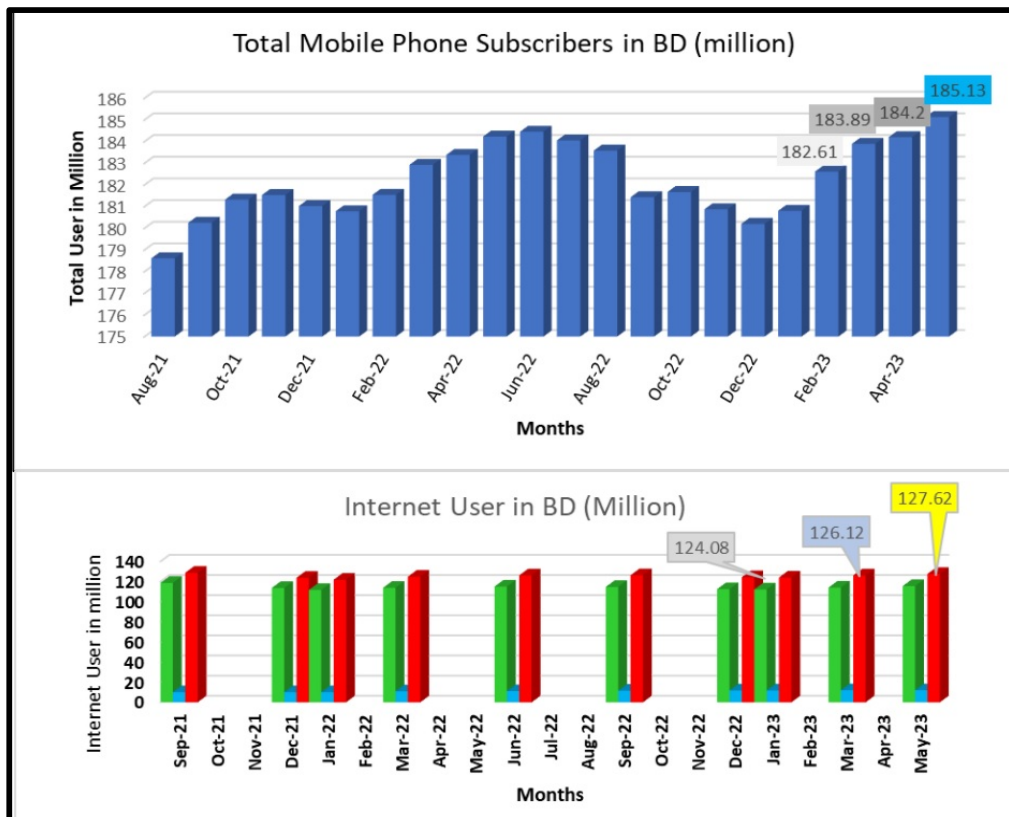
Source: Bangladesh Bank and UNDP

Reduced Social Tie and Family Bonding: Societal norms are diminishing due to socio-economic changes, such as increased shifts in family patterns and the influence of the internet and social media. In contemporary times, the traditional dynamics of family life have been disrupted and diminished by our excessively mechanised way of living. Regrettably, the prevalence of screen time has supplanted quality family time in contemporary society (**Iqbal, The Financial Express, 2021**). Furthermore, the rate of divorce rose to 1.4 in 2022, compared to 0.7 for every 1,000 people in 2021 (Bangladesh Bureau of Statistics, 2023). As a result, compromised social ties and family bonding affect interpersonal relationships among members of organisations such as the Army.

Cultural Globalisation: Satellite television, electronic and print media, contact with people from other countries, movies, and the internet all contribute to cultural globalisation, influencing norms and behavior. Cultural Globalisation widens someone's vision and increases awareness. However, the negative effects, on the other hand, directly affect our social, family, and religious values. The deterioration is evident in the weakening of familial bonds and the inadequacy of educational and social institutions in guiding youths.

Internet-Based Perception: The internet has changed how individuals behave in real and virtual worlds (**Mashihur, 2023**). As the internet becomes part of daily life, people customise their digital identities to reflect their values. This online perspective can create a gap between one's online and offline selves. The internet's obscurity and distance might sometimes cause people to act differently than in person. Currently, in Bangladesh, 89.9% of individuals use mobile phones, and 44.5% use the Internet (**Bangladesh Bureau of Statistics, 2023**).

Figure-4: State of Mobile Phone and Internet Users in Bangladesh



Source: Internet Users Statistics, 2023

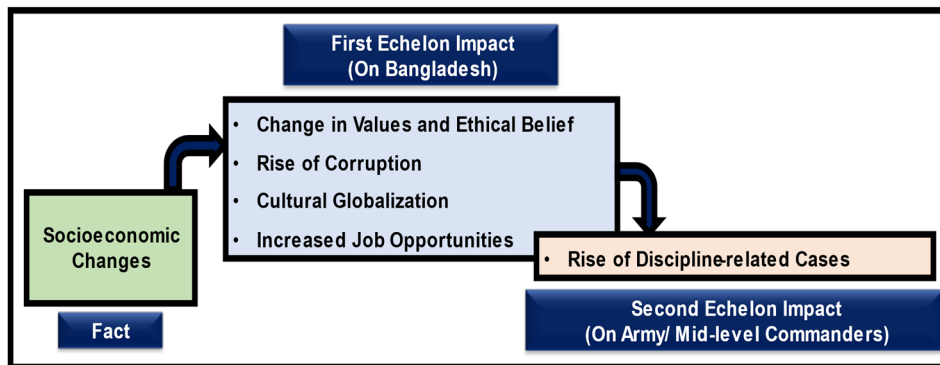
Impacts of Socio-Economic Changes on the Functioning of Mid-Level Commanders

General: The army is not separate from society. As such, the army is also affected by the socio-economic changes that are occurring. Mid-level commanders, who deal directly with their subordinates, are one of the key areas where socio-economic changes affect military institutions. There are both negative (challenges) and positive (opportunities) impacts associated with socio-economic changes.

Negative Impacts of Socio-Economic Changes on Mid-Level Commanders.

- a. **Discipline-Related Challenge:** Mid-level commanders are responsible for overseeing the discipline of their subordinates, which has become increasingly challenging due to a rise in disciplinary cases. In the past decade, the Bangladesh Army has seen an increase in drug-related, monetary misappropriation, and extramarital affair-related disciplinary cases. These phenomena are a result of the influence of socio-economic changes, such as changes in values and ethical beliefs, the rise of corruption, and exposure to social evils etc.

Figure-5: Discipline-Related Challenge



Source: Researcher's Own Construct

- b. **Cognitive Dissonance:** A soldier may experience cognitive dissonance when examining what he has learned in the army. Because in some instances, what he learned to be incorrect is extensively practiced in the real world. This may happen due to changes in values and ethical beliefs, the rise of corruption in society, and cultural globalisation, making it difficult for level commanders to deal with.

- c. **Degradation in Military Values and Ethos:** Being part of societal change, nowadays, soldiers are much more aware of individual benefits rather than responsibilities. Some soldiers lack a commitment to military values such as

loyalty, discipline, and courage, instead merely displaying superficial conformity through their outward actions (Zaved, 2023). An increase in offenses like extramarital affairs, family disharmony, drug abuse, and stealing bears testimony to the decline of military values and ethos.

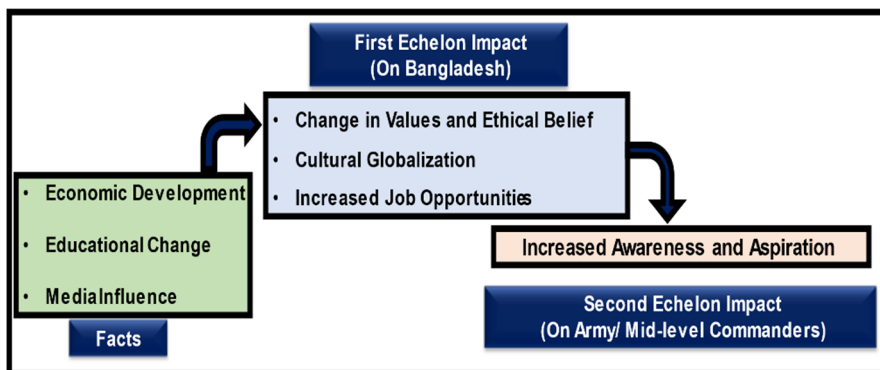
d. Aspiration Versus Expectation-Reality Conflict: Educational advancement, economic growth, internet-based perception, cultural globalization and heightened awareness have all contributed to a rise in aspiration in all spheres of society. However, military members live a challenging, exhausting, and arduous life. Because of traditional needs, he needs a regimented life. His appetite for esteem is not completely answered if he stays in such a formatted life. Knowing the environment around him is likely to suffer from expectation-reality conflict; thus, his devotion to duty may suffer.

e. Decline in Interpersonal Relationships: Today, citizens of society and organisations are linked virtually, but they are disconnected physically (Asif, 2023). The effects of socio-economic change on individual behavior, such as individualism, diminished social ties and family bonding, and over-dependency on the internet, contribute to the deterioration of interpersonal relationships in the Army.

Positive Impacts of Socio-Economic Changes on Mid-Level Commanders.

a. Increased Awareness and Aspiration: Currently, soldiers are more aware and knowledgeable of their surroundings. It makes them more professional, allowing them to carry out their duties more efficiently. Again, socio-economic changes and connectivity have increased people's aspirations on a variety of issues, which may inspire them to be more serious about pursuing their careers and to avoid any undesirable behaviour that may hinder their or their family's aspiration for a better life.

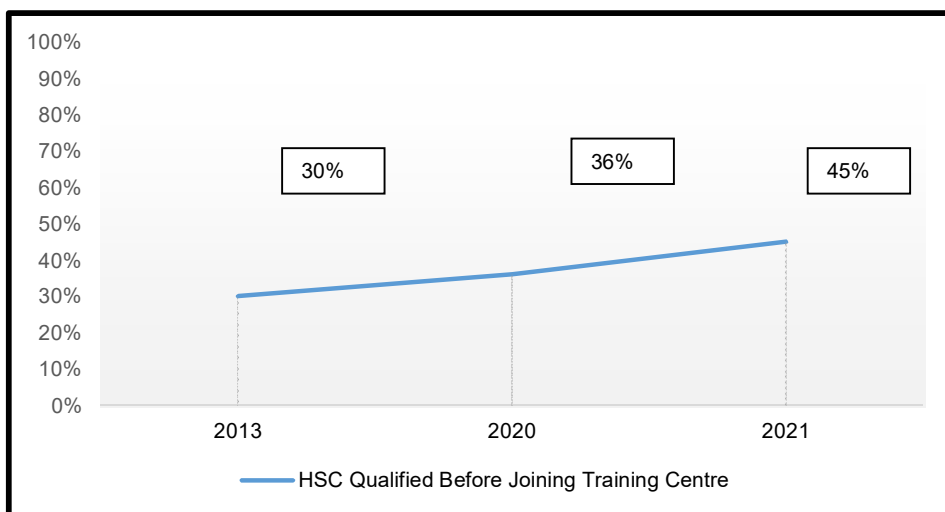
Figure-6: Increased Awareness and Aspiration



Source: Researcher's Own Construct

b. **Quality Intake and Better Uptake:** Today we have soldiers with better educational qualifications and uptake. The socio-economic perspective has played a significant role behind the screen. According to data provided by various centres, there is a sharp change in the educational background of the recruits selected for training.

Figure-7: State of HSC Qualified Recruits Before Joining Training Centre



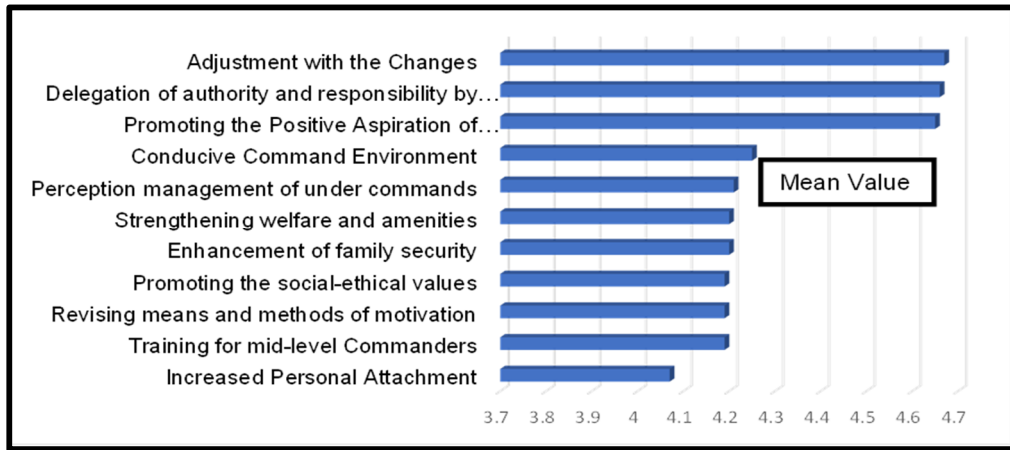
Source: Secondary Data (Haque, 2022)

c. **Drive for Education and Better Living:** Now-a-days, many troops aspire to have higher education while also leading a normal and decent life. This has a favourable impact on the organisation and the leadership's performance. Because positive aspiration leads to positive changes in their mindset, which leads to positive actions, and troops are more likely to be devoted and take the work seriously.

Addressing the Impacts of Socio-Economic Changes on the Functioning of the Mid-Level Commanders

General: Socio-economic changes are realities of the time. It is not practical to go against the tide and ignore the impacts of Socio-economic changes. Rather, it is more advisable to address the impacts of socio-economic developments directly and accommodate them in a manner that will benefit the organisation. The army and commanders must capitalize on positive socio-economic shifts and mitigate their negative effects.

Figure-8: Response on measure to address the negative impacts of socio-economic changes



Source: Survey Questionnaire

Adjustment to the Changes: Socio-economic transformations will persist. Recognizing this fact, the army should strive to embrace these changes positively and employ them to assert their authority. They must be able to comprehend the psyche of their subordinates in the changed environment (**Mashihur, 2023**). The **Duke of Edinburgh**, at the sovereigns' parade of Sandhurst, said, "As you grow older, try not to be afraid of new ideas." Instead of imposing restrictions, allowing things on the basis of merit will yield greater returns. Therefore, mid-level commanders must also adapt to changes to the extent necessary to deal with challenges.

Training for the Mid-Level Commanders: A specialized training module for mid-level officers in the army is necessary. The training should address contemporary issues, extrinsic challenges, and society's pros and cons. Besides, training should include case studies, decision-making exercises, socio-economic seminars, etc. Training is essential for mid-level commanders to effectively navigate the challenges posed by ongoing socio-economic changes.

Promoting the Positive Aspiration of Subordinates: There may be a feedback system in place to better understand the aspirations of present-day soldiers. Options for higher education, capacity building for post-retirement careers, and work and education options for family members may be some of the focus areas in this regard (**Sajed, 2023**). While the army can provide opportunities for higher education and skill development, individual leaders are responsible for identifying the aspirations of subordinates and facilitating their development through appropriate training or employment.

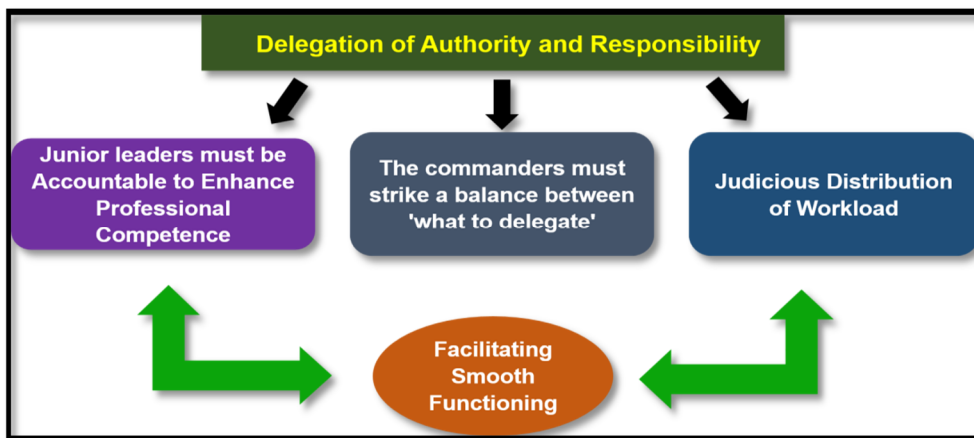
Figure-9: Promoting Positive Aspiration of Subordinated



Source: Researcher's Own Construct

Delegation of Authority and Responsibility: The delegation of authority and responsibility can serve as an effective strategy for mid-level Army commanders to address challenges that are impacted by socio-economic shifts. Junior leaders must be made responsible and held accountable to enhance the professional competence and dedication of young soldiers. However, delegation of authority in the army should not involve legal authority or major decisions.

Figure-10: Flowchart Depicting Delegation of Authority and Responsibility Enable Smooth Functioning of Mid-Level Commanders

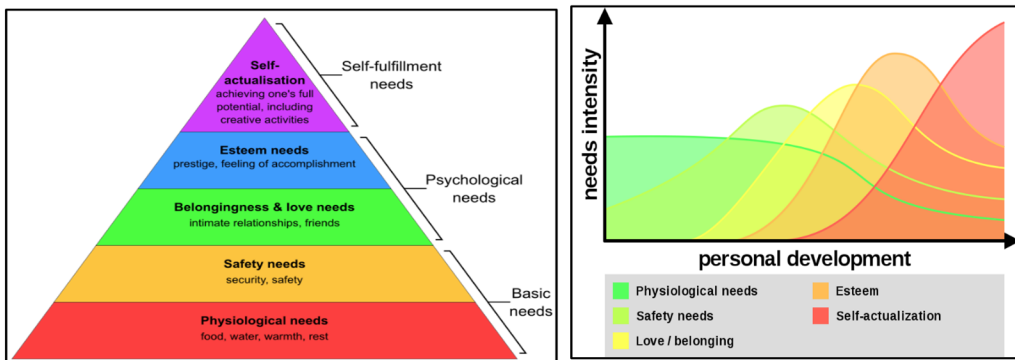


Source: Researcher's Own Construct

Promoting Social-Ethical Values: Social values educate us to respect the older and love the younger members of society, while moral and ethical values teach us the code of behaviour by which to exist in society (Rashid, 2021). Promoting and upholding the social-ethical values among the unit soldiers may enhance basic soldiering qualities like selflessness, honesty and integrity, loyalty, and a positive attitude. Furthermore, certain Army values and traditions must be upheld at all costs. Training, inspiration, and the promotion of regimental spirit can accomplish these goals.

Revising Means and Methods of Motivation: The ability of mid-level commanders to effectively motivate their subordinates is crucial for meeting the challenges posed by societal and economic shifts. Considering the changing societal dynamics, motivation should be based on organizing informal interactive sessions periodically at the unit level with the participation of representatives from all tiers. Maslow's hierarchy of needs is a motivational theory that proposes that an individual's behavior is influenced by five distinct categories of human needs. The ultimate stage is self-actualization, characterized by individuals being intrinsically driven to pursue their personal desires. According to Maslow's theory, it is necessary to fulfill every level of needs in order to effectively motivate team members (Maslow, 1943).

Figure-11: Maslow's Hierarchy of Need



Source: Secondary Date (Maslow, 1943)

Increase Personal Attachment: Powell said, “The day the soldiers stop bringing you their problems is the day you stopped leading them. They have either lost confidence that you can help them or concluded that you do not care. Either case is a failure of leadership” (Powell, May 22, 2012). In this connection, mid-level commanders must increase their attachment to their subordinates. They should be familiar with each individual's strengths, weaknesses, and issues. Besides, they should be more cordial to listen and solve their problem.

Conducive Command Environment: Commanders should ensure a command environment where every member of the unit feels important and is motivated to take responsibility despite the expanse of sacrifice and hardship. In this connection, Former United States Chief of Staff General Edward C Meyer said, “Once I became Chief, I set two personal goals for myself. The first was to ensure that the army was continually prepared to go to war and the second was to create a climate in which each individual member could find personal meaning and fulfillment. It is my belief that only by attainment of the second goal will ensure the first” (Field Manual (FM) 22-100, Army Leadership, 1-17, 1999). Therefore, a conducive command environment ensures a

positive environment in the unit and will encourage everyone to perform their best and act as a motivating factor to serve the organisation.

Strengthening Welfare: Many of the challenges posed by socio-economic changes to the army mid-level commanders can be tackled by enhancing the welfare and amenities of subordinates. The present-day welfare of soldiers is not limited to food, accommodation, etc. only. Instead, he desires a better existence with his family. However, Army's welfare efforts should not be limited to cantonments only but instead, extend to the homes of soldiers stationed in distant areas.

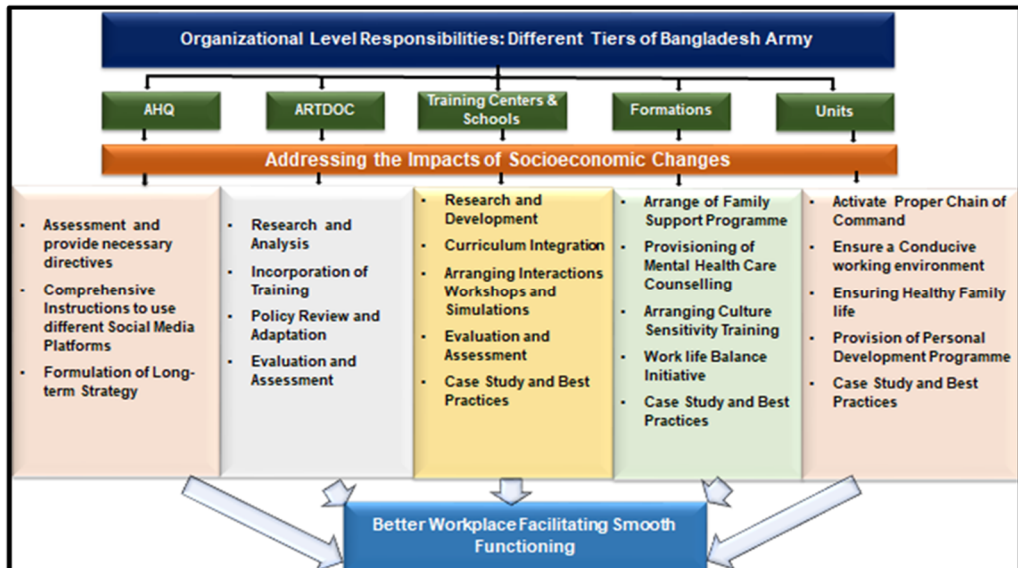
Responsibilities to Address the Impacts of Socio-economic Changes: Addressing the effects of socio-economic changes is the responsibility of both organisational and individual commanders. It is essential to define the activities or responsibilities of individual Commanders and organisations. A holistic approach to address the impacts organisationally would facilitate individual endeavour and mitigate the challenges at the individual level as well. Based on the findings of this research, the responsibilities are outlined in the table below.

Table-2: Responsibility for Addressing the Impacts of Socioeconomic Changes

Ser	Action	Responsibility
1.	Adjustment with changes	Mid-Level Commanders
2.	Training for Mid-Level Commanders	Both Organization and Mid-Level Commanders
3.	Promoting Positive Aspirations of Subordinates	Both Organization and Mid-Level Commanders
4.	Delegation of Authority and Responsibility	Both Organization and Mid-Level Commanders
5.	Promoting Social-Ethical values	Both Organization and Mid-Level Commanders
6.	Revising Means and Methods of Motivation	Both Organization and Mid-Level Commanders
7.	Increased Personal Attachment	Mid-Level Commanders
8.	Conducive Command Environment	Both Organization and Mid-Level Commanders
9.	Strengthening Welfare	Both Organization and Mid-Level Commanders

Source: Researcher's Own Construct

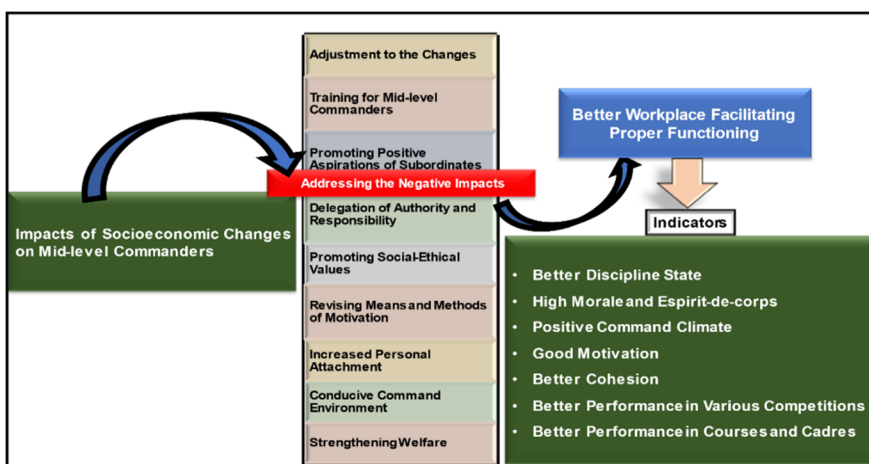
Figure-12: Suggested Roadmap for Different Tiers to Address the Impacts of Socioeconomic Changes



Source: Researcher's Own Construct

Addressing the impacts of socio-economic changes on mid-level commanders is crucial for fostering a congenial working environment. The indicators of a better workplace that were identified through survey results, focused group discussions, and interviews are shown in Figure 13.

Figure-13: Effects of Addressing the Impacts on Mid-Level Commanders



Source: Survey Questionnaire

Conclusions

Bangladesh has undergone significant socio-economic transformations in the last decade. Such transformations have posed a shift in mechanisms in the organisational structure and value system. The Army, as an integral component of society, must not disregard such changes. Therefore, socio-economic changes are expected to have consequential effects on the Army as well. A soldier raised within such a social framework finds himself at odds with the noble dimensions of soldiering. On the other hand, mid-level commanders in the Army are responsible for interpreting the strategies to subordinates and executing the directives of the higher command for the efficient accomplishment of the assigned mission. However, the aforementioned social phenomena are likely to impact the functioning of mid-level commanders.

According to the theoretical perspective of sociology, the dominant factors such as economic growth, educational change, change in lifestyle and living, media influence, change in family patterns, women empowerment, etc. were considered for contemporary reviews. The various dimensions of socio-economic changes occurring in Bangladesh have a reciprocal relationship, influencing one another. For instance, economic development has been observed to have an impact on family patterns and lifestyles. Additionally, educational advancements have been found to contribute to both economic development and the empowerment of women. Furthermore, the media has been shown to exert influence on both lifestyle choices and family patterns. Therefore, socio-economic changes and their causes are not mutually exclusive, but rather form a comprehensive system that leads to overall societal transformations. The socio-economic changes in Bangladesh have a significant impact on individuals and at a macro level, resulting in notable shifts in individual attitudes and beliefs as well as organisational dynamics. The major impacts on society include a change in values and beliefs, increased job opportunities, the rise of corruption, reduced social ties and family bonding, cultural globalisation, internet-based perception and drive for a better life, etc.

The functioning of mid-level commanders in the army is significantly affected by socio-economic changes in Bangladesh. These changes primarily involve shifts in the attitudes of subordinates. While some of these changes present challenges for mid-level commanders, others offer opportunities. Disciplinary cases, including drug-related issues and extramarital affairs, are increasing significantly. Soldiers experience cognitive dissonance when traditional military culture conflicts with evolving real-world practices. Socio-economic changes have led to a decline in military values and ethos, posing challenges for mid-level commanders in instilling these values. Furthermore, the changes lead to heightened aspirations, which can generate conflicts between soldiers' expectations and the reality of military existence. Moreover, the advent of technology had detrimental effects on interpersonal relationships, resulting

in decreased morale and unity. On a positive note, socio-economic changes have led to improvements in the quality of recruits and their motivation for education and better living conditions. There is also an increased awareness and aspiration among soldiers.

It is crucial to take appropriate measures that minimise challenges and maximise potential. Mid-level commanders may undergo specialised training that covers current issues and challenges. Besides, promoting social and ethical values in the military fosters virtues like selflessness, honesty, integrity, loyalty, and a positive attitude, thereby cultivating a positive environment. Moreover, motivation can be augmented through interactive sessions. Additionally, it is important for mid-level commanders to establish strong bonds with their subordinates, allowing them to gain a comprehensive understanding of their unique abilities, limitations, and apprehensions. Creating an inclusive environment that encourages a sense of value and motivation among all members can improve performance and cultivate a positive atmosphere. Mid-level commanders should prioritise these approaches in their day-to-day activities. Additionally, the Army should adopt an institutional approach to effectively implement these measures. A synergistic approach between mid-level commanders and the Army will yield the best results in addressing the impacts of socio-economic changes on mid-level commanders.

Recommendations

Based on the findings of the research, the following recommendations are made to address the impacts of socio-economic changes on mid-level commanders:

- a. Army Training and Doctrine Command in consultation with Military Training Directorate may form a board of officers to suggest specialised training modules for mid-level commanders. The recommended module may be included in the course curriculum of Junior Command and Staff Course.
- b. Military Training Directorate, Army Headquarters may introduce an ethical training package in group training for JCOs, NCOs, and ORs.
- c. Periodically the unit may organise workshops and seminars on the subject with representative participation from all tiers. Such sessions should also focus on changing socio-economic dynamics and their negative effects.

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Brief Biography



Major Md Al Amin, SUP, psc, Infantry was born on 20 November 1990 in Jamalpur. He passed both Secondary School Certificate and Higher Secondary Certificate Examinations from Rangpur Cadet College in 2006 and 2008 respectively. He was commissioned from the Bangladesh Military Academy (BMA) with the 63rd BMA Long Course in the Corps of Infantry on 22 December 2010. Being adjudged the best all-round cadet, he was awarded the coveted 'Sword of Honour'. He also received the 'Dr. Kudrat-I-Khuda Gold Medal' for securing the first position in his Bachelor of Science (pass) degree.

He has diverse experience in service in units, headquarters, and training institutions. He served in two infantry units encompassing various regimental appointments. In pursuit of his unit career, he gained experience serving under OPERATION UTTARON in Ruma garrison (29 Bangladesh Infantry Regiment). Furthermore, he has served as a Platoon Commander in Bangladesh Military Academy and as Private Secretary to Principal Staff Officer of the Armed Forces Division. Apart from the mandatory courses for his professional career, he has completed Potential Platoon Commanders' Course, Basic Paratrooping Course, Rigger Course, Junior Officers' Administration Course, United Nations Staff Officers Course, and Infantry Command Course (Elementary level) in China. He was awarded the Army Medal of Excellence for securing first position in three Army-level courses. He has participated in the United Nations Peacekeeping Mission in Cote d'Ivoire as an adjutant of a contingent. He is a graduate of the Defense Services Command and Staff College, Mirpur. In his Staff Course, he received the Bir Sreshtho Mohiuddin Jahangir Award for the Best Individual Research Paper from the Army Wing. Presently, he is serving as Brigade Major of Headquarters 97 Infantry Brigade deployed under OPERATION UTTARON in Ruma garrison. He is married and blessed with a daughter.

Leading Generation Z Officers: Challenges and Ways Forward

Major Redwan Abyaz, psc, Infantry

Abstract

The integration of Generation Z (Gen Z) officers into the military landscape presents a dynamic challenge in leadership within the context of the Bangladesh Army (BA). The research explores the challenges and strategies associated with effectively leading Gen Z officers. With Gen Z officers entering the workforce alongside Generation X and Y counterparts, a distinct generational gap emerges, requiring nuanced leadership approaches. Gen Z officers bring unique traits such as intelligence, innovation, and technological proficiency, and also exhibit characteristics like intolerance shaped by evolving societal norms. Their preference for work-life balance and flexible arrangements further distinguishes their expectations within the military context. The challenges of leading Gen Z officers are multifaceted, encompassing disparities in teamwork, adherence to established practices, and soldier connectivity. Perceptions from senior generations reveal additional hurdles, including reduced mental resilience and detachment from regimental values. Effective leadership strategies are essential to bridge this generational gap. An organizational approach is advocated, emphasizing roles in organizational, operational level, and direct level leadership, as well as followership responsibilities. The study finds that by promoting work-life balance, fostering effective command climates, and enhancing interpersonal communication, leaders can cultivate an environment conducive to success. Validation of proposed strategies underscores the importance of followership responsibility in fostering cohesion within the Bangladesh Army (BA). Recommendations, including army-level projects and targeted training modules, further support effective leadership practices. Finally, the research concludes the necessity of aligning leadership approaches with the unique attributes of Gen Z officers to ensure harmony and productivity within the BA. By understanding and addressing generational dynamics, leaders can cultivate a resilient and adaptable military force capable of meeting contemporary challenges.

Introduction

With the addition of Gen Z officers, the BA now boasts a workforce characterized by the presence of three distinct generations. Each generation, including Gen Z, possesses

its own unique characteristics. This development has raised questions about how to effectively lead Gen Z officers within the military. To clarify the generational categories: those born between 1965 and 1980 belong to Generation X, individuals born from 1981 to 1996 are part of the Millennial Generation, or Generation Y, and those born from 1997 to 2012 make up Gen Z¹.

Effective leadership in the military encompasses the ability to inspire, guide, and influence a team of diverse individuals toward the successful accomplishment of mission². Effective military leaders exhibit adaptability, resilience, accountability, and an unwavering commitment to the values and principles of the armed forces, ultimately ensuring the readiness and effectiveness of their unit in often challenging and dynamic environments³.

Leading Gen Z officers in the BA demands a distinct approach due to several factors. To begin, this generation's upbringing amidst rapid technological advancements has made them tech-savvy and accustomed to instant information sharing, sometimes diverging from traditional military communication norms. Effectively leading Gen Z officers entails adapting leadership styles and communication methods, embracing technology, and addressing their unique aspirations while upholding the military's core mission and values.

Aim

The aim of this article is to identify the characteristics, workplace traits, and challenges associated with Gen Z officers, with a view to suggesting leadership approaches to effectively lead them.

Understanding the Characteristics of Gen Z Officers

Social changes play a pivotal role in shaping the attitudes of a generation. These changes also impact the customs, practices, and overall work environment within units. Gen Z officers are observed to hold notably different opinions and perspectives regarding their profession and way of life⁴.

Figure-1: Characteristics of Gen Z Officers



Source: Author's self-construct

- a. **Intelligent:** Growing up in the digital age with access to vast amounts of information and technology, Gen Z has developed strong cognitive abilities and adaptability. Survey results indicate that 52.67% of respondents strongly agreed that Gen Z officers are intelligent.
- b. **Enthusiastic and Innovative:** Gen Z officers are often described as enthusiastic and innovative. They bring a fresh perspective and a high level of energy to their work. However, there are instances, where Commanding Officers (COs) may need to invest additional effort in helping Gen Z officers, understand the purpose of the task at hand.
- c. **Multitasker:** Gen Z officers are often recognised for their multitasking abilities. Gen Z officers can efficiently switch between different responsibilities, staff appointments in the units, and effectively prioritize their workload.
- d. **Technologically Proficient:** The widespread adoption of digital technologies has enabled Gen Z officers to develop a high level of technological proficiency. Gen Z officers consider technology to be an essential part of their daily lives.
- e. **Self-serving:** While Gen Z officers are often perceived as more materialistic compared to their predecessors, they themselves view their materialistic mentality as reasonable rather than severe. However, officers from Gen Y have opined on the perception of increased materialism among the younger officers.

Workplace Traits of Gen Z Officers

Workplace traits, also known as work-related traits, refer to the specific qualities, behaviours, and skills that individuals exhibit in a professional setting. In the context of the BA, understanding the unique workplace traits of its Gen Z officers has become a matter of utmost importance.

Figure-2: Workplace Traits of Gen Z Officers



Source: Author's self-construct

- a. **Level of Commitment:** Younger generations globally prioritize personal well-being and work-life balance⁵. While Gen Z shows commitment, there is a decline due to factors like career confusion, administrative tasks replacing service-oriented roles.
- b. **As a Team Member:** While older generations in the workplace tend to value teamwork and working towards a common goal, Gen Z officers often prefer to work independently. They sometimes struggle to fully embrace the spirit of team membership.
- c. **Work Standard:** Gen Z officers display commendable work standards. They demonstrate satisfactory proficiency as staff officers, showcasing their abilities in tasks such as preparing presentations and delivering oral briefs⁶.

d. **Level of Loyalty:** Senior generations in the work are loyal as they have strong work ethics. On the contrary, the younger generations do not like a chain of command, rather want to be self-commanded⁷.

e. **Connectivity with Soldiers:** Gen Z officers are more self-centric and objective oriented who prefer discrete lifestyles and isolation. However, Gen Z officers claim that the increased commitment within their units is attributed to a sense of detachment or aloofness from under commands⁸.

Analysis of Survey Results

Although most of the characteristics and workplace traits were found to be significant through one-sample statistical analysis, a few were also found to be insignificant.

Table-1: Survey Analysis of Gen Z Officers' Characteristics

One-Sample Statistics-1					
Characteristics of Gen Z	Mean	Standard Deviation	Mode	Mode Value	Remarks
Intelligent	4.54	.664	4	Agree	Significant
Enthusiastic and Innovative	4.64	.839	4	Agree	Significant
Multitasker	4.40	.898	4	Agree	Significant
Technologically proficient	4.95	.544	5	Strongly Agree	Significant
Intolerant Attitude	*	.	.	.	Not Significant
Less Patriotic	**	.	.	.	Not Significant
Self-serving	4.46	.674	4	Agree	Significant
Ambitious	4.63	.483	4	Agree	Significant

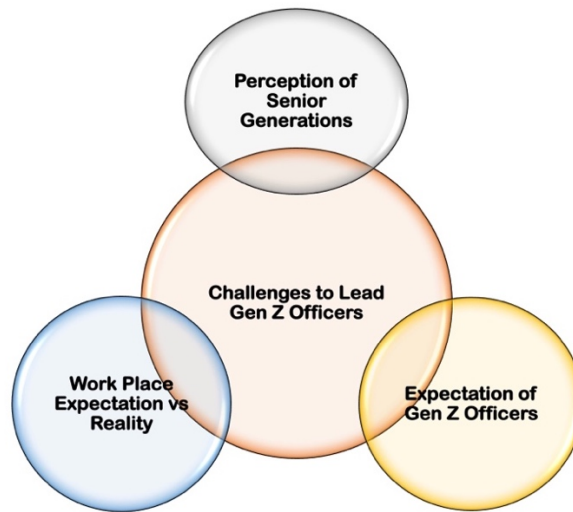
Table-2: Survey Analysis of Work Place Traits of Gen Z Officers

One-Sample Statistics-2					
Work Place Traits of Gen Z	Mean	Standard Deviation	Mode	Mode Value	Remarks
Level of Commitment	4.70	.818	4	Poor	Significant
As a team Member	4.01	.792	4	Poor	Significant
Work Standard	3.42	.640	3	Satisfactory	Significant
Level of loyalty	4.33	.727	4	Poor	Significant
Respectfulness towards Senior	4.35	.746	4	Poor	Significant
Adherence to best Practices	**	.	.	.	Not Significant
Connectivity with Soldiers	4.58	.782	4	Poor	Significant

Challenges to Lead Gen Z Officers

The differences in expectations and perspectives between senior generations and Gen Z officers present significant challenges in effectively leading and harnessing the full potential of this new generation. In order to analyse the challenges, a comprehensive understanding of the perceptions of senior generations, expectation of Gen Z officers, and the disparity in workplace expectations and realities between generational groups is crucial.

Figure-3: Challenges to Lead Gen Z Officers



Source: Author's self-construct

- a. **Reduced Mental Robustness:** Gen Z officers face challenges related to reduced mental resilience, including a lack of endurance to work long hours and meet deadlines. In certain instances, it has been noted that Gen Z officers may display emotional responses when their requests for leave are denied due to exigency of service.
- b. **Intolerant Attitude:** Gen Z officers frequently demonstrate an intolerant attitude, which poses challenges in military settings. Regrettably, some commanding officers have observed a lack of proportional perspective in this regard.
- c. **Tendency to Avoid Hardship:** There are multiple observations from COs suggesting Gen Z officers have this tendency. Attributes like comfort-oriented

culture and fear of failure and judgment can be stated as the root cause of these problems.

d. **Disturbed Personal Life:** A significant number of Gen Z officers face disruptions in their personal lives, which subsequently impact their professional lives. Interestingly, Gen Z officers themselves concur with these findings. The root cause of this issue is attributed to multiple relations or immoral relationships fostered through social media and a perceived decline in morality.

e. **Lack of Reliance on Command and Instruction:** Unlike older generations, Gen Z officers often exhibit a tendency to verify orders and instructions. They frequently confirm the authenticity of commands and compare activities with other units.

f. **Motivation Driven by Materialistic Gains:** It is important to recognise that the motivation of Gen Z officers is not solely driven by materialistic gains. While some Gen Z officers may prioritize materialistic gains, others may prioritise patriotism and selfless service. Research has indicated that Gen Z officers do place a higher emphasis on achieving financial stability and success compared to previous generations.

g. **Change of Mindset towards Life and Service:** Gen Z officers exhibit a distinct mindset towards the military lifestyle and service compared to their predecessors. They often demonstrate a more individualistic and self-centred approach.

h. **Questioning the Rationale of Given Order:** The younger generations in the work are accustomed to questioning authorities, even while respecting it⁹. The acceptance of this notion varies among COs, with some finding it unacceptable while many consider it a normal phenomenon.

j. **Less Adherence to Military Traditions/ Best Practices:** There are some best practices in the army which are very important to preserve the hard-earned reputation of BA. The COs find it challenging to establish an effective command climate in their units due to this characteristic exhibited by the young officers¹⁰.

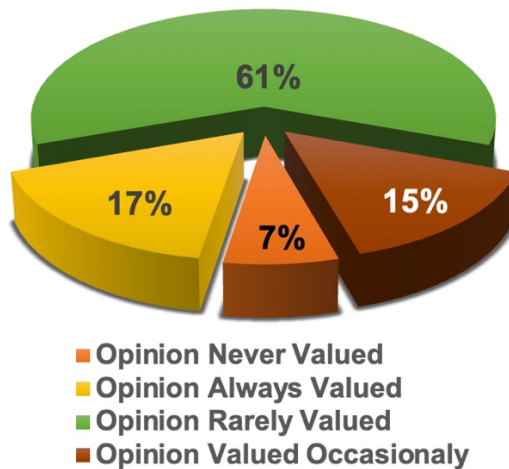
Expectations of Gen Z Officers

Understanding the expectations and disappointments of Gen Z officers is crucial in effectively leading them. It provides insights into the challenges of communication and addressing the generational gap between COs and Gen Z officers. By gaining this understanding, COs can better navigate these challenges and foster effective leadership approaches.

a. **Work-Life Balance:** Gen Z officers prioritize a healthy work-life balance. They place importance on having time for personal interests and overall well-being in addition to their professional commitments¹¹.

b. **Value of Opinion:** Gen Z officers have a strong expectation that their opinions and ideas should be valued. Survey results indicate that 61% of Gen Z officers believe their opinion is rarely valued, 17% believes that their opinion is always valued, and 7% opine that it is never valued.

Figure-4: How often is the opinion of Gen Z officers valued?



Source: Author's self-construct

c. **Autonomous Work Environment:** Gen Z officers have a strong preference to a unit environment that provides them with a sense of freedom. Research findings suggest that the perception of Gen Z officers being over-supervised is partially attributed to the zero-error syndrome.

d. **Job Satisfaction:** Job satisfaction among Gen Z officers, as indicated by the survey results, shows a varied range of responses. Among respondents of survey, 65% reported being moderately satisfied, while 7% was not satisfied with their jobs. Notably, dissatisfaction was primarily attributed to the attitude of seniors, accounting for 68% of the responses.

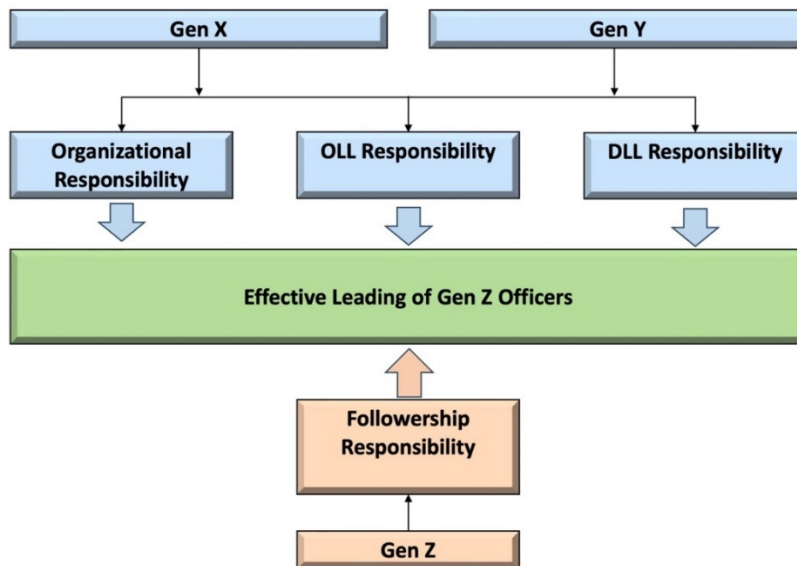
e. **Expectation vs Reality:** It is not accurate to say that the motivation of Gen Z has a lack of commitment. Many are way more committed; however, it is identified that commitment is decreasing among Gen Z officers. They joined the army to serve the nation instead they are mostly busy with administrative jobs, and event management¹².

Ways to Lead Gen Z Officers Effectively

Multi-pronged Approach

To lead Gen Z officers effectively, a comprehensive approach encompassing various aspects is essential. This includes an organizational responsibility, responsibilities of Organizational Level Leaders (OLL), Direct Level Leaders (DLL), and the responsibilities of followership¹³. While the BA creates a supportive environment to facilitate this transformation, leadership responsibilities entail appropriate actions from the Generation X and Y cohorts. Additionally, followership responsibility requires proactive engagement from Gen Z officers themselves.

Figure-5: Ways to Lead Gen Z Officers Effectively



Source: Prepared by researcher following 55 Division Model

Organizational Responsibility

Certain conditions can only be created by the organization. Both OLLs and DLLs can fulfil their responsibilities effectively if the BA sets the tone for leading Gen Z officers effectively. Necessary steps may be taken by the Army Headquarters (AHQ) to raise general awareness on this matter.

- a. **Bridging the Generational Gap:** Because of evident variations in upbringing and perspectives, distinct generations often hold differing outlooks on both life and profession. This is clearly exemplified in the survey results where 70% of Gen Z officers and 69% of senior generation officers strongly concur that a generational gap exists and influences the workplace ambience.

b. **Work-life Balance:** A disparity between anticipation and actuality exists within the mindset of Gen Z officers. Regrettably, their perception of senior officers not emphasizing this equilibrium holds some truth. Given this scenario, it is imperative for the BA to advocate for work-life balance across all levels.

OLL Responsibility

“Leaders who exercise leadership through subordinate leaders and are responsible for leading the various organizations that make up the larger organization are described as organizational level leaders. Organizational leaders are responsible for communicating intent two echelons down and understanding intent two echelons up”¹⁴.

In the context of the BA, division and brigade commanders wield authority over units under their command through CO/OCs.

a. **Promoting Honor and Pride:** Some tasks within the units, such as organizing events like Pohela Boishakh, National Days, engaging in sports, and participating in training competitions, might not be taken very sportingly by Gen Z officers¹⁵. To address this mindset, consistent motivation from leadership is essential.

b. **Improved Lifestyle:** Offering junior officers an improved life within the military environment serves a dual purpose of benefiting the organization. A significant portion of officers has expressed the need for improved living conditions in the officer's mess.

Figure-6: Improved Lifestyle Construct



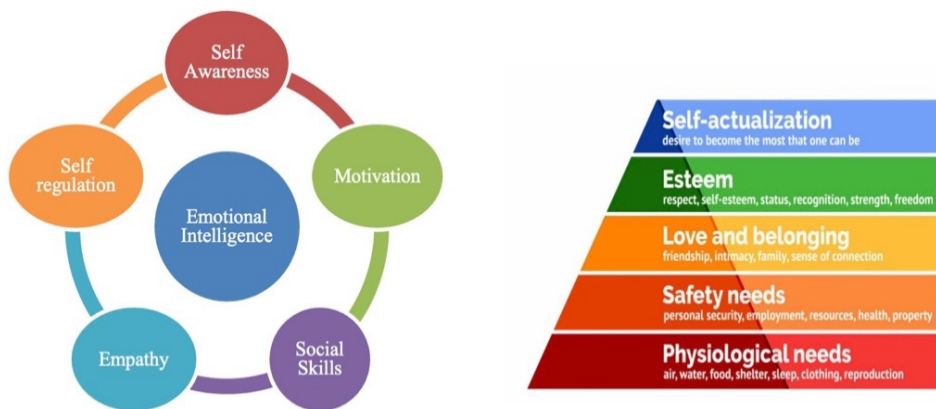
Source: Author's self-construct

DLL Responsibility

Direct leadership primarily occurs in face-to-face interactions, particularly within the first line of leadership up to battalion level. DLLs possess a significant ability to influence junior officers, using their charisma to inspire and motivate. Leadership modules with an emphasis on the following aspects may be added to the curriculum of the Defense Services Command and Staff College and Unit Leadership Training to enable DLLs to effectively lead Gen Z officers.

- a. **Enhanced Interpersonal Communication:** Effective leadership requires creating an environment where Gen Z can voice their thoughts openly, without fear of repercussions. DLLs should place special emphasis on this aspect to lead effectively. Moreover, to lead effectively, DLLs must enhance communication with junior officers to ensure clarity.
- b. **Leading with Emotional Intelligence:** Emotional intelligence encompasses the ability to recognize, and express one's emotions while effectively handling relationships with empathy and wisdom¹⁶. Emotional intelligence empowers DLLs to forge strong connections with their Gen Z officers by engaging with their emotions. Gen Z officers often prioritize higher-order needs on Maslow's hierarchy, and DLLs need to possess emotional intelligence to discern this subtlety¹⁷.

Figure-7: Emotional Intelligence and Maslow's Hierarchical Needs

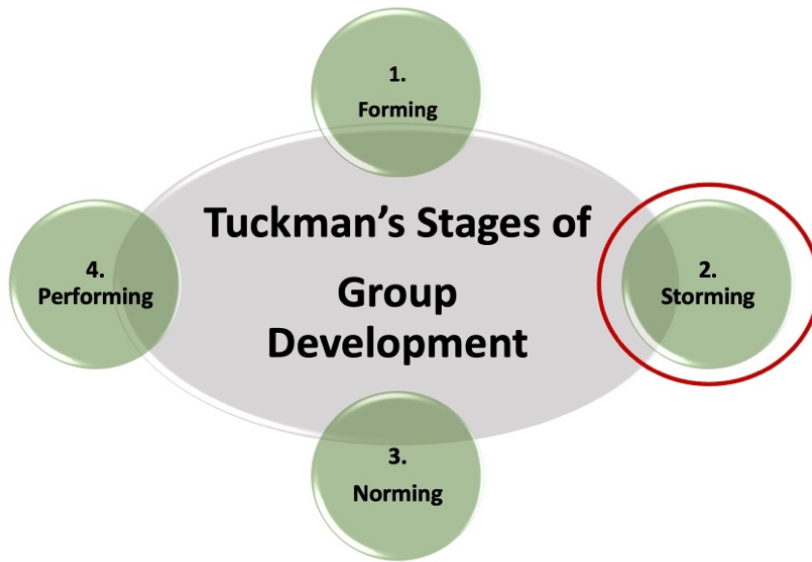


Source: 55 Division 2023

- c. **Shaping and Stimulating the Mindsets:** Effective mentoring and guidance play a pivotal role in shaping and invigorating the mindset of Gen Z officers. Within the BA, the responsibility of mentoring and moulding falls upon DLLs.

d. **Developing Team Spirit:** As an effective approach to leading Gen Z officers, developing team spirit becomes paramount. DLLs are pivotal in this endeavour. **Tuckman's Group Development Theory** serves as an ideal model, particularly in situations where DLLs play a pivotal role, emphasizing the second stage, known as "storming." This stage involves addressing conflicts within the group dynamics and finding effective resolutions.

Figure-8: Tuckman's Stages of Group Development



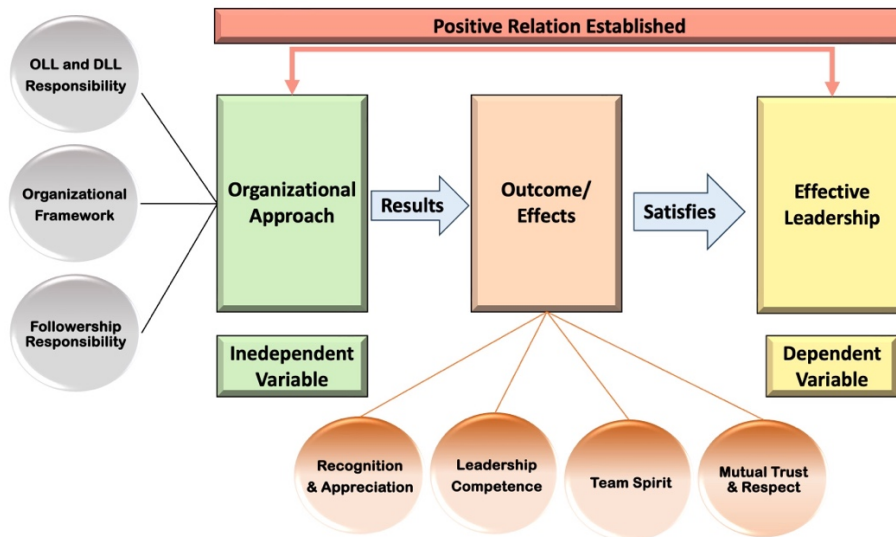
Source: Author's self-construct

e. **Empowering and enabling Gen Z officers:** Empowering junior leaders within the unit emerges as a formidable strategy for DLLs to effectively navigate challenges stemming from the generational gap. By empowering junior leaders with responsibilities, the foundation of established practices is fortified.

Fellowship Responsibility

While senior generations play a crucial role in cultivating an environment conducive to effective leadership, Gen Z officers equally shoulder the responsibility of active engagement. Necessary steps may be taken during the indoctrination period of the Bangladesh Military Academy (BMA) to sow this seed, enabling future Gen Z officers to better connect with senior generations.

Figure-9: Relationship between Organizational Approach and Effective Leadership



Source: Researcher's Own Construct

Conclusion

The emergence of Gen Z officers in the BA has brought forth intricate challenges in effectively leading them. Co-existing with officers from Generation X and Y, Gen Z officers introduce unique characteristics and perspectives. The undeniable generation gap persists among these cohorts. While differing work attitudes exist within each generation, the inclusion of Gen Z officers complicates the task of upholding unit cohesion.

Gen Z officers exhibit unique traits such as intelligence, enthusiasm, innovation, multitasking ability, technological proficiency, and high ambition. These officers prioritize personal well-being and work-life balance, leading to a preference for flexible work arrangements. Their commitment, teamwork, work standards, loyalty, adherence to best practices, and connectivity with soldiers vary.

While Gen Z officers exhibit traits such as intelligence, enthusiasm, and technological proficiency, their workplace traits highlight areas for development. Few challenges found out are reduced mental resilience, intolerance, avoidance of hardship, personal disruptions affecting professionalism, reliance on commands, materialistic motivations, and detachment from regimental values. The identified challenges call for adaptive leadership approaches to address these complexities.

An organizational approach is deemed essential to bridge the generation gap and create a conducive environment for effective leadership. A multi-pronged approach involving organizational, OLL, DLL, and followership responsibilities is needed. Organizational responsibility involves recognizing generational differences and advocating for work-life balance. OLLs are to ensure an effective command climate, promote honour and pride, and improve the lifestyle for officers. DLLs are to enhance interpersonal communication, lead with emotional intelligence, shape mindsets, develop team spirit, and empower Gen Z officers. Gen Z officers, in followership responsibility, are to embrace soldiering as a way of life and forge a connection with the regimental lifestyle.

Recommendations

Based on the findings of this research, following are recommended to lead the Gen Z officers effectively:

- a. Army and division level project study may be conducted on this topic to raise general awareness amongst officers.
- b. The Military Training (MT) directorate may add a sub-module called '**Bridging Generational Gap**' to '**Unit Leadership Training**' for commanding officers, second in commands, and potential commanding officers, focusing on reducing its negative effects and enhancing effective leadership.
- c. A sub-module named "**Effective Leadership**" may be incorporated within the leadership module at the staff college, with a focus on addressing the significance of intergenerational differences within units to enhance effective leadership.
- d. Motivation lectures may be conducted by influential/impactful military guest speakers in BMA on the importance of adherence to followership responsibilities in order fit in seamlessly with senior generations in the BA.

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Brief Biography



Major Redwan Abyaz, psc, Infantry, was born on 18 November 1991 in Jashore. He passed both Secondary School Certificate and Higher Secondary Certificate Examinations from Mirzapur Cadet College. He was commissioned from Bangladesh Military Academy (BMA) on 21 December 2011 with 65 BMA Long Course in the Corps of Infantry and achieved the most prestigious ‘Sword of Honour’. His military career includes service in two infantry battalions in all possible appointments, Aide-de-camp to General Officer Commanding of an infantry

division, and Assistant Director of Special Security Force. Apart from the mandatory courses, he attended the Basic Para Course, Platoon Commanders’ Battle Course (UK) and Advanced Close Protection Operative Course (Poland). In addition, he also served as a Staff Officer in Bangladesh Military Contingent to Kuwait under OKP-6 (Infantry). He has successfully completed Staff Course 2023 in Defence Services Command and Staff College, Mirpur, Dhaka. Currently he is undergoing Army Command and Staff College, Shivapuri, Nepal.

Military Ethics : Transition from Moral Code to Legal Bindings

Group Captain Md Sharif Mustafa, BPP, fawc, psc, GD(P)

Abstract

Ethics, universally accepted and shared words, is an arrangement of our attitudes that defines what is good for the individual, the institution and society. Similarly, military ethics intend to guide members of armed forces to act in a manner consistent with the requirements of combat and military organisation. Such understanding is noteworthy for the members of military institutions as they hold a central position in a state, the protection of the society, or the state itself. Society allows individuals like the military professionals to be trained in managing violence for safeguarding territorial sovereignty and protecting the people. They are also given free licence to apply lethal force and take lives, if needed. Conversely, they are required to behave humanely in treating another airman, or an enemy soldier / wounded warrior in the battlefield or an ordinary citizen/non-combatant whose safety and security are in their hands. The discharge of these responsibilities requires professional mastery which have been transitioned from the moral code to the legal bindings. Today, under the lights of legal bindings, they need to act like a double-edged sword in which one side is effectively lethal and the other side is still life-giving. This paper examines the development of military ethics and its' transition from moral values to the codification of the International Humanitarian Laws (IHL).

Introduction

The way we think about 'right' or 'wrong' is based on our self-beliefs and often governed by ethical obligations of the organisations. This realisation is the key as our actions or behaviours, ethical or unethical, will largely affect the organisations we serve. Traditionally, most of the organisations have an intellectual culture to render public services to the members of the society. However, only a few of those could become professional organisations because they could continuously update themselves through knowledge, experience and training. Medicine, Law and Clergy can be recounted as the first three (03) accepted professions in that sense. These professions, as opposed to the colloquial occupations, are distinguished by their specialised learning process and the unequivocal commitments to provide essential public services for good.¹ More importantly, it is the bonding of sacred trust and confidence between their professionals and clients that define the professions. For example, we rely on the doctors'

prescriptions when sick, count on the lawyers' advice with legal proceedings and depend on the military with national security matters. Such dependency upon these professionals gives rise to the 'ethos' of public services and embodies the inherent values of the parent society.

Like other traditional professions, the '**military**' or the '**profession of arms**', is the ultimate in each of the above/mentioned disciplines and dedicated toward the core public services which is to shield the very existence of the society or defend the sovereignty of a state. All expert personnel of this profession operate within a self-policing guild, uphold their moral codes and put the citizens of the country before themselves. The intrinsic expertise of the military, surfaced from the historic root of the '*Just War Theory*', has coated the profession of arms with '**moral values**' and shielded their professionals with '**ethical armours**'. However, it is the practices of a rigorous 'moral code of conduct' that to show restraint in violence and bloodshed, have qualified the military to be a profession of arms. And it is the 'Military Ethics', largely self-made and self-enforced,² that have guided military professionals to preserve the sanctity of human lives with the skills to destroy the entire civilisation. Such an intricate link between the core moral values of this profession and specialised skills of professionals makes the military unique where the aspiration toward its most salient expertise, maim or killing, would prohibit the aspirant warriors from participating in it.

Over the ages, military ethics practiced by heroic and elite military leaders were influenced by different regimes across philosophical debates and heritages. Since the mid-19th century, the enforcement of meritocratic social system had put a heavy premium on professionals' capabilities as the profession of arms failed to espouse similar contemporary ethos and statecraft of the states. Accordingly, steps were taken to formulate an international legal framework based on centuries of customs, practices and theories for humanitarian agreement in battles. The universal acceptance of the International Humanitarian Law (IHL) has started to espouse more on legal bindings than on the ethical practices during violence and bloodshed. Today, under the lights of the 'Geneva Conventions' and the 'Hague Conventions', the military needs to function as an autonomous arbiter of the international trust profession. In search of better clarity, this paper has attempted to extract the moral code of the military from the historical perspective and surface the present practices of military ethics. A subtle endeavour is made to examine ethical practices transiting to the present legal framework of military ethics to show that these approaches are more distinctive than one might presume.

The Moral Code

The origin of the moral code of the military is not as old as the history of military establishment. As it has been found in history, from caveman to biblical times amid ‘the Stone’ to ‘the Bronze’ to ‘the Iron’ ages, human civilisation evolved through violence and bloodshed. The winner used to take not only the lives of the losers, but also to kill all wounded and innocent people, and their property had been razed. In fact, the concept of humanitarianism did not prevail in those times. Even the ancient religious scriptures such as the Torah (31:1-10), the Old Testament (Deuteronomy 20:1-4), the Bible (31:7~8) and the Bhagavad Gita (BG 2.33) are full of inhumane narrations where believers were asked to kill all the enemies who lived. Records of those ancient battles could also be found in the ‘Bible’ of which much of the ‘Old Testament’ narrated the history of the Jewish nation and its numerous wars. Following verse is an example of inhumane edicts given to the Jewish nation:

“They warred against Midian, as the LORD commanded Moses, and killed every male. They killed the kings of Midian with the rest of their slain, Evi, Rekem, Zur, Hur, and Reba, the five kings of Midian. And they also killed Balaam the son of Beor with the sword.” (The Bible, 31:7~8)³

The subsequent influence of religion and adaptation of shared languages, cultures and customs aimed at humanising social, political and military relationships helped to address humanity in battles on the concept of ‘*Primum non nocere* (first, do no harm)’. The best-known ancient military ‘**code of justice**’ came from the Babylonian king Hammurabi (1792~1750 BCE). He inscribed 282 laws on a stone that imposed the ‘moral codes’ of the military. It is believed that those laws are the historic root of justice for the formulation of present-day IHL/LOAC.⁴

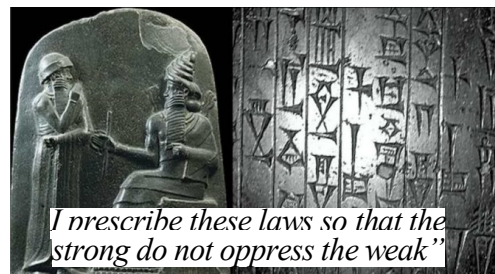
Since the beginning of CE, elite military leaders also reflected the ‘code of disciples’ based on the intellectual directives of Medieval military institutions. The ‘*Art of War*’ written by Sun Tzu in the 5th century was probably the first institutional directives about ‘**code of humane conduct**’ in battle. The great military expert of ancient China used to practice ransom or absorb injured or captured enemy soldiers into his own army’s

Figure-1: The Moral Code



Source: Internet

Figure-2: 1st Written Law



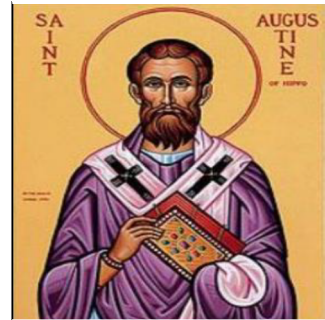
Source: Internet

enslavement instead of slaying them. At the beginning of the Middle Ages, technological invention and cultural developments forced a dramatic transformation in the character of warfare from classical antiquity. Most of the military institutions started to train soldiers through ‘moral/ethical codes’ of the society that humans would care for each other as a positive reflection of humanity.⁵ Gradually, the practices of military ethics mediated through history by distinguishing honourable from dishonourable conduct in battles.

Institutionalising the Moral Code to Theories

Christian faith ‘*thou shalt not kill*’ could be recounted as the first conceptualised paradox of military ethics in warfare. The rise of European Catholic churches and their secularised successors changed the character of the moral code of the military. The disciples of the Christian religion, who had supreme control of state’s politics and military forces, started to avoid fighting as they believed that taking lives would always be sinful and evil to mankind. More importantly, their strong faith in the Bible helped them to treat all humans equally and in turn, took away their hatred or animus against adversaries. There came a revolutionary change on such religious faith when the Roman Empire converted to Christianity in 324 CE. As the Emperor Constantine faced difficulties to form the Christian Army, Saint **Augustine** of Hippo (354~430 AD), one of the great doctors of the Church, came up with a theory to fight justified wars. He could convince disciples of the Latin Churches that war would not be sinful if those were fought for defending citizens or recovery of lands under the proclamation by a legitimate authority such as King or Bishop.⁶ He was influenced by four-fold cardinal virtues (prudence, justice, courage and temperance) of Catholic Church’s concept⁷ and became the progenitor of the ‘**Just War Theory** (*bellum justum*)’.

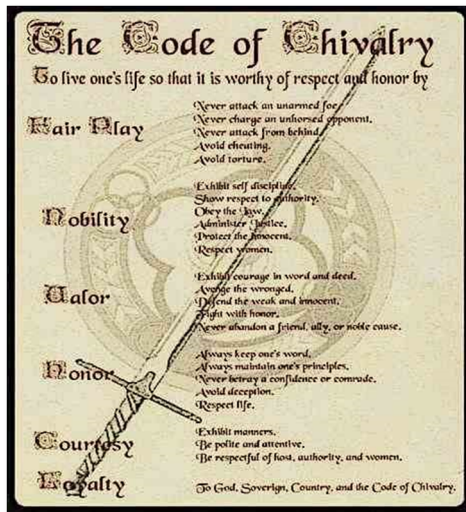
Figure-3: Progenitor of Just War Theory



Source: Internet

Soon, the statecraft of the Roman Empire started to favour religious wars with the paradox of ‘**justification**’ (morally justified before the commencement and morally conducted once launched).⁸ The first part (*jus ad bellum*) has stated the ‘**conditions**’ and the second part (*jus in bello*) has outlined the military ‘**conduct**’. Similarly, the Qur’anic verses exposed the Islamic version of ‘Just War’ theory after 623 CE to guide military institutions in the Arabian Peninsula. In fact, the Islamic Renaissance could infuse supreme ethical behaviours in battlefields across the entire provinces of the Byzantine and Persian Empires in Asia, Africa and Europe. Precariously, Cristian version of the ‘Just War’ theory influenced European societies and the Roman practices of *jus ad bellum* and *jus in bello* became the basis of ‘military ethics’ on compliance of

Figure-4: Code of Chivalry



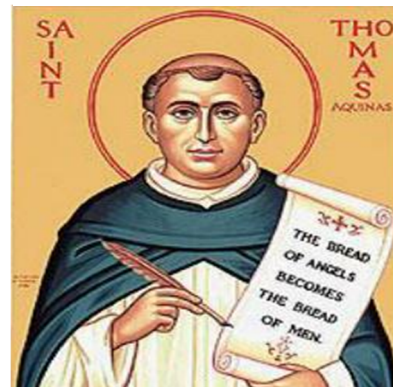
Source: Internet

'justness' and 'rules' rather than on inherent moral values. A series of penitential expeditions to earn forgiveness by European Christians are example of such justness in guise of military crusades (1095~1291 CE).⁹ Though some of the rules, such as the '**Code of Chivalry**', prompted moral values of soldiers during combats, those were only practiced by the knightly class of warriors.

During the high Middle Ages, agricultural and technological innovations allowed societies to embellish, and the founding of universities emphasised philosophical arguments in joining faith to reason. Gradually, rulers' (King or Bishop) decisions to justify war were severely

questioned in the subsequent religious battles as they failed to set the right 'conditions and conduct' for the combatants. Saint Thomas Aquinas (1225~1274 AD), an Italian Dominican theologian, synthesised Augustine's 'Just War' theory and broke it into six (06) clear '**principles**' (right intention, proper authority, last resort, probability of success, beneficial outcome and proportionality) to provide Christian values to the state to act right way in potential conflict situations.¹⁰ As agrarian societies became industrialised, the new novelty further influenced philosophical perceptions suppressing religious beliefs. With the advent of science, new technological marvels and its associated lexicon, such as the use of gunpowder in combat, also started taking the faith of soldiers away from religion. The collapse of the unified Christian civilisation of Europe and the encounter of Europeans with the inhabitants of the New World spurred the need for a less religious and Eurocentric understanding of 'Just War' theory and military ethics.

Figure-5: Thomas Aquinas



Source: Internet

Franciscus de **Vitoria** (1483~1546 AD), a Spanish Theologist, shook the foundation of religious belief and surfaced the spiritual side of Christianity by giving birth to the '**Natural Law Theory** (*ius naturae*)'. He argued that all

Figure-7: Grotius



Source: Internet

rights are natural and contributed to eternal law as these resulted from God's divine wisdom. Successively, Hugo **Grotius** (1583~1645 AD), a Dutch lawyer, combined both '*Natural Law*' and '*Biblical revelations*' and surfaced the '**Natural Law Just War Theory**'. He emphasised on the impulse to restrict the extent of warfare and especially protect the lives of non-combatants in warfare.¹¹ In fact, he espoused '*humane side*' of the 'Just War' theory that later divided believers of Catholic churches between God-centric (Catholic) and mankind-centric (Protestant) leading to 'Thirty Years War' (1618~1648 AD)'.

Formulation of Legal Bindings

The European Enlightenment of the 18th century made a perpetual change in societies and new concepts such as the '**Law of Nations** (*ius gentium*)' and the '**Law of Peoples** (*jus gentium*)' started to influence civilisation. Emmerich de **Vattel** (1714~1767 AD), a diplomat for the king of Saxony, took away the religious belief completely from the 'Just War' theory and proposed a system of laws, rules and treaties for the nation. Industrial renaissance, that encouraged many kingdoms and nations under the Royalty to form new nation-states, also surfaced humane aspects of morality suggesting a desire to limit the negative impact of war. At the beginning of the 19th century, collation of good custom and practices, and then codified to treaties, began universally. At the same time, a legislative foundation exclusively for military warfare started to formulate on the principle of '**agreements must be kept** (*pacta sunt servanda*)'. The treaty of '*Armistice and Regularisation of War*' signed on 26 November 1820 between Colombia and Spain was the first treaty that set new groundbreaking standards of 'mercy' in war away from the policy of 'war to the death'.¹² It aimed to codify protections for all people (soldiers and civilians) affected by war. The treaty focused on *jus ad bellum* and was the precursor of developing today's IHL/LOAC.

Figure-6: Vitoria



Source: Internet

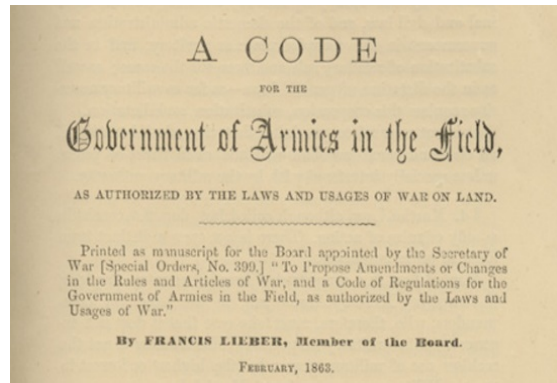
Figure-8: Vattel



Source: Internet

Conversely, the '**1863 Lieber Code**'¹³ was the first attempt to lay down specific military conducts (*jus in bello*) in the battlefield. Francis Lieber, by the order of the President Abraham Lincoln, issued the first state-mandated '**General Order 100**' to the Union Forces on 24 April 1863 during the American Civil War (12 April 1861~09 April 1865).¹⁴ However, the '**1st Geneva Convention**' for '*the Amelioration of the Condition of the Wounded in Armies in the Field*' became the founding text of contemporary

Figure-9: 1863 Lieber Code



Source: Internet

IHL.¹⁵ The convention held on 22 August 1864 largely owed its existence to Jean-Henri Dunant who witnessed the aftermath of the bloody battle between French and Austrian armies in Solferino on 24 June 1859. The Swiss businessman proposed the adaptation of an international treaty in his book '*A Memory of Solferino*' and later created the '**International Committee of the Red Cross (ICRC)**' to provide medical relief in the battlefields. The first convention signed by 13 countries marked a turning point in the ratifying laws and custom of war. Subsequently, the '*Saint Petersburg Declaration* (29 November 1868~11 December 1868)' banned explosive projectiles charged with inflammable substances (>400 grammes weight) to reduce sufferings of soldiers. As the first international treaty failed to bind nation-states, for example unethical military conducts in the Franco-German War of 1870~71, His Majesty, the Emperor of Russia, made a solemn pronouncement to codify 'laws' instead of 'treaties' at the Conference of Brussels on 27 August 1874.¹⁶ Though the proposal was not accepted due to lack of ratification, the idea became a reality in the '**2nd Geneva Convention**' held on 10 December 1884. Meanwhile, the Institute of International Humanitarian Law (IIHL) at Sanremo, Italy entrenched the '**1880 Manual of the Laws and Customs of War**' on 09 September 1880 according to the draft of 'Brussels Declaration'. Later, the '1st International Peace Conference' at The Hague between 18 May 1899 and 29 July 1899 became the foundation to negotiate a series of international treaties and declarations on the basis of the '**Laws of War**'.

The '**1st Hague Convention of 1899**' marked the beginning of formulating the international legal framework (i.e. general international law, IHL, international human rights law and international criminal law) to ensure humanity in both land and naval battles. The preamble of the convention categorically outlined the famous '*de Martens Clause*' for the formation of armed forces and their conduct during a war.¹⁷ It also

espoused the principles of ‘Geneva Convention of 1864’ on maritime warfare (Section III) and permanently banned the use of asphyxiating gases (Declaration II) and expanding bullets (Declaration III) such as ‘Dumdum’ used in the Indian sub-continent which would expand or flatten easily in the human body. Besides, the convention (Declaration I) made ‘**Air Law**’ for the first time to prohibit launching of projectiles and explosives from balloons/zeppelins for five years.¹⁸ The ‘**2nd Hague Convention of 1907**’ ratified more international laws for the humane maritime warfare giving both rights to enemy merchant ships and banning bombardment by naval forces. As destructive potentials of the newly invented ‘*aircraft*’ could not be visualised, the convention did not renew or make new air law, rather kept the same provision (Article 25) governing artillery bombardment and other attacks by land forces.

The value of air power heralded a military revolution that further tested the moral fibre of the military and political leaders. The use of aircraft during the First World War (WWI) gave hope to bring about a more humane resolution in land battles and signalled a divergence from the horrors of trench warfare. Instead, aerial platforms started to cause attrition in the third dimension and exposed nations’ citizenry to indiscriminate destruction away from the battlespace. After the terrible sufferings, destructions and human losses in WWI, most of the nations started to consider that aggressive war would be a crime not only against the immediate victims but against the overall humanity. Thus, the ‘**League of Nations (LON)**’ was established on 10 January 1920 to bring peace and stability under the arrangement of ‘*Treaty of Versailles*’. However, there were no legal bindings in Article 25 (2nd Hague Convention of 1907) to limit the destructive capabilities of the aircraft. On 04 February 1922, the ‘**Washington Conference**’ adopted a resolution to set up an international commission to address international law, especially related to air warfare. Subsequently, consensus could be attained to ratify air law in ‘**The Hague Commission of Jurists**’ held between 11 December 1922 and 12 February 1923, and the ‘**Rules of Air Warfare**’ was adopted to reflect specific conduct (*jus in bello*) related to aerial targeting and indiscriminate bombardment.

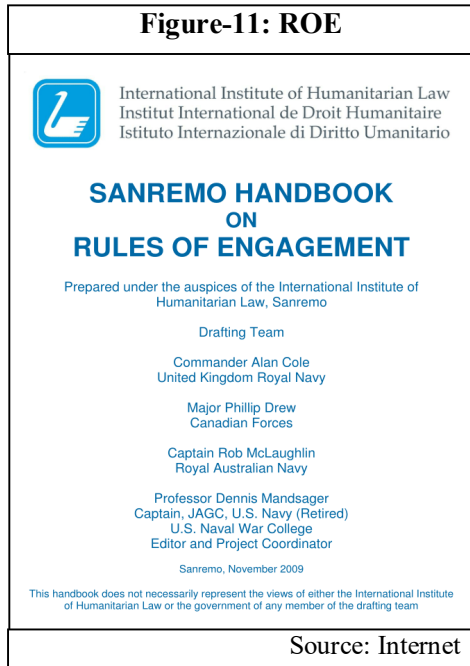
The ‘**3rd Geneva Convention**’ held in 1929 was unique in a sense that it codified a treaty to improve sufferings of prisoners of war (POW) and protect the ‘**Red Crescent** (Islamic version)’ and ‘**Red Lion and Sun**’ (Persian version, presently not in use) humanitarian emblems during war. However, the covenant of LON and newly adopted air rules could neither stop indiscriminate bombings nor bring about a more humane



resolution in treating combatants and non-combatants in subsequent wars. As seen during the Second World War (**WWII**), all previous codified laws and treaties failed to stop unnecessary violence and bloodshed, and even led to the atomic destruction of Hiroshima and Nagasaki. Virtually WWII outweighed humanitarian concern for non-combatants and highlighted the inadequacies of the international laws and its ratification by nation-states. The birth of the United Nations (**UN**) on 24 October 1945, replacing the LON, gave hope to bring international peace and security. The '**4th Geneva Convention**' held between 21 April 1949 and 12 August 1949 adopted four (04) treaties with traditional principles towards humane conduct of warfare. One of the conventions actually restated the principle that POW must be released and repatriated without delay after the cessation of active hostilities. More importantly, IHL was made specific to 'humanitarian purposes in war', paradigm shift from the special law (*lex specialis*) that dealt with only human rights (*lex generalis*). Besides, rights of refugees, peacekeeping missions and international cooperation during disturbances, tension, etc (which were outside the war situations) were defined by the '**UN Charters**' and kept within the framework of 'Peacekeeping Operations' and/or 'Management of Security/Peaceful Settlement of Disputes' among states.

Unfortunately, the 'Cold War' stance between the two superpowers followed by world-wide economic recession, degradation of renewable resources and the repressive political system erupted hostilities between state and non-state actors in different parts of the world. The period between 1950~1976 was full of asymmetric/irregular warfare where IHL was found ineffective to protect the safety of innocent people. For example, the American use of aerial bombardment in support of the South Vietnamese clearly demonstrated the lack of non-combatant immunity. The Diplomatic Conference held on 10 June 1977 for the '*Reaffirmation and Development of IHL*' proposed to distinguish combatants and non-combatants between governmental armed forces and non-state armed groups or between organised armed groups (**OAG**). Accordingly, two Additional Protocols (**AP-I** and **AP-II**) were included in the 'Geneva Conventions' for the classification of International Armed Conflict (**IAC**) and Non-International Armed Conflict (**NIAC**) respectively. As these APs have replaced the word '**War**' with the

Figure-11: ROE



term ‘**Armed Conflict**’, IHL as the ‘Laws of Armed Conflict (**LOAC**)’ becomes applicable to situations of both IAC and NIAC.

The diversity of modern conflicts has become increasingly arbitrary since the end of the Cold War. For example, IHL/LOAC could not be implemented during the 1st Gulf War especially in the maritime environment. The issue was immediately addressed through ‘*Sanremo Manual on International Law Applicable to Armed Conflicts at Sea*’ in 1995 to reflect the best military practices. Since the terrorist attacks of 11 September 2001, many provisions of IHL/LOAC have also been contested and undermined by military actions during the subsequent Global War on Terror (**GWOT**). While the Jews version of ‘*Red Crystal*’ was accepted as a medical emblem, AP-III (Magen David Adom) was adopted to protect Israel's national emergency medical service on 08 December 2005. In 2006, ‘*Sanremo Manual on the Law of NIAC*’ was circulated to replicate better military practices in complex situations especially for irregular warfare. Last, but not the least, a realistic and practical yet comprehensive manual was promulgated in November 2009 about the ‘Rules of Engagement (**ROE**)’ during IAC/NIAC including ‘Self-defence’ applicable. Since then, ‘*Sanremo Handbook on ROE*’ has been used to regulate the conduct of armed forces by individual nations, alliances and coalitions around the world.

Interpretation of Today’s Military Ethics

According to the Article 38(1)(b) of the 1946 Statute of the International Court of Justice (**ICJ**), IHL has been termed as ‘Laws of War’ or LOAC (after 1977) because it is applicable in both conditions (*jus ad bellum*) and conduct (*jus in bello*) of military operations. The codified IHL/LOAC and ROE are the result of the consistent policy objectives and political constraints of the nation-states where the military ethics focus to strike a careful balance between military necessities and the requirements of humanity.¹⁹ Today, if any military force is required to intervene in IAC/NIAC, it must be publicly declared only by a legitimate authority.²⁰ Only then, professional planners or legal advisers will craft the military operations as per the language of ROE and recurring IHL/LOAC. For example, Bangladesh Armed Forces has to follow **Series 100~102** (100: Use of Surface Munitions, 101: Use of Sub-surface Munitions & 102: Air to Air Engagements) of ‘*Sanremo Handbook on ROE*’ to conduct ‘Air Operations’ as we have ratified ‘Geneva Conventions of 1949’ including AP-I and AP-II. Besides, our military professionals/leaders need to adhere to the following principles/rules in both IAC/NIAC:²¹

- a. **Military Necessity:** It is the right of the belligerent to apply any measure to bring about the successful end of a military operation. It validates the concept of *jus ad bellum* of the ‘Just War’ theory and exclusively legitimises ‘*the means used*

to achieve an end state'. An example of this principle was the intervention by India for humanitarian support during the liberation war of Bangladesh.

b. **Distinction:** This principle is concerned with who or what are legitimate targets in IAC/NIAC to achieve military objectives and guides us to distinguish between combatants and civilians, and between civilian and military objectives. It is a cornerstone of *jus in bello*. This principle has forced the US military to adopt 'precision style of warfare' in the Gulf War and subsequent conflicts.

c. **Proportionality:** The principle is concerned with how much force is morally appropriate and dictates the weight of attack/force needed to achieve a legitimate military objective. Thus, this rule prohibits excessive force that may cause incidental injury or loss of civilians and damages. Redefining 'mass into precision' is a perfect example of this principle for air targeting.

d. **Humanity:** The principle describes the prohibition of inflicting suffering, injury or destruction not actually necessary for the accomplishment of legitimate military targets. It has inextricably tied to the distinction and proportionality principles to treat the enemy and innocent parties with dignity and human rights. An example of this principle is the current debate over banning certain non-lethal weaponry such as laser blinding weapons, audio-sonic weapons and chemical/neurological neutralising agents.

e. **Precaution:** This rule is related to the conduct of military operations so that constant care can be taken to spare the lives of civilians and their properties. This rule strongly discourages legitimising accidental non-combatant deaths as 'collateral damage'. This rule is a caution for military professionals so that the operational languages such as 'soft targets', 'double effect', etc can not justify the death or potential death of innocent victims by hiding the reality of action.

f. **Weapon Prohibitions:** This rule prohibits the use of certain weapons that may cause superfluous injury or unnecessary suffering. The convention on banning Cluster Bomb Unit (CBU) is an example of this principle.

As of April 2024, the 'Geneva Conventions of 1949' have been ratified by 196 states, and AP-I, AP-II and AP-III have been ratified by 174, 169 and 78 states respectively. As all nations may not be parties to the IHL/LOAC or have the same interpretations of the law embodied, military professionals must identify these differences for multinational operations. It is the duty of the military professions to adhere to the prescribed principles to reflect on the spirit of military ethics. In the absence of inherent moral consensus or religious beliefs, the legal practices of military professionals would guide political masters in declaring legitimate force, protecting non-combatants and

prohibiting unrestrained violence in IAC/NIAC.²² Henceforth, all military institutions need to educate and train their professionals that impact military operations. These would help to attain a similar legal perspective and guide us not only in military operations, but across a broad range of domains, including diplomacy, UN missions and human rights.

Findings and Recommendations

Today's military ethics is far from the moral code of the profession of arms and legally binds all nations to moderate military operations. As all nations are not parties to IHL/LOAC or have the same interpretations of the law embodied, they must educate and train their military professionals with the provisions of international laws. As military ethics set standards of professional expertise, henceforth:

- a. All members of the military must be trained on the inherent values of the parent society and provisions of international laws that impact military operations.
- b. All military institutions are obliged to educate and train their professionals with the legal framework of IHL/LOAC and ROE.
- c. All military institutions need to closely interpret legal bindings of military ethics and identify differences for the legitimate conduct of military operations in both IAC/NIAC.

Conclusion

Warfare and the military are an essential piece of comprehensive understanding of moral values of military ethics. Historical and anthropological evidence suggests that every society has generated a consensus of beliefs, attitudes and behaviours that defines the terms of justification for the resort to violence and the limits to be set on the use of violence by members of that culture. Over the period, our societies have subscribed to some form of Just War Theory, even if only in a subconscious manner, through the adherence to IHL/LOAC. All 196 states who are legally bound by Geneva and Hague Law, need to guide their military for multinational operations or asymmetric warfare in the spirit of age-old military ethics.

These are the values of leadership and overall integrity of the military that are in the heart of exercising the legal version of military ethics. Such moral values of the military and the weight of shouldering legal aspects of IHL/LOAC and ROE set all military institutions as unique professions. It is important to continually espouse the values of our society to ensure that all laws and customary practices of the day reflect military operations. **It is the professional responsibility of the military to embody such worth and seek to achieve this equilibrium.**

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Brief Biography



Group Captain Md Sharif Mustafa, BPP, fawc, psc was commissioned on 26 December 1992 in GD(P) Branch. He was awarded with ‘Osmani Gold Medal’ for his outstanding academic performance in BSc (Aeronautics) degree. He is a veteran Fighter pilot with Category ‘A’ (both Operational and Instructional) rating and has more than 2,600 flying hours in various types of fixed wing aircraft. He has demonstrated ‘Low Level Flying Display’ by MiG-29B/UB and K-8W aircraft on the occasions of national events (Independence and Victory Day) during 2008, 2013 and 2014. He held many important command and staff assignments during his long meritorious service

in BAF. He commanded the lone Flying Instructors’ School (**FIS**), an Advance Jet Training Unit (**AJTU**), a Multi-role Combat Aircraft (**MRCA**) Squadron and Command & Staff Training Institute (**CSTI**) of BAF. He also commanded Flying Training Wing (**FTW**) of BAFA, Flying Wing of BAF Base Zahurul Haque, Operational Wing of BAF Base Bangabandhu and BAF Base Cox’s Bazar. He also led a national level ‘Task Force’ constituted in aid to civil power role. On academic ground, he is a ‘graduate’ of DSCSC and ‘fellow’ of Air War College, Pakistan. He has completed two Masters (Military Studies and Strategic Studies) in his long illustrious professional career. His articles have been published in Mirpur Papers and Bimansena of BAF. He has served as OIC, Mission Air Operations Centre (**MAOC**) of UNMIS (UN Mission in Sudan) in 2005~06 and 2IC of Utility Aviation Unit (**BANUAU**) and Contingent Commander (**CC**) of Aviation Transport Unit (**BANATU**) of MONUSCO (UN Organization Stabilization Mission in the DR Congo) in 2015~16 and 2022~23 respectively. Presently, the officer is commanding Flight Safety Institute (**FSI**) of BAF.

Strategies Employed in Russia Ukraine War: A Suggested Approach for Bangladesh

Major Md Shahin Alam, psc, Infantry

Abstract

The ongoing war between Russia and Ukraine is a significant episode of the 21st century that has demonstrated a number of valuable military strategies. Therefore, the study of the war is particularly relevant to any country, including Bangladesh. Keeping that in context, the purpose of this paper is to examine the important strategies of the Russia-Ukraine war, with a focus on proposing a comprehensive approach for the Bangladesh Armed Forces (BDAF). Employing a qualitative methodology, the study utilises secondary data collected from books, journals, open sources like online publications and the internet, newspaper articles, and published reports from Ukrainian and Russian military forces. The findings demonstrate several strategies employed in the war, such as hybrid warfare, siege warfare, information warfare, proxy warfare, and diplomatic endeavors. The study also demonstrates that, despite differences, a few of these threats in a broader context may still be prevalent in Bangladesh's security environment. Taking these factors into account, the study suggests that Bangladesh develop a comprehensive national security strategy. It also suggests that the BDAF pursue military diplomacy, improve its intelligence and drone capabilities, and acquire the modern technology necessary to respond to cyberattacks and potential adversaries' electronic warfare strategies. The study's recommendations include purchasing drone technology and providing media training for BDAF personnel. By integrating lessons from the Russia-Ukraine war and adopting the suggested approach, the BDAF can effectively address evolving threats and safeguard its national security.

Introduction

The Russia-Ukraine war has been one of the most consequential geopolitical events of the 21st century. In the war, both sides employed a variety of military strategies in order to defeat other. As a consequence, the Russia-Ukraine war demonstrated a number of valuable strategies for the 21st century. Given the current geopolitical tensions in the world, it is of the utmost importance for countries like Bangladesh (BD) to comprehend these strategies in order to develop an effective approach for confronting potential adversaries. However, BD's security environment differs from Russia and Ukraine. This

difference necessitates a comprehensive review of the Russia Ukraine war strategies and BD's security environment to determine the relevance and necessary adaptations for BD.

The security environment at BD remains highly precarious due to a wide range of threats. BD, for example, is now home to the biggest refugee camp in the world. Moreover, it is located in a volatile security environment where a power struggle exists between superpowers. The rapid digital transformation at BD has also raised the possibility of cyber threats. Additionally, the country is constantly at risk from non-traditional security threats, including the regular occurrence of natural catastrophes. Given these considerations, BD has a pressing need to develop an appropriate approach for strengthening its capacity to ward off any future threats.

Against this backdrop, the article begins by providing a brief overview of the Russia-Ukraine war. The subsequent discussion highlights the strategies employed by both sides during the war. Finally, the paper suggests ways that BD could implement to enhance its capacity. Though the article will focus exclusively on Bangladesh Armed Forces (BDAF), it makes a suggestive approach for the country.

The Russia-Ukraine War in Brief

Russia's full-scale offensive against Ukraine began on 24 February 2022 following the annexation of Crimea in 2014. Russia's multi-front assault (Belarus/Kyiv axis, Kharkiv axis, Donbas axis, and Crimea-Kherson axis)¹ (Map 1) began following an air campaign targeting Ukrainian air defences, supply depots, and airfields alongside special military operations to capture Kyiv, the capital of Ukraine.

Failing to achieve a swift victory to capture the capital, Russia reinforced its offensive in eastern Ukraine by April 22, concentrating on important cities along the Sea of Azov and the Black Sea. By May 22, Russian forces could take control of major cities like *Kherson*, *Mykolaiv*, *Melitopol*, and *Mariupol*. Some of these cities are significant port cities that could help Russia annex them while also weakening Ukraine economically and psychologically. By September 22, Russia declared (Map 2) the annexation of four Ukrainian regions: Luhansk, Donetsk, Zaporizhzhia, and Kherson, which they held as of now either partially or fully.

Map-1: Russian Initial Axes of Advance in Ukraine

Source: Zabrodskyi, Watling, Danylyuk, O. V, & Reynolds, N. (2022)

Map-2: Annexed Regions in Sep 22

Source: Institute of Study of War, War Mapper

On the contrary, Ukraine was capable of demonstrating formidable resistance and conducting a successful counter-attack (Map 3) to regain control of a few cities, notably in *Kharkiv* and *kherson* region. They could also disrupt Russian supply lines, including the crucial Crimean bridge that connects the occupied Crimean Peninsula to Russia. Since the start of the war, both Russia and Ukraine have been extremely active on social media platforms in order to spread propaganda and portray their narrative to the world. The Ukrainian president, *Volodymyr Zelenskyy*, was seen as active in addressing many forums, including the US Congress² and the European Parliament³ seeking support and military assistance from the US and western countries.

Map-3: Map Showing Ukrainian Territory Occupied by Russia that Regained by Ukraine



Source: Institute of Study of War (ISW), War Mapper, available at <https://www.understandingwar.org/>, accessed on 25 March 23

The Russia-Ukraine war has evolved into an international conflict with the involvement of major powers and western countries. The USA and western countries have been providing financial and military assistance to Ukraine, while China has maintained good relations with Russia. International organisations responded and condemned Russia's invasion of Ukraine from the outset. The United Nations General Assembly resolution⁴ and the International Court of Justice demanded the immediate cessation of Russian operations in Ukraine, while the Council of Europe expelled Russia for the invasion.⁵ Thereafter, numerous countries also imposed economic sanctions on Russia, resulting in a widespread effect on the global economy.

Strategies Employed in the Russia-Ukraine War

Hybrid Warfare (HW): Neither the concept of HW nor Russia's employment of this strategy is entirely novel.⁶ Though the concept of "HW" swiftly gained prominence following the annexation of Crimea by Russia in March 2014.⁷ Simply put, the concept refers to the merging of regular and irregular forces in order to achieve battlespace synergy. It encompasses the full "competitive area," including subversive, economic,

information, and diplomatic tactics, as well as the employment of armed forces above the "grey zone" concept's upper threshold.⁸

The implementation of the HW strategy has been a defining feature of the Russia-Ukraine war. However, in this war, Russia's HW strategies were significantly broader and distinct from those employed in the past. Russia implemented the strategy quite efficiently, making Ukraine dependent on its economy, particularly gas⁹, and then annexing Crimea in 2014. In 2022, Russia finally launched its major offensive. In addition to regular warfare, Russia also conducted propaganda campaigns and employed cyberattacks against Ukraine's vital infrastructure throughout the war.

Siege Warfare: At the beginning of the 21st century, advanced military forces were exploring the concept of winning the conflict using robots and technology.¹⁰ However, the Russia-Ukraine war has inflicted a severe setback on the concept. It demonstrated that a relatively weaker force, even without superior technology, can thwart a major military power.¹¹ As compared to Russia, Ukraine had fewer regular and reserve military personnel, as well as a lesser number of military platforms (Table 1). Yet they were successful in preventing Russia from a quick victory, as many had predicted. In contrast, in failing to swiftly overrun the cities, Russia employed a strategy similar to the first world war: *siege warfare*.¹² For example, the Russian military forces actively participated in siege warfare in Mariupol and Kharkov. During the siege of these cities, Russian forces imposed a curfew and disrupted the supply and communication lines.¹³ The Russia-Ukraine war also reintroduced the use of trenches in a 21st century battle.

Table-1: Comparison of Major Military Platforms and Budgets between Ukraine's and Russia's Armed Forces

Items	Ukraine	Russia
Active Personnel	1,96,000	9,00,000
Reserve Personnel	9,00,000	20,00,000
Armoured Fighting vehicle	3,309	15,857
Aircraft	132	1,391
Helicopter	55	948
Submarines	0	49
Defence Budget	4.7 Billion USD (approximately)	45.8 Billion USD (approximately)

Source: The Military Balance 2022, pp 164-181¹⁴

Information Warfare (IW): With technological advancement and the widespread use of social media, IW strategy has become a significant component of modern warfare and an integral component of HW. Both Russia and Ukraine have prominently displayed this strategy in the war, stretching back the connection since 2014. On the Russian side, the IW strategy entails justifying its attack for self-defence and denying responsibility for the war. During the annexation of Crimea, Russian propaganda aimed to defame the Ukrainian government and generate sympathy for Moscow among the Russian-speaking community.¹⁵ Subsequently, the Russian disinformation effort has continued across many platforms, like Facebook.¹⁶ Besides, Russia has also hacked Ukraine's cell network security and transmitted targeted messages to Ukrainian troops and their families using its electronic warfare (EW) and cyber capabilities.

The Ukrainian strategy, on the other hand, includes disseminating information portraying her tenacious resistance against Russia. The strategy also includes projecting Russian forces' brutality during war and requesting a desperate need for sophisticated military hardware from western countries. As such, news headlines have frequently featured Ukraine's appeals. Ukraine President *Volodymyr Zelenskyy* has also addressed many international forums to garner international support. Furthermore, in May 2021, Ukraine established the Centre on Countering Disinformation (CCD) for monitoring and analysing information threats to national security.¹⁷

Drone Warfare: Drones have been employed significantly by both sides to achieve their objectives in the Russia-Ukraine war. Russia had a considerable number of drones like *Kalashnikov Kyb*, *Eleron-3SV*, *Orlan-10*, *Forpost R*, and *Orion E* in its inventory. These were used by the Russian military for reconnaissance, surveillance, and attacks on Ukrainian defensive positions.¹⁸ Besides, the use of drones was also effective to enhancing the accuracy of long range indirect fires by the Russian military.¹⁹ Ukrainian forces claimed that they received artillery fire immediately after detection of a Russian UAV²⁰ which was subsequently followed by a conventional offensive.

In comparison to Russia, Ukraine's drone capability was comparatively limited, which later enhanced gradually by the support of western countries. The most prominent foreign country origin drones were *Baykar Bayraktar TB2* (Turkish origin), *Punisher*, *Aerorozvidka R18*, *Quadcopter*, *Warmate 1*, and *Tupolev Tu-141 Strizh*. By employing *Baykar Bayraktar TB2*, Ukraine could penetrate through Russia's air defences and hit two oil depots inside Russian territory.²¹ Ukraine could also use drones to attack and disrupt Russia's line of communication and logistic column. Ukraine also demonstrated its innovativeness by using consumer drones like *Quadcopters* to enhance its defences and attack on Russian troops. Moreover, Ukraine employed a variety of drones for surveillance and reconnaissance throughout the war. The Russia-Ukraine conflict has also served as a testing ground for drone capabilities, with Russia purchasing Iranian drones (kamikaze) such as *Shahed-129*, *Shahed-191* and conducting drone operations in Ukrainian cities.²²

Proxy War and Diplomacy: Proxy war has become an integral part of the strategic and security environments.²³ In the Russia-Ukraine war, several countries have taken a particular position, while a few countries have maintained neutrality.²⁴ As an example, Russia has continued to gain support from Belarus and Iran. China, despite maintaining its neutral stance, has faced accusations of providing technological support to Russia. Ukraine, on the other hand, has received military and economic assistance from the USA and its European allies.

A key strategy in the Russia-Ukraine conflict has also been diplomacy. In the war, the diplomatic efforts have included sanctions, peace discussions²⁵, and diplomatic pressure on both Russia and Ukraine. In response to Russia's invasion of Ukraine, the EU has imposed unprecedented sanctions against Russia. Besides, Ukraine has been very active in pursuing diplomacy and has sought support from the UN and the Organisation for Security and Co-operation in Europe (OSCE)²⁶ to condemn Russia's invasion. Ukraine has also focused on enhancing its military capabilities through diplomatic efforts.

Analysis of the Security Environment of BD

Geographically, BD is situated in a volatile region of the world. It shares borders with two geographically large countries: India, which is occasionally contentious due to religious issues, and Myanmar, which is a militarily ruled, rugged nation. Moreover, BD is trying to manage the enormous influx of *Rohingya* refugees from Myanmar, which has put a strain on the country's resources and internal security. Besides, there is the existence of separatist groups in the country that are still active in CHT.

The ongoing competitiveness between China and India, including the USA, over regional dominance may have an impact on the security environment in BD. Furthermore, BD's political situation is volatile, with a history of violent demonstrations and conflicts. Even in the slightest form, there are religious and ethnic social fracture lines that could be exploited by external actors. Furthermore, the country's digital economy has grown rapidly, increasing the country's integration into and dependency on the global economy. On the adverse side, this raises BD's susceptibility to cyberattacks and other types of digital threats. To address these potential threats, within the framework of national strategy, BDAF must immediately undertake a comprehensive endeavor to enhance its capacity.

A Suggested Approach for BDAF

Pursuing to Develop a Comprehensive National Security Strategy (NSS): A NSS to protect and promote its own national interests is a government matter and relatively complex. BDAF, through the Armed Forces Division (AFD), may pursue the government to develop a comprehensive strategy for national security. The NSS should

incorporate political, military, economic, social, and cultural security issues. Therefore, representatives of all possible stakeholders, like military, paramilitary, and law enforcement organisations, civil society, the commercial sector, and appropriate government organisations should be included in developing NSS. The core elements of the strategy may include the security environment and national security priorities. BD's national security priorities may typically include sovereignty and economic prosperity. The security situation is dynamic; therefore, the NSS should be reviewed on a regular basis.

Enhancing Capabilities to Counter HW Threats: Within the strategic framework, BDAF should emphasise a defensive HW strategy to counter HW threats. Armed forces personnel should be trained on HW through courses, seminars, and study periods at the appropriate level. The training should focus on improving their knowledge and developing organisational capabilities to effectively detect, deter, and respond to hybrid threats across the political, military, economic, social, informational, and infrastructural (PMESII) dimensions. The BDAF should also significantly improve its intelligence capabilities. This capability may involve enhanced collaboration and coordination among all intelligence units and organisations on a regular basis. Furthermore, these intelligence agencies must integrate modern technologies to develop a more robust intelligence system.

Developing IW Capabilities: In the present day, IW holds great relevance and significance. Hence, the BDAF must prioritise this aspect with greater importance. In doing so, it should acquire modern technology, and develop the infrastructure required to respond to cyberattacks and conduct media campaigns. It should train its personnel in media training, strategic communication, psychological operations, and information security. In addition, BDAF should strengthen ISPR with qualified staff and equipment to improve its media campaign abilities.

Enhancing Drone Capabilities: The BDAF must enhance its ability to efficiently address the challenges of drone warfare. As such, investing in enhancing drone capabilities, such as improved radar systems, EW capabilities, and anti-drone weapons, would be crucial. Moreover, strengthening military cooperation with technologically advanced friendly nations can facilitate training exchanges and the acquisition of drone technologies. Furthermore, patronising research and development by military personnel and also within military institutions to build indigenous drone and anti-drone systems would enhance drone capabilities significantly. Besides, equipping fighting units with drones will also improve their operational efficiency on future battlefields.

Pursuing Military Diplomacy: The foreign policy dictum of BD is “friendship to all and malice to none.” In order to achieve the aforementioned objective, the BDAF

should prioritise military diplomacy. It can take the form of high-level defence-related visits, talks about security issues, and defence cooperation like training exchanges and the procurement of defence equipment. Thereby, BDAF will be able to forge strong ties with its neighbours and with the world's superpowers. Military diplomacy may also be useful for achieving a peaceful resolution to existing issues and preventing the escalation of tensions with neighbouring countries.

Modernising the Armed Forces: A country cannot adequately confront security challenges or defend its sovereignty without modernising its armed forces. In this regard, BDAF requires more investment in acquiring interoperable, modern, and advanced equipment, such as weapon systems, communication technology, and surveillance equipment. Additionally, the development of the domestic defence industry could aid in the modernisation of the armed forces. In this aspect, the effort may include recruiting experts, investing in research and development, and building infrastructure in military institutions like BMTF for the development, and production of military equipment by themselves, as well as establishing partnerships with foreign defence industries.

Enhancing the Capabilities Targeting EW: The increasing prevalence of EW in modern wars necessitates the protection and security of cyber domains and communication networks. Therefore, BDAF must acquire modern cybersecurity capabilities to defend against cyber threats. The capacity ought to be improved so that manoeuvre units can actively operate, reducing their electronic footprint and denying adversaries intelligence, surveillance, and reconnaissance. To achieve this, the manoeuvre units may have a cost-effective UAV defence. Additionally, BDAF requires reliable horizontal and vertical communication systems that are interoperable, secure, jam-resistant, and have a low probability of detection. There is also a continuous need to promote digital literacy among military personnel to counter electronic threats as well as reduce the negative impact of rumors. Additionally, military personnel must emphasise deception, camouflage, and concealment to be able to conduct operations undetected.

Conclusions

The war between Russia and Ukraine is one of the defining events of the 21st century. Russia has launched a multi-pronged invasion of Ukraine, which has not been as successful as anticipated. In contrast, the Ukraine force, despite being relatively inferior, has waged a fierce battle and prevented Russia from seizing its capital. It also conducted a number of successful counterattacks and recaptured significant territories from Russian forces. The war exemplified a variety of strategies employed by both sides, such as HW, siege warfare, IW, drone warfare, proxy war, and diplomacy. These strategies are relevant in a broad security context and thus valuable for BD to enhance its security.

BD is susceptible to multifaceted threats due to the volatile security situation in neighbouring countries, including the refugee crisis. In addition, BD faces various threats, such as separatist groups, cyberattacks, and the potential to be affected by a power struggle among superpowers. Therefore, BDAF, through AFD, may pursue the development of a NSS to evaluate its threats and develop a security strategy. Furthermore, it must improve its intelligence organisation capabilities and train its personnel to deter HW threats. To enhance IW capabilities, BDAF should also acquire modern technology and strengthen ISPR's capabilities. In the present-day context, BDAF should enhance its drone capabilities by patronising research and development. Additionally, it should have an advanced radar system and EW capabilities. Furthermore, BDAF should promote military diplomacy, with a focus on high-level defence-related visits, training exchanges, and forging strong connections with its neighbours and the world's superpowers.

There is no skepticism that modernising the armed forces is essential, with a focus on the capabilities of possible adversaries. The modernisation initiative should include interoperable military equipment for forces as well as enhanced capacities for military equipment production and development. Furthermore, enhancing cybersecurity capabilities and digital literacy among military personnel will be vital in effectively repelling cyberattacks against the force and the country as a whole. By employing the suggestive approach, BDAF can improve their security posture and effectively address the evolving security challenges of a world that is becoming more complex.

Recommendations

The following recommendations are made for consideration:

- a. The AFD may endeavour to purchase suitable drone technologies for three services in order to improve the BDAF's drone capabilities.
- b. The BDAF may conduct various training programmes at different levels to train its personnel on media training, strategic communication, and information security.

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Brief Biography



Major Md Shahin Alam, psc was commissioned from Bangladesh Military Academy with 58th BMA Long Course in the Corps of Infantry on 18 June 2008. He is a graduate of ‘Defence Services Command and Staff College’, Mirpur. He also obtained ‘Master of Social Science in Security Studies’ from Bangladesh University of Professionals. He is a francophone having achieved a B1 diploma from *Alliance Française* and a diploma on Intensive French Language Course (SILF) from *Ecole Militaire*, Paris, France. In addition to mandatory courses, he attended Potential Platoon Commander Course (PPCC)

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In his career, he held all the regimental staff appointments at different capacity in 6 BIR. He participated in counter insurgency operation (CIO) in Chittagong Hill Tracts under ‘*OPERATION UTTARON*’ in 2009. He also participated in ‘*OPERATION PURBO PRACHIR*’ while serving in 6 BIR. As a staff officer, he served as GSO-3 (Intelligence) in Headquarters 24 Infantry Division, GSO-2 (Programme) in Bangladesh Military Academy and GSO-2 (Coordination) in Headquarters Army Training and Doctrine Command. He also served in Headquarters Army Security Unit as Security Officer to the Chief of Army Staff prior to embarking on overseas training. As an Instructor, he served as a Platoon Commander in Bangladesh Military Academy. He participated in United Nations Peacekeeping Mission in Central African Republic as pioneer Aide-de-Camp (ADC) to Deputy Force Commander, MINUSCA from 2014 to 2016. Presently he is attending French War College at *Ecole Militaire*, Paris, France.

He is happily married to Mrs Abida Sultana. He is a blessed father of his son Arham Tahir.

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